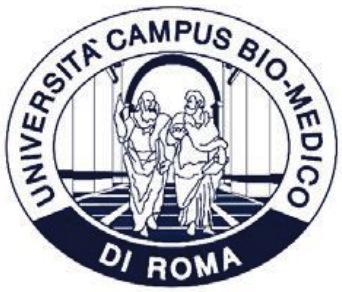

Università Campus Bio-Medico di Roma

Course of Doctoral Research in

Integrated Biomedical Sciences and Bioethics

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The Indispensability of an Interdisciplinary Approach in Bioethics for India

(The Need for an Inter-religious, Inter-cultural Approach in Formulating a Scheme for Bioethics Education in the Universities and Medical Colleges in India)

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Introduction

India, being a land of plurality of cultural, religious and healthcare traditions needs a wider concern in its application of bioethics in the area of education and practice. This research tries to perceive the specific characteristics that would help to codify a Bioethics curriculum for Indian medical university students; specifically for the medical undergraduate, post graduate and for the nursing courses.

There was a triple "i" approach explained by Prof. Simonetta Filippi on 30.06.2015 during the Doctorate School Programme of Campus Bio-Medico di Roma, as an introduction to the PhD programme. Those three components were *international*, *inter-sectoral* and *interdisciplinary* approach to the research conducted. This in fact helps the collaboration with the research in different backgrounds, traditions and disciplines in the society. To a research project in Bioethics this approach is indispensable and the present project meets with all these characteristics.

The motivation for the study can be illustrated in two aspects:

a. Social, Geographical and Political Characteristics of India:

India, as its character depicts is multi cultural and multi religious, having a secular democracy, being a land of many faiths and cultures. It is the 7th largest nation in the world having an area of 3,287,590 kmsq, and the second largest population with 1,210,854,977 citizens according to the 2011 Census of India.[1] Multiplicity of languages makes English the commonly used official language and there are 22 other official regional languages apart from Hindi, the national language. The plurality in diverse fields makes India to have an inter-disciplinary approach in any principle it commonly adopts for the people.

b. Specific Medical and Ethical Concerns:

With regard to the healthcare in India, anyone would be amazed with the variety and fusion of its practice. Presences of modern Allopathic medicine, as well as the medical traditions of Ayurveda, practice of Homeopathy, Unani, Siddha and Yoga are simultaneously done with almost equal importance in the country. Although India has more than 400 Allopathic medical colleges one cannot disregard the presence of 301

[1] Census of India, 2011 accessed on 12.07.2017 from http://www.dataforall.org/dashboard/censusinfoindia_pca/; The population of India according to the United Nations data in 2016 is 1,32,68,02,000. Accessed on 12.06.2017 from http://data.un.org/CountryProfile.aspx?crName=INDIA.

Ayurvedic Medical Colleges, 207 Homeopathic Medical Colleges, 44 Unani Colleges and many other important Siddha, and Yoga Colleges in the nation. The healthcare by the public sector is limited to 25% and the other 75% is controlled by the private sector.[2]

India having a disease burden of 28/100 persons has only 6 doctors, 13 nurses and 7 hospital beds for 10,000 people.[3] Along with this insufficiency the malpractices in the healthcare sector need special attention to be controlled.

It is also noted that though there are different ethical forums that are operational in the country, they are not organised with a government scheme for a specific bioethics education. But the instruction given by the Medical Council of India (MCI) and the initiatives taken up by the Indian Council of Medical Research (ICMR) and UNESCO to facilitate bioethics education in India is a positive invitation for bioethics studies in this regard. Moreover, there are a number of medical colleges which are looking forward to include bioethics in the undergraduate curriculum of medical education. There are also individual and collective efforts to equip personnel in teaching bioethics in the medical institutions.

The objectives of the thesis in this regard are therefore,

a. to provide a more unified, practical and ethical vision to the different medical traditions, associations and committees which are independently operational in the field of bioethics in India;

b. to provide the possibilities of shaping a philosophically strong bioethics that is adaptable and meaningful in the context of India that may lead to modeling a scheme/core curriculum of bioethics in the universities for undergraduate and post graduate courses in medicine and for the nursing students regarding specific issues in bioethics.

c. to initiate and foster more concern and awareness in bioethics in the medical and university educational spheres and give a wider outlook of themes in the context of India.

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[2] Radwan I., *India – Private Health Services for the Poor*, Washington: World Bank, 2005; Lawrence C. Loh, Cesar Ugarte-Gil, Kwame Darko, *Private Sector Contributions andTheir Effect on Physician Emigration in the Developing World*, Bulletin of the World Health Organisation, accessed on 20.06.2017 from http://www.who.int/bulletin/volumes/91/3/12-110791/en/.

[3] India Brand Equity Foundation, *Healthcare*, January 2017, accessed on 02.06.2017 from https://www.ibef.org/download/Healthcare-January-2017.pdf.

d. in the administrative system, a conscientisation on the need and urgency of the bioethics education so that adequate measures may be taken to implement rules and regulations to include ethics education in the medical curriculum.

The topic studied in the thesis is not explicitly new in certain aspects of its approach in the particular context of India. The argument of the indispensability and the urgency of a philosophically strong bioethics with a core curriculum in the entire medical and university education, with the backing of a wider statistical analysis and a control group study with an international group is but, a new venture in this regard. Learning deep into the particular religious, social, cultural, philosophical and medical traditions of India helps to a great extent in understanding and designing an adaptable bioethics for India, without losing its basic principles. Thus, this research and its results act as an initiative to inspire and foster the implementation of a curriculum of bioethics in the medical education spheres.

The methodology consists of the survey conducted among the doctors, medical students and nurses in India and the control group of specializing medical doctors in Italy. It also includes the interviews done with experts in the field of bioethics, religions, philosophy and medicine in India. Collaboration for the research with the St. John's National Academy of Health Sciences, Bangalore, India, Pontifical Academy for Life, Vatican and Society for Community Health Awareness Research and Action (SOCHARA), Community Health Cell (CHC), Bangalore, and their allied organizations add to the qualitative content of the study. It also incorporates the investigation into the original writings in Indian philosophy and studies on Ancient Vedic Hinduism and Scriptures especially Ayurveda, also a comprehensive study of bioethical principles in Islam, Buddhism, Sikhism, Jainism and Christianity and other religious traditions in India. Apart from the official international and national documents on bioethics there are also books, articles and writings by experts in the field of bioethics, science and philosophy which are studied in detail.

The structure of the thesis shows in the First Chapter an analysis of the general Indian context in view that how the diverse social, cultural and religious features of India could influence the content and methodology of bioethics in India. Chapter 2 specifically concentrates on the medical traditions of India and their influence on the healthcare practices of Indian society. It also gives a deeper look into the traditional Indian

concepts of healthcare ethics. Chapter 3 is an analysis of the contemporary activities undertaken in the actualization of a better ethical practice in the field of medicine, animal research and environmental health. This chapter views bioethics in a wider perspective than merely minimizing into ethics in medical practice. It also includes an inquiry into the potential forces and organizational structures in the Indian society through which bioethics can be disseminated in various ways.

Chapter 4 is dedicated to the acknowledgement of partnerships and assistance received from individuals, institutions and organisations for the particular research. With the contributions of the experts in the field, it also gives a deeper look into the theme of bioethics in contemporary India. Chapter 5 contains the specific analysis of the survey conducted in India and its comparative analysis with the data collected from Italy as a control group for the particular study. This chapter includes the statement of the data collected and the discussion of the data in order to help in building up the concepts instrumental to the foundation of a bioethics in the context of India. Chapter 6 shortly evaluates the prerequisites for an ethics curriculum in the field of medical education. It also presents the illustration of various bioethics curricula already existing in the country followed by the proposal of a framework of the core curriculum for the undergraduate, post graduate medical courses and for the nursing course in the Indian context.

This research hopefully would pave way to initiate and foster discussions in various forums and ultimately would result in creating a suitable and relevant bioethics curriculum in the context of India. Integration of the values from all the rich religious, philosophical, social, cultural and medical traditions of India requires extensive studies and collaborative efforts from the part of experts in these fields. Bioethics being interdisciplinary, in this regard has a deeper meaning in the Indian context, considering the nation's multiplicity of characteristics. Profound analyses, a clearer vision and constant efforts can as a result build up and employ bioethics education plan for the healthcare educational institutions in India.

Part I

India: The General Context

Chapter 1

The Indian Society

India, officially known as the Republic of India is a South Asian country and the seventh largest country in the world. According to the World Bank estimate India has 1.311 billion people[4] and is the second largest populated country after neighboring China. India is the most populous democracy in the world. The constitution of India which came into existence on 26 January 1950 proclaims in its preamble that India is a sovereign, socialist, secular, democratic republic.[5]

The salient features of the Indian society are so unique that one marvels at the existence of such a nation having a manifestation of enormous diversities. India is multi-cultural, multi-lingual, multi-ethnic and multi-religious in its formation with its all urban, rural and tribal dimensions. These diverse aspects of the population make India multi ethical in its moral characteristic. Among all these diversities India stands harmonious as one nation proclaiming its motto "unity in diversity" proclaimed by its first Prime Minister Pandit Javaharlal Nehru. It is essential in this context to view and understand in detail to what sort of a society the plan of ethics education is proposed. The various aspects that influence the healthcare system and the medical education environment are therefore, to be comprehended meticulously as any such research moves forward.

1.1. India Land and the People

The baseline principle of the Indian culture and life is seen in the slogan "unity in diversity". The striking diverse languages, speech, physical features of the people, religious beliefs, costumes, lifestyles, customs, standards of living, food, climate, geographical differences and many other dissimilarities make India a unique nation in the whole world. Indian historian Damodar Dharmananda Kosambi in his book *The Culture and Civilization of Ancient India in Historical Outline* sums up the diversity of the Indian society:

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[4] World Bank 2015 estimate retrieved on 15.02.2017 from http://data.worldbank.org/country/india. The United Nations' statistics of the Population Division says that the population of India in 2016 is approximately 1.32 billion, retrieved on 15.02.2017 from http://data.un.org/CountryProfile.aspx?crName=INDIA.

[5] The Preamble, Constitution of India.

> Richer Indians may be dressed in full European style, or in costumes that show Muslim influence, or in flowing and costly robes of many different colourful Indian types. At the lower end of the social scale are other Indians in rags, almost naked but for a small loincloth. There is no national language or alphabet; a dozen languages and scripts appear on the ten-rupee currency note. There is no Indian race. People with white skins and blue eyes are as unmistakably Indian as others with black skins and dark eyes. In between we find every other intermediate type, though the hair is generally black. There is no typical Indian diet, but more rice, vegetables, and spices are eaten than in Europe. The north Indian finds southern food unpalatable, and conversely. Some people will not touch meat, fish, or eggs; many would and do starve to death rather than eat beef, while others observe no such restrictions. These dietary conventions are not matters of taste but of religion. In climate also the country offers the full range. Perpetual snows in the Himalayas, north European weather in Kashmir, hot deserts in Rajasthan, basalt ridges and granite mountains on the peninsula, tropical heat at the southern tip, dense forests in laterite soil along the western scarp. A 2,000-mile-long coastline, the great Gangetic river system in a wide and fertile alluvial basin, other great rivers of lesser complexity, a few considerable lakes, the swamps of Cutch and Orissa, complete the sub-continental picture.[6]

There are various cultural and social diversities that enrich the Indian lifestyle. Even though there exist sharp differences in religious beliefs, social and political systems and economical situations, India miraculously remains a united and unique nation. *The States Reorganization Act* which was enacted in 1956 was intended to stabilize the official boundaries of Indian states along linguistic lines.

The Constitution of India is considered to be the ultimate authority in the Republic of India. The Constitution describes India as a democratic country and the power is distributed among the Centre and the States. The Indian Parliament has two houses Lok Sabha (council of the people) and Rajya Sabha (council of the States). In the higher authority come the Legislative, Executive and Judicial powers. The Legislation of the country is led by the Prime Minister and the ministers in the centre, and in the States the Chief Minister and ministers. In the Central government there are Members of the Parliament (M.P.) and in the States there are Members of the Legislative Assembly (M.L.A.) for the representation of the constituencies. The person in the executive power in India is the President of India. In the State level it is the Governor. The apex court

[6] D. D. Kosambi, *The Culture and Civilization of Ancient India in Historical Outline*, 1997 (first ed. 1964), retrieved on 30.03.2017 from http://vidyaonline.org/dl/cultddk.pdf.

which controls the highest judicial power is the Supreme Court of India and in the States it is the High Court which has the highest judicial power.

Figure 1: Political Map of India[7]

[7] In the maps of India that are printed in the Western Countries, part of Jammu and Kashmir is cut off from the geographical portion of India. It is after the war between India and Pakistan in 1962 there is a "line of control" established in Kashmir. This area is called Pakistan Occupied Kashmir. India claims the area as its geographical territory, though there are many countries who do not accept it.

1.1.1. Multi Ethnic Characteristic of Indian Society

Indian society is composed of many races. In India there is an admixture of many races that we find worldwide. As the people of Africa are black in colour complexion, the people of Europe are Caucasian and white in their skin complexion. In India we come across people who are white, black, and brown in the colour of complexion. It is said that the aborigines of India were Dravidians and they were found in the Southern part of India, and had black skin tone. But, the advent of Aryans also resulted in an admixture of blood relations. Aryans were fair in skin traits and the biological unification made new conjoined races in India.[8] There are different theories existing among the anthropologists, sociologists and historians of India regarding the composition of the Indian society. They generally have made inferences based on the physical characteristics, group characteristics i. e., colour of the skin, shape of head, colour of eyes, facial structure, shape of nose etc. It is also noted that India has faced a lot of conquests from various parts of the world. It has also resulted in the mingling of races, their cultures and so on. It resulted eventually in a new civilization.[9] The following tables prepared by the Mumbai University show the different traditional and contemporary ethnic groups found in India.

Table 1: Multi-Ethnic Groups in India[10]

Sr.No.	Racial Group	Characteristics
1.	Negritos	Originally from Africa and the first to come to India. They are found in Andaman Islands, Kochin and Travancore Tribes: Jarwas, Onges, Sentinelese and the great Andamanese, Live like 'early man'.
2.	Proto-Australoids	Short, flat nose, wavy hair and black in colour They grew rice, vegetables and sugarcane They are found in Santal Tribe, Kol (Chota Nagpur), Bhill in Madhya Pradesh. They could maintain pure racial group.

[8] University of Mumbai, *FYBA Foundation Course I*: *Social Awareness and Personality Development*, p. 6 retrieved on 14.03.2017 from http://archive.mu.ac.in/myweb_test/FYBA%20FOUNDTION%20COURSE.pdf.
[9] University of Mumbai, FYBA Foundation Course, p. 6.
[10] University of Mumbai, FYBA Foundation Course, p. 7.

3.	Dravidians	Cultured people before Aryans. Short stature, dark skin, ample and long hair, long head, broad nose. It is said that still they have maintained their identity. According to Risley[11] they are the original inhabitants of India but in due course they came into contact with Aryans, Mongoloids and got their characteristic changed. They are the people who developed Indus Valley Civilization i.e., Harappa and Mohan-jo-Daro.[12]
4.	Indo-Aryans	Aryan tribe that had inter-marriages and inter-mingling of cultures with Indians. Fair skin, tall, long head, pointed long nose. They settled in North and Central India.
5.	Indo-Mangolians	Short stature, wheatish yellow coloured, beardless flat nose and flat face They are also found in Tibet, China, Japan and Burma In India found in Sikkim, Assam, Nagaland, Mizoram, Meghalaya, Arunachal Pradesh, Manipur and Tripura.
6.	Mangolo-Dravidians	Admixture of Mongol and Dravidians These are found in Bengal and Orissa
7.	Aryo-Dravidians	Admixture of Aryans and Dravidians They are found in the Ganges Basin, Punjab, Bihar, Rajasthan and Uttar Pradesh.
8.	Scytho-Dravidians	They are found in Sindh (Pakistan) They are also found in Gujarat, and Maharashtra It is also said that they represent Marathas and Coorg people.
9.	Turko-Iranians	Tall, fair, dark eyes. These are coming under the Baluchi, Brahmi and Afghan. They are found in Baluchistan, Punjab and Sindh.

[11] Mentions here the anthropologist and ethnographer Sir Herbert Hope Risley.
[12] The two earliest civilizations of Indian subcontinent.

Table 2: New Foreign Races in India[13]

Sr. No.	Racial Group	Characteristics
1	Greeks, Shakas, Pallavas, Kushanas and Huns	These People were the invaders in India. They settled and accepted the culture of India and also influenced the Indian culture. It is said that origin of Rajputs is to be attached with Huns but Rajputs believe in their *Agnikula/ Agnivansh**[14] theory.
2	Jews, Parsis, Muslim	Traditionally speaking Jews were persecuted by Titus in 70 A.D. and came in India. Parsis came from Persia. We find these races only in Mumbai. Muslims came before 712 A.D. and are similar to Persian, Indo-Aryan, Turks and Afghans. They also intermingled with Indian culture but even today their ideals are different from that of Hindus.
3	Europeans	Portuguese, Dutch, French, British and formed in various parts of India in minority groups.

All these groups in diverse parts of India constitute the Indian population with their variety of characteristics peculiar to the race and culture very particular to their communities. The social structure in India has been influenced a lot by the natives and the later welcomed groups and this intermingling is definitely one of the peculiar characteristic of Indian society. It is also noted that the ethnic diversity as well as the consequent genetic diversities allow the medical and human scientific researches a plethora of research sample categories which would facilitate a more authentic and efficacious finding in the researches. This is one of the reasons the pharmaceutical companies are very much interested to have their human subject researches in India.[15]

[13] University of Mumbai, *FYBA Foundation Course*, p. 8.
[14] In the text where the *asterisk* (*) symbol is seen an explanation is found for the term/s in the Glossary.
[15] Tarun Garg, Omkar Singh and Saahil Arora, "Opportunities and Growth of Conduct Clinical Trials in India", *International Journal of Pharmaceutical Sciences Review and Research*, 8(1), May-June 2011, p. 153.

1.1.2. Social and Political Context

As we have noted earlier, the nature of the Indian Society is pluralistic. It means that there are multiple ethnic groups, races where one cannot boast of his/ her pure racial origin, multiple linguistic groups, which led to the partition of majority of states in India, multiple religions and their various ideologies and living systems. All these unique features of Indian society has contributed to the richness of the nation and at times led to conflicts. India is also known as the largest democracy in the world.

1.1.2.1. Demographic Indicators

Demographic features of a nation provide a general idea of the size of its population, composition, territorial distribution, changes and the components of changes such as new births mortality and social mobility. This section is divided into two parts namely population statistics and vital statistics. Population statistics are the indicators that measure the size of the population, sex ratio, density and dependency ratio. Whereas, vital statistics is an indication to proper life scenario of the population, including birth rate, death rate, natural growth rate, life expectancy at birth, mortality and fertility rates. These indicators help the governing authorities to plan and make policies with programmed interventions setting up short and long term goals for the progress and development of the people and the nation, with an integrated vision.[16]

The National Health Profile which is the official data of health profile in India and is made in accordance with the WHO norms states these significant features about the Indian Demographic Profile:

- India's population as per census 2011, stood at 1.21 billion (623.27 million males and 587.59 million females). Out of the entire census till date from the British times, the Average Annual Exponential Growth Rate has been negative only for the decade 1911-21 when there was a decline in population due to great influenza epidemic and two successive bad harvests in West Bengal.[17]

[16] Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, *National Health Profile 2015*, 10th Issue, New Delhi, 2015, p. 2; data is also in the *Census of India 2011*.
[17] Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, *National Health Profile 2015*, pp. 2-3.

- The country has a low sex ratio of 943 females per 1000 males, which is showing a slight improvement in the last decade. Among the states, Haryana is the lowest in sex ratio (877/1000) and Kerala (1082/1000) stands with the maximum sex ratio.[18]
- The population density of India in the 2011 Census was 382 people per sq. km. It is also noted that the urban population of India constitute 31.14% of the total population. There has been a 12% increase in the urban population after the Census in 2001 and it is also noticed that the overall population density is grown by 17.7%.[19]
- Age distribution of the population depicts 28.4 % in the 0-14 age group and the 60+ age group accounts only 8.3%. There was a decline in birth rate as well as in death rate. The birth rate was 25.8 in 2000 but in 2012 it is diminished to 21.6 whereas, the death rate declined from 8.5 to 7.0 per 1000 over the same decade. The natural growth rate diminished from 17.3 in 2000 to 14.5 in 2012 as per the latest official information.[20]
- In 1970-75 the life expectancy at birth was 49.7 years; in 2006-10 it increased to 66.1. It is notable that the life expectancy for the females is 67.7 years and for the males 64.4 years.[21]
- Infant mortality rate has declined tremendously. As per the 2013 estimate reports 40 per 1000 live births, even though there exists a disparity between rural (44/1000) and urban (27/1000) areas. The calculation states that the maternal mortality rate is highest in Assam and lowest in Kerala.[22]
- The Total Fertility Rate (TFR) for India is 2.3, whereas in rural areas it has been 2.5 and in urban areas 1.8 as per the information available in the year 2012.[23]

[18] Ibid, p. 4; "Gender Composition of Population and Sex Ratio (States and Union Territories)", *Census of India 2011*, p. 83, retrieved on 04.04.2017 from http://censusindia.gov.in/2011-prov-results/data_files/india/Final_PPT_2011_chapter5.pdf,
[19] Ibid, pp. 5-9.
[20] Ibid, pp. 10-11.
[21] Ibid, pp. 17-18.
[22] Ibid, pp. 19-22.
[23] Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, *National Health Profile 2015*, p. 2, 25; the whole data is calculated chiefly from the *Census of India 2011*.

1.1.2.2. Socio-Economic Indicators

In the achievement of the health goals, socio-economic indicators are very important. It is because they provide the data on education, gender, poverty, housing, amenities, employment and other economic indicators of the people in the country.[24] This would help us to evaluate the overall social growth of the population. In India where the private sector dominates the healthcare facilities to a greater extent than the public sector, the economic factors are significantly determinants in attaining medical care even in necessary situations.

1.1.2.2.1. Literacy

In 1947 when India got its independence, the literacy rate of the nation was a meagre 14%. With much concentration on education remarkable developments have taken place in the country regarding its literacy. Though there was a drastic difference between certain states like Kerala and Mizoram who were well above the national average and the northern state of Bihar with a dismal rate than the collective national average. According to the 2011 census the national average of literacy in India is 74.04%. Kerala marks the top in the list with 94% of literacy and Bihar with a much less 61%.

There is also a disparity between the male literacy and female literacy rate. The national average of male literacy rate is 80.9%, whereas the female literacy rate is much lower marking just 61.8%. There is no doubt that the literacy rate and education indicate the growth and development of the nation. Therefore, strong measures are being taken by the Centre and State governments to improve the primary education all over the country.

1.1.2.2.2. Poverty and Unemployment

It is an unfortunate fact that poverty is widespread in India. Before 2005, the official government measure to calculate poverty was based on food security and it was defined from per capita expenditure for a person to consume enough calories and be able to pay for associated essentials to survive. In 2005 the government adopted the Tendulkar

[24] Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, *National Health Profile 2015*, p. 28.

methodology which moved away from the 'calorie anchor' to 'a basket of good' and used rural, urban and regional minimum expenditure per capita necessary to survive.[25] According to this methodology the Planning Commission of India in its 2001-2012 evaluation admits that 25.7% of the population in the rural and 13.7% in the urban regions are living under poverty line.[26]

Fortunately, employment has grown at an average annual rate of .2% in India from 28.7 millions in 2010 to 28.99 millions in 2011. Featuring employment as an element of development in the country, and thanks to the new planning and investment, India now is considered to be one of the fastest growing economies in the world.[27]

As far as the sanitation is considered, India still lacks adequate facilities for clean drinking water, toilet facilities, drainages and hygienic household atmosphere to live in.[28] The vulnerable slum population in India as per the census 2011 was 93.05 million (9.3 crores[29]) and it was projected to be raised to 104.66 million (10.46 crores).[30]

1.1.2.3. Health Indicators

Health indicators try to measure various aspects of the health of the population. These indicators are analysed over a time so that it can note the particular change in diverse sectors of the population. These variations will eventually contribute to the planning for a better healthcare system in the country. These indicators include the prevalence of the common communicable and non communicable diseases, morbidity and associated mortality, health risks and performance related national health programmes in the country. It also provides an overview of reproductive and child health in India and the important information about National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS).[31]

[25] Ibid, p. 28.
[26] Ibid, pp. 28; 34-37.
[27] Ibid, pp. 28; 38.
[28] Ibid, pp. 40-46.
[29] 10 millions are equal to 1 crore; 10 lakhs make 1 million. This terminology for calculation is commonly used in India.
[30] Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, *National Health Profile 2015*, p. 49.
[31] Ibid, p. 55.

One of the greatest health challenges in India for centuries is Malaria. Over the time this disease has been diversified under the pressure of developments into various ecotypes. These ecotypes have been characterised as forest malaria, urban malaria, rural malaria, industrial malaria, border malaria and migration malaria. Though the cases of infection and death toll are declining over the years, it remains still a challenge in the country. Another great concern for public health in India in recent years is caused by Dengue and Chikungunya transmitted by Aedes mosquitoes.[32] Every year thousands of individuals are infected and add to the burden of healthcare. There are also cases reported in large number for swine flu (H1N1), Rabies, Acute Encephalitis Syndrome, Tetanus, Meningococcal Meningitis, Pulmonary Tuberculosis and Diphtheria on account of their high risk of fatality, though the number of cases and death toll are decreasing as medical care advances.[33]

The years past the independence of the country and particularly the past few decades have witnessed a gradual growth in economic development, nutritional status, fertility and bringing down mortality rates and consequently the disease profile of the country has changed notably. Though the communicable disease burden of the country is being controlled gradually we cannot deny the accelerated rise in the prevalence of chronic non communicable diseases (NCDs) such as cardiovascular diseases, diabetes, chronic obstructive pulmonary disease, cancers, mental health disorders and injuries. Based on available data cardiovascular diseases (24%), chronic respiratory diseases (11%), cancer (6%) and diabetes (2%) are the chief causes of mortality in India.[34] Being a health indicator it is also noted that the total number of disabled persons in the country according to the 2011 census is 2,68,10,557. It is also a surprising fact that the suicide rates are increasing significantly and the maximum number of the suicide cases is reported between the age group 15-29 (46,368 cases in 2013). From 2005 to 2015 there was an increase of 17.3% in suicides in the country. In 2015 there were 1,33,623 suicide deaths reported all over the country.[35] The death toll other than natural calamities and diseases is also notable of which 34.3% are killed in road accidents and 2.2% are killed

[32] Ibid, p. 55.
[33] Ibid, p. 57.
[34] Ibid, p. 57.
[35] Ibid, p. 58; 133-134; refer also *Accidental Deaths and Suicides in India 2015* (latest comprehensive report available), National Crime Records Bureau (NCRB), Ministry of Home Affairs, at www.ncrb.gov.in accessed on 04.04.2017.

by snake bite.[36] Diseases accelerated by the contamination of natural resources like water, air, soil and common food products contribute much to the disaster. Later as I treat the environmental concerns in healthcare we make reference to this point in particular.

1.1.2.4. Multi-Lingual Nature

One of the most important features of the Indian society is that there are a variety of languages spoken in the country. According to a "Linguistic Survey" conducted in India there are 179 languages and more than 1652 dialects being used in the country. It is also noted that certain dialects spoken by the tribal communities are not yet registered. Officially there are 22 major languages which are included in the Eighth Schedule of the Constitution of India.

The first linguistic survey was done under the moderation of the British Governance in India between 1894 and 1928. The person headed the group was the famous Irish linguistic scholar George A. Grierson. From his study and research for 34 years he registered 364 Indian languages.[37] Another comprehensive study concluded in 2013 under the leadership of Ganesh Devi, who supervised the project of *Bhasha*[38] *Research and Publication Centre*, Vadodara, Gujarath state, with more than 3000 volunteers who worked for four years notes that there are 780 languages existing in India. The study also states that in the past 50 years India has lost around 220 languages and dialects and another 150 will disappear in the next half century.[39]

Below are given the 22 languages officially recognised by the Indian Constitution, followed by the States and Union Territories of India and the major languages spoken in those regions.

[36] Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, *National Health Profile 2015*, pp. 136; 141-142.
[37] David Lalmalsawma, *India Speaks 780 Languages, 220 Lost in Last 50 Years – Survey*, September 7, 2013, accessed on 31.03.2017 from http://blogs.reuters.com/india/2013/09/07/india-speaks-780-languages-220-lost-in-last-50-years-survey/; the publication of Grierson is available at http://dsal.uchicago.edu/books/lsi/ accessed on 31.03.2017.
[38] *Bhasha* in Hindi and in many other Indian languages means "language".
[39] David Lalmalsawma, *India Speaks 780 Languages, 220 Lost in Last 50 Years – Survey*.

Table 3: Languages in VIIIth Schedule of the Constitution of India[40]

Sr. No.	Name of the Language
1	Assamese
2	Bengali
3	Gujarati
4	Hindi
5	Kannada
6	Kashmiri
7	Malayalam
8	Marathi
9	Oriya
10	Punjabi
11	Sanskrit
12	Tamil
13	Telugu
14	Urdu
15	Manipuri
16	Sindhi
17	Nepali
18	Konkani
19	Dogri
20	Maithili
21	Santhali
22	Bodo

Table 4: Indian States and Their Languages[41]

Sr.No.	Name of the State	Official Language Spoken
1.	Andhra Pradesh	Telugu, Urdu
2.	Arunachal Pradesh	English, Hindi
3.	Assam	Assamese, Bodo, Bengali, Karbi
4.	Bihar	Hindi, Urdu, Bhojpuri, Magadhi, Maithili
5.	Chhattisgarh	Hindi, Chhattisgarhi
6.	Goa	Konkani, Marathi, Portuguese, English
7.	Gujarat	Gujarati, Hindi, Urdu
8.	Haryana	Hindi, Punjabi
9.	Himachal Pradesh	Hindi, Pachari

[40] *VIII schedule, Constitution of India*.
[41] *VIII schedule, Constitution of India*, with the bifurcation of the new states after the constitutional observation, the list is modified later. Accessed on 03.04.2017 from http://www.mapsofindia.com/culture/indian-languages.html.

10.	Jammu & Kashmir	Kashmiri, Dogri, Urdu
11.	Jharkhand	Hindi
12.	Karnataka	Kannada
13.	Kerala	Malayalam
14.	Madhya Pradesh	Hindi
15.	Maharashtra	Marathi, Konkani
16.	Manipur	Manipuri, Maithili
17.	Meghalaya	Khasi, Garo, English
18.	Mizoram	Mizo, English
19.	Nagaland	English
20.	Orissa	Oriya
21.	Punjab	Punjabi
22.	Rajasthan	Hindi, Rajasthani
23.	Sikkim	Nepali
24.	Tamil Nadu	Tamil
25.	Telangana	Telugu, Urdu
26.	Tripura	Bengali, Kokborok
27.	Uttarakhand	Hindi, Urdu
28.	Uttar Pradesh	Hindi, Urdu
29.	West Bengal	Bengali

Table 5: Union Territories and their languages[42]

Sr. No.	Union Territories	Official Language
1	Andaman & Nicobar Islands	Malayalam, Tamil, Telugu, English, Hindi
2	Chandigarh	Punjabi, Hindi
3	Dadara & Nagar Haveli	Gujarati
4	Daman & Diu	Gujarati, English
5	Lakshdweep	Malyalam
6	Pudduchery	Tamil, French
7	Delhi	Hindi, English, Urdu, Punjabi

After the Independence of India, it was on 7th June 1955 the first official language commission under the chairmanship of Balasaheb Gangadhar Kher made the recommendation that the official language of India is to be changed from English to Hindi. But the Southern states and North Eastern state West Bengal protested against this move arguing that it is the Hindi imperialism of the North. To resolve the situation

[42] Ibid.

then Prime Minister Pandit Javaharlal Nehru withdrew the decision to make Hindi the official language. Again it fuelled protests from the Northern Hindi speaking regions and they wanted to withdraw the decision to make English the official language of India. At the end the resolution is made with a "Tri-Lingual" formula, i.e., English would be the official language for national and international communications. Hindi is given the grade of national language and the regional and vernacular languages are encouraged to foster culture and literature.[43]

1.1.2.5. Religious Context

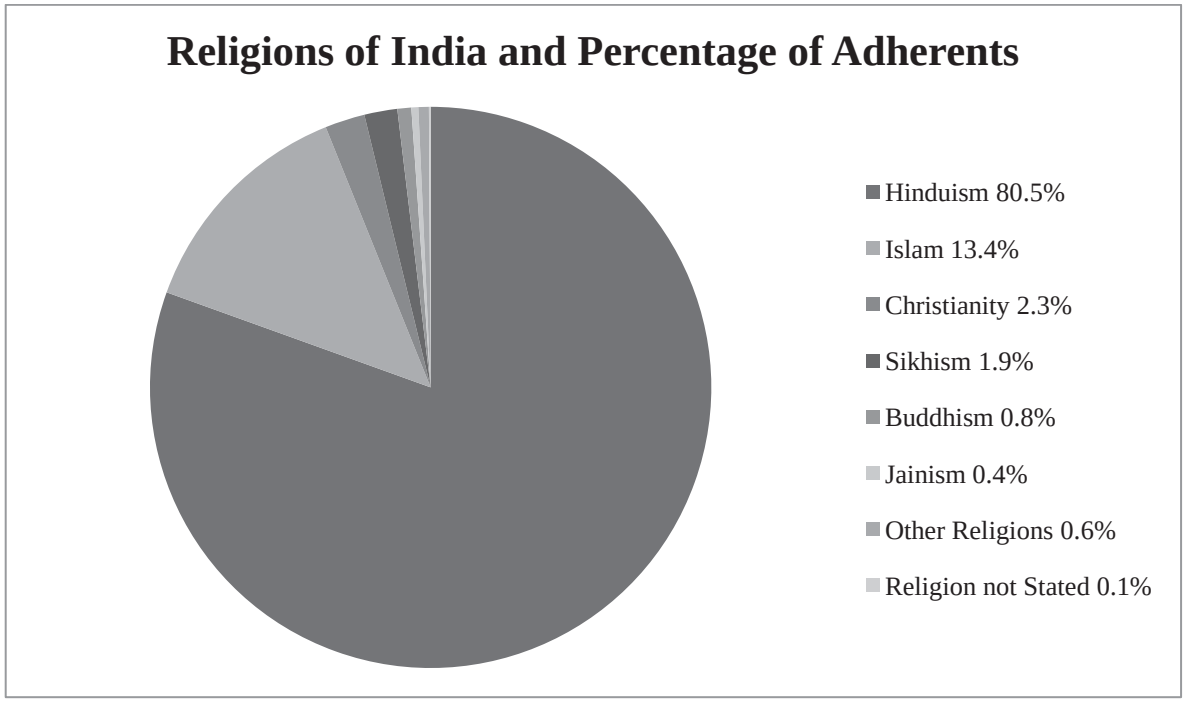
Religion and its influence on the people is an exceptional matter in the history and culture of India. The county has been uniquely characterized by its diversity in religious beliefs and practices from pre-historic period. The Indian subcontinent is the cradle of world's four major religions namely Hinduism, Buddhism, Jainism and Sikhism. Though the life of the people is very much influenced by the religion they follow, religious tolerance and harmony among this diversity is an established reality by law and custom. The constitution of India has declared the right to freedom of religion and worship and it is seen as a fundamental right.[44]

As per the 2011 Census of India 80.5% of the Indian population practices Hinduism that constitutes 90% of the world Hindu population. The second largest religion in India is Islam having 13.4% of the entire population. Christianity, Buddhism, Sikhism, Jainism, Zoroastrianism, Baha'i religion and other smaller groups and atheists constitute the remaining 6% of the population of India.[45]

The existing religious composition of the population in India according to the 2011 Census of India is given below:

[43] *FYBA Foundation Course: Multi-Cultural Nature of India*, Mumbai: University of Mumbai, 2007, pp. 6; 33-34.
[44] Durga Das Basu, *Introduction to the Constitution of India*, (21ed.), India: LexisNexis, 2013, p. 124.
[45] Source: *Census of India 2011*. "Population by Religious Community – 2011", Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India, retrieved from http://www.censusindia.gov.in/Census_Data_2001/India_at_Glance/religion.aspx, on 04.04.2017.

Figure2: Religions in India



1.1.2.5.1. Hinduism

Hinduism is one of the very old religions of the world, which emerged from the *Vedic* religions of ancient India. Whether it can be called a single religion or a cluster of different similar religious traditions inculcating the traditions of Pantheism, Monotheism, Animism, Henotheism, Polytheism, Panentheism, Monism, Atheism, Agnosticism, and Gnosticism is being discussed by philosophers and sociologists of religion.[46]

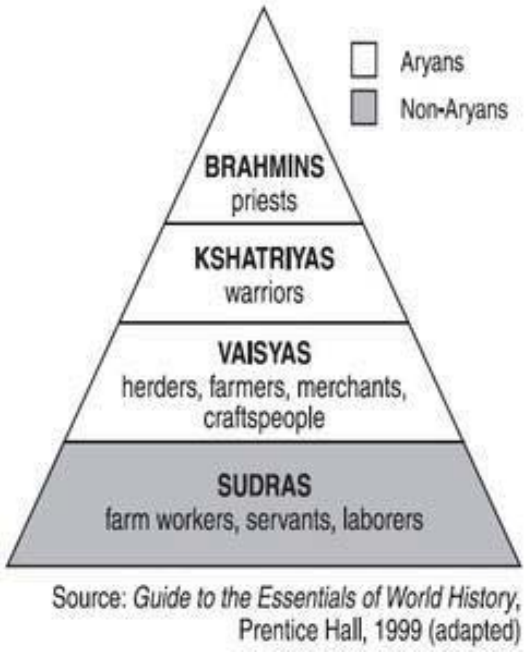
It is argued that the present Hinduism as a religious unity emerged in response to Buddhism and Jainism, movements began in Northern Part of Indian peninsula around 500 BCE that denounced the Caste (rigid religious divisions) system, which was a prominent marker of Vedic religions.[47] The caste system still remains as an integral part of the Hindu religion in its beliefs and practices.

[46] Peter C. Rogers, *Ultimate Truth, Book I*, IN, Bloomington: Authorhouse, 2009, p. 109; Sitansu Chakravarti, *Hinduism a Way of Life*, Delhi: Motilal Banarsidas Publishers, 1991, p. 71; Ninian Smart, "Politheism", *Encyclopaedia Britannica Online*, 1.22.2016, retrieved from https://www.britannica.com/topic/polytheism, on 04.04.2017; Devdutt Pattanaik, *The Man Who Was a Woman and Other Queer Tales of Hindu Lore*, New York: Harrington Press, 2002, p. 38.
[47] Walter D. Penrose Jr., *Hinduism*, 2015, retrieved on 04.04.2017 from http://www.glbtqarchive.com/ssh/hinduism_S.pdf.

1.1.2.5.1.1. The Caste System

The caste system in India and Nepal originated more than two to three thousand years ago. An ancient written document called *Manusmrti* dating back to 1000 years before Jesus Christ was born, has the credit of being the most important and authoritative book on Hindu laws. It "acknowledges and justifies the caste system as the basis of order and regularity of society".[48] It was the occupation of the people that distinguished them in the earlier stage, later it became hereditary. Each person then was born into a certain caste, a social status which cannot be changed.[49] The four primary castes in Hinduism are *Brahmins* (the priestly class), *Kshatriya* (warriors, nobility and administrators), *Vaisya* (farmers, traders and artisans) and *Shudra* (tenant farmers and servants). The people who were born outside of (and below) caste system were called outcastes or "untouchables".[50] The origin of the people according to their caste is defined by the part of body of God Brahma from which they emerged. Bhahmins are born from the face of Brahma, Kshatriyas from the arms, Vaishyas from the thighs and Sudras from the feet. The outcastes were considered to be born out of the dust from his feet or outside his body.

Figure 3: the Pyramid of Caste System in India



Source: *Guide to the Essentials of World History*, Prentice Hall, 1999 (adapted)

[48] BBC, *What is India's Caste System?,* 20 July 2017, retrieved on 22.07.2017 from http://www.bbc.com/news/world-asia-india-35650616.
[49] Kallie Szczepanski, *History of India's Caste System*, ThoughtCo., August 9, 2016, retrieved from https://www.thoughtco.com/history-of-indias-caste-system-195496, on 04.04.2017.
[50] Ibid.

Figure 4: God Brahman and the Origin of Castes

1.1.2.5.1.2. The Theology of Caste System in Hinduism

The *chakra* (wheel/ cycle) theory of life in Hinduism[51] depicts every life transforms to another and it depends on the way one lives his present life. After each life the soul is reborn into a new body. A particular soul's new body/ form depends upon the virtuousness of its previous life. Thus a virtuous *Shudra* person can be reborn into the *Brahmin* Caste in the next life.[52] The souls may be reborn in the human society in different castes as well as if they were malicious can be born also as other animals. Therefore, having respect to the souls in them many of the Hindus practice vegetarianism. The whole idea is that in the present life one has to struggle hard to live a virtuous life for his better rebirth.

[51] Hindus believe in reincarnation, *chakra* means wheel or cycle, therefore, the cyclic life of a being receiving life one after another till *moksha*, the absolute blissful oneness with the Supreme Being.
[52] Kallie Szczepanski, *History of India's Caste System*.

The caste system in India is very much prevalent in marriage, food habits and religious worships. Wedding across the caste lines was strictly forbidden; therefore, once they didn't find sufficient partners most people married from their sub-castes or *Jati*.[53]

There was also discrimination in the food habits. Anyone could receive meals from Brahmins but it was considered to be pollution if the Brahmins accepted certain food from a lower caste person. To note the extreme, if an untouchable dares to take water from a public well the well becomes polluted. Not even his shadow should fall on the upper castes, because it would make them polluted.

In the Hindu temples all the three higher castes were allowed to enter for worships; where always the Brahmin priest was the official minister. In most of the temples the lowest caste Shudras were not allowed to offer sacrifices. To tell the extreme, they were not even allowed to set their foot on the temple premises.[54] The people who violated the social norms or religious laws were also made untouchables. There on their descendents too would fall in the same category of social structure. They were so impure that their contact with any other caste person would contaminate the other person and thus the contaminated person should wash his clothes and make a ritual bath for purification.

It is also noted that there exists the caste system among the Muslims, Christians and other religions of India as an influence of the Hindu religion and their traditional family lineage, even after their conversion to these religions.[55] For example the Islam in India has Sayed, Sheikh, Mughal, Pathan and Qureshi castes and the Christians too observe caste systems in various parts of the country.

When India received independence from the British rule, the new government instituted laws to protect the "scheduled castes and scheduled tribes" (SC/ST) including both untouchables and groups who lived a traditional life style. These measures include the reservation system for these marginalized and less advantaged groups. There were also punitive measures taken if anyone made discrimination in the name of proper caste. It is

[53] Ibid.
[54] Ibid.
[55] Devdutt Pattanaik, "Beyond Hinduism: Is Caste a Religious or a Regional Problem?", *Scroll.in*, Jan. 31, 2016, retrieved on 02.03.2017 from http://scroll.in/article/802759/beyond-hinduism-is-caste-a-religious-or-a-regional-problem.

thus observed that the caste system in India today has become a political category than a social or religious hierarchy.[56]

1.1.2.5.1.3. Major Sects in Hinduism

Hinduism is basically called *Sanathana Dharma* means "eternal faith". It is a family of religious ways of life having four major denominations Saivism, Shaktism, Vaishnavism and Smartism, comprising of nearly a billion followers worldwide.[57] Each has a variety of guru lineages, religious leaders, priests, sacred scriptures, monastic communities, schools of philosophy, pilgrimage centres and thousands of temples. These denominations are religions in itself, but in the common form of Hinduism they share a vast heritage of culture and belief system like *karma**, *dharma**, reincarnation, all-pervasive Divinity, worship in the temple, multitude of deities, traditional *guru-shishya** system of education, the scriptural authority of *Vedas**.[58]

Hinduism generally uses the symbol of lotus flower, as the way of life of the followers. As the lotus arises from the mud and blossoms in the sunlight in purity and perfection the individual souls from its earthly inclinations should liberate itself to the Supreme Divinity. This unfolding of one's true nature and finding realization in the Divinity is process of reincarnation until it reaches *moksha** the fulfillment or blissful union in the Divinity.

1.1.2.5.1.3.1. Saivism[59]

In Saivism the Supreme God is *Siva*, the Compassionate One.[60] Under the leadership of a *satguru* (a spiritual master) the saivites follow their way of life esteeming philosophy

[56] Kallie Szczepanski, *History of India's Caste System*.
[57] Kauai's Hindu Monastery, *Basics of Hinduism: The Four Denominations of Hinduism*, retrieved on 05.04.2017 from https://www.himalayanacademy.com/readlearn/basics/four-sects. This article is a summary of the book written by Satguru Sivaya Subramuniyaswami named *Dancing with Siva: Hinduism's Contemporary Catechism*, Himalayan Academy Publications, 2003.
[58] Kauai's Hindu Monastery, *Basics of Hinduism: The Four Denominations of Hinduism*.
[59] For more details on the main sects of Hinduism Saivism and Vaishnavisam pleae ref.: https://www.britannica.com/topic/Hinduism/Vaishnavism-and-Shaivism. Accessed on 12.06.2017.
[60] The *Trimurti* (Triad Godhead) in Hinduism are Brahma, Vishnu and Maheshvara (Siva). They have the functions of Srshti (creation), Sthithi (maintenance) and Samhara (destruction). Siva also comes as a destroyer or a fierce God; hence, the word *Compassionate Siva*.

and self discipline. They practice yoga and worship in the temple to be in union with Siva within.

1.1.2.5.1.3.2 Shaktism

Shaktas worship *Devi*, the Divine Mother or *Shakti* generally the divine consorts of other Gods. Shaktism is also known for its tantric form of worships. Apart from this, kundalini *yoga*, rituals to call forth cosmic forces, real magics and holy diagrams are used in their worships.

1.1.2.5.1.3.3. Vaishnavism

Vaishnavites have Vishnu and his 10 incarnations as their deities, especially Krishna and Rama. Vaishnavites are said to be dualistic in their philosophy. They are pious and very devotional and this religion is rich with saints, pilgrim centres, temples and scriptures.

1.1.2.5.1.3.4. Smartism

Smartas are liberal devotees, they are nonsectarian in their belief. The deities are Ganesha, Siva, Vishnu, Surya, Sakti and Skanda. They accept all Hindu Gods. They have a contemplative lifestyle, following a philosophical meditative path. They believe that right knowledge can bring one's oneness with the Supreme Reality.

The gist of comparison between these religions by Satguru Sivaya Subramuniyaswami is given as follows:

> Saivism, Shaktism, Vaishnavism and Smartism: among these four streams, there are certainly more similarities than differences. All four believe in karma and reincarnation and in a Supreme Being who is both form and pervades form, who creates, sustains and destroys the universe only to create it again in unending cycles. They strongly declare the validity and importance of temple worship, in the three worlds of existence and the myriad Gods and devas residing in them. They concur that there is no intrinsic evil that the cosmos is created out of God and is permeated by Him. They each believes in maya* (though their implications differ somewhat),

> and in the liberation of the soul from rebirth, called moksha, as the goal of human existence. They believe in dharma and in ahimsa*, non-injury, and in the need for a satguru to lead the soul toward Self Realization. They wear the sacred marks, tilaka, on their foreheads as sacred symbols, though each wears a distinct mark. Finally, they prefer cremation of the body upon death, believing that the soul will inhabit another body in the next life. While Hinduism has many sacred scriptures, all sects ascribe the highest authority to the Vedas and Agamas*, though their Agamas differ somewhat. [61]

1.1.2.5.1.4. Hindu Perspective of Bioethics

Hindu bioethics finds its expressed version specifically in the Ayurvedic and Siddha traditions of Indian Medicine. Philosophically the belief in rebirth and Karma are central principles in defining the life of a human being. Unlike the Judaic, Christian and Islamic view of linear life the Hindus have a view of a cyclic life i.e., life goes on being reborn and re-dead in different forms until it is totally purified and attains the liberation in the Cosmic Consciousness.[62] What a person does in each life determines the nature and quality of the next life and thus comes the principle of Karma, i.e. every action and thought whether good or evil imprints an effect in the soul and that is carried to the next life. Since there is no particular theories on life having a beginning, the Hindu thought always have the assumption that it has been existing forever and the Karma which is carried out through the lives is passed on until it is fully liberated from the clutches that binds to life. This liberation is possible only through actions and thoughts that is virtuous and take one nearer to the ultimate goal of life. Therefore, a person who is newborn already had previous lives and a termination of pregnancy would mean sending the soul back to the karmic cycle of life again.[63]

Ayurveda and Siddha, which are mainly formed in the Hindu traditions, have a vision of the human person as a combination of mind, soul and body, and hence, there is a holistic approach in medical care. This necessitates a treatment not just on the physical dimension but seeing the person as a whole, because he is part of a

[61] Kauai's Hindu Monastery, *Basics of Hinduism: The Four Denominations of Hinduism.*
[62] S. Radhakrishnan, *The Principal Upanisads*, London: Allen and Unwin, 1968, pp. 113-145.
[63] Harold Coward and Tejinder Sidhu, "Bioethics for Clinicians: 19. Hinduism and Sikhism", *Canadian Medial Association Journal*, 163(9), pp. 1167-1170 retrieved on 12.04.2016 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC80253/.

cosmic system. I explain the traditional ethical views in Ayurvedic practice of medicine in the following chapter.

1.1.2.5.2. Islam

Islam is the second largest religion of India having around 175 million people adhering to it, which is the 13.4% of the entire population of India. It is said that Islam arrived in India in the 7th century through the Arab traders and not by invaders. Quoting H. G. Rawlingson and B. P. Sahu, Head of the Department of History of the Delhi University, Atul Sethi states in his article that, in the last part of the seventh century Arab Muslims began settling down in the South Indian coastal area. They were allowed to marry Indian women and were treated with respect. They also began to occupy positions of prominence in the areas of their settlements by the 8th and 9th Centuries.[64]

1.1.2.5.2.1. Ethics in Medical Care: An Islamic Perspective

Abdul Rahman et al. describe Quranic ethics as a perfect model for all mankind, all professions and all time. They articulate this view in saying that a Muslim physician derives his profession from Islamic teachings and philosophy and for thousands of years ethics has been recognized as an essential requirement in the making of a physician.[65] The Quranic codes of medical ethics include guidelines for the physician's behavior and attitude, both at the personal and professional levels, which should also guide him in his private life. A person who doesn't possess moral values in private life cannot be trusted in professional activities as well, even with the highest professional and technical qualifications. It is seen to be impossible to have two ethical standards.

Based on several Quranic verses Abdul Rahman et al. state that the Muslim physician must believe in God and in Islamic teachings and practice, both in private and public life. He must be grateful to his parents, teachers and elders. He must be humble, modest,

[64] H. G. Rowlingson, *Ancient and Medieval History of India*, Delhi: Bharatihya Kala Prakashan, 2001; Atul Sethi, "Trade Not Invasion Brought Islam to India", *Times of India*, June 24, 2007, retrieved on 04.04.2017 from http://timesofindia.indiatimes.com/india/Trade-not-invasion-brought-Islam-to-India/articleshow/2144414.cms?referral=PM; refer also M. Burhanuddin Qasmi, "Origin of Muslims in India", *Asian Tribune*, 22 April 2008 retrieved on 04.04.2017 from http://www.asiantribune.com/node/10670.

[65] Abdul Rahman, C. Amine and Ahmed Elkadi, "Islamic Code of Medical Professional Ethics", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, p. 120. Pp. 120-126.

kind, merciful, patient and tolerant. He must follow the path of the righteous and always seek God's support. The physician equipped with the above-listed virtues is capable of complying with the needed professional requirements.[66] The physician should also abide by the legal regulations of the profession of the country not violating the Islamic teachings. Recognizing God as the owner of both physician and patient it is logical that the care provided to his patient has to be in accordance with God's guidelines.[67]

A subject of great importance is the subject of life. Life is given by God and cannot be taken away except by Him or with His permission. Quran says: "It is he who created death and life, that He may try which of you is best in deed" (Quran 67/2). It further states: "…whoever kills a human being in lieu of another human being nor because of mischief on earth, it is as if he has killed all mankind and whoever saves the life of a human being, it is as if he has saved the life of all mankind" (Qumran 5/32).[68] A physician should therefore, respect life in all its forms, from beginning (conception) to death. There is no termination of pregnancy (if it doesn't threaten directly the life of the mother) and terminating the patient in his/her deplorable condition of illness.[69]

The humanitarian aspect of medical profession is never to be neglected or overlooked. The healthcare professional should offer sufficient help to the patient regardless of the financial ability or ethnic origin. On doing such service to the needy Quran says: "and they feed for the love of God, the indigent, the orphan, and the captive, (saying) 'we feed you for the sake of God alone: no reward do we desire from you, nor thanks" (Quran 79/8-9).[70]

1.1.2.5.2.2. Oath of a Muslim Physician

This oath is adopted by the Islamic Medical Association of USA and Canada. It was promulgated in the *Convention Bulletin of Islamic Medical Association*.

"Praise be to Allah (God), the teacher the unique, Majesty of the heavens, the Exalted, the Glorious, Glory be to Him the Eternal Being who created the universe and all

[66] Ibid, p. 121.
[67] Ibid, p. 122.
[68] Ibid, p. 122.
[69] Ibid, p. 122.
[70] Ibid, p. 123.

creatures within, and the only being who contains the infinity and the eternity. We serve no other God besides Thee and regard idolatry as an abominable injustice.

Give us the strength to be truthful, honest, modest, merciful and objective. Give us the fortitude to admit our mistakes, to amend our ways, and to forgive the wrongs of others.

Give us the wisdom to comfort and counsel all towards peace and harmony.

Give us the understanding that ours is a profession sacred that deals with your most precious gifts of life and intellect.

Therefore, make us worthy of this favored station with honor, dignity and piety so that we may devote our lives in serving making poor or rich, wise or illiterate, Muslim or non-Muslim, black or white, with patience and tolerance, with virtue and reverence, with knowledge and vigilance, with Thy love in our hearts and compassion for Thy servants, Thy most precious creation.

Hereby we take this oath in Thy name, the Creator of all the Heavens and the earth and follow Thy counsel as Thou have revealed to Prophet Muhammad.

Whoever kills a human being, not in lieu of another human being nor because of mischief on earth, it shall be as if has killed all mankind. And if he saves a human life, it shall be as if he has saved the life of all mankind."[71]

1.1.2.5.3. Christianity

Christianity exists in India from 52 A.D. It is believed that the Church has its beginning in India with the advent of St. Thomas, disciple of Jesus.[72] There are 3 Catholic traditions (Rites) and more than 30 other sects and denominations of non Catholic Christians in India. According to the Census 2011 Christians are 2.3% in the total population of India.[73] St. Thomas arrived at Musiris (Kodungallur) in the Southern coast

[71] Ibid, pp. 124-125.
[72] Erwin Fahlsbusch, "Syrian Orthodox Churches in India", in *The Encyclopaedia of Christianity*, Vol.5, Grand Rapids, MI: Wm.B. Eerdmans, 2008, p. 285., also Mathew N.M., *St. Thomas Christians of Malabar through Ages*, Thiruvalla: CSS, 2003.
[73] Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India, *Religion: Census of India 2011*, retrieved on 10.06.2017 from http://censusindia.gov.in/Census_And_You/religion.aspx.

of India and it is situated in the state of Kerala which is today the home of St. Thomas Christians.

There are two rites of St. Thomas Catholic tradition called Syro-Malabar Church and Syro-Malankara Church. Then later from the 15th Century with the arrival of the Portuguese, grew also the Roman Catholic Latin tradition. There exist a number of non Catholic Christian traditions all over India. Apart from these there are also a number of Pentecostal groups, Yahweh Witnesses and so on. The concentration of Christians is seen more in Kerala where the third largest religious community is that of Christians (18%) after Hindus and Muslims. Then there are numerous Christians in the Konkan coast and North East India. Christianity has contributed much to the growth of India especially in the areas of education and healthcare. At present it possesses numerous educational institutions, centres of social development, hospitals, clinics, dispensaries etc., most of them are in the rural areas.[74]

The culture of Indian Christianity can never be generalized as different traditions exist in Christianity itself in India. The culture and traditions of Syrian Christians in Kerala are extremely different from that of the Christians in other parts of the country. The Goan Christians have their tradition from 16th century as they had received the Christian faith from the Portuguese missionaries like Francis Xavier, John D. Britto and so on. The Goan Christians have adopted more of the Western lifestyle and culture. The Christians in North East India are still different with their protestant influence and contextual lifestyles.

1.1.2.5.3.1. Christianity and Bioethics

It can be said that no religion has taken bioethics as seriously and propagated it as it is done by Christianity.[75] The main source of Christian ethics comes from the Holy Bible. Secondly, there are traditional teachings of doctors in Christian theology and philosophy and the documents promulgated by the Church.[76] The Catholic Church views the saving

[74] Abraham Thomas Vazhayil, *Christians in Secular India*, Vancouver: Fairleigh Dickinson University Press, 1974, pp. 89-91, 178-182.
[75] Edwin C. Hui, "Bioethics in Christianity", in, Anne L.C. Runehov, Luis Oviedo (eds.), *Encyclopedia of Sciences and Religions*, Dordrecht: Springer, 2013, pp.213-216.
[76] In the case of bioethics the Catholic Church and other non Catholic Churches and denominations have different ethical standpoints on particular issues. Therefore, I would like to mention only a few general grounds here.

presence of Christ and His Church in a variety of ways in its healthcare initiatives: by testifying to transcendent spiritual beliefs concerning life, suffering and death, by humble services to humanity and especially to the poor, by medical competence and leadership and by fidelity to the Church's teachings while ministering to the good of the whole person.[77] Catholic Church also believes that every patient, regardless of the extent of his physical or psychic disability, has a right to be treated with a respect consonant with his dignity as a person.[78] Every medical and surgical procedure should intend the total good of the patient. Catholic Church also urges that from the moment of conception life must be guarded with utmost care. Any deliberate procedure to terminate pregnancy or to put to an end a suffering patient is immoral.[79] There are also diverse directives given in the documents *Catechism of the Catholic Church*, *Gaudium et Spes*, *Humanae Vitae*, *Evangelium Vitae*, *Dignitas Personae*, *Donum Vitae*, *Deus Caritas Est* (Encyclical published by Pope Benedict XVI) and several documents published by the Pontifical Academy for Life, Pontifical Council for the Family, and by Pontifical Council for the Pastoral Assistance to Healthcare Workers.[80]

Non Catholic Christians (Protestants) reflect a notable diversity in their ethical and religious positions and therefore it is not possible to make a general medical ethics of these groups. Part of the chief commitment of Protestantism is a respect for the lay person's capacity to develop and articulate his or her own moral and religious positions. Paul Ramsey explains certain common features which can be found in the protestant groups regarding this topic. They are: covenant fidelity, faithfulness defined by covenant, the role of all, including lay persons in decisions and the uniqueness of the religious perspective.[81]

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[77] United States Catholic Conference, "Ethical and Religious Directives", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, p. 58. pp.58-64.

[78] Pope John XXIII, *Encyclical on Establishing Universal Peace in Truth, Justice Charity and Liberty Pacem in Terris*, April 11, 1963, no. 11.

[79] Vatican Council II, *The Pastoral Constitution on the Church in the Modern World Gaudium et Spes*, December 7, 1965, no.51.

[80] The Prefect of the Congregation for the Doctrine of Faith Card. William Levada explains the role of *Magisterium* (the Teaching Authority of the Catholic Church) in Bioethics, ref.: http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20070208_levada-dallas_en.html. Accessed on 15.05.2017. More documents on Catholic Bioethics are found in https://www.ncbcenter.org/resources/church-documents-bioethics/. Accessed on 15.06.2017.

[81] Paul Ramsey, "Patient as a Person", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, pp.65-70.

There are also diverse methodologies used in Christian reasoning to morally evaluate situations of specific concerns in the medical field. There are methodologies more adopted on the basis of natural laws by the Catholic Church and on the other hand there is a concentration on human communities and person by the protestant Churches. This weakens of course a universal ethical appeal. Scripture, theology, philosophy, anthropology and social sciences are used in these methodologies to explain and ethically evaluate situations of specific concerns. In both the cases the concept of conscience is a central point of discussion and the position of a good conscience can decide the ethical value of a person in his decision making.[82]

In the practical sense of implementing bioethics in India the leading institutions St. John's Medical College, Bangalore (Catholic) and Christian Medical College, Vellore (non-Catholic) are giving a good stand with their specific bioethical concerns and taking initiatives in propagating the value in the healthcare system of the country. In addition to this the Christian healthcare institutions explicitly proclaim the ethical norms with regard to their service and they stick to the policies regarding the Christian teachings.

1.1.2.5.4. Sikhism

Sikhism has its origin in India around 500 years ago.[83] They are mainly found in the Punjab state in India. Sikh religion is the 4th largest religion in India and the 5th largest religion in the world. According to the 2011 Census of India the Sikhs constitute 1.9% of the Indian population counting 20.8 million individuals. Sikh population in India is found in Punjab, Union Territory of Chandigarh, New Delhi, Haryana, Utharakhand, Rajasthan, and Jammu and Kashmir. Though a minority community in India, the contribution Sikh community has made to the growth of India in the field of national defense, sports, politics, economic growth etc. is praiseworthy.[84]

[82] Lisa Sowle Cahill, "Within Shouting Distance: Paul Ramsey and Richard McCormick on Method", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, pp.70-82.
[83] Harold Coward and Tejinder Sidhu, "Bioethics for Clinicians: 19. Hinduism and Sikhism", *Canadian Medial Association Journal*, 163(9), pp. 1167-1170 retrieved on 12.04.2016 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC80253/.
[84] *Punjab Data: Sikh Population in India* retrieved on 12.03.2017 from http://www.punjabdata.com/Sikh-Population-In-India.aspx.

Sikh religion is founded by its first master Guru Nanak who was a born Hindu. The word *Sikh* means *learner* or *disciple*.[85] This tradition of Gurus passed onto 10 Gurus till Guru Gobinth Singh and he passed the Guruship to the Sacred Scripture of Sikhs called *Guru Grandh Sahib*. This book contains the writings of Sikh Gurus as well as the sacred writings from other religions because Sikh religion has no difficulty in accepting other religious principles as they believe that all religions are equal. Though having this view the *Guru Grandh Sahib* also states that, "I do not make pilgrimages to Mecca, nor do I worship Hindu sacred shrines. I serve the One Lord, and not any other. I do not perform Hindu worship services, nor do I offer the Muslim prayers. I have taken the one formless Lord into my heart; I humbly worship him there".[86] Therefore, though there are inclusive elements seen in Sikh faith regarding the acceptance of the principles from other religions, it tries to keep its specific identity in worship and religious life style.[87]

1.1.2.5.4.1. Sikh Bioethics

It is said that the Hindu and Sikh bioethics are different from the contemporary "right based" secular bioethics. These traditions are grounded on the religious beliefs and cultural values and primarily there is a "duty based" approach to bioethics.[88]Although there are a lot of differences between the Hindu and Sikh communities and its traditions, these religious groups have certain common features such as the belief in Karma and rebirth, collective versus individual identity, a strong emphasis on purity and the preference for male children.[89]

In 1699 when the *Khalsa* (means pure) renewal of Sikhism began the members were to live according to the codes of conduct called *Rahit*. The members affiliated to this new movement in Sikhism were to have the five *K*'s (*Panch Kakar* in Punjabi) which include *Kesh* (long uncut hair), *Kachera* (shorts), *Kangh* (comb), *Kirpan* (dagger or

[85] *Guru* means master; *Sikh* means learner or disciple. More on Sikhism and its religious and ethical outlooks ref.: http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/sikhism-bioethics. Accessed on 16.05.2017.
[86] *Gurumukhi to English Translation and Phonetic Transliteration of Sri Guru Grandh Sahib: Sentence by Sentence*, retrieved on 15.02.2017 from http://fateh.sikhnet.com/SGGS/translation/1136.html.
[87] For more details on Sikhism and its culture and tradition, ref.: Harjot Oberoi, *The Construction of Religious Boundaries: Culture, Identity, and Diversity in the Sikh Tradition*, Delhi: Oxford University Press, 1994.
[88] Harold Coward and Tejinder Sidhu, "Bioethics for Clinicians: 19. Hinduism and Sikhism".
[89]Ibid.

sword) and *Kara* (bangle).[90] Although there is a preference for the male children, Sikh religious view prohibits the female infanticide, but leaves for the decision of the family the issues like abortion, birth control, suicide and euthanasia.[91]

1.1.2.5.5. Buddhism

Buddhism arose in the ancient kingdom of Magadha, (at present in Bihar, North India) as a result of the reforms in Hinduism and later grew into a particular religion different from the Hindu traditions. The propagator of these religious principles was Siddhartha Gauthama[92] who became a *Buddha* (an 'enlightened one') and promulgated his insights to the people of the time.[93] Though there were various sects from the primary two streams *Mahasamghika* and *Sthaviravada* originated at paresent there are mainly two branches of Buddhism existing in the world, *Mahayana* and *Hinayana* (*Theravada*).[94]It flourished in the time of king Ashoka and received the support till 13th Cent. Then with the entry of Islam in the late 12th century Buddhism got diminished its holds and became almost extinct in the country, making its presence only in a few pockets.[95] According to the last census of India conducted in 2011, the Buddhist population of India is around 0.8% of the total population of India which is constituted of 8.4 million individuals.[96]

1.1.2.5.5.1. Buddhist Faith: The Fourfold Truths and Eightfold Path

Buddhists believe in the fundamental four noble truths such as: 1. we crave and have a deep desire for the impermanent states of things, which give suffering, which are

[90] *The 5 K's*, retrieved on 12.05.2017 from http://www.amritsar.com/The%20Five%20K.shtml.
[91] Ref.: http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/sikhism-bioethics. Accessed on 16.05.2017; Aman Singh, *Bioethical Issues: A Sikh Perspective*, retrieved on 12.05.2017 from https://www.sikhphilosophy.net/threads/bioethical-issues-a-sikh-perspective.24293/; also ref.: I. J. Singh, "Bioethical Issues: A Sikh Perspective", in *The Sikh Way: A Pilgrim's Progress*, Ontario: The Centennial Foundation, 2001, pp. 19-26.
[92] Siddhartha was the prince of the kingdom called *Kapilavastu*, in today's Nepal.
[93] Vincent A. Smith, *The Early History of India from 600 B.C. to the Muhammadan Conquest Including the Invasion of Alexander the Great*, 3rd ed., London: Oxford University Press, 1914, pp. 168-169.
[94] Akira Hirakawa, Paul Groner, *A History of Indian Buddhism: From Samkyamuni to Early Mahayana*, New Delhi: Motilal Banarsidass Publications, 1993, p.2.
[95] Wendy Doniger (ed.), *Merriam-Webster's Encyclopedia of World Religions*, Springfield, Mass.: Merriam-Webster, 1999, pp.155-157; Peter Harvey, *An Introduction to Buddhism: Teachings, History and Practices*, London: Cambridge University Press, 2013, pp.194-195.
[96] *Census of India* 2011.

incapable of giving satisfaction and are painful. 2. This craving keeps us attached to *Samsara** (the constant rebirth and re-death), 3. There is an end to this suffering by attaining *Nirvana* (cessation of craving), and 4. This can be accomplished by following the eightfold path.[97]In short, these truths are called *Dukha* (suffering), *Samudaya* (arising, coming together), *Nirodhana* (cessation, confinement) and *Magga/ Marga* (path, way).[98]

The eight fold path is the right way to attain liberation of the soul according to Buddhism. They are divided into three parts *Sila* (physical control), *Chitta* (mental control) and *Praina* (intellectual development). *Sila* includes 1. Right Speech, 2. Right Action, and 3. Right Livelihood. *Chitta* includes 4. Right Exertion, 5. Right Mindedness and 6. Right Meditation. *Praina* is consisted of 7. Right Resolution and 8. Right Point of View.[99]

1.1.2.5.5.2. Buddhist Vision of Morality and Bioethics

Buddha view of Morality seems to be more or less similar to the *Nyaya-Vaisheshika*[100] Hindu philosophical tradition. It says: "actions are good or bad not in terms of the external consequences they produce, but the inner motive which prompts them. In other words, it is the purity or impurity of motive which decides whether an action is right or wrong. The Buddhists also take into consideration *vasana* (inclination) as the root cause of all actions, and hence moral judgment is to be passed on the good or evil *vasanas*, which are the sources of our actions.[101]

As opposite to Hindu tradition, the Buddhists do not believe in ritualism, caste system and the duties obliged to the people depending on their castes. Though the principle of Karma was greatly exercised, the only acts which were regarded as meritorious were

[97] Rupert Gethin, *Foundations of Buddhism*, London: Oxford University Press, 1998, p. 59.
[98] Norman K. R., *The Four Noble Truths*, 2003, retrieved on 14.05.2017 from http://www.ahandfulofleaves.org/documents/Articles/The%20Four%20Noble%20Truths_Norman_PTS_2003.pdf.
[99] *Buddhism, IAS UPSC Notes for Indian History – Indian Art and Culture*, October 27, 2015, retrieved on 12.02.2017 form http://www.nextgenias.com/2015/10/buddhism-ias-upsc-notes-for-indian-history-indian-art-and-culture.html.
[100] The Hindu philosophical system has chiefly the following schools called the Nyaya-Vaiseshika school, The Samkya-Yoga School, The Mimamsa School, The Sankara Vedanta School, The Ramanuja Vedanta School, and the Carvaka School. They have certain common elements in their systems of philosophical reasoning yet they are different in many aspects.
[101] Kedar Nath Tiwari, *Classical Indian Ethical Thought: A Philosophical Study of Hindu, Jaina and Budha Morals*, Delhi: Motilal Banarsidass Publishers, 1998, p. 28.

moral acts whereas; belief in the efficacy of rites and ceremonies was condemned as heresy.[102]Ahimsa is thus emphasized as the truest and purest spirit or virtue. As virtues of social morality Buddhism affirms the following: humility, charity, love, gratefulness, sympathy, forgiveness, veracity, justice etc. And again as virtues of individual morality it emphasizes the following: self-restraint, temperance, contentment, gentleness, celibacy, patience, purity etc.[103]

A certain particular issue like euthanasia is totally forbidden in Buddhism because it brings harm to both the active participant and the patient. The belief in reincarnation supports the position against euthanasia. Buddhism has a concentration of its view that goes beyond the physical pain. In the fully enlightened stage one can enter in *Nirvana* or *Samadhi* which is the ultimate union with the ultimate reality.[104]

1.1.2.5.6. Jainism

Jain religious system is originated in India and it is believed that it has a history from the *Sramana** period in the Indus Valley Civilization.[105] The Jains believe that the principles of the religion always existed and exist. As per the 2011 Census of India there are 4,451,753 Jains in India covering almost all the states and Union Territories except Lakshadweep. The states in India with more Jain concentration are Maharashtra, Rajasthan, Gujarath and Madhya Pradesh. They are one of the religious groups with the highest literacy rate in the country. It is measured that 94.9% of the Jains are literate in India.[106]

Jainism has a view that the founders of the religion were not divine beings but human beings who found the reality of life and got enlightened. This elevated spiritual existence is called *Kevala*, being a blissful soul, the omniscient solitude free from all sufferings due to Karma and liberated from rebirth.[107] There were 24 *Tirthankaras* (the

[102] John Mckenzie, *Hindu Ethics*, New Delhi: Oriental Book Reprint Corporation, 1971, pp. 106-107.
[103] S. Tachibana, *The Ethics of Buddhism*, London: Curzon Press, 1926, p. 95.
[104] Olinda Timms, *Biomedical Ethics*, New Delhi: Reed Elsevier, 2016, p. 167.
[105] Gerald James Larson, *India's Agony over Religion*, Albany: State University of New York Press, 1995, p. 27.
[106] Ref.: *Jainism in India,* retrieved on 14.05.2017 from https://www.revolvy.com/topic/Jainism%20in%20India&item_type=topic.
[107] Christopher Key Chapple, *Bioethics in Jainism*, 1995, retrieved on 16.05.2017 http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/jainism-bioethics.

gurus who have found the liberation of the soul crossing over the river of rebirth) and they established the religious system. Historical records exist only for the two recent Thirthankaras Parsvanatha and Vardhamana Mahavira or Jina (means conqueror). *Jaina* means disciple or follower of *Jina* the one who conquered the karmic clutches of life.[108] The religious belief and the practical life of the Jain religion are closely related. Jainism believes in no creator God. Rather, it has a unique respect for life in all forms. Therefore, they express their respect even to the smallest life form in the universe seeing the presence of the Ultimate Being in it (the principle of Ahimsa, non violence).

1.1.2.5.6.1. The View of Ethics and Bioethics in Jainism

The ultimate goal of Jain religion is to get rid of the karmic influences and free the soul to be united in the Ultimate Bliss. Jaina ethics consists of taking *Vrata* (vows) in order to eliminate the karmic clutches in life. These vows are *Ahimsa* (non violence), *Satya* (truthfulness, honesty), *Asteya* (not stealing) and *Aparigraha* (non possession). With these vows Vardhamana Mahavira added a fifth vow which is *Brahmacharya* (chastity).[109] There are mainly two sects in Jainism, they are: *Swetambara* (White Clad, those who wear white cloths) and *Digambara* (Sky Clad, in this order the highest class of religious renounce everything including their dress).

Jains normally are vegetarians and even if they engage in trade they do not indulge in selling or buying animal products or weapons. They are also very respectful in treating the animals to the extent that most of them wear a cloth over their nose not to get small creatures being inhaled into the nose accidently.

Respect for the nature is another aspect of Jain ethical views. New sects like Terapanthi Svetambara Jainist tradition teaches 12 fold system of vows including the timely adaptations like "not to resort to unethical practices in election" and "avoid contributing to pollution".[110]

Jains have special respect for death as it is the passing from this life to the other. They see death as a quest for spiritual freedom to the extent that one in old age, or infirmity or famine can decide to renounce food, drinks and then in reciting prayers till the end can

[108] Ibid.
[109] Ibid.
[110] Ibid.

attain death. This is not considered as suicide or euthanasia but the expression of one's ultimate freedom and renunciation of worldly possessions.

We could say that the Jain religious system as widely speaking is a pro-life system of religion which has a unique respect for life in all its forms. The universe is seen as a cosmic biological existence or a biocosmology, a reality suffused with life. Therefore the animal protection, preservation of nature and ecology, tolerance of multiple perspectives, and non-violence to humans and all beings around make a strong base for the ethical views of Jains.

1.1.2.5.7. Other Notable Religions and Groups

Apart from all the religions that I have described above there are religions like Zoroastrianism (Parsi religion), Donyi-Polo, Bahà'ì religion and Judaism, though they are very minor group in the nation. The population of these religions and the people whose religions are not explicitly stated constitute 0.9% of the Indian population according to the Census of India 2011.

A study done in the year 2016 states that the Parsi community in India contains around 45,000 people in the country.[111] Zoroastrianism is founded by Prophet Zoroaster (or Zarathustra) in ancient Iran around 800 B.C. and in India it is called Parsi religion. The holy book of Zoroastrians is the *Zend-Avesta*, which describes the battle between good and evil. Parsis believe in a single God, called Ahura Mazda who is symbolized by fire. The aim of the religious belief is to purify oneself by choosing good thoughts and actions, and thus win over the darkness or evil.[112] The Parsi community, though very small, is very influential in India. The Parsis are the most educated, urban, elite and wealthy religious community among all religions of the country. They have played an

[111] Dean Nelson, "India's Swindling Parsi Population to be Boosted with Fertility Clinics", *The Telegraph*, retrieved on 121.04.2017 from http://www.telegraph.co.uk/news/worldnews/asia/india/9612009/Indias-dwindling-Parsi-population-to-be-boosted-with-fertility-clinics.html.

[112] Ref.: *Zoroastrianism*, retrieved on 14.06.2017 from http://www.indovacations.net/english/Zoroastrianism.htm.

important role in the growth of trade, industry, finance and philanthropy, which has earned them an important place in India's social and economic life.[113]

The traditional belief of the Donyi-Polo religion asserts that love, compassion, equality and selfishness are naturally ordained by Donyi-Polo, and this central principle makes us distinguish between right and wrong. These are inscribed in nature. The moral dimension of Donyi-Polo religion also means purity, beauty, simplicity, and frankness.[114]

Donyi Polo religion is more structurally animistic or shamanistic religion. The word "Donyi-Polo" means "Sun-Moon". This religious belief is seen mainly in the North East region of India among the Tani and other Tibeto-Burman people.[115]

Donyi-Poloists explain the Donyi-Polo nature of the universe as the eyes or visions of human consciousness. Happiness in life is a result of right actions and these right actions keep up the equilibrium and the harmony of the universe.[116] This religion believes in the right conscience as a naturally prevailing reality. If anyone tries to go against this right conscience by doing evil or hiding or masking good actions then the forces of the conscience make a psychological pressure on the person and he loses happiness in life.[117]

Bahà'ì religion or Bahà'ì faith is a teaching and lifestyle that promotes the essential worth of all religions and the unity and equality of all people. It is founded by Bahaullah in 1863 in the Middle East and now it has 5-7 million adherents spread worldwide with the highest concentration in India and Iran.[118] They are particularly concerned with the education and healthcare of the population in the development of the country.[119]

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[113] *Zoroastrian Religion*, retrieved on 12.06.2017 from http://www.culturalindia.net/indian-religions/zoroastrian.html.
[114] Nabam Tadar Rikam, *Emerging Religious Identities of Arunachal Pradesh: A Study of Nyishi Tribe*, Mittal Publication, 2005, p. 127.
[115] Ibid, p. 118; Tamo Mibang and Sarith Kumar Chaudhuri, *Understanding Tribal Religion*, Mittal Publications, 2004, p. 47.
[116] Rikam, 2005, p.127.
[117] Rikam, 2005, p. 127; Sarit Kumar Chaudhuri, "The Institutionalization of Tribal Religion: Recasting the Donyi-Polo Movement in Arunachal Pradesh", in *Asian Ethnology*, 732(2), Nanzan Institute for Religion and Culture, 2013, p. 264. pp. 259-277.
[118] Ref.: *The Bahà'ì Faith: The Website of the Worldwide Bahà'ì Community*, retrieved on 12.06.2017 from http://www.bahai.org/.
[119] Ref.: *What Bahà'ìs do: Devotional Life,* retrieved on 12.06.2017 from http://www.bahai.org/action/devotional-life/.

1.1.3. Multi Healthcare Traditions

India is home to the Traditional Alternative Medicine (TAM) systems of Ayurveda, Siddha and Yoga. Apart from these Unani, Naturopathy and Homeo are used widespread in the country for long years, though in the modern times Allopathy has its upper hand in the healthcare system of India. This in fact brings a particular outlook to the healthcare system in the country. Since it is given in detail a depiction of the Tradintional and Alternative Medicines of India in the Second Chapter I do not make an analysis of their specific features here. The only point we keep in mind here is that the multi healthcare traditions in the country have brought in a diverse view on healthcare and healthcare ethics in the country. It would also mean that the historical influence from the society has contributed to their practice, philosophy and ethics. To note precisely, as Dagmar Wujastyk explains, the systems of medicine has evolved in a long period of time, where they experienced different communities, different counties and different law systems so the traditional medical literature doesn't represent just a short period of time. Likewise, it also represents the ethical principles of the epoca it was written.[120]

1.1.4. Multi Ethical Context of India

The presence of such a range of different characteristics in the country, in effect, resulted in forming a multifaceted value system in India. We cannot in this context deny the similarities too. One who studies the Indian history and society could without any difficulty understand that the culture, religion, medical traditions, political ideologies and ethnic communities influence the society at large and bring their own ethical principles as part of their way of living.

It is also argued from the nature of the Indian society that, the Indian moral system or Indian ethics has a characteristic peculiar to its own. In India when a particular religious way of life is analysed, a sharp distinction between religion, philosophy and ethics is hardly ever observed. These three have been pursued together. For example, Hinduism, Buddhism and Jainism speak of *moksha* as the end of life and all the three pursuits -

[120] Dagmar Wujastyk, *Well-Mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda*, New York: Oxford University Press, 2012, pp. 3-4.

philosophical, religious and ethical - are ultimately meant for the attainment of that goal. Philosophy is much a means to *moksha* as religion and ethics are.[121]

Prof. Kedar Nath Tiwari describes in his book *Classical Indian Ethical Thought: A Philosophical Study of Hindu, Jaina and Budha Morals*, the distinctive characteristics of Indian moral system. In short words they are:

1. Social and Individual ethics where one needs to practice virtues in personal life and in relation to the society. Eg. *daya* (compassion), *asteya* (non stealing of the properties), *ahimsa* (non killing/ non hurting others), *dana* (giving alms), *indriya nigraha* (control of senses), *paropakara* (helping or service to others), *aparigraha* (non attachment to worldly objects), *saucha* (cleanliness) etc.

2. Spiritualistic Outlook: by and large the Indian moral system is constructed on the spiritualistic outlook with regard to the universe. One is moral not just because of his or her rational considerations, but because of one's spiritual nature one is obliged to be moral both in the sense of social and individual setting. Each one has a soul within and liberating the soul is done through the spiritual moral exercises.

3. Metaphysical Basis: In India morality has a metaphysical and religious foundation, otherwise, it is thought that it would be rootless, shallow, non serious and artificial. Dr. Radhakrishnan in this regard points out: "Any ethical theory must be grounded in metaphysics, in a philosophical conception of the relation between human conduct and ultimate".[122] Spiritualism itself is a kind of metaphysics and is the very core of religion.

4. Authority as the Primary Source: Authority is the primary source in Indian Ethics. Indian vision of morality is that it has got a universal pursuit and anyone cannot handle it if he/she is not an expert. It is left to certain few men of vision who have gone through various aspects of human life and can foresee the situations to which human beings are exposed. Ex. *Rshis* (sages), who are the authors of the *Sastras* (sciences/ wisdom).

5. More Perceptive than Speculative or Critical: Indian thinkers always adopted a practical outlook and as a result they have never separated theoretical thinking from their practical consequences. Indian ethics by nature is perceptive, prescriptive and

[121] Kedar Nath Tiwari, *Classical Indian Ethical Thought: A Philosophical Study of Hindu, Jaina and Budha Morals*, p. 31.
[122] S. Radhakrishnan, *Eastern Religions and Western Thought*, Oxford: Clarendon Press, 1940, p. 80.

normative. In short, the primary concern of Indian ethics has been to prescribe norms for a morally superior life in both its personal and societal aspects.

6. Humanism: Indian moral system is by and large humanistic. Though in the Western thought there exists an opinion that Indian moral system is other worldly and life-negating in its approach, the true nature and spirit of ethics makes the Indian moral system humanistic in its nature. The spiritual nature of man as a basic consideration of Indian thoughts makes the humanistic point of view deeper with the point of view that each one should try to attain one's perfection to realize the potentials implied in oneself. The means are virtuous life, mutual brotherhood, love, compassion etc. which are essential elements of any moral system. There also exist personal virtues like *indriya nigraha* (mortification of senses) and *cittashuddhi* (purity of mind and thoughts) that lead to the ultimate end of self-realization.

7. *Moksha* as the Ideal of Life: The ideal of life in the Indian thought is *Moksha*. A virtuous and ethical life can facilitate to the self realization of oneself in liberating his soul from the external clutches and attaining *Moksha* ('heaven'). It falls as the highest ideal among the *Purusarthas* (the ultimate meanings of life, the object of human pursuit). In order the *Purusarthas* are *Kama* (pleasure, love, psychological values), *Artha* (wealth, prosperity, economic values), *Dharma* (righteousness, moral values) and *Moksha* (liberation, spiritual values). In general *Moksha* is seen as the highest ideal by most of the schools in Indian thought. Whether *Dharma* (morality in a wider sense) is the means to attain it? The Indian schools differ in their views. For attaining *Moksha* it is necessary to have self knowledge and self realization.

The belief in *Karma* has a particular importance in this regard. *Karma*, whether good or bad, binds the person. Good/moral actions lead to good rebirth, but rebirth itself is bondage. In order to get complete release from the fetters of bondage we are ultimately to rise above the level of Karma, and hence, the morality of Dharma. *Nishkamakarma* signifies that actions are to be carried out without having attachment to results. Actions with attachment bind us, so actions are to be performed without attachment to them. Moral actions in the sense of Nishkamakarmas have liberating effects.[123]

[123] All these points are taken from the explanation given in Kedar Nath Tiwari, *Classical Indian Ethical Thought: A Philosophical Study of Hindu, Jaina and Budha Morals*, , pp. 32-39.

Indian systems alone have such a varied view on morality and ethical evaluation of thoughts, actions and life itself. Apart from these native Indian philosophical, religious and ethical systems there are also the ethical visions of Christianity, Islam, Parsi, Sikh communities that are operational in their respective spheres of personal and institutional life in the society following specific morals of their own. Therefore, if one asks a question, is there a common Indian morality in India the answer can be 'yes' and 'no' because, there are many elements that are common in the moral systems of India with regard to its cultural and religious perspectives. At the same time we also find diversities in principles specific to certain moral issues.

1.1.5. Importance of a Broader View in Bioethics in the Context of India

A patient's decision in a treatment plan is very important in the medical procedure. In the context of India the various cultural and religious elements influence the choice of the medical procedures that a patient adheres to. Quoting the article of Advocate Healthcare named *Religious Beliefs and Decisions*, Dr. Olinda Timms writes in her book, *Biomedical Ethics*:

1. Hindus believe death is a counterpoint of birth marking the transition to another life. Reincarnation is an important step that prepares the soul for *Moksha* or salvation. The moment of death is a crucial landmark in personal destiny and being medicated or unconscious at the point of death may not be acceptable. Pain relief without loss of consciousness could be preferred. Such requests may be encountered in terminal and palliative care.

2. In Muslim communities, consanguineous marriages may find sanction even though there could be risk of fetal or chromosomal abnormalities. This should be kept in mind in fertility counseling.

3. Among Christians, Catholics strongly believe that life begins from conception and it is immoral to abort the fetus at any stage of its development, except if the mother's life is in grave danger. Doctors need to be sensitive about such beliefs when presenting options of care.

4. Conservative Buddhists believe that the body should not be disturbed until three days after death as it may interfere with reincarnation. This would impact discussions with the family regarding autopsy or organ donation.

5. Jains observe a very restricted vegetarian diet in line with religious beliefs, important in designing a diet plan for diabetics or renal patients.

6. The Jehovah's Witness sect believe in a bible teaching that forbids the transfusion of any blood product into the body, a challenge in life-threatening conditions.

7. Christian Scientists may refuse surgical or medical intervention for community members, even in emergencies. The doctor may have to defer to the decision to refuse treatment, against medical advice.[124]

We understand at this point how diverse are the concerns for an ethical decision making in such a milieu of a range of diversities. Many of the bioethical concepts in India in the initial stage of its growth, in education and practices, were taken from the basis of Western principles. There are issues that can be discussed in the common forums and the principles that guide certain circumstances in medical field. Yet, the variety of human culture, religious traditions, views on life, birth and death, health and illness and the status and identity of the individual demand the physicians and healthcare professionals to be more sensitive and respectful towards the diverse perspectives the patients bring to ethical decision making.[125]

There are multiple elements that cause challenge in a professional healthcare setup. These varieties in medical practices are seen richness by certain people while others have difficulties in accepting such kind of healthcare traditions and speak of most of the Traditional and Alternative Medical streams as unscientific and unauthentic and label them as harmful or dangerous. But in the context of India as Allopathy is trusted by most of the people, there are also a good number of the population who sort to Ayurveda, Yoga, Unani, Siddha and Homeopathy or the fresh hand-made medicines prepared by a local practitioner. Apart from these, the people of India from the beginning has shown a lenience towards the medical practices available even spiritual and 'superstitious" religious healing practices done by tribal priests or physicians. There are a notable number of people who approach TAM for certain particular diseases or health conditions. Therefore, though the effectiveness of these medical practices is tested for proof in all the situations, one cannot deny them all as unauthentic or useless.

To understand the mentality of the people of India and their inclination to widely accept the healthcare practices can have many reasons including the unavailability or inapproachability that a poor person faces in front of the super specialty care that the

[124] Olinda Timms, *Biomedical Ethics*, pp. 44-45; Advocate Healthcare, *Religious Beliefs and Healthcare Decisions,* available at http://www.advocatehealth.com/beliefs/.
[125] Harold Coward, P. Ratnakul, (eds.), "Introduction", in *A Cross Cultural Dialogue on Healthcare Ethics*, Waterloo (ON): Wilfrid Laurier University Press, 1999, pp. 1-11.

modern medicine offers. The challenge of the physicians those who are practicing Allopathy or the modern healthcare systems therefore, is to have more openness in understanding the society and the culture of the particular patients and giving them proper advice and remedies that would heal them and guide them to lead a healthier life.

Chapter 2

Medical Practice in Indian Context: Prehistory to the Present

India holds one of the oldest traditions in medical practice. Archeological and modern genetic evidence suggest that human communities have migrated into the Indian subcontinent since prehistoric ages. The earliest settlers knew the medicinal value of certain herbs and the usage was common among them. It is a very long evolution that took place up to the modern times in passing generation to generation this precious knowledge of the preservation of health. Today traditional medical knowledge is getting worldwide attention in a renovated global healthcare demand and the significant role the traditional healthcare streams in satisfying public health needs of the developing countries. There are more investigations and studies done in this field to find out the real resources and potentials to make them available in the modern healthcare systems.

Generally the healing practices were considered as a sacred work, a service which is to be done with much respect to the patient. This respect was given reciprocally to the *Vaidya* (physician) from the part of the patient and the society. Evaluating the social situations this chapter explains how in a particular social, religious and cultural context of India the medical practice has grown and how the imparting of this knowledge was done in an ethical manner.

2.1. Traditional Medicine in India and Their Ethical Concerns in Healthcare Practice

India is world famous for its traditional medical systems. India is blessed with its natively originated *Ayurveda*, *Siddha* and *Yoga* and with the widely practiced *Homeopathy*, *Unani* and many other traditional regional medical systems and natural healing techniques. However, the growing awareness among the scientific communities and the public about the intrinsic value of traditional medicines makes Ayurveda, Siddha, Unani, Homeopathy and Yoga to have an active role in complimenting the mainstream biomedicine. In addition, the challenge exists in the preservation and

integration of the different streams of healing traditions to meet the healthcare needs of the contemporary society.

There are different outlooks on the traditional systems of medicine in the modern world. Especially in the West, these traditional systems of healthcare are considered as Complementary and Alternative Medicine (CAM) or Traditional and Alternative Medicine (TAM). But is Allopathy, the so-called scientific modern medicine, the only true and valid means of healthcare? The answer from contemporary researches explains: it is not. Dr. Timothy McCall, MD, a renowned Yoga therapist comments:

> Many practitioners of yoga feel a natural affinity for Complementary and Alternative Medicine (CAM). For one thing, yoga and its sister science ayurveda often get lumped into this category, and our direct experience—along with an increasing amount of scientific research—tells us they work. But consider this: The distinction between CAM and conventional medicine is by and large an arbitrary one. Historical flukes, political maneuvering, and marketing considerations, as much as logic or evidence, have often determined what has been deemed mainstream medicine and what has been shunted to the world of alternative healing.
> How else could you explain why aspirin, a drug originally derived from willow tree bark, is considered a conventional medical treatment for pain relief, while willow tree bark itself is alternative? In the same vein, some human hormones remain firmly in the mainstream, available only by prescription, while others are readily available in the supplement aisle at Whole Foods. If a chiropractor manipulates your spine, that's CAM. If an osteopath does it, it's conventional. If a physician prescribes chelation therapy, which entails infusing a synthetic chemical into your veins, to treat lead poisoning, it's considered conventional. If the same therapy is used for heart disease, it's alternative. And sometimes treatments flip in and out of the mainstream. At one point, homeopathy was part of conventional medicine; now it's relegated to the fringe. And in recent years some conventional doctors have rescued leeches from the oblivion of quackery by using them for difficult cases of wound healing—with impressive results. Many in the medical community reserve the term "conventional" for treatments that have scientific evidence behind them and classify those that don't as "alternative." But that argument doesn't hold up to careful scrutiny. A recent randomized controlled study, for example, demonstrates yoga's effectiveness in treating chronic back pain, whereas some commonly performed back operations lack such proof. Indeed, many aspects of modern medical care aren't supported by good science. So the distinction between conventional medicine and CAM doesn't really tell us

> all that much. A more important distinction—and it's one that never changes—lies between holism and reductionism.[126]

Dr. McCall also points to the reductionist and holistic approach in medical care. Reductionism in medicine tries to diagnose the causes of the disease to a single point and treats it individually. Holistic approach takes into consideration the integral person who has the disease and tries to rectify the disorders in health. It concentrates on the overall wellbeing of the organism treatment of the disease and prevention in future. Dr. McCall explains how these treatments are diverse in their approach.

Reductionist Approach	Holistic Approach
Therapies usually rely on one major mechanism of action	Therapies rely on many simultaneous mechanisms of action
Faster in onset	Slower in onset
High-tech	Low-tech
Side effects usually negative	Side effects usually positive
Effectiveness tends to wane over time	Effectiveness tends to increase over time
Patient is typically the passive recipient of care	Patient is typically actively involved in care
Correct diagnosis is usually required to treat successfully	Diagnosis is helpful, but effective treatment is possible without it
Minor emphasis on prevention	Major emphasis on prevention
Health equated with the absence of symptoms, signs of disease, or abnormal lab tests	Health defined as a high level of physical, emotional, and spiritual well-being

Table1: Taken from the article *The Language of Healing*.[127]

The point we note here is that the approach and the methods used in traditional medicine are diverse and different from the modern medical system. There is clearly an inadequacy to evaluate using these diverse systems of healthcare practices with a modern mind set up, because we know that the traditional medical systems have a gradual growth from the ancient history. Moreover, they don't just treat the physical and material human body, but treats the human being as a physical and spiritual entity,

[126] Timothy McCall, "The Language of Healing", *Yoga and Joyful Living*, Summer 2010, pp. 36, 38, retrieved on 17.06.2017 from http://www.drmccall.com/uploads/2/2/6/5/22658464/mccallyogaholism.pdf.

[127] Timothy McCall," The Language of Healing", p. 39, retrieved on 17.06.2017 from http://www.drmccall.com/uploads/2/2/6/5/22658464/mccallyogaholism.pdf.

hence, the well being of the whole person. Now we would like to have an introductory look into the traditional medical systems that are rooted in India.

2.1.1. Ayurveda

Ayurveda is one of the oldest and still existing, health traditions in the world. The ancient written form of it is a part of *Adharva Veda*, one of the four ancient Vedas of India.[128] Ayurveda is based on *Sankhya* philosophy, which means 'rational enquiry into the nature of the truth'. Sanskrit meaning of *Ayu* is life and *Veda* is knowledge/science. The origins of Ayurveda practice dates back to around 5000 BCE.[129] The two famous ancient medical books of India were *Charaka Samhita* (1000 BCE) and *Sushruta Samhita* (100 AD) which were considered to be classics. *Ayurveda Materia Medica* give detailed descriptions of over 1500 herbal plants and 10000 formulations for medicinal usage. *Madhave Nidan* (800 AD) a diagnostic classic provides over 5000 signs and symptoms for various diseases. The Ayurvedic tradition since the 19th century particularly views the Compendia (*Samhita*) ascribed to Charaka, Sushruta, Vaghbhata and other treatise ascribed to Sarnghadhara, Madhava and Bhavamishra as its core texts though certain other texts and treatise are used historically in Ayurvedic practice.[130]

In Ayurveda life is considered as the union of body, senses, mind and soul. The concept of *Prakrti* or human/ material constitution plays a central role in understanding health and disease in Ayurveda, which is similar to modern pharmacogenomics. India at present has more than 4,00,000 registered Ayurveda doctors. Government of India's Ministry of AYUSH* (Ayurveda, Yoga, Unani, Siddha and Homeopathy) has the responsibility to organize and regulate their quality, education and practice.[131] There are at present around 301 Ayurveda institutions around the country.[132] The parliament of

[128] V. Narayanaswamy, "Origin and Development of Ayurveda: A Brief History", *Ancient Science of Life*, 1 (1), 1981, p. 1.
[129] T. S. S. Dikshith, *Safe Use of Chemicals: A Practical Guide*, London etc.: CRC Press, 2009, p. 16; Mari Clements, "Ayurveda: Mother of Traditional Medicine", in Elizabeth R. Mackenzie, Birgit Rakel, (eds.), *Complementary and Alternative Medicine for Older Adults: A Guide to Holistic Approaches to Healthy Aging*, New York: Springer Publishing Company, p. 215.
[130] Dagmar Wujastyk, *Well-Mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda*, p. 1.
[131] Patwardhan Bhushan and Mashelkar Raghunath Anant, "Traditional Medicine-Inspired Approaches to Drug Discovery: Can Ayurveda Show the Way Forward?", Elsevier, *Drug Discovery Today*, June 2009, p.2.
[132] Med India, *Ayurveda Colleges in India*, retrieved on 15.06.2017 from http://www.medindia.net/education/ayurveda_colleges.asp; The Central Council of Indian Medicine

India has passed the Indian Medicine Central Council Act in 1970 in view of standardizing qualifications for Ayurveda practitioners and providing accredited institutions for its study and research.[133]

The concept of Ayurveda is to prevent illness healing the sick and preserve life. It was taught in the ancient times in the *Gurukula* system of education, where the students of medicine lived with the master and learned directly from him. At present this system of medicine is evolved into undergraduate and postgraduate courses with specific curriculum in different government and private institutions. Ayurveda is not just a system of medicine that heals the illness. It is a healthcare system that offers a body of wisdom designed to assist people to live vibrant and healthy while realizing their full human potential. Hence, it is also considered to be a sophisticated, but, powerful mind-body health system.[134] Ayurveda uses eight measures to diagnose the illness. They are *nadi* (pulse), *mootra* (urine), *mala* (stool), *jihva* (tongue), *shabda* (speech), *sparsha* (touch), *druk* (vision) and *akruti* (appearance).[135]

2.1.1.1. Ethics of Professional Conduct

The code of conduct in Charaka Samhita contains an *Anusasana* (directive) called *Atreya Anusasana* (7th cent B.C.) which predates Hippocratic Oath by two centuries. The ethics of professional conduct (*Anusasana*) for an Ayurvedic medical practitioner, from diverse ancient texts, as compiled by K. R. Srikanta Murthy, which reads:

1. The physician should first investigate the patient and his disease thoroughly and on correct diagnosis, should think of the treatment. Treatment however efficient is bound to fail if the diagnosis is wrong.

2. Theoretical knowledge and practical experience together make for better knowledge.

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lists 247 Ayurveda colleges around India, retrieved on 15.06.2017 from https://ccimindia.org/colleges-ayurveda.php.

[133] *Indian Medicine Central Council Act, 1970*, retrieved on 12.06.2017 from http://www.pousada-tauma.com/documents/Indian-Medical-Central-Council-Act-1970.pdf.

[134] Deepal Chopra, *What is Ayurveda?*, retrieved on 12.06.2017 from http://www.chopra.com/articles/what-is-ayurveda#sm.000yhus9833dfje11uw1gscvhio85.

[135] Mishra L., Singh B. B., Dagenais S., "Healthcare and Disease Management in Ayurveda",in *Alternative Therapies in Health and Medicine*, 7 (2), 2001, pp. 44-50; Ananda S. Chopra, "Ayurveda", in Selin Helaine, *Medicine Across Cultures: History and Practice of Medicine in Non-Western Cultures*, Kluwer Academic, 2003, p. 79.

3. Knowledge of any one science by itself is not enough to arrive at correct decision; the physician should learn many sciences.

4. Knowledge of any one part, cannot stand for the whole.

5. Careful observation of the different stages of the disease discriminating the manageable and unmanageable - helps to undertake proper therapy. Lack of such knowledge leads to loss of reputation to himself and his science.

6. After diagnosis the physician adopt effective and appropriate therapy at the proper time, but should on no account delay suitable treatment nor adopt ineffective measures.

7. Physician who by his conduct allows the disease to progress or adopts hasty measures even before the right time is to be considered a 'sinner' and stands liable for punishment. (Sushruta Samhita 1/17-1/11)

8. Drugs and recipes should be suitable and effective; no harmful therapy should be adopted however much it has been extolled.

9. If by single therapy no relief accrues, alternate therapy is to be adopted soon after (Sushruta Samhita 1. 35/47).

10. Aim of treatment is not merely to relieve the suffering but to restore health; strive to maintain and promote health but do not undermine the natural strength of the patient.

11. The scope of medical science is merely to lend a helping hand to those who are sinking in the quagmire of disease; it is just an aid. Physicians should not assume too much either to himself or to his science in case of cure.

12. Physician is not the controller of life, (neither its savior, nor its remover) proper diagnosis and suitable therapy are the only two on which he has control.

13. It is impossible to guarantee life in all cases even by experts, even under ideal conditions nor death be predicated as certain when suitable conditions do not exist.

14. Treatment is to be done to the last breath, for, many a hopeless patient recovers by the grace of God.

15. In case of grave emergency adopt all measures immediately just as redeeming a house from fire.

16. When Death is certain if not intervened, and even if intervened success is doubtful, surgery or any other method of treatment is to be adopted with due permission of the patient or his relatives.

17. No charity is greater than saving a life. Treatment never goes waste, in some it brings wealth, with some others fame, friendship with some others but with everyone it bring experience to the physician.

18. Medical science should not be used for selfish gains nor for money, but should be for the service of all creatures.

19. Medical practice is quadric-facetted, viz., friendship with all, sympathy and compassion for the sick, utmost care and attention towards the manageable patient and connivance of the hopeless. (Charaka Samhita 1/ 9-26)

20. He who makes medicine a merchandise shall only reap a heap of sand casting away a heap of gold.

21. He who bestows health and relieves the pain is worthy of every kind of worship and all the fruits of righteousness shall accrue him.

22. Physician by relieving the suffering attains heaven without performing sacrifices.

23. Practicing the profession on the principles of philosophy of life, looking after the health of the deserving and the needy, showing kindness and compassion to all beings is the Dharma for the medical man; accepting from the rich just enough money to meet the minimum needs, his life and his dependents is the Artha; respecting the elders, scholars, professional brethren and nobles and receiving honours from them, winning love and affection of all by sympathetic service is the Karma; by practicing thus the physician is sure to attain salvation *Moksha*.[136]

Ayurveda further gives guidelines for the physicians to attain *Moksha* by living a simple life after the model of great physicians and sages of ancient times, Bharadvaja, Atreya, Agnivesha, Divodasa, Sushruta, Charaka, Nagarjuna and Vaghbhata in India.[137] Since the time of Charaka, for practicing the medicine after learning the *vidya* (knowledge) from the *guru* (master) the disciples were to make an oath as an initiation to their service of medical care to the society.

[136] K. R. Srikanta Murthy, "Professional Ethics in Ancient Indian Medicine", in Robert M. Veatch, *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston, MA: Jones and Barlett Publishers, pp. 128-129.
[137] K. R. Srikanta Murthy, "Professional Ethics in Ancient Indian Medicine", p. 129.

2.1.1.2. Oath of Initiation (From the Charaka Samhita)[138]

This Oath was considered as a norm for the lifestyle of a physician. It also included the life outside the physical treatment or medical practice done by the physicians. It envisaged the physician to lead a celibate life, eat no meat, lead a life giving selfless service and pray for the wellbeing of all the creatures. The oath reads:

1. The teacher then should instruct the disciple in the presence of the sacred fire, Brahmanas [Brahmins] and physicians.

2. [saying] "Thou shalt lead the life of a celibate, grow thy hair and beard, speak only the truth, eat no meat, eat only pure articles of food, be free from envy and carry no arms.

3. There shall be nothing that thou should not do at my behest except hating the king, causing another's death, or committing an act of great unrighteousness or acts leading to calamity.

4. Thou shalt dedicate thyself to me and regard me as thy chief. Thou shalt be subject to me and conduct thyself forever for my welfare and pleasure. Thou shalt serve and dwell with me like a son or a slave or a supplicant. Thou shalt behave and act without arrogance, with care and attention and with undistracted mind, humility, constant reflection and ungrudging obedience. Acting either at my behest or otherwise, thou shalt conduct thyself for the achievement of thy teacher's purposes alone, to the best of thy abilities.

5. If thou desirest success, wealth and fame as a physician and heaven after death, thou shalt pray for the welfare of all creatures beginning with the cows and Brahmanas.

6. Day and night, however thou mayest be engaged, thou shalt endeavour for the relief of patients with all thy heart and soul. Thou shalt not desert or injure thy patient for the sake of thy life or thy living. Thou shalt not commit adultery even in thought. Even so, thou shalt not covet others' possessions. Thou shalt be modest in thy attire and appearance. Thou shouldst not be a drunkard or a sinful man nor shouldst thou associate with the abettors of crimes. Thou shouldst speak words that are gentle, pure and righteous, pleasing, worthy, true, wholesome, and moderate. Thy behaviour must be in consideration of time and place and heedful of past experience. Thou shalt act always with a view to the acquisition of knowledge and fullness of equipment.

[138] "Oath of Initiation: from the Caraka Samhita", in Robert M. Veatch, *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston, MA: Jones and Barlett Publishers, pp. 130-132; *Oath of Initiation (Caraka Samhita)*, retrieved on 12.06.2017 from http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/oath-initiation-caraka-samhita.

7. No persons, who are hated by the king or who are haters of the king or who are hated by the public or who are haters of the public, shall receive treatment. Similarly, those who are extremely abnormal, wicked, and of miserable character and conduct, those who have not vindicated their honour, those who are on the point of death, and similarly women who are unattended by their husbands or guardians shall not receive treatment.

8. No offering of presents by a woman without the behest of her husband or guardian shall be accepted by thee. While entering the patient's house, thou shalt be accompanied by a man who is known to the patient and who has his permission to enter; and thou shalt be well-clad, bent of head, self-possessed, and conduct thyself only after repeated consideration. Thou shalt thus properly make thy entry. Having entered, thy speech, mind, intellect and senses shall be entirely devoted to no other thought than that of being helpful to the patient and of things concerning only him. The peculiar customs of the patient's household shall not be made public. Even knowing that the patient's span of life has come to its close, it shall not be mentioned by thee there, where if so done, it would cause shock to the patient or to others.

Though possessed of knowledge one should not boast very much of one's knowledge. Most people are offended by the boastfulness of even those who are otherwise good and authoritative.

9. There is no limit at all to the Science of Life, Medicine. So thou shouldst apply thyself to it with diligence. This is how thou shouldst act. Also thou shouldst learn the skill of practice from another without carping. The entire world is the teacher to the intelligent and the foe to the unintelligent. Hence, knowing this well, thou shouldst listen and act according to the words of instruction of even an unfriendly person, when his words are worthy and of a kind as to bring to you fame, long life, strength and prosperity."

10. Thereafter the teacher should say this—"Thou shouldst conduct thyself properly with the gods, sacred fire, Brahmanas, the guru, the aged, the scholars and the preceptors. If thou have conducted thyself well with them, the precious stones, the grains and the gods become well disposed towards thee. If thou shouldst conduct thyself otherwise, they become unfavorable to thee." To the teacher that has spoken thus, the disciple should say, "Amen."

2.1.2. Yoga

The term Yoga has a vast display of meanings around it. Generally it means to unite, to connect, to add or to attach. Yoga as a practice is seen to harness the horse or the bullock in this context the harnessing of one's internal and external forces to be in control of oneself. Yoga includes philosophy, religion and physical and spiritual

practices. There are different Yoga traditions in the Hindu, Buddhist and Jainist traditions. Here in this context of study I treat the medical part of yoga and its healthcare implications.

The concept of Yoga is explained in the article *Yoga in Health and Disease* as follows:

> According to the concept of *Sadhana* of Sri Aurobindo[139], the new faculties of deeper perceptions of the world beyond the five senses emerge in this phase of superhuman existence. Further, growth leads man to unfold the deeper layers of consciousness and widen the spectrum of his knowledge to move towards divinity or perfection. Yoga is a systematic conscious process for accelerating the growth of a human being from his animal level towards the ultimate state of divinity (Swami Vivekananda). It is a systematic methodology for an all-round personality development i.e., physical, mental, intellectual, emotional and spiritual components of man. Thus, Yoga in its general methodology for the growth of man towards divine heights includes techniques useful for therapeutic applications in making man healthier.[140]

According to the tradition of Yoga and Upanishads, man has five bodies or *kosas* (sheaths) which is graphically represented in the figure below.

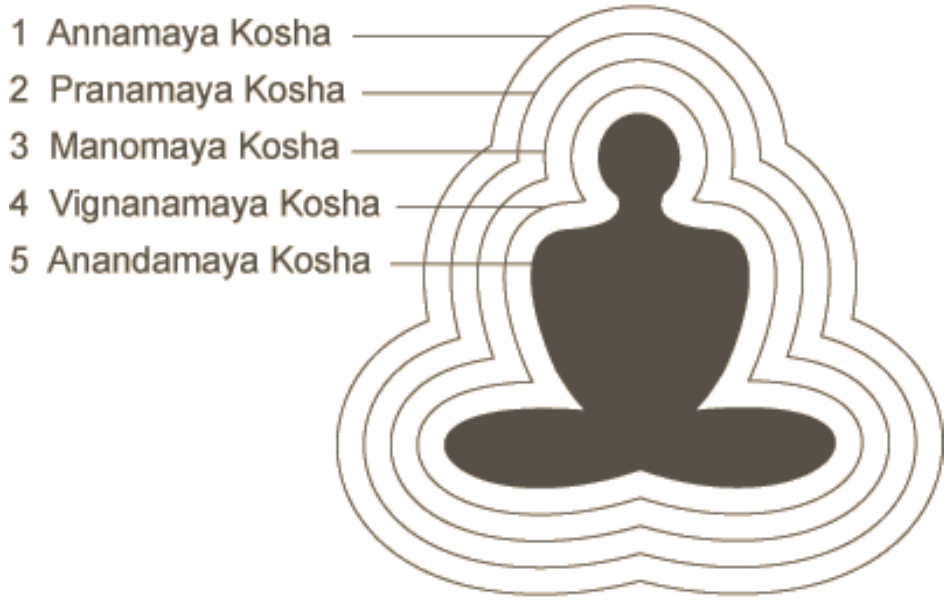

Figure 1: The Five *Kosas* in Yoga

[139] *Sadhana* is the process of disciplining life and the human faculties in order to liberate the human being to the ultimate existence or perfection one should reach. For details, *Sri Aurobindo on Himself, Part One, Section Four, Sadhana for the Earth-Consciousness*, retrieved on 18.06.2017 from https://www.aurobindo.ru/workings/sa/26/0009_e.htm.

[140] R. Nagarathna, H. R. Nagendra, S. Telles, *Yoga in Health and Disease*, retrieved on 18.06.2017 from http://passthrough.fw-notify.net/download/027763/http://www.laxminarayanmandir.libraryofyoga.com/bitstream/123456789/903/1/MEDICAL%20APPLICATIONS%20OF%20YOGA.pdf..

> The outer and the largest, the physical body, is called *Annamaya kosa*. This is the part of the physical body that we see from outside, to say, the visible part of our Self. The next subtler body is the *Pranamaya kosa* characterised by the predominance of *prana*, the life principle. It exists in the physical body. It is interactive and dependent. Controversies apart, Kirlian photography[141] triggered the interest of a large number of scientists and technologists all over the world. The scientific study of the Human Aura by Tart delineates the following aspects of the human aura; the outer physical aura, psychological aura, inner psychical aura and the projected aura. *Manomaya kosa* or the inner psychical body is in charge of the functions of mind, namely perception, analysis, memory and also the emotions. The *Vijnanamaya kosa* featured by discrimination and a capacity to judge is aimed at channelizing human behavior and energy towards perfect health, in tune with nature. It is the conscious body in a human being. In the *Anandamaya* state, man is established in perfect harmony and balance of all his faculties and is featured by total mastery, bliss and freedom from anxiety and fear.[142]

Dr. Timothy M. McCall in his book *Yoga as Medicine* describes 75 health conditions that can be treated with therapeutic yoga. He also gives a wide list of references for these remedies in his compilation *75 Health Conditions Benefited by Yoga, as Demonstrated in Scientific Studies*.[143] He also argues that Yoga is the best overall system of stress reduction ever invented.[144] Originated in India, Yoga is gaining popularity worldwide although all these original principles are not exactly followed by the contemporary Yoga practitioners.

2.1.3. Unani

The Unani system of medicine was founded by Hippocrates (460 BCE) and later built up by Galen. They gave a scientific touch to the medical care. They introduced methods of taking medical histories and founded therapeutics on careful observation and

[141] A method of high frequency photography by Kirlian which makes visible the aura of physical body.
[142] R. Nagarathna, H. R. Nagendra, S. Telles, *Yoga in Health and Disease*, retrieved on 18.06.2017. Also seen in Bethsabé, *Pancha Kosha Yoga*, retrieved on 17.06.2017 from http://www.panchakoshayoga.com/index.php?path=home/5koshas&PHPSESSID=8d3234a5bae91b97d7cfbd147ec496f7.
[143] Timothy McCall, *75 Health Conditions Benefited by Yoga, as Demonstrated in Scientific Studies, Yoga as Medicine: The Science and Practice of Therapeutic Yoga*, retrieved on 19.06.2017 from http://www.drmccall.com/uploads/2/2/6/5/22658464/yam--75conditions.pdf.
[144] Timothy McCall, *Stress, Your Health, and Yoga, Yoga as Medicine: The Science and Practice of Therapeutic Yoga*, retrieved on 19.06.2017 from http://www.drmccall.com/uploads/2/2/6/5/22658464/stresshealthyoga.pdf.

experiment.[145] The Humoural Theory was introduced at this time. It proposes the presence of four humours in the body: blood, phlegm, yellow bile, and black bile. The situation of the person was accordingly expressed by the words sanguine, phlegmatic, choleric and melancholy according to the preponderance of their particular humour.[146] Dr. Mel Borins explains the concept of Unani Medicine:

> The humours themselves were assigned temperaments; blood is hot and moist; phlegm is cold and moist; yellow bile is hot and dry; black bile is cold and dry. Drugs or natural substances were also assigned temperaments. Every person was supposed to have a unique humoural constitution which represented his healthy state. Any change in this humoural balance brought about a change in his state of health. The Unani physician gives medicaments or treatments to enhance the person's own restorative power or "medicatrix naturae" to reach the healthy state. The nature of the substance matches the nature of the illness.[147]

The Greek system of medicine found its routes to Alexandria, Iran and later to Bagdad in the middle of the eighth century. Educated Muslims and Christians translated many scientific and philosophical works into Arabic. Slowly this evolved Arab system of medicine was later introduced to India by Arab and Persian settlers. As it was a practice by the Arab physicians, they gradually absorbed the best part of the natural healing practices from the local systems. They analysed the various herbs and naturally occurring substances and kept testing and experimenting with these newly found items. They were highly influenced by the ayurvedic medicine and other local systems of healthcare. Dr. Mel Borins further explains the system of Arab medicine:

> In the Arab system of medicine the human body is considered to be made up of seven components, each having a close relation to, and direct bearing on, the state of health of an individual. According to this system, the human body contains four Elements: air, fire, water, and earth. The Elements have their own Temperaments and Humours as mentioned above. After the practitioner considers the four Elements, the Temperament, and the Humours, he goes on to consider the various Organs of the body, as well as the Spirits or the life force. The practitioner also considers the three faculties: the Natural Power of metabolism and reproduction; the Psychic Power, both perceptive through the five senses and motive (movement as a response to sensation); and the Vital Power which maintains life. Finally, the movements and Functions of the various organs of the body are examined.

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[145] Quotting "Unani Medicine in India: Presentation at First International Congress of Oriental Medicine", in *Reproductive Health Matters*, Seoul: October 1976, Mel Borins, "Traditional Medicine of India", *Canadian Family Physician*, Vol. 33, April 1987, p. 1061.
[146] Mel Borins, "Traditional Medicine of India", p. 1061.
[147] Ibid, pp. 1061-1062.

> The Unani system places great reliance on the pulse for diagnosis. The 10 features which are particularly observed are: quantity, force, duration of movement, condition of the vessel wall, volume, duration of diastole, palpation of the pulse, equality and inequality, balance of the pulse, and rhythm.[148]

There is also a traditional practice of examining the patient's urine and stool and at present the Unani practitioners also utilize the modern technologies such as microscopic examination, chemical analysis, radiography and electro-cardiography. Evaluating the nature of the patient's disease and the cause found, the practitioner then undertakes the treatment. Treatment could involve pharmacotherapy, dietotherapy, regimental therapy or surgery.

Pharmacotherapy is the most common usage of treating ailments in Unani medicine. The drugs are made from plants, minerals and animal parts and so, natural. Certain prescriptions date back to thousands of years. The remedies generally use multiple ingredients combine in certain powders, decoctions infusions and tablets, and are taken internally or applied externally. The herbs used for the treatment of vitiligo, asthma and rheumatoid arthritis are found to be most successful.[149] The point to be noted here is that since all these medicines are naturally made there are very less side effects.

Dietotherapy is a very important factor in the Unani medical practices. Administering specific foods, regulating the quantity and quality of the food etc. are seen to be common methods. Unani believes in the curative capacity of certain foods vegetables as well as non-vegetables. The weakness or disorders of certain body part or organs is treated with the same animal organ giving it as food to the ailing person. This is a common approach by many traditional "natural healers".

Regimental therapy includes venesection or bloodletting, cupping (applying hot cups to the skin to cleanse the skin from waste matters or to correct liver diseases or to treat piles and inflammation), inducing sweating, massage therapies, purgatives and laxatives for intestinal evacuation, emetics to treat headache and migraine, physical exercises, application of leeches on the skin for skin diseases etc.[150]

[148] Ibid, p. 1063.
[149] Ibid, p. 1064.
[150] Ibid, p. 1063.

As a system of medicine Unani has its own peculiarities. It doesn't see the person with an ailment just as a physical body to cure. Greek philosophy is very much in the background of treating a disease. Dr. Borins writes:

> The Unani system also places great emphasis on the psychosomatic nature of disease. Hippocrates believed that the human body contains a unique power, which is other than matter that keeps the body alive. This element is termed "anima" or "psyche", and Greek physicians were aware that a human being is composed of body and soul, and that both must be studied in health and sickness. The state of disease is not only caused by malfunctioning of the physical system, but also, and most often, caused by a state of psycho-organic imbalances. The Unani physician, while searching for the nature, causes, reasons, and symptoms of the patient's physical ailment and its treatment, also keeps this second aspect in mind.
> While pointing out the basic duty of a physician to be a supporter of this healing power of the body, Hippocrates made it clear that this power requires as much support spiritually as it requires physically. A physician should be considerate and kind, and implant ideas of hope and happiness to tranquilize the spirit. Unani practitioners are taught to reflect these Hippocratic beliefs.[151]

2.1.4. Siddha

Siddha like Ayurveda accepts the concept that every being is made of five cosmic elements water, air, fire, earth, ether. The patient and the medicament consist of these elements. A disease is seen to be a derangement of this cosmic equilibrium. The Siddha practitioner tries to remove the morbid state by suitably restoring the equilibrium of these five basic elements. Quoting Prof. R. Kumaraswamy from the Siddha Research Institute, Madras Dr. Borins says that these elements do not correspond so much to the physical state of matter, but rather represent energy levels both in the microsomal and macrosomal stages, in the universe and in the human body.[152] He explains:

> According to the concept of the ancient Siddhas, there are three major cosmic forces, or biospheres, controlling the activities of living beings. These forces are the "Vaatha", representing the creative or anabolic forces, "Kapha", representing the destructive or catabolic force, and "Pitha", representing the protective force comparable to the glandular and thermoregulatory phenomenon of the body. These three environmental states represent three separate physiological biospheres and are made up of a proportionate combination of the five elements.

[151] Ibid, p. 1064.
[152] Ibid, p. 1064.

> All human beings are classified into Vaatha-dominant, Pitha-dominant and Kapha-dominant beings. When a Vaatha-dominant biosphere is deranged and becomes Vaatha-deficient, as a result of the interaction of cosmic phenomena, food habits, genetic or climatic changes, the biospheric equilibrium is disturbed, and it has to be given a Vaatha-dominant drug to match and set right the equilibrium and thereby the disease condition. Whereas modern medicine is causative-agent oriented, Siddha medicine is biosphere or environment-oriented.[153]

Siddha and Ayurvedic traditions use the palpation of the radial pulse to help analyze conditions of health and disease. The practitioners also examine the patient's eyes, nails, tongue and lips. In older days, these physicians were also pharmacists. They manually collected the herbs and substances for their medicines and made and stored them for usage.

A notable feature of Ayurveda and Siddha is that the physicians not only cured the sick, but also had practiced certain techniques to restore health, and prevent the people from diseases. In order to do that they had studied in detail the seasons and probable causes of illness and made the people self-protective towards the possible illness. They did all these in a manner to do the service to the society and were so considered to be sages or wise people. Monetary gain was never a concern for them in treating a sickness and saving the life of a person.

2.1.5. Homeopathy

Homeopathy is not a medical system of Indian origin. This system is created by Dr. Christian Friedrich Samuel Hahnemann (1755-1843) in 1796 based on his doctrine *similia similibus curentur* (*like cures like/ let likes be cured by likes*) this rule is also known as the *Principle of the Law of Similars*.[154] The idea is that a substance that causes the symptoms of a disease or ailment in healthy people would cure similar symptoms in sick people. Robert Ellis Dudgeon states it "was an amplification and extension of his "Medicine of Experience", worked up with greater care, and put into a more methodical and aphoristic form, after the model of the Hippocratic writings."[155] Dr Rajesh Shah

[153] Ibid, p. 1064.
[154] Rajesh Shah, *What is Homeopathy?*, retrieved on 12.06.2017 from https://www.askdrshah.com/homeopathy-brief.aspx.
[155] R. E. Dudgeon, *Lectures on the Theory and Practice of Homeopathy*, London: Henry Turner, 1853, p. xxxi.

explains the mechanism of Homeopathy as contrary to the conventional medicine, it is much safer, deeper acting, somewhat slower and the result is much longer lasting by energizing the body's curative powers.[156]

The history of Homeopathy is dated back to 1830s, the first incident being Dr. John Martin Honigberger treating Maharaja Ranjith Sing, then ruler of Punjab. Then in 1845-46 Homeopathic hospitals were started by surgeon Samuel Brooking at Tanjore and Paducuta in South India. It was also noticed that during 1848-49 in the great epidemic of Cholera, Homeopathy was widely used by Dr. Rutherford Russel and Dr. Cooper in India.[157]

Dr. Ajoy Kumar Khosh remarks that in India Homeopathy was earlier practiced by amateurs in the civil and military services and certain other people until Mahendra Lal Sircar became the first Homeopathic physician in India. Then a number of allopathic doctors started homeopathic practices.[158] In 1881 the first Homeopathic Medical College in India, the Culcutta Homeopathic Medical College was established. Thus the Homeopathic medical tradition in India had an official opening.

In 1973 Government of India recognised Homeopathy as one of the national systems of medicine and thus brought into existence the Central Council of Homeopathy (CCH). From then on only qualified homeopaths could practice Homeopathy in India. At present India has over 200,000 registered Homeopathy doctors and this system of medicine is the third largest in the country after Allopathy and Ayurveda.[159]

Critics have always argued that the practice of Homeopathy is unethical because it is not scientific and fail to meet the evidence base and therefore it is not legitimate.[160] Smith K. argues that the benefits that this system of treatment brings are minimal and they are not up to the standards of healthcare. He rules Homeopathy out as unscientific and

[156] Rajesh Shah, *What is Homeopathy?*, retrieved on 12.06.2017 from https://www.askdrshah.com/homeopathy-brief.aspx.
[157] Neetu Meena, *History of Homeopathy*, retrieved on 12.06.2017 from https://www.slideshare.net/neetumeena948/history-of-homoeopathy-in-india; Ajoy Kumar Khosh, "A Short History of Homeopathy in India", *Homeopathy*, 99, 2010, p. 130.
[158] Ajoy Kumar Khosh, "A Short History of Homeopathy in India", pp. 130-131.
[159] Ibid, p. 130.
[160] Levy D., Gadd B., Kerridge I., and Komesaroff P., *A Gentle Ethical Defence of Homeopathy*, 2014, retrieved on 12.06.2017 from https://ses.library.usyd.edu.au/bitstream/2123/11701/2/GentleDefenceOfHomeopathy_preprint-2014.pdf.

unethical.[161] It is also criticized as a placebo.[162] The argument for homeopathy includes that it offers significant value and benefits to patients, it facilitates a diagnostic profess which culminates in treatment or referral, it is founded upon caring, there is a therapeutic relationship between the clinician and the patient, and it is guided by the freedom of choice by the consenting patients.[163] Homeopathy has its basic thrust on the holistic approach to healthcare.

2.2. Differences between Traditional Medicine and Modern Medicine

In India the Council for Scientific and Industrial Research (CSIR) has organized several public and private partners to conduct clinical trials on herbal products generated through reverse pharmacology. It says that there was a wider acceptance of Ayurvedic traditional medicines and promises cheaper, faster and more effective drugs.[164]

Dr. Timothy McCall in an interview, comments about the difference of practice in Yoga to the modern medicine. He says that in a given situation with a patient, the therapist (*yogi*) personalizes everything to the individual. It is never, "here is the protocol for your condition, do this". In modern medicine, we are more and more trying to standardize care, based on the results of large controlled studies, but holistic systems like Yoga and Ayurveda don't work that way. And this fact poses a challenge to researchers who wish to study them and accurately capture their value.[165]

He also narrates how the observation skills are used by practitioners in traditional medicines as different from the modern medicines with the use of machines.

> One day, B.K.S. Iyengar was working with a man with low back pain who was doing the pose *uttitha trikonasana*. Iyengar had him turn his front foot five

[161] Kevin Smith, "Against Homeopathy: A Utilitarian Perspective", *Bioethics*, 26, 2012, pp. 398-409; Kevin Smith, "Homeopathy is Unscientific and Unethical", *Bioethics*, retrieved on 10.02.2017 from http://www.dcscience.net/Smith-response.pdf.
[162] D. M. Shaw, "Homeopathy is Where the Harm is: Five Unethical Effects of Funding Unscientific 'Remedies'", *Journal of Medical Ethics*, 36, pp. 130-131.
[163] Levy D., Gadd B., Kerridge I., adn Komesaroff P., A Gentle Ethical Defence of Homeopathy, 2014, retrieved on 12.06.2017 from https://ses.library.usyd.edu.au/bitstream/2123/11701/2/GentleDefenceOfHomeopathy_preprint-2014.pdf.
[164] Priya Shetty, "Integrating Modern and Traditional Medicine: Facts and Figures", retrieved on 10.02.2017 from http://www.scidev.net/global/indigenous/feature/integrating-modern-and-traditional-medicine-facts-and-figures.html.
[165] Kelly McGonigal, "Interview: A Conversation with Timothy McCall MD", *International Journal of Yoga Therapy*, 19, 2009, p. 144.

> degrees in, then five degrees out, and compared the results. Just by watching him, Iyengar knew exactly what was going on with the student's sciatic nerve. No Western physician could do that without an MRI! It used to be that the physical examination and subtle diagnostic techniques were highly valued and stressed in medical education. Not anymore. With more reliance on high-tech tests, the physical examination is considered less important. For the first time ever, medical students are being taught by a generation of professors who themselves never learned to do physical exams, as well as doctors in prior generations. With these observational skills eroding, doctors are in a poor position to really get concepts like the rarified perceptive abilities of master teachers.[166]

He also sees the inability and inadequacy of measures that is used in modern science to evaluate and understand the traditional medical systems like Yoga. He explains:

> Yoga involves hundreds of different tools that can be combined, modified, and taught in an essentially infinite number of ways, and the patterns of practices may change over time. Yoga therapy has more variables than reductionist science can ever sort out. It's a combinatoric explosion that quickly exceeds the ability of one-at-a-time science to measure. Reductionist science can either ignore the complexity or measure some greatly reduced version of it, for example, reducing the great, beautiful, wide field of Ayurveda to studying turmeric pills for arthritis, regardless of *doshic* imbalance. Or a Yoga study that offers all subjects the same ten poses for back pain, without any consideration of the students' differing postural habits, breathing patterns, state of their nervous systems, stress levels, overall level of fitness, and all the other things that good Yoga therapists routinely assess in developing their recommendations for individuals. And if these greatly diminished versions fail to produce a statistically significant result in eight or twelve weeks, we say Ayurveda or Yoga doesn't work. But slow and steady, personalized and holistic is the way we do it, so I think it's actually pretty impressive how well Yoga tends to do in short-term reductionist studies with standardized protocols.[167]

It is really complex to compare and evaluate two systems of healthcare which function in different axioms of knowledge and practice. The philosophy behind the healthcare to an extent determines its ethical content. However, in the common comparison made between these different traditions many authors diminish them only to the scientific content of the medical practice. The following chart gives a gist of the key differences between traditional and modern medicines.

[166] Ibid, p. 144.
[167] Ibid, p. 146.

	Traditional Medicine	Modern Medicine
Knowledge protection	Open access	Closed, patent-protected
Formulation	*Ad hoc* during consultation with the patient	Pre-determined, and once tested in clinical trials cannot be changed unless re-tested
Regulation	Virtually none, though some countries are trying to introduce rules and standardisation	Extremely tight, to the point that bringing drugs to market now costs billions of dollars
Testing	No formal testing as knowledge of the effectiveness is handed down through generations	Rigorous trials that happen in different phases, first testing for safety, then efficacy
Dosage	Unfixed: the amount of medicine given might be roughly similar, but the active ingredient (which is what dosage really is) can vary hugely	Fixed doses that tend to vary only slightly with age or weight, or disease severity
Consultation	Lengthy, and the patient is asked about a wider range of questions than just their symptoms	Consultations in both primary and secondary care tend to be brief and focused, especially as national health systems come under strain
Training	Both systems of medicine require lengthy training over many years but with traditional medicine, knowledge is often passed one-to-one through families, and practitioners are often born into a family of healers	Often vocational: health professionals go through formal training in schools and universities

Table 2: Key differences between traditional and modern medicine[168]

[168] Source: Priya Shetty, "Integrating Modern and Traditional Medicine: Facts and Figures", retrieved on 10.02.2017 from http://www.scidev.net/global/indigenous/feature/integrating-modern-and-traditional-medicine-facts-and-figures.html.

Though many of these concepts are not applicable to the mainline traditional medical systems like Ayurveda, it demonstrates the basic confusion within the various traditions coexisting in the title of traditional medical practices. Taking into consideration the above mentioned points one would clearly see the ethical challenges in comparison with the practice of modern medicine. The former being more "unscientific" in its nature and practice has to overcome many hurdles to clear the ethical principles that govern its research, medical application, treatment of the patients, justifiable results, benefit for the society, harmlessness in the treatment etc. It also needs to establish the standards for safety and evidences.[169] Modern medicine tries to have measures in handling all these challenges by making prescribed rules and regulations. This is a field in which the traditional medicine should develop its competence in justifying its practices ethically.

It is not forgotten that the traditional medicines are progressing in the field of research and technology as well in healthcare practices. To a certain extent we need to accept the fact that certain practices in Ayurveda, Siddha, Yoga, Naturopathy etc. cannot be done with technological assistance, because a number of treatments rely on the natural resources and freshly made herbal medicines. The scientific evidence of the medical practice in this regard may fail the Allopathic scale of evaluation or the efficacy which may be sought and found by the scientific analysis. Yet we cannot look down upon the usefulness of these medical traditions in a country like India where more than 90% of the people make use of at least one of these traditional medical systems of healthcare.[170]

[169] John G. Tilburt and Ted J. Kaptchuk, "Herbal Medicine Research and Global Health: An Ethical Analysis", *Bulletin of the World Health Organization*, 86, 2008, pp. 577-656.
[170] Marc Lallanilla, "Ayurveda: Facts about Ayurvedic Medicine", *Livescience* accessed on 06.06.2017 from https://www.livescience.com/42153-ayurveda.html.

Chapter 3

Bioethics in Modern India

In India the term bioethics was used in terms of medical ethics in some institutions and accepted as standards of professional conduct and etiquette for the physicians of modern medicine in 1956 under the Indian Medical Council Act.[171] It is still a developing concept in the medical and scientific spheres. In general terms it can be explained as the practical application of ethics related to life. But, the question is, does it pertain to only the human life? The first set of analysis among the primary arguments in this regard is confusing because the terms 'bioethics', 'biomedical ethics' and 'medical ethics' are used at times as synonyms, other times in an ambiguous style or still certain other times in an altered manner. This chapter therefore, is a study on the birth and development of bioethics in India to examine if it could be traced through its different and various components that really make a constructive and practical bio-ethics in the nation.

The international terminological reference ideally would be the one adopted in the *Internet Encyclopedia of Philosophy*, which states "Bioethics" as a discipline of applied ethics and a particular way of ethical reasoning that substantially depends on the findings of the life sciences. It provides a disciplinary framework for the whole array of moral questions and issues surrounding the life sciences concerning human beings, animals, and nature. It has got an inter disciplinary approach which inculcates different area of natural sciences, most notably, medicine in the case of medical ethics and considers other disciplines of applied ethics such as research ethics, information ethics, social ethics, feminist ethics, religious ethics, political ethics, and ethics of law in order to solve the case in question.[172]

3.1. The History of Bioethics in India: Indicators

Among the sub disciplines of bioethics, i.e., medical ethics, animal ethics and environmental ethics, we realize that the concept of bioethics is very broad and

[171] Section 20A. 1, *The Indian Medical Council Act, 1956*, retrieved on 12.02.2017 from http://www.mciindia.org/ActsandAmendments/TheMedicalCouncilAct1956.aspx.
[172] Gordon John-Stewart, "Bioethics" in *Internet Encyclopedia of Philosophy: A Peer Reviewed Academic Resource*, ref: http://www.iep.utm.edu/bioethic/ as registered on 26.05.2016.

encompasses various grounds and themes perhaps different among themselves even if precisely at the same time this apparent difficulty brings out a very important aspect of bioethics. Or to say, its systemic nature, in fact, that one discipline can speak of humans, animals and environment stresses that all these realities exist in a single, global order without destroying the individual peculiarities, which allows the construction of proper relations among them. When we talk about the relations in the field of bioethics we point to the horizontal relationships (similar ones), vertical relationships (human beings and things) and individual relationships (each element in itself). Bioethics in this way appears to be a science of relationships based on the knowledge of the realities present in it in view of a global sustainability. This is the reason why the theoretical foundations in bioethics are anthropological, cosmological, ethical and political. As Dr. G. N. Rao the Founder and Chairperson of the L.V. Prasad Eye Institute in his discourse during the IV National Bioethics Conference indicated, "bioethics is not clinical ethics alone. It refers to biotechnology, law, community, end-of-life issues, and other aspects of our daily lives. The purview of bioethics and its debates should extend further than they do today". It is also viewed in the conference that there is a need to bridge the several components of healthcare research, clinical practices and the other elements.[173]

We would like to outline the birth of bioethics activities in India and some of its development trends briefly. In order to succeed in this endeavor naturally we try to choose different indicators. In this chapter we would like to steer our work through three indicators.

1. Chronology of scientific publications in the area of bioethics (including medical ethics)

2. The development of academic activities in the field of bioethics in institutions

3. The beginning and growth of groups and associations that nurtured the theme of bioethics

The first indicator is justified by the view that the scientific activity reaches a minimum maturity only when it is able to present or share its results with the international scientific and research readership. Only in that way, the activity of inter-subjective evaluation with the critical rationalism requiring a minimum of scientific quality

[173] Rakhi Ghoshal and Sanna Meherally, "Conference Report", *Indian Journal of Medical Ethics*, 10(1), January-March 2013, p. 16.

standards becomes possible. Therefore, first we searched for history of indexed articles written by authors with Indian affiliation or Indian authors as published in Pub Med Central, Cochrane Library etc. The second pointer identified by us on the academic activity is because the external manifestation of the birth and development of any school based on the local thinking which guarantees a prerequisite that the knowledge and the development of a framework depends on its roots in a concrete national culture. The third indicator can help us to measure the maturity of the theoretical dimension that becomes practical, moulding the society accordingly or on the other hand by working with certain principles which influence the society to assure the dissemination of those principles for which they stand.

3.1.1. The History of Bioethics Teaching/ Institutions/ Initiatives

India's history of modern school of medicine initiated in 1823 when the French Government first set up a medical school in Pondicherry called École de Médicine de Pondichérry. This medical college was renamed to Dhanvantari Medical College at the time of de facto transfer of Pondicherry to the Government of India. This institution is later upgraded into Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER).[174] The second one was in Kolkata set up in 1835 by British initiatives in India and this establishment was then called "Medical College, Bengal".[175] Today this renamed "Medical College and Hospital, Kolkata" stands as the second medical school which was established in Asia to teach European Medicine. Presently the number has increased to more than 450 medical colleges teaching MBBS as per the list of the Medical Council of India. Of these, very few have a planned program of teaching bioethics or medical ethics as part of the curriculum. Unlike in the West, India did not have many academic openings to teaching bioethics in philosophy, medicine, social sciences, or life sciences, despite various initiatives to get it included as a separate discipline in the curriculum. It was of course the individual institutional policy that brought medical ethics to academics in India. Two pioneering institutions in this regard are St. John's National Academy of Health Sciences (SJNAHS) Bangalore in Karnataka state, and Christian Medical College, Vellore in the Tamil Nadu state. Recently by the

[174] Accessed on 02.12.2016 from http://jipmer.edu.in/about-us.
[175] David Arnold, *The New Cambridge History of India III (5): Science, Technology and Medicine in Colonial India*, Cambridge: Cambridge University Press, 2000, p. 63.

initiative of diverse agencies there are a number of institutions setting up a program to teach ethics course as part of their curriculum.

3.1.1.1. St. John's National Academy of Health Sciences (SJNAHS) Bangalore

St. John's National Academy of Health Sciences (SJNAHS) Bangalore introduced medical ethics as a separate subject in curriculum from its inception in 1963.[176] Until 1985, the chaplains of the medical college were the instructors in medical ethics. Some of the topics were addressed in the Forensic Medicine curriculum. As recently as 1998, SJNAHS was the only medical college in India that taught medical ethics as a regular part of its undergraduate study program. Interns were required to attend monthly clinical ethics sessions in which the cases of ethical importance were discussed with the faculty and members of the department of medical ethics.[177] In 1999, St. John's medical ethics program became the model to design bioethics curriculum in Rajiv Gandhi University of Health Sciences, Karnataka (in collaboration with Community Health Cell, Bangalore).[178]

3.1.1.2. Christian Medical College (CMC) Vellore, Tamil Nadu

A second pioneering institution in this regard was the Christian Medical College (CMC) Vellore, Tamil Nadu. CMC was founded in 1900. In 1971 ethics committee was formed to discuss ethical issues related to renal transplantation. In 1982, the Low Cost Effective Care Unit was set up as an attempt to practice medicine that was rational, of good quality and cost-effective. Here the concepts of Patient's autonomy, patient as a partner in the healing process, and patient empowerment were the driving forces without having

[176] Ravindran G. D., Kalam T., Lewin S., Pais P., "Teaching Medical Ethics in a Medical College in India", *National Medical Journal of India*, Nov-Dec. 10 (6) 1997, pp. 288-289.
[177] Karuna R., "Ethics in Medical Curriculum; Ethics by the Teachers for Students and Society", *Indian Journal of Urology*, 25 (3) 2009, pp. 337-339.
[178] Maithreyi M. R., *Towards a History of Bioethics in India (1980-2010): Mapping the Field, A Preliminary Report*, Mumbai: Centre for studies in Ethics and Rights, 2012, pp. 21-22; also ref. Narayan R., Lewin S., Srinivasa D. K., Francis C. M., (eds.) *Teaching of medical ethics in undergraduate medical education: proceedings of 77 the workshop 31st March-1st April*, Bangalore: Rajiv Gandhi University of Health Sciences, 1999.

the clothing of bioethics.[179] In 1994, a formal Institutional Review Board (IRB) was formed. When other institutions teach medical ethics in the Forensic Medicine course as part of mandatory curriculum, SJNAHS Bangalore and CMC Vellore taught medical ethics with a prescribed plan throughout undergraduate medical education.

3.1.1.3. Indian Council of Medical Research (ICMR)

In this regard we must also appreciate the initiatives taken by the Government organisation, the Indian Council of Medical Research (ICMR) which steered in a big way the insemination of bioethics training in India. Its function is to formulate, coordinate and promote biomedical research in India. It has published its first ethical guidelines as early as in 1980, namely, *Policy Statement on Ethical Considerations involved in Research on Human Subjects*[180] soon after the publication of Belmont Report in 1979. This statement was revised in 2000[181] and again in 2006.[182] This contributed much to an ethical awakening in the research institutes in India. Apart from the policy making, the initiatives taken by the Senior Deputy Director General, Vasantha Muthuswamy, and the Deputy Director General (Sr. Grade), Nandini K. Kumar in the field of education and training in bioethics are praiseworthy.

With international collaboration and grants received from National Institute of Health (NIH) USA, Genome Canada, WHO and Forum for Ethics Review Committees in Asia Pacific (FERCAP), ICMR launched diverse programs in disseminating bioethics education in various regions of India. Two ICMR scientists, Vasantha Muthuswamy and Rema Mathew studied at the Kennedy Institute of Ethics at Georgetown University, U.S.A. through Fellowship granted by WHO. Also, from the year 2001 onwards twelve doctors specialized in bioethics at Toronto, Canada under Fogarty Fellowship and some others at other bioethics institutes abroad as Erasmus Mundus Fellows. This training eventually bore fruits for the bioethics courses conducted by ICMR. Then Deputy

[179] Bhattacharji S., "Working the Contradictions: Three Decades", in A. Zachariah, R. Srivatsan, S. Tharu (eds.), *Towards a Critical Medical Practice: Reflections on the Dilemmas of Medical Culture Today*, Hyderabad: Orient Blackswan; 2010, pp. 97-108; also ref. Maithreyi M. R., 2012, pp. 23-25.
[180] *Policy Statement on Ethical Considerations Involved in Research on Human Subjects*, New Delhi: Indian Council of Medical Research, 1980.
[181] *Ethical Guidelines for Biomedical Research on Human Subjects*, New Delhi: Indian Council of Medical Research, 2000.
[182] *Ethical Guidelines for Biomedical Research on Human Participants*, New Delhi: Indian Council of Medical Research, 2006.

Director General Sr. Grade, Nandini Kumar initiated Capacity Building in Bioethics during 2002-2012 through the NIH Grant. Dr. Nandini Kumar, being one of the first Fogarty Bioethics scholars, launched quite eligibly the Fogarty style of "trainees to trainers" program in Bioethics through her various initiatives in India. She was so praised by her Toronto mentor Dr. Peter Singer that "Dr. Kumar is a great example of leveraging funding from Fogarty." Dr. Nandini Kumar was thus engaged by Singer to apply for the Fogarty aid in planning her own bioethics training program, specially formulated to India's unique cultural, social and research environment. Besides training five ICMR scientists in Western IRB, Washington, USA, in ethics committee management, this grant also enabled training of around 2000 people in bioethics through short and long course, of which the first one year online distant education program was conducted in collaboration with the Indira Gandhi National Open University (IGNOU) from 2011 - 2013.[183] Many trainees under this program have served as resource persons, made their mark in World Congress of Bioethics, started short and long-term courses in bioethics (e.g. one year Diploma course in PSG Institute of Medical Sciences and Research, Coimbatore, Tamil Nadu) and have formed a network group in some States to conduct workshops on bioethics. Some of these trainees have also become Heads of Unit of UNESCO Chair.

3.1.1.4. Madras University

In South India, during the years 1992-2003, Prof. Jaypaul Azariah, Zoology professor of Madras University with Darryl Raymond Johnson Macer (Regional Advisor on Social and Human Sciences in Asia and the Pacific, UNESCO, Thailand and founder of EUBIOS Ethics Institute Thailand) introduced bioethics activities including research promotion and survey among teachers in Tamil Nadu. For Macer, bioethics is "love of life", in all its forms.[184] Attracted by this ideology of Macer, Prof. Azariah contributed his share in the dissemination of bioethics by organizing lectures and publishing materials appropriate to Indian culture. He founded All India Bioethics Association

[183] Kumar Nandini K., "Bioethics Activities in India", *Eastern Mediterranean Health Journal*, 12 (1) 2006, pp. S56-S65; Kumar Nandini, Ravindran G. D., Bhan A., Srivastava J. S., Nair V. M., "The India Experience", *Journal of Academic Ethics,* Springer 2008 (6), pp. 295-303; Steve Goldstein, "Trainee to Teacher: Leveraging Bioethics Learning in India", *Global Health Matters Newsletter*, Fogarty, NIH, Nov.-Dec. 2011, retrieved on 01.12.2016 from https://www.fic.nih.gov/News/GlobalHealthMatters/nov-dec-2011/Pages/bioethics-india.aspx.

[184] Macer Darryl R. J., *Bioethics is Love of Life: An Alternative Textbook,* Christchurch, NZ: Eubios Ethics Institute, 1998.

(AIBA), which also has a news link on bioethics from 1998 onwards. The same year, while Prof. Azariah was still the head of the Department of Zoology, the Academic Council of the University of Madras approved the restructured B.Sc. Zoology curriculum which had included bioethics as one of its components. He claims that theirs is the first attempt to bring "bioethics" to India.[185]

3.1.1.5. Other Notable Initiatives

As the conscientisation in the area of bioethics education gradually spreads in India, a number of medical colleges have initiated teaching of medical ethics in non-formal forms. However, long term programs were started by ICMR and Yenepoya University, Mangalore, Karnataka. The latter set up a Centre for Bioethics in 2011 which conducts an annual Continuing Medical Education (CME) in Bioethics.[186] In 2013 the Centre has introduced an international CME on Public Health Ethics, to mark a progress in the field of bioethics education. Yenepoya University claims to have started the first formal, structured academic course in bioethics as the Postgraduate Diploma in Bioethics and Medical Ethics (abbreviated to PGDBEME).[187] PSG Institute of Medical Sciences and Research, Coimbatore started one year Diploma program (PGDBE) in 2015. Manipal University will soon start one-year course in bioethics in 2017. It is also noted that the Astron Institute of Social Sciences, Gurgaon, Haryana has organised an online certificate course in "Medical Law and Bioethics" recently.[188]

3.1.1.6. UNESCO Bioethics Programme

It is in this context that the recent more active intervention of UNESCO in bioethics teaching steered by Russel D'Souza, UNESCO Chair in Asia Pacific region, has brought more visibility to bioethics as a significant topic to teach in the medical colleges to inculcate morality in character building of healthcare givers. By creating a core curriculum for bioethics, the Heads of Unit of UNESCO chairs in various regions of

[185] Maithreyi M. R., 2012, p. 46.
[186] Vaswani V., Vaswani R., "Bioethics Education in India", in Henk A. M. J. ten Have (ed.), *Bioethics Education in Global Perspective: Challenges in Global Bioethics*, *Advancing Global Bioethics*, vol. 4, Dordrecht: Springer, 2015, (pp. 37-50), pp. 42-43.
[187] Ibid, p. 44.
[188] Accessed on 02.02.2017 from http://www.astroninstitute.in/certificate-course-on-medical-law-and-bioethics; and http://www.astroninstitute.in/wp-content/uploads/2017/06/medical-law-brochure.pdf.

India are striving to make the Universities and medical colleges adopt it for the study of bioethics. This initiative has a starting point at Haifa University when on 24 June, 2001; an agreement was signed by the Director-General of UNESCO and the Rector of the Haifa University, Israel, concerning the founding of a UNESCO Chair in Bioethics at the International Center of Health, Law and Ethics, at the University of Haifa. The purpose of the Chair is to coordinate and stimulate an International Network of Institutes for Medical Ethics Training (NIMED), associating higher education institutes in both the developed and developing countries, and to build up an up-to-date syllabus for medical ethics education, which will fulfill the necessities of medical schools in the world.[189] In India, so far, 48 institutions including Health Universities and Medical Colleges have accepted this core curriculum.

3.1.1.7. Text Books in Medical Ethics and Bioethics

It is very important here to mention the very few formal bioethics/ medical ethics text books published in India by Indian authors. It was Dr. C. M. Francis who published the first book in 1993 named "Medical Ethics" as a study/ teaching aid for the medical students and teachers.[190] Being principal of the medical colleges in Calicut and Kottayam in the Kerala state before being the founder-director of Sree Chitra Tirunal Medical Centre of Advanced Studies in Specialties in Trivandrum, Kerala and serving St. John's Medical College, Bangalore as its dean for 8 years his experience with hospital, medical education and health management helped him concretely to formulate this prescribed textbook for undergraduate medical students. The textbook has 8 chapters dealing with the professional and personal aspect of the physicians, ethics of trust and ethics of rights, beginning and end of life, health policy and rights, human experimentation and research and a few important emerging issues like HIV/ AIDS, Genetics etc.

A second remarkable contribution was the book named "Bioethics" written by S. Ignacimuthu S.J.[191] former Vice Chancellor of University of Madras, Chennai and

[189] For more details please refer: http://www.unesco-chair-bioethics.org/?page_id=8, accessed on 04 February 2017.
[190] C. M. Francis, *Medical Ethics*, New Delhi: Jaypee Brothers, 1993, 2007 (II ed.), book available online https://docs.google.com/file/d/0BxvjJ4mG_bfYUDF1VG1vdlB5Rlk/edit, retrieved on 02 February 2017.
[191] Elaborate details on the author and his academic profile can be accessed at http://loyolacollege.edu/profile/PBT/Rev.Dr.S.Ignacimuthu,S.J..pdf, retrieved on 02.12.2016.

Bharathiyar University, Coimbatore, Tamil Nadu. The book was published in 2008. It covers the historical origin and principles of bioethics and discusses themes concerning reproduction, birth, life, death, health, new innovations in the biomedical sphere, experimentation and research, genetics, clinical trials, etc. It also gives a great concentration on bioremediation and environmental protection. The book was recommended for all medical, biotechnology, biology, bioengineering, agriculture and law students.

A third and noteworthy recent publication is authored by Dr. Olinda Timms, named "Biomedical Ethics". Interested in bioethics, Dr. Olinda specialized in Medical Law and Ethics from the National Law School of Indian University, Bangalore and had also a Post Graduate Diploma in Bioethics from ICMR, and presently serving on the Institutional Ethics Committee of St. Martha's Hospital, Bangalore and Bangalore Baptist Hospital, and is adjunct faculty at the Department of Health and Humanities, St. John's Research Institute, Bangalore. The book is divided into 13 chapters and the contents cover introductory notes to Medical Ethics, its principles, codes and proceeds to an ethical doctor-patient relationship, ethical treatment of beginning and end of life, emerging medical technologies, research ethics, organ donation, public health ethics, medical errors and negligence, the medical professional and his relation with the society and publication ethics.[192]

3.1.2. Bioethics and Animal Ethics

Considering the institutions that teach ethics in treating animals, the first concern goes to those institutions who directly educate on the themes of animal rights, justice, principles of cohabitation and so on. We have earlier mentioned the initiatives in Madras University by the proposal of Prof. Jaypaul Azariah accepting bioethics learning in the Zoology course. But in no way we may disregard the institutes, those as part of the regulation, teach ethics on animal experimentation i.e., the educational institutes, laboratories and the entities that involve animal experimentation. It is important to note here because, in this case it is the government, with its duly formulated rules and regulations, the guardian of ethics being practiced in the laboratories and research circles.

[192] Olinda Timms, *Biomedical Ethics*, 2016.

Union Ministry of Environment and Forests regulates animal care and experimentation on them. An autonomous organization established in association with the Ministry of Environment and Forests is the Salim Ali Centre for Ornithology and Natural History (SACON) at Anaikatty, Coimbatore, Tamil Nadu. It is founded in honour of India's leading pioneer of ornithology Dr. Salim Ali. SACON's mission is professed as "to help conserve India's biodiversity and its sustainable use through research, education and people's participation, with birds at the centre stage".

It was an initiative of the Central Board of Secondary Education (CBSE) to introduce the animal welfare education materials from Non-Governmental Organizations (NGO) in its curriculum but this was not compulsory. The Animal Welfare Board of India has suggested the central government to inculcate animal welfare education in the curriculum in all schools in India for all children from 8-12 years old. This publication was called the "Compassionate Citizen".[193] AWBI claims to have supported materially the *Karuna Club Movement*, which trained 40,000 teachers to promote Compassionate Citizen Program. Environmental education institutions by setting eco-clubs in schools and integrating Environment Education concepts within the curriculum through effective teacher training programs have gone forward with this goal. AWBI has conducted its own Training Programs for Humane Educators and with the alliance of Blue Cross Hyderabad, AWBI has carried out Master Trainers Training Program for teachers.[194]

3.1.3. Ecological Concerns and Ethics

A number of institutions and animal and ecological research centres work under the Central government and different State governments. For example the Indian Council of Forestry Research and Education (ICFRE), Dehradun guides different regional institutes of which two notable academic institutions are in New Delhi. The first is the Indian Institute of Ecology and Environment (IIEE), founded in 1980 in response to the deliberations made at Founes (1971) Stockholm (1972) and Belgrade (1975) on environmental concerns and with the subsequent recommendations and deliberations

[193] For more information please refer: http://api.worldanimalprotection.org/country/india#_ftn2.
[194] For more information please refer: http://api.worldanimalprotection.org/country/india. Please refer also: http://www.compassionatecitizen.org/pdf/endorsement-CBSE-circular-compassionate-citizen.pdf; http://www.compassionatecitizen.org/pdf/endorsement-AWBI-dr-shashi-tharoor.pdf.

from UNEP and UNESCO during the intergovernmental conferences. This institute engages in education on environmental concerns, ecology, pollution control, disaster management, sustainable development, ecological tourism etc.[195] The second one, the Centre for Environmental Management of Degraded Ecosystem, affiliated to the University of Delhi, works towards propagating awareness, research and training in priority areas of environmental management of degraded ecosystems. It actively stands for the biodiversity conservation, rehabilitation measures, habitat reconstruction, pollution control and such developmental activities.

Changing and challenging ecological concerns in India have now made environmental ethics seminars a part of institutional education in various parts of India. For example, The Department of Philosophy and Religion at Banaras Hindu University has conducted an international seminar and a national seminar in 2012. The thrust of the seminar was to inculcate the Indian traditional ethical values in treating the environment. Later, the anthology was published with the title *Environmental Ethics: Indian Perspectives.*[196]

It is also interesting to see that International Society for Environmental Ethics (ISEE), which was founded in 1990, was particularly interested to study India and its religions and the environmental ethics and philosophy they proclaim. Thus, they had various programs to promote environmental ethics in the Indian context. There was a PhD course in *Environmental Ethics with a Focus on Indian Philosophy* at the University of North Texas, USA. Likewise, it organized study programmes like the Eastern Religion and the Environment, South Asian Philosophy and Religion etc. This society had also networked with various other initiatives like the *Bhumi Project*, the *Ecodharma Centre*, *Ecodharma Project*, *The Forum in Religion and Ecology* etc. Whether in India or in the West, the themes that originate from the Indian religious traditions in connection with the nature, ecology and environmental concerns still have to be studied in-depth to understand them better to teach in order to harvest the fruits of treating the Mother Nature with due respect and 'reverence'.

[195] For more details please refer: http://www.ecology.edu/index.html retrieved on 03.12.2016.
[196] Tiwari Devendra Nath and Mishra Ananda (eds.), *Environmental Ethics: Indian Perspectives*, Banaras Hindu University, 2012.

3.2. Publications in the Field of Bioethics in India

The origin of the notion of "bioethics" in the Western world is attributed to 1970s; particularly to the publication of the articles by two authors, i.e., by Potter, "Bioethics, the Science of Survival" in 1970 and Callahan's article "Bioethics as a Discipline" in 1973. It is also noted that the word Bio-Ethik in German, which is translated in English as Bio-Ethics, found place in the writings of the German theologian Fritz Jahr, who published three articles in 1927, 1928 and 1934. The early 70s have also witnessed the discussions between Shriver and Hellegers in the United States for the establishment of an institute where the medical dilemmas could be analysed using moral philosophy. Thus, in 1971 the *Joseph and Rose Kennedy Center for the Study of Human Reproduction and Bioethics* was founded.[197] Today it is called The Kennedy Institute of Ethics, which is one of the most influential institutions in the entire world in the sphere of Bioethics.

In India if we search for such a discussion and the creation of an institute for studies in medical ethics we may not find one. But as the thoughts on the medical dilemmas and the ways to handle them arose in the West, India too was facing similar situations. If we go back to find which is the first indexed article written on bioethics or ethics in medical practices, we might point to Prof. D. V. Subba Reddy's *Medical Ethics in Ancient India*, published in the 1961, September issue of the *Journal of Indian Medical Association.*[198] This article deals with the precepts for new medical graduates as described in the ancient text *Kashyapa Samhita*[199] and the code of conduct and qualities of a good physician as it is given in the text of *Kalyana Karaka*[200]. These texts assert the selfless nature of medical care provided by the physician. They also give emphasis to the character of the physician who desired for goodness and welfare of the world, possessed profound knowledge, dealt with the patients ethically and with respect, and lived a righteous life. *Journal of Indian Medical Association* (JIMA) is one of the oldest medial publications in the country which was being printed from Calcutta (now Kolkata) from

[197] Gordon John-Stewart, "Bioethics".
[198] Subba Reddy D. V., "Medical Ethics in Ancient India", *Journal of Indian Medical Association*, Sep. 16 (37) 1961, pp. 287-288. The author was the director and professor of Upgraded Department of History of Medicine at Osmania Medical College, Hyderabad, Andhra Pradesh.
[199] *Kashyapa Samhita*, also known as *Vriddha Jivakiya Tantra*, is a 6th Cent. BCE treatise on Ayurveda attributed to sage Kashyap. In comtemporary ayurveda medicine it is consulted especially in the fields of paediatrics, gynaecology and obstetrics.
[200] *Kalyana Karaka* is a 9th cent. CE composition or redaction of the practice of Ayurveda ascribed to Ugradithyacharya, a Jain Scholar.

1934 onwards. Later its headquarters was shifted to New Delhi in 1948. It publishes news and articles on medical research activities from all over India and claims to have 1.7 lakh (Hundred and seventy thousand) subscribers around the world. And one of the very first indexed articles in the field of medical ethics in India was published in this journal.

We find a similar article in the *Journal of the American College of Surgeons* (JACS), the official scientific publication of the American College of Surgeons (ACS) which was formerly known as *Surgery, Gynaecology & Obstetrics* from 1905 to1994. In 1965, Ranes Chakravorty has published an article titled *The Duties and Training of Physicians in Ancient India as Described in the Sushruta Samhita.*[201] The article introduces the formation of the written form of *Sushruta Samhita* and its historical nuances, also explaining how the teaching of Ayurveda and the training of the students especially for surgical practices were taking place.[202] The final part of the article comprises general remarks on the duties and behaviour of a physician, who should be an expert in medical knowledge and ethical practice. It is also interesting to note in this text that the physician while serving selflessly and in a friendly manner the priests, holy men, his elders, teachers and friends, the poor, the mendicants, honest people and those who are guests and who seek protection, is asked not to treat the evil persons, criminals, and those who want only kill birds and beasts.[203]

Another article which we find in the year 1967 is the *Ethical and Medico-legal Aspect of General Practice* written by J. B. Mukherjee and published in the official monthly scientific journal of All India General Practitioners' Association (AIGPA) called *Indian Medical Journal*.[204] In the same year Dr. (Capt.) H. N. Shivapuri published an article titled "Medical Ethics" in the *Journal of Indian Medical Association*.[205] He was the secretary of the Indian Medical Association from 1941 to 1955. This article was based on an address delivered by him at the refresher course organised by Bareilly Branch of Indian Medical Association during November – December 1966.

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[201] Chakravorthy R., "The Duties and Training of Physicians in Ancient India as Described in the Sushruta Samhita", *Surgery, Gynecology and Obstetrics*, May 120, 1965, pp. 1067-1070.

[202] There were also cultural and religious hurdles to overcome. Surgeons were treated low and as an outcaste in Hinduism because they cut 'meat'.

[203] Against the ruler's decree Susrutha did plastic surgery of nose which were cut off as a punishment. Hence, he had to face a lot of problems.

[204] Mukherjee J. B., "Ethical and Medico-legal Aspect of General Practice", *Indian Medical Journal*, 61(1) Jan. 1967, pp. 1-2.

[205] Shivapuri H. N., "Medical Ethics", *Journal of Indian Medical Association*, Sep. 16, 49(6) 1967, pp. 298-301.

The term "Bioethics" finds place in the text with an Indian affiliation in a joint work published in *Collegium Anthropologicum* in 1993 by Mano K., Verma I.C., et al., which was the *International Opinion Survey for Bioethics and Medical Genetics*. It was a description of a comparative survey done among the general public in India, Japan and Thailand to evaluate their general bioethical decisions considering their differences in religion, economics and culture.[206] And a second one in 1996 by Suman Sahai published in the *Economic and Political Weekly* with the title *Bogus Debate on Bioethics*. In this article the author argues that the concerns of the West in the field of bioethics are not the same as that of India, and therefore India needs to consider bioethics which is rooted in its own philosophy and religion, reflecting particular social and human needs to contextually resolve the ethical dilemmas. She pursues her arguments based on the developments in the scientific field, especially of genetics and biotechnology.[207] It is interesting to note that in the same year ICMR committee for revising ethical guidelines was set up.

We must mention here the emergence of a full-fledged literary contribution to the theme of medical ethics propounded by a group of doctors in Mumbai in 1992. The association was called The Forum for Medical Ethics Society in India (FMES). This forum emerged from an effort to expose malpractices in the Maharashtra Medical Council. In August – October 1993 the first newsletter was born with different medical themes, and later it was transformed to a journal called *Issues in Medical Ethics* and today it is the most powerful medical ethics journal in India renamed again as the *Indian Journal of Medical Ethics.* So far it has published 10 issues under the label *Medical Ethics: Journal of Forum for Medical Ethics Society* (1993 - 1995), 32 issues in the journal titled *Issues in Medical Ethics* (1996 - 2003), 48 issues with the title *Indian Journal of Medical Ethics* (2004 - 2015) and 4 issues till December 2016, with a new series of the journal which is launched from 2016 January. From the 90s onwards, there are various articles on bioethics in journals published in India and abroad.

As components of bioethics we need to also consider publications on animal ethics and environmental ethics besides number of other subjects too, to make the picture clear. We found the first indexed article with an Indian affiliation on animal ethics by Moor-

[206] Mano K., Fujiki N., Hirayama M., Nakazaki S., Verma I. C., Ratanakul P., "International Opinion Survey for Bioethics and Medical Genetics", *Collegium Anthropologicum*, Dec. 17(2) 1993, pp. 191-198.
[207] Sahai S., "Bogus Debate on Bioethics", *Economic and Political Weekly*, Dec. 14; 31 (50) 1996, pp. 3231-3232. Later this article was republished in *Biotechnology and Development Monitor*, 30, March 1997, p. 24.

Jankowski J. *et al*, '*Humane Methodology and Conservation of Species in Maintaining a Primate Animal Laboratory for Biomedical Experimentation: Twenty Years Experience*, which was published in the *Developments in Biological Standardization'* in 1980. [208] Here the authors discuss the renewal of a laboratory research system based on their policy of reduction of numbers, refinement of techniques aimed at avoiding or diminishing pain and suffering, and replacement of primate animal use (or animal use) whenever possible. This article explains how an acceptable protocol has been formulated and practiced in various institutions in different countries including India, to stabilize animal research projects with a more humane approach. A second article, entitled '*Ethical Considerations in Medical Research'* authored by G. V. Satyavati[209] published in the *Indian Paediatrics* in 1982 highlights the humane features of scientific research. From then onwards, we have a number of publications on the animals used in experimentation, ethical treatment of domestic and wild animals, animal rights, animal welfare etc.

The environmental issues attained peak of attention in India with the Bhopal gas tragedy in 1984. An article published by William J. Curran in 1985 in *The New England Journal of Medicine* entitled '*American Personal-injury Lawyers at Bhopal. Ethics and Public Policy in Mass Disaster'* is one example for this. It discusses the political, legal, environmental and ethical issues related to such mass disasters.[210] A central concern in the article pertains to the context of legal situations, medical practice and ethics in such circumstances causing mass-injury. Meanwhile, although not indexed, there were also publications of great environmental activists like Sunderlal Bahuguna. In his article *Technology V. Ecology*[211] published in *The Hindustan Times* in 1986, he raised his concern about growing technology threatening nature. The challenges we face from natural catastrophes and other environmental concerns have paved way for an increase in publications on environmental concerns, rights and ethics in India. It is a hopeful phenomenon to see that in recent years the articles and books published on bioethics with an Indian affiliation is increasing. Now other journals like *NMJI (National Medical*

[208] Moor-Jankowski J., Goldsmith E. I., Wittrup L., "Humane Methodology and Conservation of Species in Maintaining a Primate Animal Laboratory for Biomedical Experimentation: Twenty Years Experience", *Developments in Biological Standardization*, 45, 1980, pp. 197-202.
[209] Sathyavati G. V., "Ethical Considerations in Medical Research", *Indian Paediatrics*, 19 (3), 1982, pp. 201-208.
[210] Curran W. J., "American Personal-injury Lawyers at Bhopal. Ethics and Public Policy in Mass Disaster", *The New England Journal of Medicine*, 313 (17), 1985, pp. 1068-1070.
[211] Sunderlal Bahuguna, "Technology V. Ecology", *The Hindustan Times*, Feb. 9, 1986.

Journal of India) from New Delhi and *Postgraduate Medicine* from Mumbai besides some other journals are also regularly publishing articles on bioethics.

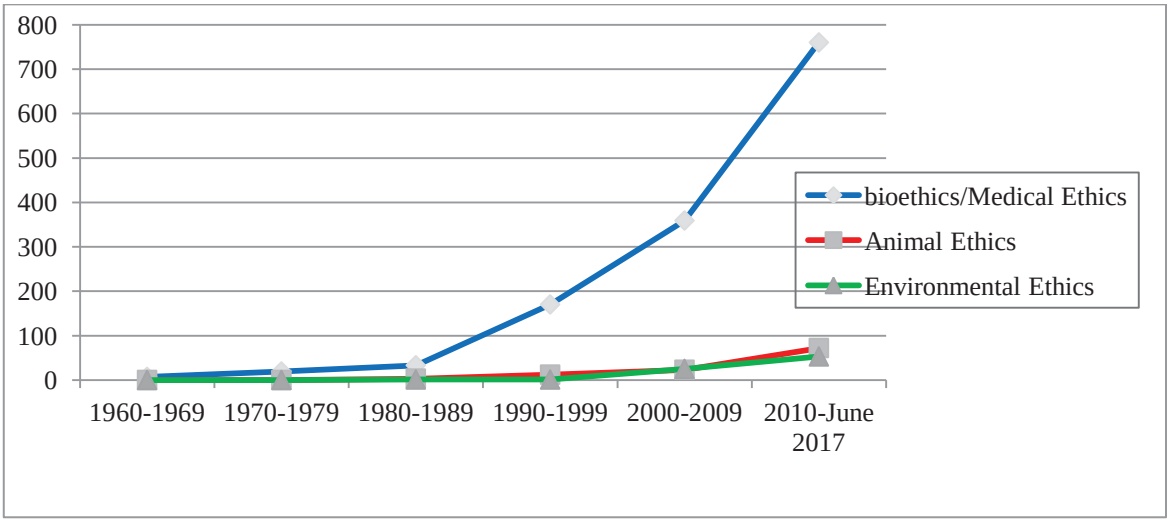

Figure1: Number of indexed articles of Indian affiliation published through the years from 1960 to June 2017

3.3. Associations and Other Movements that Contributed to the Growth of Bioethics in India

The beginning and growth of bioethics and medical ethics activities in India is a result of a number of associative frameworks for upholding the ethical concerns in the public healthcare system, distributive justice in medical treatment, eradicating corruptive malpractices from the authorities, bringing more ethical consciousness among the healthcare practitioners and so on. Though a few of them had a religious back up, most of them were organized under secular leadership by activists who were adamant in realizing a better future for the healthcare system in India.

3.3.1. FIAMC Biomedical Ethics Centre, Mumbai (FBMEC)

The first centre of medical ethics in Asia, in fact sixth in the world was *FIAMC Biomedical Ethics Centre*, Mumbai *(FBMEC)*, which was an extension of *Fédération Internationale des Associations Médicales Catholiques (FIAMC)*. Bio-Medical Ethics Centre (FBMEC) in Mumbai was founded in 1981 as a result of the resolutions taken at

the 14th World Congress of the *FIAMC* held in Mumbai in 1978.[212] This was of course a Catholic Church initiative, as it already had the vision of a bioethics that comes out as a system in moral theology and moral philosophy promoting life in all senses. FBMEC organized seminars and workshops for Christian healthcare practitioners and for the public, working directly in institutes and schools in Mumbai to create a larger awareness about the issues pertaining to the field for ethically analyzing them.[213]

3.3.2. Medico Friends Circle (MFC)

Though it was not exactly to discuss bioethical concerns as it is envisaged today, in 1974, the formation of the group, *Medico Friends Circle* (MFC), an activist group organized by two doctors Dr. Anil Patel and Dr. Ashwin Patel, provided a pro-people, democratic and secular platform to a range of healthcare activists, analysts and workers.[214] It tried to gather likeminded persons to "foster among health workers a current that upholds human values and aims at restructuring the healthcare system" largely public health ethics, human rights and social justice. This has to be seen as a significant step today. The innermost concern of MFC was public healthcare, activities for justice, creating a better ecosystem for the healthcare and research practices in the country. From 1976 onwards, MFC bulletins contain topics related to bioethical issues, which made the bulletin emerge internationally as a notable one.[215]

3.3.3. Forum Against Oppression of Women

When considering the activists working in certain areas related to bioethics and human rights, the birth of a group like *Forum Against Rape* formed in 1979 is notable. Later it was called *Forum Against Oppression of Women*. They campaigned against domestic violation, rape, sexual harassments, foetal sex determination etc. As a result of the protests and campaigns of like minded groups, in 1988, the State of Maharashtra

[212] Maithreyi M. R., 2012, p. 15.
[213] Ibid, p. 16., also ref. Pandya Sunil K., "Seminar on Ethical and Legal Issues in healthcare Organised by FIAMC Bio-Medical Ethics Centre, Association of Medical Consultants, 12 November 1995 at Seth G. S. Medical College, Bombay", *Issues in Medical Ethics*, Apr-Jun 4 (2), 1996, pp. 59-60.
[214] Phadke Anant, *MFC: Looking Back and Looking Ahead; Some Reflections*, ref. http://www.mfcindia.org/mfcpdfs/ history1.pdf; also, http://www.mfcindia.org/main/perspective.html as registered on 02.12.2016.
[215] Ref. http://www.mfcindia.org/mfcpdfs/70s.html as registered on 02.06.2016.

promulgated *The Maharashtra Regulation of use of Pre-natal Diagnostic Techniques Rules, 1988* and the reason was the rise of female foeticide due to the foetal sex determination techniques.[216] The Government of India assented to the suggested regulations on 20 September 1994 and promulgated as a rule in 1996 with the name *Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994*, after *Centre for Enquiry into Health and Allied Themes* (CEHAT) raising the issue again to make a strong regulation nationwide.[217] This rule was amended later in 2003 naming the act as *Preconception and Prenatal Diagnostic Techniques (Prohibition of Sex Selection) Act (PCPNDT)***.**[218]

3.3.4. Anusandhan Trust and Allied Organizations

In 1991, *Anusandhan Trust* is formed with a proclaimed mission "to promote activities and institutions that undertake, within a human rights framework, research, advocacy, services, training and activities (RASTA) in arenas that lead to strengthening of human development and social security, especially in areas of public health policy, health rights, health systems and financing, and other economic, social and cultural rights in partnership and involvement of people in its oversight and monitoring towards realizing universal and equitable access."[219]

In 1994, the first Centre under Anusanthan Trust, the *Centre for Enquiry into Health and Allied Themes* (*CEHAT*, meaning *Health* in Hindi) was set up. This is one of the most significant organizations that directly dealt with the theme of bioethics/medical ethics in India. First funded project was against abortion supported by the Ford Foundation. In 2001, CEHAT with the help of Brihadmumbai Municipal Corporation sets up *Dilaasa* to respond to domestic violence. In 2005, a separate bioethics centre apart from CEHAT was formed, the *Centre for Studies in Ethics and Rights* (CSER). The Board of Trustees at a Special Meeting of the Trust held on May 11, 2013, decided

[216] Retrieved on 01.12.2016 from http://bombayhighcourt.nic.in/libweb/rules/MahRegulationofuseofPre-natalDiagnosticTechniquesRules1988.pdf, Maithreyi M. R., 2012, pp. 29-30.
[217] *The Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994*, retrieved on 01.12.2016 from http://chdslsa.gov.in/right_menu/act/pdf/PNDT.pdf
[218] Retrieved on 01.12.2016 from http://www.childlineindia.org.in/CP-CR-Downloads/PNDT%20Act.pdf; Dr. Ayush Goel et al., *Preconception and Prenatal Diagnostic Techniques Act*, retrieved on 01.12.2016 from https://radiopaedia.org/articles/preconception-and-prenatal-diagnostic-techniques-act.
[219] Ref. http://www.anusandhantrust.org/

to change the structure of CSER from an independent Centre to a Research Programme on Ethics, directly under the Trust. CEHAT has also engaged itself in conducting workshops on sexual assaults, women empowerment, courses on counseling skills and an International Postgraduate Course on Health and Human Rights (from February 18-27, 2013).[220] We would also take note of SATHI (Support for Advocacy and Training in Health Initiatives), which is one of the third centres which governed Anusandhan Trust. It has developed into full-fledged institution from 01 April 2005, involving in health action and campaigns. SATHI is based in Pune.[221]

3.3.5. Forum for Medical Ethics Society (FMES)

Another notable event was the emergence of the *Forum for Medical Ethics Society* (FMES) in 1992 by a group of likeminded persons in Mumbai to expose malpractices in the Maharashtra Medical Council. In 1993, its first newsletter (August – October) was born covering diverse medical issues. Later this was converted to a journal called *Issues in Medical Ethics* and at present it is the only Indian medical ethics journal renamed as the *Indian Journal of Medical Ethics (IJME),* which we have already mentioned in this chapter.[222] The challenging and praiseworthy endeavors taken up successfully by Dr. Prof. Amar Jesani for the dissemination of bioethics in India through various means working also with MFC, CEHAT, CSER and FMES are praiseworthy. His guidance and continued efforts to advise, assist and teach bioethics in different forums and institutes in India encouraged the propagation of bioethics in India. More about Dr. Jesani is found in chapter 4.

3.3.5.1. National Bioethics Conference (NBC)

As Bioethics is slowly finding its roots in the Indian soil, international conferences have been hosted by the FMES, ICMR, other organizations and Medical Colleges. Thus the first *National Bioethics Conference* (NBC) was conducted by *IJME* in 2005 in Mumbai. The themes of the conference were ethical challenges in HIV/AIDS; ethics of life and death in the era of high-tech healthcare; ethical responsibilities in violence, conflict and

[220] Ref. http://www.cehat.org/go/TrainingandEducation/Home
[221] Retrieved on 01.12.2016 from http://www.anusandhantrust.org/centres/CSER.
[222] *Medical Ethics: Quarterly Newsletter for the Forum for Medical Ethics*, Aug.-Oct., 1(1) 1993, pp. 7, 9.

religious strife; and ethics and equity in clinical trials. The second NBC was held in 2007 in Bangalore and in 2010 the third NBC at All India Institute of Medical Sciences, New Delhi. From 6-8 December, 2012 fourth NBC was organised at University of Hyderabad, Andhra Pradesh and from 11-13 December, 2014 fifth NBC at St. John's National Academy of Health Sciences, Bangalore, Karnataka. From 13-15 January 2017 the sixth NBC was organised in Pune, Maharashtra.

3.3.6. Community Health Cell (CHC) and SOCHARA

It is not with less importance we treat the Community Health Cell (CHC) founded by Dr. Ravi Narayan and Dr. Thelma Narayan in 1984 in Bangalore. The purpose of the movement was Public Health Activities. It has also taken up initiatives for the promulgation of public health ethics, and formulation of ethics curriculum for the medical colleges etc. Dr. C. M. Francis who joined CHC has written the text book titled *Medical Ethics* and it was first published in 1993.[223] In 1990 CHC registered as *Society for Community Health Awareness Research and Action* (SOCHARA).[224] These organisations are very much instrumental as a partner in holding National Bioethics Conferences in Bangalore and other parts of India.

3.3.7. All India Bioethics Association (AIBA)

We have already mentioned the bioethics activities undertaken in the Madras University from 1992 by Prof. Jaypaul Azariah and Prof. Darryl Macer. In 1996, the *All India Bioethics Association* (AIBA) was formally registered and in 1997 the first international workshop-cum-seminar on bioethics in Chennai took place. This was a sincere attempt to teach 'bioethics' in totality i.e. seek what is good and right for life in all its senses and to live in harmony with people and the environment. As it was intended to make an interdisciplinary approach in bioethics, in the workshop were present philosophers, poets, technologists, scientists, legal experts, physicians, public administrators, historians, educationalists, economists, environmentalists, marine biologists, theologians, anthropologists, Non Governmental Organisations, sociologists and

[223] Francis C. M., *Medical Ethics*, New Delhi: Jaypee Brothers, 1993.
[224] Since CHC and SOCHARA are partner institutions for this Research, we deal more with their activities in the IVth Chapter.

chemists who were thinking together under the same covering of bioethics.[225] The workshops covered different themes which are integral to bioethics such as, biotechnology, genome, philosophy of life and death, biodiversity, religion and human values, medical ethics, scientific ethics and animal rights , environmental ethics of large-scale systems – oceans, ethical costs and benefits of environmental ethics, land ethics and eco-ethical management, ethics and development, bioethics education and so on.[226]

In 1998, the publication of AIBA news link included bioethics initiatives and discussions on various issues for conscientisation. In 2003, AIBA organised a convention called the *World Conference on Nature, Science, Technology, and Religions: our Common Bioethical Issues*. There were a lot of bioethical themes discussed and debated in the conference.

3.3.8. The Forum for Ethics Review Committees in India (FERCI)

It is also worth noticing The Forum for Ethics Review Committees in India (FERCI), a Maharashtra registered society, set up as the national chapter of FERCAP (Forum for Ethics Review Committees in Asia-Pacific), the latter being an initiative undertaken by WHO TDR[227]. It was established in Agra on 19 December 2002, to improve understanding and implementation of ethical review of biomedical research in India, giving relevance to local cultural values. FERCI operates in intimate collaboration with important organisations and institutions like the World Health Organization (WHO), Indian Council of Medical Research (ICMR), Central Drugs Standard Control Organization (CDSCO), FERCAP, Strategic Initiative for Development of Committees for Ethics Review (SIDCER) etc. Membership of FERCI is open to everyone involved with ethics review committees and those interested in the process of ethics review of biomedical research in India.[228]

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[225] Azariah J., Azariah H., Macer Darryl R. J. (eds.), *Bioethics in India: Proceedings of the International Bioethics Workshop in Madras: Bio management of Bio-geo-resources, 16-19 Jan. 1997, University of Madras*, Eubios Ethics Institute, 1997. Also found in http://www.eubios.info/india/BIIP.HTM.

[226] For further information on the topics please refer: http://www.eubios.info/INDIA.htm, accessed on 20.01.2017.

[227] The Special Programme for Research and Training in Tropical Diseases based at the World Health Organization.

[228] FERCI: Forum for Ethics Review Committees in India, retrieved on 01.02.2017 from http://ferci.org/.

FERCI also has been holding biannual national conferences the first being in Mumbai during 5-6 November 2011 and the second at Coimbatore, 8-9 November 2013. Breaking the norm this year when Kolkata Conference took an annual turn. Although it is meant for ethics committees, the theme did provide chance to discuss other topics of interest. Since bioethics includes research ethics FERCI activity would fall under the latter area.

3.3.9. Organizations for Animal and Environmental Welfare

At this point we need to also mention the organisations that are functional in the field of animal and environmental welfare. Animal welfare groups and the animal rights movementss are seen in different forms worldwide. The internet directory shows more than 1,89,000 such groups around the world.[229] Many of these organisations set forward their propaganda on animal protection and welfare advocating the basic rights of the animals the same as the human rights. There were various associations functioning in India in order to propagate rights and welfare of the animals. Some associations with a religious colouring tried to protect certain animals because of the sacredness connected to them. In fact all the Indian religions uphold sympathy and compassion to all sentient beings.

The animal rights movements in the West were not a result of any religious motivations. In fact, Christianity is criticised for its dogma taken from the scriptures which states that "man has dominion over all the other creations". We cannot take it as an occidental belief, because it originated in the Old Testament in the Christian Bible which is the base also for the sacred scriptures of Judaism and Islam which are of Oriental origin. But in a particular way the Indian attitude to animals is one that is associated with religious and ethical features.

Hinduism and Buddhism believe in a hierarchy of organisms rather separate living dynamisms directed to one spiritual core. The Hindu belief places many forms of plants, birds and animals at par with humans and worthy of worship. The holy animal figures appearing in the sacred scriptures do give a picture that they are not seen inferior to humans but are a part of the nature where every being has a holy existence. Moreover, the belief that humans are on a continuum with animals can lead to a more positive

[229] Ref. "List of Animal Welfare Groups", accessed on 02.09.2016 from https://en.wikipedia.org/wiki/List_of_animal_welfare_groups.

outlook. The Hindu tradition believes that all animals have souls like humans and this relates to the concept of *ahimsa* (a principle of non-violence/ non-killing or not harming the other being). It is a principle which says animals have their own life, their own interests and their own ability to feel pain – we should not therefore harm them or kill them. We also share this idea of *ahimsa* in Buddhist and Jainist traditions.[230] The usefulness of these animals is also a concern here. This has brought a healthy respect in the Indian cultural outlook for treating animals and all forms of life. Moving further, Buddhism and Jainism envisage vegetarianism and respect for all living beings. Hence, to a far extent most of the religions in India had a great respect and sincere appreciation to the living beings. The present political environment with its religious hue could also be one reason animal activism has risen suddenly, in various parts of the country.

In the West there were already philosophical interventions as early as the time of Jeremy Bentham in 1780, who raised the issue for not having a moral regard of humans for fellow animals. There was a further concrete philosophical move when Peter Singer took up the issue of animal rights and Dian Fossay and Jane Goodall echoed similar feelings for the protection and welfare of animals especially with regard to the use of primates. A revolutionary view in this regard we see in *The Case for Animal Rights* published by Tom Regan in 1983.[231] The fundamental wrong from the part of the human beings is that we view them as resources to benefit from them in one way or other. Hence, he argued that animals cannot be used as mere receptacles; they cannot be experimented on because like humans they too have an inherent value.[232] And thus the arguments for the rights of the animals are taken to further extent.

3.3.9.1. Animal Protection Movements

One of the earliest animal protection movements founded in India during the British governance was the *Cow Protection Movement* which demanded the end of cow slaughter in the country. This movement which was founded in 1882, was supported by *Arya Samaj* and its founding father Swami Dayananda Saraswati. *Arya Samaj* was against any kind of animal sacrifices and animal worship. Swami Dayananda Saraswati

[230] Jayaram V., *Treatment of Animals in Hinduism*, retrieved on 01.02.2017 from http://www.hinduwebsite.com/hinduism/essays/animals.asp.
[231] Tom Regan, *The Case for Animal Rights*, U.S.: University of California Press, 1983.
[232] Ibid, p. 243.

and his followers travelled across India spreading their ideologies based on Indian Vedic tradition and culture, including the respect for animals like cow, elephants and the animals which are mostly associated with human living. This propaganda in fact resulted in the establishment of various cow protection societies in different regions of India.

It was a notable instance when the government of India passed the *Prevention of Cruelty to Animals Act* in 1960 (amended in 1982). This resulted in the formation of the *Animal Welfare Board of India* (AWBI) in 1962 under the stewardship of Late Smt. Rukmini Devi Arundale, who was a well-known humanitarian. The Animal Welfare Board of India from then has been functioning as a statutory advisory body on Animal Welfare Laws and promotes animal welfare in the country through various propagandas and by assisting other animal welfare organisations.[233] AWBI has particular concern on the domestic animals, pets, animals that are taken to the scientific laboratories for research purposes, animals that are used in entertainment, like circuses, zoos, theme parks etc., and also the animals made use of in the religious places. Later, Central Drug Research Institute (1991), Lucknow and Indian National Science Academy (1992) released guidelines for use of animals in scientific research,

At present India has a number of international, national and regional organisations and groups those who actively support and promote animal welfare and rights in the country. *Federation of Indian Animal Protection Organisations* (FIAPO), which was registered on 25 November, 2010 is a collective of animal protection organisations to assist, represent, connect and inform other animal protection organisations and activists across India. It also undertakes campaigns for animal protection, welfare and rights of animals. Another noted organisation in this regard is the People for Animals (PFA) organisation which claims to have 26 hospitals, 165 units and 60 mobile units and a working 250 thousand members. They conduct education programs in schools, active animal protection campaigns, rescue missions, conscientisation project among different communities etc.[234] Famous political leader and animal welfare activist Smt. Maneka Sanjay Gandhi is a strong supporter of such groups. As a result of her endeavours in 2001, the Committee for Purpose of Control and Supervision of Experiments on Animals (CDCSEA) applied stricter rules for protection of such animals. This led to

[233] For further details please log on to http://awbi.org/?q=node/1
[234] For more details please refer: http://www.peopleforanimalsindia.org/aboutus.php. As retrieved on 02.02.2017.

modifications in animal facilities and animal care. Although there exist a number of groups, we cannot say that India is on strong foot, to ensure the protection and welfare of animals compared to certain other Western countries.

3.3.10. Organisations that Promote Ecological Concerns

As we look at the associations which promote ecology removed from human selfishness, we may find a great number of organisations work under this banner similar to animal welfare groups. The *Chipko Movement* by Chandi Prasad Bhatt and Sunder Lal Bahuguna, and *Narmada Bachao Andolan* by Baba Amte and Medha Padkar are good examples of the initiatives undertaken by these charismatic activists in different parts of India, which arose out of concern for preservation of ecology. There are also groups that are united with a vision and mission of alleviating pollution from the nature. One of the examples is the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Area Community Environmental Monitors (SACEM) which came into existence as a defence to the pollution caused by an industrial unit (including chemical and pharma plants), at Cuddalore, Tamil Nadu. These individuals have been trained in systematic and organised documentation of pollution and health impacts, which they have done over a long time.[235] With the collaboration of the likeminded groups they have also created a "smell index" to document the level of air pollution in the area.[236] These initiatives made the local Pollution Control Board to be more active in their responsibilities towards the community. SACEM and several other groups have collaborated to form another movement called Community Health Environment Survey Skill-share (CHESS) and it is operational from 2001.[237] CHESS with the collaboration of SOCHARA have conducted many workshops, activisms, and brought many environmental activists together to the cause against pollution.

We must take to our serious consideration the good thoughts and inspiration given to the ecological movements by the father of the nation, Mahatma Gandhi. He lived a life that was in harmony with all creatures and the nature. His famous words "the mother

[235] SACEM, SIPCOT Area Community Environmental Monitors, retrieved on 15.06.2017 from http://www.sipcotcuddalore.com/about_us.html.
[236] SACEM, SIPCOT Area Community Environmental Monitors: Gas Trouble-Air Quality in SIPCOT, Cuddalore, retrieved on 15.06.2017 from http://www.sipcotcuddalore.com/downloads/cuddalore_air_quality_report.pdf.
[237] Adithya Pradyumna, "Countervailing Power in the Environment Movement in India", in SOCHARA Team Bangalore (ed.), *Social Justice in Health: Multiple Pathways towards Health for All*, Bangalore: SOCHARA, 2014, p. 174, pp. 173-175.

nature has everything for our needs, but not for our greed", clearly proclaim how respectful and selfless one should be in dealing with the natural resources to be used for one's necessities, and not for pleasure or waste. His writings published in *Hind Swaraj* in 1909 are a warning on the exploitative nature of "man by man and of nature by man".[238]

As we observe today there are a number of interested groups, associations and organisations working to promote positive thoughts and attitude to treat modestly the nature that we live in. As the ecological concerns urgently necessitate sustainability, protection, and preservation to keep up the basic equilibrium that makes this planet a healthy place for all creatures to live in, we know that the number of the groups working to achieve this goal are not yet enough. There may not be an explicit view or a proclaimed label of "eco-ethics" or "environmental ethics" in most of these associations. But we decipher it from what they do and what the goal of their organisation is. That is why it is so important to consider these groups and organisations with a better scrutiny - with efficient management, rules and regulations to guide them, to inspire and promote them to avail more resources and back them up with more philosophical reasoning to stand up for their causes.

3.4. Government as a Coordinator of Bioethics Activities

India, as we have seen has different traditions of medical practices like Ayurveda, Yoga, Siddha, Unani and many other localized traditions of healthcare. Homeopathy as a medical solution for various health necessities is accepted as well with a major importance. And the modern medicine without any question is the dominant resource of medical care in India. As we have seen in this chapter, when "bioethics" in its wider concerns evaluated, India has more to hope from the present situations. What we need is an organizational initiative from the part of the Central and State governments. As Debabar Banerji points out "the discussion of traditional and modern medicine raises many critical issues, covering such fields as innovation, cultural diffusion, sociology of knowledge of medicine, professionalization, the medical and health industry, the social power structure social relations, and international relations". He continues, "health

[238] For more details please refer: http://download.nos.org/333courseE/26.pdf as retrieved on 07.03.2017.

services are one of the many factors that influence the health status of a population. The health of a population is also influenced, sometimes even more significantly, by such social and economic factors as nutrition, water supply, waste disposal, housing education, income and its distribution, employment, communication, transport and the social structure. Moreover, like the other factors influencing health status, the health services of the community are usually a function of its political system. Political forces play a dominant role in shaping the health services of a community through factors such as decision on resources allocation, manpower policy, choice of technology, and the degree to which services are available and accessible to the population".[239]

Healthcare of the population is a serious responsibility of the government. As we have seen in this chapter the Ministry of Health and Family Welfare, various agencies of the government, associations etc. work in this field to assure good health and welfare to the people. Our concentration here is on the means that the government can utilize to facilitate the system of a better healthcare in the country. Developing all the material infrastructure in the country by building more hospitals, dispensaries, clinics, nursing homes etc. is a part of it. Producing adequate number of professionals to meet the requirements with regard to the healthcare demands of the country is a second concern. Ensuring the quality of healthcare professionals is a third concern, where, along with their academic competency the quality of personality (ethical behaviour) is also considered with prime importance. As the health of the people doesn't depend only on the "disease handling" alone, as we have noted now, we need to look into the possibilities of facilitating the preservation and promotion of health with a wider outlook into the situation we live in. For which the consideration also goes to a healthy environment, a healthy living system and an atmosphere that renders feasible means to live healthy. To coordinate all these, the government is the prime machinery to implement rules and regulations appropriate to the country time to time.

[239] Debabar Banerji, "Place of the Indigenous and the Western Systems of Medicine in the Health Services of India", *International Journal of Health Services*, 9(3), 1979, pp. 511-512.

Part II

The Research and Its Particular Details

Chapter 4

Partnership for the Research

It is part of an international PhD research programme like the "Doctoral Course in Integrated Biomedical Sciences and Bioethics" to opt for appropriate collaborators to achieve its objectives. The selection of these partners required each member to possess a prominent role in the field of bioethics, medical ethics and bioethics education.

To assure this end, the healthcare institute, St. John's National Academy of Health Sciences, in Bangalore, India, was selected, a well-known and influential bioethics academy, as well as Pontifical Academy for Life (PAV) in the Vatican and two significant social organization for healthcare and healthcare ethics in India, Community Health Cell (CHC) and Society for Community Health Awareness Research and Action (SOCHARA), Bangalore, Karnataka.

4.1. St. John's National Academy of Health Sciences, Bangalore

St. John's National Academy of Health Sciences (SJNAHS) was established by the Catholic Bishops' Conference of India (CBCI) in 1963. The medical college is considered one of the best in India. Situated on a132-acre campus, St. John's has a 1,350 state-of-the-art hospital inpatient beds for all medical needs, including super-specialty departments.

SJNAHS also includes a superior College of Nursing, a Research Institute - the first in a medical school - with the most modern facilities including a Biorepository and an Institute of Healthcare Management and Paramedical Studies. St. Johns National Academy of Health Sciences is affiliated with the Rajiv Gandhi University of Health Sciences, Karnataka.

St. John's has a staff of 608 administrators, 240 undergraduates, and sixty postgraduates. At present, St. John's Medical College Hospital has 1,350 inpatient beds, distributed among the Departments of General Medicine, General Surgery, Paediatrics, Obstetrics and Gynaecology, Psychiatry, Plastic Surgery, Ophthalmology, Dermatology, Venereology and Leprology, Genito-urinary Surgery, ENT diseases, Dental Surgery, Nephrology, Orthopaedics, Intensive Care, Cardiac Care, Cardiology, Cardio-thoracic Surgery, Neurology, Neuro-Surgery, Gastroenterology, Radiology,

Radioimmunoassay and Haemodialysis. CT and MRI Scans and Radio Therapy are also available on campus.

The college and hospital sector of SJNAHS also accommodates a quality College of Nursing, which began as a School of Nursing on July 1, 1980, and then was raised to the status of a College of Nursing on September 25, 1989. The courses conducted there are the following: General Nursing and Midwifery, Basic Bachelor of Science, Post Certificate Bachelor of Science, and Master of Science in Nursing Courses in Medical Surgery, Community Health, Paediatrics, Obstetrics and Gynaecology.

The St. John's Research Institute from its inception in 2010 has so far undertaken seventy-five research projects in different divisions of healthcare; namely, Clinical Research and Training, Epidemiology, Biostatistics and Population Health, Health and Humanities, Infectious Diseases, Medical Informatics, Mental Health and Neurosciences, Molecular Medicine, and Nutrition.[240]

4.1.1. Mission and Motto

The Mission of St. John's National Academy of Health Sciences is to educate healthcare professionals who are committed to reaching out to the underprivileged and medically alienated of the nation. To this purpose, St. John's claims to have harmoniously dedicated its efforts to attaining excellence by committing to social justice in healthcare.[241] The motto scripted in the emblem and repeated thrice in the St. John's anthem states, "He shall live because of me." The prospectus of St. John's National Academy of Health Sciences explains:

> The EMBLEM of this Institution portrays a man lying with sickness being helped to rise, and given renewed life by Christ, who is signified by the Cross, on which He died, and which is a symbol of love. The motto of the emblem, HE SHALL LIVE BECAUSE OF ME, links this Institution with the XXXVIII International Eucharistic Congress held in Bombay in December 1964, of which it is the Chief Memorial. The motto is a constant reminder to our Staff and Students that they are God's collaborators in their care of human lives. The colour scheme: The cross is WHITE, signifying

[240] The divisions of research and the project titles so far undertaken are listed in the site https://www.sjri.res.in/Projects?page=4. Accessed on 26.03.2017.
[241] Ref. http://www.stjohns.in/.

purity of spirit; the body of the man lying down is BLUE, signifying aspiration towards heavenly things; and the background is GOLD or YELLOW, signifying the flame of knowledge.[242]

4.1.1.1. Aims and Objectives of the Institution

St. John's was founded by the Catholic Bishops' Conference of India and it stands as a Catholic Institution in formation and teaching. Though the Catholic candidates are given priority, like any other educational institution in India St. John's is open to other qualified candidates for all the courses offered. The Medical College Hospital is a teaching and training hospital for the students and also serves as a hospital for all the people irrespective of their religion, caste, or backgrounds, particularly the underprivileged and disadvantaged.[243]

The objectives of SJNAHS declare:

1. Excellence in all fields of healthcare education.
2. Adequate Christian formation of the students.
3. Upholding respect for life, from the moment of conception to its natural end.
4. A genuine feeling of compassion for the patients and their families as persons.
5. A special thrust to Community Health fostering the dimensions of participatory team work.
6. Serving the health needs of medically underserved areas of our country and our medically underprivileged brethren.
7. Acquiring the ability to research, and application of the advances in scientific knowledge to the relevant fields of work.
8. Striving towards promoting holistic health.
9. Acquiring an exemplary steadfastness to principles and moral values so as to witness to a life of honesty and integrity.[244]

[242] From the Prospectus 2016-2017 retrieved on 30.03.2017 from http://stjohnsadmissions.in/prospectus.pdf.
[243] Ibid, p. 4.
[244] Ibid.

4.1.2. Bioethics at St. John's National Academy of Health Sciences

We have already seen in Chapter II that St. John's National Academy of Health Sciences (SJNAHS) in Bangalore had introduced medical ethics as a separate subject in curriculum from its inception in 1963.[245] The Medical College chaplains were teaching medical ethics until 1985. Some of the topics were addressed in the curriculum of Forensic Medicine. Till 1998, SJNAHS was the only medical college in India that taught medical ethics as a regular part of its undergraduate programme. Interns had to attend monthly clinical ethics sessions in which the cases of ethical importance were discussed with the faculty and members of the department of medical ethics.[246] Understanding the need of such a formation in the medical education, in 1999, St. John's medical ethics programme became the model of the bioethics curriculum designed at Rajiv Gandhi University of Health Sciences, in Karnataka (in collaboration with Community Health Cell, Bangalore).[247]

4.1.3. The 5th National Bioethics Conference (NBC) at St. John's

National Bioethics Conference (NBC) is the most prominent bioethics conference that is conducted in India. Since 2005 the Forum for Medical Ethics Society (FMES), Mumbai which publishes the *Indian Journal of Medical Ethics* has been providing an opportunity to diverse organizations and institutions from biomedicine, public health, social sciences, law and the non-governmental sector to collaborate in bringing up the promulgation of bioethics in India through National Bioethics Conference. This cooperation among different parties brings together scholars and practitioners in different fields for a deeper reflection and debate on the ethical issues that confront the healthcare system in India.

The first NBC was organised in Mumbai in November 2005, attracting twenty collaborating organizations and 200 participants. The second NBC was at NIMHANS

[245] Ravindran G. D., Kalam T., Lewin S., Pais P., "Teaching Medical Ethics in a Medical College in India", *National Medical Journal of India*, Nov-Dec. 10 (6) 1997, pp. 288-289.
[246] Karuna R., "Ethics in Medical Curriculum; Ethics by the Teachers for Students and Society", *Indian Journal of Urology*, 25 (3) 2009, pp. 337-339.
[247] Maithreyi M. R., 2012, pp. 21-22; also ref. Narayan R., Lewin S., Srinivasa D. K., Francis C. M., (eds.) *Teaching of medical ethics in undergraduate medical education: proceedings of 77 the workshop 31st March-1st April*, Bangalore: Rajiv Gandhi University of Health Sciences, 1999.

Convention Centre in Bangalore in December 2007, bringing together thirty-eight collaborating organizations and 600 participants.[248]

The fifth National Bioethics Conference was hosted at St. John's National Academy of Health Sciences from December 11 – 13, 2014. The main collaborators of the NBC were St. John's National Academy, Bangalore, Society for Community Health Research and Action (SOCHARA), Bangalore, and Forum for Medical Ethics Society (FMES), Mumbai. The theme of the conference was "Integrity in medical care, public health, and health research." The aim of the conference was to encourage discussion on the role of bioethics as a value base influencing concepts and practice in medical care, public health and health research.[249]

The fifth NBC was so far the largest participated bioethical conference in India with 695 registered participants, including 250 students and more than fifty others from diverse disciplines who came for specific sessions. There were medical professionals, social scientists, academics, bioethicists, counselors, economists, lawyers, journalists, theologians, community workers, researchers, advocacy organizations, and administrators among the participants. Along with the partakers from fourteen states from India, the conference witnessed the participants from ten foreign countries.[250]

The whole conference had the concentrated theme of diverse aspects of the healthcare system in India where more practiced care, concern, and integrity are needed. With this in mind, there was also a particular workshop on curriculum development called "Bioethics for the Medical Undergraduates." This was jointly organised by the departments of Medical Education and Medical Ethics from St. John's Medical College, Bangalore, and Christian Medical Centre (CMC) in Vellore, Tamil Nadu. The intention was to make a draft curriculum for learning and teaching bioethics in medical colleges, discuss the challenges faced in teaching ethics, to have more openness and possibilities that facilitate learning and teaching bioethics with a collaborative network of institutions and to develop database to support this process.[251]

[248] From Indian Journal of Medical Ethics Report accessed on 26.03.2017 from http://ijme.in/articles/national-bioethics-conference-3/?galley=pdf.
[249] Prasanna Saligram, Sunita Simon Kurpad, Thelma Narayan, "IJME Fifth National Bioethics Conference: A Summary Report", *Indian Journal of Medical Ethics*, 12 (2), April – June 2015, p. 104.
[250] Ibid.
[251] Ibid.

4.2. Pontifical Academy for Life, Vatican

The Pontifical Academy for Life, Vatican, was founded by Pope John Paul II. The Academy exists for the promotion and defense of human life, especially regarding the areas of biomedicine, law and bioethics as it is part of Christian Morality. Its statutes were codified in the Motu Proprio *Vitae Misterium* of Pope John Paul II published on 11 February 1994.[252] To achieve its objectives, the "Vitae Mysterium Foundation" was instituted in October 1994.[253]

4.2.1. Specific Tasks of the Academy[254]

1. Academic Task: Study questions and issues connected with the promotion and defense of human life from an interdisciplinary perspective.

2. Social Task: Foster a culture of life through suitable initiatives and always in full respect of the Magisterium of the Catholic Church.

3. Communicational Task: Inform the authorities of the Church, the mass media, and the civil community in general about the most relevant results of its study and research activities.

4.2.2. Ordinary Activities of the Academy

Article 6 of the Statues of the Pontifical Academy for Life describes the ordinary activities of the Academy. These scientific and interdisciplinary activities are oriented to maintain a close relationship with the institutions and agencies of biomedical sciences, and healthcare-related organizations (Catholic, Christian or non-Christian), who acknowledge human dignity and the inviolability of life from conception until natural

[252] Pope John Paul II, *Motu Proprio Vitae Mysterum*, 11.02.1994, retrieved from http://w2.vatican.va/content/john-paul-ii/it/motu_proprio/documents/hf_jp-ii_motu-proprio_19940211_vitae-mysterium.html, on 27.03.2017; also Pope Francis, *Statutes of the Pontifical Academy for Life*, Art. 1, para.2, 18.10.2016, retrieved from http://w2.vatican.va/content/francesco/en/motu_proprio/documents/papa-francesco_20161018_statuto-accademia-vita.html, on 27.03.2017.

[253] More reference on site http://www.academiavita.org/, retrieved on 03.03.2017; also see http://www.vatican.va/roman_curia/pontifical_academies/acdlife/documents/rc_pa_acdlife_pro_20051996_en.html, accessed on 20.03.2017.

[254] Pope John Paul II, *Vitae Mysterium*; Pope Francis, *Statutes of the Pontifical Academy for Life*.

death, and to have an essential moral foundation of science and the medical arts.[255] To this end the activities are formulated as follows:

a) organises a General Assembly each year, in which all Members take part;

b) convenes and coordinates the activities of working groups, both national and international;

c) studies legislation in force in the various countries as well the various approaches in international healthcare policy, and the principal intellectual currents that bear upon the contemporary culture of life;

d) publishes the results of its studies and research and disseminates its cultural and operational proposals in publications and other media;

e) organises national and international conferences dealing with bioethical questions of significant interest;

f) organises educational initiatives in the area of bioethics, takes part in them and offers its own contributions;

g) participates through its representatives in the more important initiatives in the areas of science, biomedicine, law, politics, philosophy, anthropology, charitable assistance, morality, pastoral care and so forth, related to the Academy's purposes.[256]

Though at the inception, Pontifical Academy for Life had an independent and autonomous status, Pope Francis on October 18, 2016 (promulgated on November 04, 2016), extended status of the Pontifical Academy for Life in collaboration with other dicasteries.

[255] Pope Francis, *Statutes of the Pontifical Academy for Life*, Art. 6. (Link above) accessed on 30.03.2017.
[256] Ibid; *Vitae Mysterium* declares these activities as: Per il raggiungimento dei suoi fini, l'Accademia:
a) organizza ogni anno un'Assemblea Generale nel corso della quale viene approfondito, con un approccio multidisciplinare, un argomento di notevole rilevanza ed attualità;
b) studia le legislazioni vigenti nei diversi Paesi, gli orientamenti di politica sanitaria internazionale e le principali correnti di pensiero che hanno incidenza sulla cultura contemporanea della vita;
c) collabora con i Dicasteri della Curia Romana direttamente impegnati a servizio della vita, primi fra tutti la Congregazione per la Dottrina della Fede e il Pontificio Consiglio per la Famiglia, oltre che con la Congregazione per l'Educazione Cattolica e col Pontificio Consiglio della Cultura;
d) promuove il coordinamento fra tutti coloro che – al di la dell'appartenenza religiosa – difendono la vita secondo l'insegnamento della Chiesa e sono disposti a fare una dichiarazione scritta proposta dall'Accademia stessa;
e) partecipa con i suoi rappresentanti alle più importanti iniziative scientifiche, biomediche, giuridiche, politiche, filosofiche, antropologiche, caritativo-assistenziali, morali, pastorali ... attinenti alle finalità di studio dell'Accademia;
f) pubblica i risultati dei suoi studi, delle sue ricerche e delle sue proposte. (Art. 2)

4.2.3. New Statutes for the Academy

Though it was made an autonomous academy by Pope John Paul II, the academy now serves as part of a collaborative dicastery system with the dicasteries of Laity, Family and Life, and the Pontifical John Paul II Institute for Studies on Marriage and Family.[257] The Article 1 para. 4 of the Statutes states:

> In carrying out the activity envisioned by these Statutes, the Pontifical Academy for Life cooperates with the Dicasteries of the Roman Curia, above all with the Secretariat of State and the Dicastery for the Laity, the Family and Life, with due regard for their respective areas of competence and in a collaborative spirit.[258]

4.2.4. The Members or Academicians of the Academy

The members in the academy are characterized as ordinary members, corresponding members, honorary members, and young researcher members. The seventy ordinary members and honorary members are appointed by the Pope and corresponding members are chosen by the governing council. All these members have expertise in different fields of biomedical sciences and related disciplines.

Art. 5 of the Statutes gives the role and status of these members:

> The Pontifical Academy for Life is made up of the Ordinary Members, Corresponding Members, Honorary Members, and Young Researcher Members. Appointment as a Member of the Academy requires proven willingness to work collaboratively with the Academy in a spirit of service and solely for the accomplishment of its specific responsibilities.
>
> § 1 - Ordinary Members: There may be up to seventy Ordinary Members at any one time. They are appointed for a term of five years by the Holy Father after hearing the opinion of the Governing Council and on the basis of their academic qualifications, proven professional integrity, professional expertise, and faithful service in the defence and promotion of the right to life of every human person. At the end of their five-year terms, Ordinary Members can be reappointed for successive terms until the completion of their eightieth year of life.

[257] Ref.: *New Statutes for the Pontifical Academy for Life*, accessed on 30.03.2017 from http://www.academiavita.org/_articles/435499747-nuovo_statuto.php.
[258] Retrieved on 30.03.2017 from http://www.academiavita.org/_uploads/article_file/660903242-NEW_STATUTE.pdf.

§ 2 - Honorary Members: Certain Academicians, devoted in a particular way to life and to the activity of the Academy, are appointed Honorary Members by the Holy Father.

§ 3 - Corresponding Members: Corresponding Members are selected by the Governing Council and appointed by it for a term of five years, on the basis of their professional integrity, professional expertise, and their acknowledged commitment to the promotion and protection of human life. At the end of their five-year terms, corresponding Members can be reappointed for up to two additional terms.

§ 4 - Young Researcher Members: Young Researcher Members come from fields that are related to the Academy's own areas of research. They are no older than thirty-five, and are chosen and appointed by the Governing Council for a term of five years, which can be renewed once.[259]

Apart from these features the document also says in Art. 5 that the members can be selected from any religion or nationality, according to their competence. Paragraph 5 points out:

§ 5 - Directions and Norms for Members: (a) Academicians are selected without any religious discrimination, from among well-known ecclesiastical, religious, and lay persons of various nationalities, who are expert in the disciplines pertaining to human life (medicine, biological sciences, theology, philosophy, anthropology, law, sociology and so forth).[260]

4.2.5. Financial Assistance for the Present Research

Pontifical Academy for Life views the importance of developing bioethics in the healthcare system of each country, particularly the developing ones. Hence, the research project that culminates in the formation of a Bioethics curriculum was actively supported by the Academy and its research financed for three years by the Pontifical Academy for Life.

[259] Ibid.
[260] Ibid.

4.3. Community Health Cell (CHC) and Society for Community Health Awareness Research and Action (SOCHARA), Bangalore

The SOCHARA as an organisation began when a group of young people attempted to evolve an alternative and action oriented creative approach to health and well-being rooted in the community.[261] Community Health Cell (CHC) had its foundation in 1984 as study-reflection-action experiment. The pioneers of this move were Dr. Ravi Narayan and Dr. Thelma Narayan, and later followed by Dr. Gopinath, Dr. Mani Kalliath, Dr. Shirdi Prasad, Dr. C. M. Francis, Fr. Claude D'Souza, Ms. Valli Seshan, Dr. Mohan Isaac and Dr. D. K. Srinivasa.[262] The experiment was designed to explore and act upon the evolving principles and critical issues in public healthcare in India. The plan of this phase was to promote and facilitate the enabling dimensions in healthcare and community well-being; the socio-epidemiological approach; and participatory ethos in management and action. In June 1990, the project was further reviewed by academics, nongovernmental organisations and voluntary agencies involved in health-related action and as a result the Community Health Cell was registered as The Society for Community Health Awareness, Research and Action (SOCHARA).

4.3.1. Community Health Cell (CHC)

Community Health Cell (CHC) is the main functional component of the Society for Community Health Awareness, Research and Action (SOCHARA) since the society's foundation. It works with a large network of non-governmental and governmental agencies, national and international institutions and organisations, health and developmental campaign groups, and people's movements to make them part of its 'Health for All' movement. CHC contributes towards SOCHARA objectives in community health through different strategies such as training and interactive discussions, participatory reflections and review, research and evaluation, peer group

[261] The information given in this section is from the SOCHARA website and from the personal interviews done with Dr. Ravi Narayan and Dr. Thelma Narayan.
[262] Maithreyi M. R., *Towards the History of Bioethics in India*, pp. 43-44. Dr. D.K. Srinivasa was a later member, but was very instrumental in the engagement with the Rajiv Gandhi University of Health Sciences, Bangalore in introducing the ethics curriculum in medical education.

support along with networking and solidarity, maintaining all of them within a social, community, and human rights paradigm.[263]

4.3.2. Society for Community Health Awareness Research and Action (SOCHARA)

Society for Community Health Awareness Research and Action (**SOCHARA**) is an independent non-government organisation (NGO) which is registered under Karnataka Societies Registration Act (1960) section 17A.[264]

The Society for Community Health Awareness, Research and Action (SOCHARA) and its functional units promote a people-oriented paradigm for health and development, via a community health movement and a community health approach to public health problems based on justice and human rights.

Two decades into its inception, SOCHARA continues to participate and strengthen diverse health movements in India and around the world, encouraging and engaging with people, communities, professional bodies, and governments for equitable health and development, with a preferential emphasis on the poor and marginalised, as well as a shared goal of "Health for All." The paradigm shift is designed basically as a reallocation of primary focus from individual health to community health.

- A shift in focus from individual to community
- A shift in dimensions from physical and pathological to broader psychosocial, cultural, economic, political and ecological dimensions.
- A shift in technology from drugs and vaccines to education and social processes.
- A shift in the type of service from social marketing and providing models to enabling, empowering and autonomy-building processes and initiatives.
- A shift in the attitude of people from patients and/or passive beneficiaries to people and communities as active participants.
- A shift in research focus from molecular biology, pharmaco-therapeutics and clinical epidemiology to socio-epidemiology, social determinants, health systems and social policy research.

[263] More about Community Health Cell at http://www.communityhealth.in/~commun26/wiki/index.php?title=Community_Health_Cell and http://www.sochara.org/Evolution, retrieved on 31.01.2017.
[264] More details can be found at http://www.sochara.org/Who-We-Are, retrieved on 31.01.2017.

- A shift in structure from institutional based (hospital and health centric) work to community based and led approaches. [265]

The Paradigm Shift		
Specific areas	***From (old paradigm)***	***To (new paradigm)***
Focus	Individual	Community
Dimensions	Physical, Pathological	Psychosocial, Cultural, Economic, Political, Ecological
Technology	Drugs, Vaccines	Education and Social Processes
Type of Service	Providing, Dependence Creating, Social Marketing	Enabling /Empowering / Autonomy Building
Link with people	Patient as Passive Beneficiary	Community as Active Participant
Research	Molecular Biology, Pharmaco- therapeutics, Clinical Epidemiology	Socio-epidemiology, Social Determinants, Health Systems and Social Policy

Table 1: The paradigm shift that CHC and SOCHARA envisage to achieve[266]

There are diverse factors that are instrumental in the health and development in India. We note remarkable variations between social groups in indicators of health and personal and social development. These stark variations are seen in the analysis of the health data based on their geography, religion, caste, class, different age groups and gender. In India, therefore, it is very crucial to look at health and healthcare systems through an equity lens for socially just and modest health action. SOCHARA approaches community health action considering all its social, political, cultural, economic, and environmental contexts, through research, enquiry, reflection, discussion, and innovation. This "community health" approach is also being promoted to the younger generations of community health activists through its fellowship and other training programmes.[267]

SOCHARA also participates with other movements to promote and strengthen the public health system in the country. The Global Peoples' Health Movement (PHM), the

[265] Taken from the official site of SOCHARA http://sochara.org/Paradigm-Shift, accessed on 27.03.2017.
[266] Ibid.
[267] Ref: http://www.sochara.org/Evolution, retrieved on 01.02.2017.

Jan Swasthya Abhiyan (the Indian chapter of PHM), the local PHM chapters, are a few among these. SOCHARA also engages in the National Rural Health Mission (NRHM) which is a government primary healthcare undertaking in the national and state levels, These initiatives, with participatory research and analysis, are aimed at developing the public health system based on principles of comprehensive primary healthcare, assurance of equitable access to good quality healthcare, the addressing of health determinants reducing health disparities through promoting 'communitization[268] and community action for health'.

At present**,** SOCHARA works through three functional clusters from three state capitals in the country: Bengaluru (Bangalore) in Karnataka state, Chennai in Tamil Nadu state and Bhopal in the state of Madhya Pradesh. These clusters work with their own individual work agenda, in the particular social and cultural context that they are functioning, with a vision of the society's objectives and the motto "Health for All." From its beginning in 1984, and especially from the inception of SOCHARA, the movement has been addressing many public health challenges and unjust practices to which it responds seriously through innovative action, training, research motivational programmes, and advocacy initiatives.

4.3.3. Centre for Public Health and Equity (CPHE)

Centre for Public Health and Equity (CPHE), formally inaugurated in December 2008, is an additional functioning unit of SOCHARA. With the promotion of a new public health paradigm centred on health equity, social justice, underlying social determinants of health including gender, inclusive and responsive health systems, and health policy development, CPHE works primarily in the areas of public health education and policy advocacy. CPHE works at state, national and global levels; it complements the focus of CHC on action, networking and solidarity with civil societies and authorities.[269]

4.3.4. Community Health Library and information Centre (CLIC)

The data bank of SOCHARA is the Community Health Library and Information Centre (CLIC) which is a fruit of a gradual evolution in response to the priorities and issues

[268] Word inserted by Dr. Ravi Narayan indicating the involvement in the community and involving the community in healthcare services.
[269] From the official site http://www.sochara.org/Evolution retrieved on 02.02.2017.

that emerged. CLIC today has a trusted, accessible, and widely connected library and information service through the SOCHARA official website. There are more than 15,300 books and many periodicals, journals, reports, policy documents, magazines, and newspapers in the Bangalore library. CLIC units in each of the centres at Bengaluru, Chennai, and Bhopal provide regular updates in the centres through *Health Round-up*, a newsletter that contains health–related news, views, policies and latest statistics from various publications. In addition to this CLIC publishes a *Health Digest*, which covers various concerns in healthcare. Through its innovative application of technology, CLIC ensures that library users, researchers, and information seekers have easy access to a rich array of relevant information and resources.[270]

4.3.5. School of Public Health Equity and Action (SOPHEA)

School of Public Health Equity and Action (SOPHEA) was founded in 2011 to educate diverse groups of researchers, activists, community builders, and public health professionals. These groups can avail themselves of a deeper understanding and education in the public health services that were founded on the values of justice and equity towards an improvement of the culture, community health interventions, and development through teaching learning programmes, research, and advocacy. The centres in Bangalore and Bhopal have more initiatives in such educational initiatives through community health fellowships.[271]

4.3.6. Medical Ethics Education: Initiatives and Support of SOCHARA

From its inception, Community Health Cell and SOCHARA have been working diligently to promote medical ethics education in the universities and specifically in the medical colleges. We have already seen the various activities undertaken by these associations in facilitating ethics education in the medical spheres. Also, it is important here to note that the first text book on Medical Ethics was published by a SOCHARA member Dr. C. M. Francis.[272]

Moreover, the personal interviews with the SOCHARA and CHC directors Dr. Ravi Narayan and Dr. Thelma Narayan revealed that with St. John's National Academy of

[270] Ibid.
[271] Ibid.
[272] Already mentioned in the Second Chapter.

Health Sciences, the SOCHARA leadership was ever present in convincing the Rajiv Gandhi University of Health Sciences Karnataka, to accept the Bioethics education programme of St. John's Medical College as a model for teaching bioethics in the medical colleges of Rajiv Gandhi University. Being members of National Bioethics networks, SOCHARA and its associates closely collaborate with the assimilation of bioethics in India. We may also take note of the 5th National Bioethics Conference in Bangalore in 2014, where SOCHARA co-hosted the event with FMES Mumbai and St. John's National Academy of Health Sciences, Bangalore. Both groups collaborated in forming and adapting a bioethics scheme that is effective in the Indian social and cultural setting.

4.4. Interviews with Bioethicists in India

During my research programme in India (in January and February, 2015 and 2016), I had planned to visit a few important centres and persons in the field of bioethics. I met personally with those available whose schedule of time and place coincided with my two-month stay. The interview was based on unstructured questions. But it had the following parts: discussion of the questionnaire based on survey comments, the situation of bioethics in India, the status of bioethics teaching in the medical colleges in India, and their open comments. A few of them whom I could not meet personally were interviewed via phone or via email. There were also occasions that the persons whom I met previously either spoke to me over the phone or continued the contacts via email for further clarifications on topics pertaining to the research.

4.4.1. Journeys and Centres Visited

India as we know is a very large country. It was not that easy to cover all important centres of bioethics in four months in two years (2015-2016) that I used for my study in India. The base centre of my research in India was St. John's National Academy of Health Sciences, Bangalore, Karnataka. I visited the Society for Community Health Awareness Research and Action **(**SOCHARA**),** Community Health Cell (CHC), Centre for Public Health and Equity (CPHE), Community Health Library and Information Centre (CLIC), School of Public Health Equity and Action (SOPHEA), Bangalore,

Karnataka, Jyothi Nivas College Autonomous, Bangalore[273], *The Art of Living* International Centre, Bangalore[274], Christian Medical Centre (CMC) Vellore, Tamil Nadu, Jnana Deepa Vidyapeeth, Institute of Philosophy and Religion, Pune, Maharashtra[275], *Fédération Internationale des Associations de Médecins Catholiques* (FIAMC) centre at St. Pius X College Mumbai, Maharashtra. I have also visited Dr. Nandini Kumar who was the Deputy General (Sr. Grade) of Indian Council of Medical Research, New Delhi and is also associated with many other bioethics centres/universities in India. I had had also an opportunity to visit Dr. Amar Jesani, who is one of the founding fathers of Forum for Medical Ethics Society (FMES) and *Indian Journal of Medical Ethics*, and who is also associated with many bioethics centres including Yenepoya University, Mangalore, Karnataka, Sindh University, Karachi, Pakistan.

4.4.2. Dr. Prof. Amar Jesani

Dr. Amar Jesani is an independent consultant, researcher, and teacher in bioethics and public health. He is one of the founders of the Forum for Medical Ethics Society and its journal *Indian Journal of Medical Ethics* (IJME).[276] He was also one of the coordinators of National Bioethics Conferences from 2005. He is one of the founding trustees of Anusandhan Trust, which manages the health research institute CEHAT (Centre for Equity into Health and Allied Themes) in Mumbai, and the Health Action Institute, SATHI in Pune[277], India. He is a visiting professor of Bioethics at Yenepoya University, Mangalore, India since 2011, and Sindh University, Karachi, Pakistan from 2010.[278]

I met Prof. Dr. Amar Jesani at his residence in Mumbai on February 10, 2014. We discussed the questionnaire for survey. Finding it adequate, he advised me to proceed. Then in the discussion, the first topic was on the religious influence in ethics. Bioethics has of course values. But, should religious values be imposed in bioethics? This was his

[273] I represented St. John's National Academy of Health Sciences Bangalore to participate in the seminar on Euthanasia titled "Kill the Pain, Not the Patient" on 22.01.2015.
[274] I participated in the seminar organised by Karnataka Education Conference and The Art of Living Centre, on "Human Values and Life Skills" on 21.02.2015 representing St. John's National Academy of Health Sciences, Bangalore.
[275] Here I attended the seminar "Science, Society and Values" and Inter-college Philosophy conference on 06.02.2015.
[276] Ref.: www.ijme.in. Retrieved on 18.06.2017.
[277] Ref.: www.sathicehat.org. Retrieved on 18.06.2017.
[278] Ref.: https://ijme.in/nbc-20140321/pdf/nbc5/amar-jesani.pdf. Retrieved on 18.06.2017.

doubt. For example, he remarked that *Bhagvat Gita*[279] has principles which go against life. So, can we accept them in bioethics? He mentioned that the gap between religions in India goes wider and larger. And he was questioning why there are so many religious conditions in a professional setting. He also remarked that medical students are raising criticisms against the religious ethics that they are taught in the institutions.

Dr. Amar Jesani spoke also about the corruption in the Indian medical system that neither the Medical Council of India, nor the government could so far control. He further remarked that rectifying a corruptive medical system in a vision that values can be taught to the forthcoming generation of medical professionals is difficult. He suggested that we need a strong *health ethics* and *healthcare ethics*. He also pointed out that slowly bioethics is gaining a movement in India.

He suggested to me a few names of professionals who could be useful in my study: Dr. Nandini Kumar, former ICMR Sr. Grade Director General; Dr. G. D. Ravindran, Professor of bioethics at St. John's Medical College, Bangalore; Dr. Avinash Supe, the Dean of KEM Hospital in Mumbai, and Dr. Ravi Narayan, SOCHARA, Bangalore. He also referred to me a book entitled *Towards a History of Bioethics in India (1980-2010)* by M. R. Maithreyi. He explained about the efforts of *Indian Journal of Medical Ethics* and the National Bioethics Conferences, hoping that in the future there would be a deeper reflection and more fruitful efforts made through the imparting of bioethics in the Indian context.

4.4.3. Dr. Prof. Kishore Murthy

Professor Kishore Murthy was the course coordinator for Master of Hospital Administration (MHA) and Certificate Course in Healthcare Administration (CHCA) at St. John's National Academy of Health Sciences Bangalore. Working in the division of Medical Humanities and as a physician in the specific Indian context interview with him was certainly profitable.

He examined the questionnaire and found it was worth working on the project. He agreed that there is a great influence of religion in the ethical view of a person. He is of the opinion that we need to integrate these values in medical practice. He mentioned that he was a devotee of Sri Shirdi Sai Baba and Sri Satya Sai Baba and is happy getting

[279] One of the holy books of Hinduism.

an inspiration in the working field from his spirituality to do job in a more ethical manner. He also didn't find any difficulty to accept the good values of other religions. All religions are one: therefore, "love all, serve all" is his motto.

Regarding the medical ethics education he remarked that only St. John's Medical College and CMC, Vellore are the Institutions who are serious about teaching it in the curriculum. About the situation of ethical medical practices in India, he was not that satisfied. He talked about the corruption that is rampant in the Indian medical system. He remarked that dishonesty and greed for money make physicians do unethical and corrupt practices in the medical field. He mentioned that many doctors whom he knew were good at the initial stage of their service later became corrupt medical practitioners. The justification they say is that "when all are doing so why should we not do it"? He says that there must be a resurgence in the whole system. And there should not be a situation that one loses his/her ethical conscience as he/she goes forward in the profession.

He suggested me the names and introduced me to Dr. Ravi Narayan and Dr. Thelma Narayan who were the pioneers of the organisation of SOCHARA and CHC, Bangalore, Karnataka, India.

4.4.4. Dr. Prof. Anuradha Rose

Dr. Anuradha Rose is a professor of Community Medicine and Medical Ethics at the Christian Medical Centre, Vellore, Tamil Nadu. She is also an expert in Abrahamic religions. She is an active researcher and professor in the field of biomedical ethics. She has also contributed much to the curriculum formation in bioethics in India. I met Dr. Anuradha Rose on 24 February, 2015 at Christian Medical Centre, Vellore, Tamil Nadu.

She evaluated the questionnaire for the survey and found it worthwhile to do the research. She explained the methods used at CMC, Vellore, for teaching bioethics to the undergraduate and post graduate students. The undergraduate course includes forty hours of learning ethics, including bedside instruction and certain other practical sessions. She further told me that there are also spiritual retreats and meditations conducted for the students' integral formation.

She expressed her practical concerns in the professional field of healthcare employees in India. Privatisation, external forces from the pharmaceutical and insurance companies,

corruptive practices from the officials, and unethical hospital policies all cause the standards of healthcare system in India fall short. She proudly presented the measures taken by CMC to give better care for the poor and marginalized people who approach them for medical assistance, providing needed service with a very low cost, or no cost at all.

Dr. Anuradha Rose, with all her experience in the medical and ethical grounds, believes it is the integrity of the person that makes a better professional in the medical field or any other profession. Therefore, the curriculum formation of academic studies must be integrated with practical personality development programmes to strengthen good character and foster modesty in dealing with everyone. This character formation is the foundation of ethics learning. In addition, Dr. Anuradha Rose referred to me the research done by CMC, Vellore, in the field of curriculum formation in medical ethics and explained the study programme designed by them.[280]

It is described in the editorial of *The National Medical Journal of India* in 2015 by Dr. Anuradha Rose and Dr. K. S. Jacob, the teaching of ethics at CMC, Vellore; including a review of its goals, and difficulties faced in the ethical formation of the medical students. The article states that "the purpose of teaching bioethics is not to encourage group consensus, but to support and empower future doctors to develop their individual points of view based on sound reasoning. Training medical students to build and assess ethical justifications and weigh the issues is crucial to successful transfer of skill".[281] They also explain in the following 10 points the challenges and difficulties faced in the field of bioethics teaching:

1. Medical teachers lack background training and instruction in ethical analysis.

2. Many people have difficulty thinking critically in general and about ethical issues in particular. Common problems include moral absolutism (the insistence on rules without reasons or exceptions), ethical subjectivism (arguing for individual rights) and ethical relativism (that the correct ethical opinions depend on or are relative to a particular culture). These pitfalls should not be confused

[280] Anuradha Rose, Kuryan George, Arul Dhas T., Anna B. Pulimood, "Survey of Ethical Issues Reported by Indian Medial Students: Basis for Design of a New Curriculum", *Indian Journal of Medical Ethics*, 11(1), Jan-Mar 2014, pp. 25-28. Available at https://www.researchgate.net/publication/260130417_Survey_of_ethical_issues_reported_by_Indian_medical_students_basis_for_design_of_a_new_curriculum; Christian Medical College Vellore, An Integrated Bioethics Curriculum for Health Personnel in India, 2014 available at http://www.cmch-vellore.edu/WeeklyNews/othernews/LT2014/awards/pdf/bioethics.pdf. Accessed on 18.06.2017.

[281] Anuradha Rose, K. S. Jacob, "Editorial", *The National Medical Journal of India*, 28(2), 2015, p. 62.

with tolerance and respect for diversity, which are the key features of pluralistic societies.

3. Others fear that certain deeply held religious positions would be attacked. Students should be encouraged to understand the ethical basis of religious tenets, while critiquing them with sensitivity.

4. Students may invoke rights instead of offering reasons. They should be encouraged to see the linkage between rights and responsibilities; the need for a balance between rights of individuals and those of communities. Articulating concerns in a nuanced manner needs to be encouraged.

5. Teachers may find it difficult to facilitate ethical discussions and debate. Learning to manage diverse points of view and possible conflict, unpopular opinions and discussing them within the limitations of available time are challenges. Ethical discussions should focus on critiquing ideas, not people, allowing and respecting diverse points of view, even the unpopular, and

6. Evaluations should not only focus on medical knowledge and ethical principles but also examine attitudes.

While many groups are working on developing curricula for teaching bioethics in

India, they face many challenges. These include:

1. Several of the proposed ethics curricula are set in specialist settings in keeping with the tertiary care focus of medical education in India. They focus on exotic and rare problems while disregarding or glossing over common and widely prevalent issues in primary care and in the community. Topics related to euthanasia, issues in reproductive medicine, informed consent and legal concerns appear to be more in focus than those related to allocation of resources and corruption within the healthcare system; ethics related to curative medicine trump those associated with public health.

2. Traditional didactic lectures coupled with rote learning, popular among teachers and students, are unsuitable for communicating the complexity of issues, application of principles and resolution of ethical dilemmas. Bioethics should be debated in the clinical context using group discussions.

3. Ideally, clinicians should teach ethics, because ethics is an important and integral part of medical practice. The lack of trained ethicists in India also means that the focus should be on applied and practical ethics.

4. Religious sensitivity of the facilitator and students is mandatory and they should be able to distinguish between religion and dogma. Moral rules need to be sensitively handled with serious attempts to understand the ethical basis of diverse religious tenets in our pluralistic society.[282]

[282] Anuradha Rose and K. S. Jacob, "Editorial", pp. 62-63.

Moreover, the challenge rests in forming an appropriate curriculum for India and training a suitable and sufficient number of persons to teach bioethics.[283]

4.4.5. Dr. Ravi Narayan

Dr. Ravi Narayan is already spoken about in this chapter where we have treated the institutions of partnership SOCHARA and CHC, Bangalore, India. He is an expert in community health and public health ethics. His expertise in community health has evolved over years as a multi disciplinary team. His post graduate training was in Public Health, Industrial Health and Preventive and Social Medicine.

The questionnaire in its formative stage was presented to him and he found it relevant. He also added suggestions to improve the quality of the questionnaire. The theme of public health ethics was included in the questionnaire as a possible theme which could be taught in the curriculum. He also gave the e-mail addresses of doctors and experts in the field of bioethics who had attended the 5th National Bioethics Conference at Bangalore so that the questionnaire could be sent to them via e-mail for their replies.

Regarding the medical system in India and the ethical concerns, Dr. Ravi too has mentioned the corruptive elements that destroy healthcare in India. He also pointed out the need to reach to the marginalized people, who are direly in need of healthcare assistance. He explained how SOCHARA and CHC members contribute to the education and practical healthcare of the society, especially in the rural areas in different parts of India.

Medical ethics is found only in the subject of forensic medicine and it is not even necessarily considered, he opined. The Medical Council of India has given guidelines to include ethics in the curriculum, but so far they have not been implemented. He told me that St. John's Medical College was the first institution that implemented an ethics programme in its curriculum. Later, this was adopted by the Rajiv Gandhi Health University, Bangalore, and at present with CMC, Vellore, St. John's is trying to make a core curriculum for bioethics for the medical colleges in India.

One of the points Dr. Ravi Narayan interestingly mentioned, regarding the formation of a medical ethics curriculum, was the initiatives taken by Dr. C. M. Francis who in fact wrote the first book titled *Medical Ethics* as a reference book and teaching content to be

[283] Ibid, p. 63.

used in the medical colleges in India. Dr. Ravi also mentioned that as a future project Dr. C. M. Francis had a vision of inculcating the values of diverse religions in India and create a bioethics study book in the context of the country, which unfortunately didn't happen. Dr. Ravi also wished that if someone could take up this venture, it would be a great work to promote bioethics, which is more genuine in the framework of India.

4.4.6. Dr. Thelma Narayan

Dr. Thelma Narayan is an epidemiologist, health policy analyst, and activist who coordinates Centre for Public Health and Equity (CPHE) and is Director of the CPHE Madhya Pradesh Initiative. She is one of the visionaries and original co-initiators of Community Health Cell (CHC).

Dr. Thelma Narayan at present works with various national health initiatives including the National Rural Health Mission and the National Health System Resource Centre. She was a member of the Task Force on Health and Family Welfare, Government of Karnataka and has evolved public health and primary healthcare-oriented state health policies in Karnataka and Odisha. She was a member of the Measurement and Evidence Knowledge Network of the WHO Commission on Social Determinants of Health. She is an active member of the People's Health Movement (PHM) and was the joint convenor of the Jan Swasthya Abhiyan (PHM India) till recently. She is also a contributor to the Global Health Watch and a faculty member of the International People's Health University.[284]

She felt that the questionnaire for the survey could do a good job in the context of bioethics education in India. She has the opinion that though there are guidelines from different organs of the government like Medical Council of India, the curriculum formation is not yet done for all the medical colleges in India. She mentioned the initiatives taken by St. John's Medical College and Christian Medical Centre, Vellore, in pioneering medical ethics education in India. As a later initiative, she has also mentioned the Yenepoya University, Mangalore, which has a Centre for Medical Ethics.

She referred to the 5th National Bioethics Conference (in which SOCHARA was also an organizing partner) and said that it had a serious session on the curriculum formation in

[284] Information taken from SOCHARA official website. Retrieved on 16.06.2017 from http://www.sochara.org/Sochara-Staff.

bioethics for India. She added that there are serious concerns from the part of Rajiv Gandhi Health University, Bangalore, to adopt a medical ethics curriculum with the joint effort of St. John's National Academy of Health Sciences Bangalore and Christian Medical Centre, Vellore.

4.4.7. Dr. Mario Vas

Dr. Mario Vas is professor of Physiology at St. Johns Medical College, Bangalore. He is also the Head of the Division of Health and Humanities, St. John's Research Institute, Bangalore.[285]

He said that the questionnaire had various aspects of medical ethics treated in it and was worth doing the study. As for the curriculum and teaching contents, he was very specific in saying that the one who writes in the topics regarding healthcare ethics should have the scientific and medical knowledge of the actual situation and the procedures done in the clinical trials for each patient. He also mentioned that there are different circumstances when one cannot determine the exact physical process; therefore, taking a decision on such instances would need deeper reflection. He opposes religions that offer ethical solutions without considering the scientific and medical part of the actual process. Therefore, for bioethics to be reliable, it is necessary to join scientific realities with philosophical reflections.

4.4.8. Dr. Nandini K. Kumar

Dr Nandini Kumar, former Deputy Director General (Sr. Grade) of Indian Council of Medical Research (ICMR), has been working extensively in the fields of Ethical Guidelines in Biomedical Research and Traditional Medicine Research. She was an Adjunct Professor in the Department of Hospital Administration, Kasturba Medical College, Manipal and Dr. TMA Pai Endowment Chair for Bioethics, Manipal University. She is also a Fogarty Fellow graduate in Bioethics (International Stream) from the University of Toronto, Canada.

[285] About St. John's Research Institute and its projects the previous part of this chapter gives explanation. More on Prof. Vas may be accessed at http://sjri.res.in/health/keypersonnel/Dr.%20Mario%20Vaz.

Dr. Nandini Kumar is a Graduate in Medicine and Post-graduate Diploma holder in Clinical Pathology from Trivandrum Medical College. She continued with her medical research in the Gastroenterology Department at Trivandrum Medical College and at Madras Medical College, Chennai. She was in charge of the Liver Clinic at General Hospital, Chennai. Later, she joined the Indian Council of Medical Research (ICMR) headquarters in New Delhi as a senior researcher, and became a Program Officer for Traditional Medicine Research and Bioethics in the later years.

Dr. Nandini Kumar had been a member of several ICMR national and international working groups and organized several national and international agency-sponsored workshops on ethical issues involving biomedical research and research in traditional medicine. She was closely involved with activities related to the Government's Golden Triangle Partnership Scheme related to drug development in traditional systems of medicine and other similar programs in the country concerning herbal or herbo-mineral formulations. She also had been closely involved in finalization of the ICMR Ethical Guidelines of 2000 and of 2006, especially the section on traditional medicine research, and of the Draft Guidelines on Bio-banking and Stem Cell Research and Therapy, Mental Health Research, Data Set Protection and Disaster Related Research. Since 2000, she had been conducting many workshops and training programs in supporting curriculum development and propagation of Bioethics in India with the Fogarty's International Research Ethics Education and Curriculum Development Award (for Bioethics) program. As a member of the executive committee of the Forum for Ethics Review Committees in India, a National Chapter of the Forum for Ethics Review Committees in Asia Pacific, she is involved in ethics committee related activities of India besides being an ethics committee surveyor for India and Indian Sub-continent. As the field developed, Dr. Kumar became not only a national leader in bioethics but also a member of international panels, including the U.S. Presidential Commission for the Study of Bioethical Issues. There are a number of publications in her name in the field of bioethics which are also quoted in various chapters of this research.

I visited Dr. Nandini Kumar at her residence in Chennai, Tamil Nadu. She appreciated the questionnaire for the survey and was interested in the research topic I presented. Regarding the bioethics education in India she explained how ICMR had organised diverse projects, seminars, workshops, courses etc. to initiate bioethics education in

India.[286] As I have pointed out earlier, ICMR is also associated with Fogarty International Centre (FIC), USA on account of the Grant awarded to her by FIC for bioethics initiatives. I have explained these activities undertaken by ICMR and the significant role played by Dr. Nandini Kumar in the 3rd Chapter.

Bioethics in the Indian context is unique according to Dr. Nandini Kumar. The diverse medical traditions of India have a lot to contribute to the healthcare system and the ethical principles guiding the physicians and other healthcare professionals in our country. Her view is that the traditional Indian medical systems treat not just the patient and her/his disease, but have a holistic view of the person, of her/his physical and spiritual dimensions. Therefore, through healing of the whole person in addition to preventing her/him from possible health challenges, these systems make her/him live a better life.

Second point she told me was that the rich religious culture of India can contribute much to the value system of our country also to the professionals in the medical field. She explained that when she had conducted the different courses in ICMR in bioethics she also invited spiritual leaders from different religions to give lectures/inputs to the students. She also organised Yoga and meditation sessions for the students and all these were found to be worth doing in the formation of a bioethicist. There were also sessions for the students to integrate the principles of ethics and the legal system in the country.

Dr. Nandini undoubtedly states that St. John's Medical College is the first institution to adopt ethics teaching for the undergraduate medical students. And later it began in CMC, Vellore. Now there are many institutions which are trying to include bioethics in their teaching plan. Diverse medical colleges in Maharashtra Universities have adopted a bioethics study programme. Then, Father Muller Medical College, Mangalore, Manipal University, Yenepoya University, JIPMER Medical College, Pondicherry etc. have the program to teach bioethics now. She also mentioned the initiatives taken by UNESCO and its basic curriculum in bioethics that is adopted by many medical colleges in India.

[286] For more details of the bioethics activities in India led by Dr. Nandini Kumar please Ref.: Nandini K. Kumar, "Bioethics Activities in India", *La Revue De Sanité de la Méditerranée orientale*, Vol. 12(1), 2006, pp. S56-S65, also Fogarty International Center, "Trainee to Teacher: Leveraging Bioethics Learning in India", 10(6), Nov-Dec 2011 retrieved on 16.06.2017 from https://www.fic.nih.gov/News/GlobalHealthMatters/nov-dec-2011/Pages/bioethics-india.aspx.

Dr. Kumar explained the history of the instructions undertaken to include bioethics in the medical curriculum in India. The Medical Council of India pronounced the instruction in 1997 and only Rajiv Gandhi Health University in Karnataka had taken steps to implement the order. St. John's bioethics program was taken as the base structure to include in the curriculum. In 2015 MCI stated that at every level of undergraduate medical courses, ethics learning is a must. In 2017 this was to become mandatory for all institutions in India. For this purpose there was an initial training for trainers at Vellore, Tamil Nadu and other regional centres. The training was named Attitude and Communication (ATCOM). Manipal Medical College is now going to continue this training for new candidates.

Dr. Nandini Kumar also explained the role played by *Indian Journal of Medical Ethics* and the corresponding institutions and specifically the National Bioethics Conference, which played a major part in conscientising the Indian community the importance of the topic "bioethics". Dr. Kumar was very kind enough to review and modify the historical part of the growth of bioethics in India, which I have included in this thesis.

4.4.9. Dr. G. D. Ravindran

Dr. G. D. Ravindran is the head of General Medicine and Ethics at St. John's National Institute of Health Sciences Bangalore. His many publications and presentations in the field of bioethics affirm his interest and the vast area of activities he was involved in to aid the growth of bioethics/medical ethics, not only in the institution St. John's Medical College, but also in the country at large. His various publications are quoted in this thesis. He was also one of the persons who designed the ethics curriculum for the Rajiv Gandhi Health University, Karnataka.

My interview with Dr. Ravindran was quite brief; however, he completed the questionnaire and contributed his comments. His views on medical ethics are seen in the article "Teaching Medical Ethics: A Model," co-authored by T. Kalam, S. Lewin and P. Pais where they explain how St. John's Medical College furnished a bioethics curriculum for itself. In the 6th Chapter the curriculum of St. John's is explained in detail.

4.4.10. Dr. Russell D'Souza

Dr. Russell D'Souza is Head of the Asia Pacific Bioethics Division of UNESCO Chair in Bioethics, Haifa; Course Director of 3Term International Bioethics for Health Sciences (3T-IBHSc); UNESCO Chair in Bioethics, International Bioethics Course For Medical & Health Science Teaching Faculty, and the Director of the Centre For Asia Pacific Bioethics, Medical Ethics and Health Law Studies, Melbourne, Australia, as well as the In-charge professional of the UNESCO Bioethics programmes in India. I contacted him via e-mail and he was happy to explain the projects UNESCO had undertaken in India in recent years.

As he explains, the Indian programme of the UNESCO Chair in Bioethics had developed an integrated bioethics curriculum for medical, dental and health science courses which has been piloted for four years. This curriculum is supported by the UNESCO Core Curriculum which reflects the fifteen principles of the *UNESCO Universal Declaration on Bioethics and Human Rights* that was adopted on October 19, 2005, by 200 countries including the Government of India, a founding member of the UNESCO.

In about forty Bioethics units in medical colleges the UNESCO now has an Association of Indian Health Sciences University- UNESCO Chair national programme with the thirteen state universities of health sciences as part of this programme. These Universities are at different stages of implementing the curriculum. The UNESCO has been running the training course for senior teaching faculty whose successful completion will give them the required competency to teach integrated bioethics in their discipline of Medicine and Health Sciences.

It also has an active national student bioethics programme now hosted by Dr. D. Y. Patil University of Pune, Maharashtra. He notes that the UNESCO has developed and piloted the Integrated Bioethics Curriculum for Medicine, Dental, Nursing and Health Sciences including Ayurveda, Homeopathy and Siddha medicine. The Dental Council of India in January 2016 has accepted this curriculum. The Three Term Integrated Bioethics for Health Sciences (IBHSc) course has been successfully completed and certified after assessment of the participants. So far, UNESCO has completed training and certifying more than 900 senior Medical, Dental and Health Science Teaching faculty at ten universities in India.

4.4.11. Dr. Stephen Fernandes

I visited Dr. Stephen Fernandes at the *Fédération Internationale des Associations de Médecins Catholiques* (FIAMC) centre at St. Pius X College Mumbai, Maharashtra, on February 10, 2015. Dr. Fernandes was also the Executive Secretary of the Conference of Catholic Bishops in India's Commission for Theology and Doctrine. He evaluated the questionnaire and found it worth doing a study on the topics mentioned in it.

He explained about the seminars and workshops organised by FIAMC with national and international collaboration. These seminars are open to those in the field of medicine, social works, philosophy, religion, and theology. As part of the Conference of Catholic Bishops in India, FIAMC is based on the principles of Catholic bioethics.

Regarding bioethics education, he mentioned the courses organised by FIAMC for the healthcare practitioners, especially in Mumbai and other places in Maharashtra. Since 2003 it conducts a certificate course in healthcare ethics. The lessons are held once a month for eight capsules of a half day programme. They cover topics like abortion, organ transplantation, HIV/AIDS, and other relevant themes. He also said that there was an endeavour to teach bioethics in certain selected schools in Mumbai. But later it came to an end without proper continuity. Though the venture was appreciated, the results were not available as the programme did not become rooted in the schools.

4.4.12. Personal Evaluation

1. Most of the doctors and professors asked me to have the study only in the field of Allopathy (modern medicine). The first plan of my research was to concentrate on all the medical traditions and practices in India and then write a core curriculum with the integration of values from all these systems, including modern medicine. But, after the discussion with Dr. Paul Parathazham and the bioethicists in India, the plan was changed. They were of the opinion that Ayurveda, Siddha, Yoga, Unani and Homeopathy have very religious, psychological elements with their holistic healing system and their outlook on healthcare. So, they could not be included as pure scientific methods of medical practice. If necessary, it should be dealt differently. Hence, the decision was made to have the research only with the students and professionals in the field of modern medicine.

2. Bioethics curriculum in India is a rare matter of study. It existed only in two or three institutions and now is slowly growing in the number of institutions adapting a bioethics study programme, though at an insufficient pace and format.

3. There is widespread awareness of, and need for, an ethics curriculum in Medical studies, a venture that should be undertaken by the joint efforts of many doctor's associations, UNESCO, private medical institutions and so on.

4. Everyone accepted the importance of my study in the medical field of India and has judged my efforts praiseworthy.

5. No written history of Medical Ethics Curriculum exists in the country.

6. Few books have been written on Medical Ethics in the Indian Context. A curriculum based on it doesn't exist. Most of the medical colleges teach ethics in the course of Forensic Medicine.

7. The Medical Council of India and Indian Council of Medical Research are trying to establish a Medical Ethics Curriculum in the country and some assume that in effect that will be the UNESCO proposal of the curriculum for Bioethics.

8. A few of those who were interviewed support a religion based bioethics and others are looking for an a-religious bioethics. Most of the doctors do not like ethics and ethical issues being labelled as "Christian", "Hindu", "Islam" and so on.

9. In India everyone sees "corruption" as the biggest problem in ethics. Privatisation in the healthcare sector is an added evil.

10. A widespread feeling exists that the legal system regarding medical issues is not strong in India; this includes the government's lack of taking sufficient steps to implement orders regarding medical education.

It was a very fruitful endeavour both visiting the centres and having enlightening and encouraging talks with a number of experts in the field of bioethics in India. It gave me personally a live experience of the realities that are influential in the theoretical and practical application of an ethics curriculum in the healthcare system in the country. Although challenging, I positively regard this study enterprise as worth doing, because, talking with different doctors, professors, philosophers, bioethicists and legal experts from different backgrounds of religion, culture, worldviews, philosophical outlooks, bioethical standpoints etc. give a chance to critically evaluate the personal views and to

understand the Indian society, especially the medical education system and the whole healthcare enterprise, with a new light apprehending the realities closer. The assistance given by them to formulate the questionnaire and to do the survey in its practical sense was commendable. The collaboration with these organisations, institutes and individual persons who are serving in the field of bioethics in India has contributed much to the fruitfulness of this research.

Chapter 5

The Questionnaire, Interviews and Study Results

Part I: Introduction to the Survey and Interviews

The first part of the research involved both an historical study with the general context of India and the growth of bioethics in India. This basically required an extensive search for the literature on the topics concerned. A research is authenticated when it has an original and experimental study included in it. To verify and substantiate the objectives of the study and to profoundly establish them on evidence based resources a questionnaire survey was conducted in India and in Italy.

The questionnaire focused on discovering the present situation of bioethics and bioethics/medical ethics education in India and the responders' views on how the situation can be improved. The responders from India included doctors, medical students, and nurses whereas the control group from Italy was selected from the specializing medical students from two selected universities; namely, Campus Bio Medico University of Rome and The Sacred Heart Catholic University, Rome.[287] There was also a series of interviews conducted in India with experts in the field of Bioethics on national and International levels. This also contributed much to the comprehension of the Indian scenario of bioethics/medical ethics education and also to the work needed for necessary application in the future.

5.1. Background and Objectives

In a country like India, moral pluralism exists in an extraordinary manner because of its fragmented social and cultural constructions. It would be challenging to encounter specific issues in the society if they are not considered most sensitively and carefully. Understanding the society and its features is very important in these circumstances, which would eventually help accurately improve the present situation. The questionnaire and interviews which were used for this particular study aim at understanding the present situation of bioethics and the medical ethics taught in India were modelled with this intention.

[287] In Italian: Università Campus Bio-Medico di Roma and Università Cattolica del Sacro Cuore, Roma.

5.1.1. Background of the Study

We have seen in the earlier chapters that the Indian community is rich with its multiple religious, cultural, social, ethnic and linguistic elements. To present a set of ethical principles in a community which cherishes its vast diversities is a challenge for anyone attempting to do so. Although there exist difficulties in understanding one another, the Indian reality moves ahead as one nation with the principle "unity in diversity." This bond also allows the students from every part of India to experience their education according to their choice. Universities are open to the students of any state in India and also to the students from abroad. This fusion of particular religious, cultural, and societal backgrounds also brings together the value systems the students inherit. In such a multiplicity, teaching bioethics in the medical institutions of India could be better achieved if there is a curriculum and a teaching method that can be adapted to the particular Indian milieu.

We take into consideration the assumption that every human being has an innate human nature independent of his religion, culture, ethnicity, and so forth. Do we make a reference to the human species and humanity that every human being shares in common? Therefore, the attempt here is to construct a bioethics, among many ethics, based on this inherent human nature. To discover the regularity which is, in this context, common or frequent in different communities with diverse characteristics necessitates an empirical study with a questionnaire. Hence, we are in a research to propose a humanistic bioethics. It is not closed in human biology but in being a human being. We do not say that the culture, religion and the society are not important. We are not trying to make resolutions to the problems encountered in particular themes treated in bioethics. But we are giving indications to make a core-curriculum where diverse groups can meet each other and discuss significant themes which are of common concern.

A second aspect we have to examine in the Indian context is the lack of an organised movement on the part of the government to set up a council or committee that concentrates its work on the propagation and control of bioethics in the Indian healthcare system. For example, in the United States of America the President's Bioethics Commission performs a vigilant role in the nation's approach to bioethics issues and to make plans according to the needs of the society as certain necessity

occurs.[288] In India the formal councils like Medical Council of India (MCI), Indian Council of Medical Research (ICMR), Indian Medical Association (IMA), and others can be coordinated by the Ministry of Health and Family Welfare to have a more meaningful study into the subject in order to promulgate and promote bioethics/medical ethics education in the healthcare institutions. Bioethics, when considered in a wider sense, including environmental ethics and animal ethics, various councils can work collaboratively to establish a sound forum for the dissemination of bioethics in India. Some of these councils include The Ministry of Environment, Forest and Climate Change, The Ministry of Social Justice and Empowerment, Animal Welfare Board of India (AWBI) and The National Institute of Animal Welfare (NIAW). These groups can take a leading role with the aforementioned councils to establish a sound forum for the dissemination of bioethics in India.

It is also positively noted that there is an increasing number of bioethics associations and forums actively circulating the values in the society through various meetings, seminars and social activism. I have already elaborated the activities of the associations in chapter III. The National Bioethics Conference of India (NBC) is the largest event so far for all these associations and interested persons in bioethics to come together and discuss various matters of concern. Generally, when there is no such national forum, these groups work without a nationwide network in their own spheres and regions. These independent and individual activities will not bear much fruit if they are not supported and coordinated by the government, ideologically and systematically synchronized and guided to a common aim: a promising field for bioethics in India.

Though the Medical Council of India in its directives states that ethics should be taught in the medical curriculum, for many years up to recently, only St. John's National Academy of Health Sciences, Bangalore and Christian Medical Centre, Vellore, had a structured program of teaching bioethics in the medical institutions. As we have seen in Chapter III, at present a number of medical colleges are coming up with a plan to teach bioethics, such as Yenepoya University, Mangalore, Fr. Müllers Medical College, Mangalore, Manipal University, and so on. We also need to positively see the efforts taken by the UNESCO Chair of Bioethics, Haifa, in encouraging different institutions to join and accept their UNESCO Bioethics Core Curriculum.

[288] Ref.: Presidential Commission for the Study of Bioethical Issues available at https://bioethicsarchive.georgetown.edu/pcsbi/. Accessed on 18.06.2017.

Another serious allegation that we come to face when we analyse the bioethics already existing in India is that it lacks historical and philosophical foundation.[289] There is an argument that the bioethics we now learn is, to an extent, a Western model bioethics and India needs a bioethics with its own philosophy and value systems. There is also a second important argument in this context: India lacks personnel equipped with the right manner of disseminating bioethics. In India, bioethicists are few, and not at all sufficient for a large country like India. Therefore, satisfying the need for educating more people who can teach bioethics in the Indian context would be most helpful. When interested physicians themselves concentrate more on the field of bioethics, they serve to impart the values to the forthcoming generation of medical professionals in India.

5.1.2. Primary Objective

The primary aim for this research was to provide the possibilities of shaping a philosophically strong bioethics in the context of India that may lead to modelling a planned curriculum of bioethics in the universities and medical and nursing colleges regarding specific issues in bioethics.

India is a nation with coexisting pluralistic social characteristics, different medical traditions, and value systems. Because of it, an adaptable plan for bioethics in the particular context of India was kept under observation and deep analysis. The nation proudly upholds the motto, "unity in diversity." Hence, the study was intended to find out the unifying philosophical and ethical principles that can give a foundation to the bioethics in India.

5.1.3. Secondary Objectives

Studying the social and cultural setup of India, one can easily imagine the difficulty and complexities that exist in creating a uniform structure for any discipline. We need to also keep in mind that so far, governmentally, no official forum exists to give a standard direction and coordinate the different groups who are working for the cause of bioethics in India.

[289] Maithreyi, *Towards the History of Bioethics in India*, pp. 54-55.

As a result, the secondary objectives for this study were:

a. To provide a more unified, practical, and ethical vision to the different medical traditions, associations and committees that are independently operational in the field of bioethics in India.

b. To initiate and foster more concern and awareness in bioethics in the medical and university educational spheres.

c. To provide an effective bioethics education in the concerned fields by inspiring professionals to a sense of conscience to the need and urgency of providing an effective bioethics education in the concerned fields.

5.2. Materials and Methods

The scientific part of the research, collecting and evaluating the data, was initially done in three phases before the analysis of the whole data collected. The first phase of data collection relied on the questionnaire survey conducted in India among medical doctors, medical students and nurses, interviews with selected bioethicists in India. Also, the questionnaire survey collected the responses of the control group from Rome, Italy. The questionnaire in India was validated and in the first phase evaluated by Dr. Paul Parathazham, the director of St. John's National Academy of Health Sciences, Bangalore, India. With the control group, the study later proceeded with Dr. Massimilliano Andrea Vitali of the Campus Bio Medico University of Rome, Italy.

5.2.1. Formation of the Questionnaire

The questionnaire was semi-structured having 33 questions of different categories.[290] In India the questionnaire was written in English, which is the commonly understood language there. In Italy the same questionnaire was translated to Italian and was distributed to the selected population. The questionnaire had 8 questions having descriptive answers where the respondent could comment if desired.

[290] Please see Appendix I for the Questionnaire in English and Appendix II for the Questionnaire in Italian.

The questionnaire was thematically divided into three parts: (1) the characteristics of the population; (2) the present state of bioethics and bioethics education in India; and (3) the questions which could particularly help improve the bioethics education in India. The questionnaire for the control group in Italy was the translation of the questionnaire used in India, substituting India with Italy and the 36 states and union territories of India with the 20 regions of Italy.

The questions were meditated upon and formulated after analysing various articles and publications on the topic of bioethics education in India and abroad, and semi-finalized with the help of my Professor and Tutor for the doctoral research, Prof. Vittoradolfo Tambone. The questionnaire in English was then taken to India and presented to certain bioethicists in India; namely, Prof. G. D. Ravindran (St. John's National Academy of Health Sciences, Bangalore), Dr. Olinda Timms (St. John's National Academy of Health Sciences, Bangalore), Dr. Ravi Narayan (Community Health Cell, Bangalore), Dr. Thelma Narayan (SOCHARA, Bangalore), Prof. Anuradha Rose (Christian Medical Centre, Vellore, Tamil Nadu), Prof. Amar Jesani (Forum for Medical Ethics Society, Indian Journal of Medical Ethics, Mumbai, Maharashtra) and Prof. Nandini Kumar (Former Deputy General Sr. Grade, Indian Council of Medical Research, New Delhi) Minor suggestions cautiously inserted and the questionnaire were finalized with the help of Dr. Paul Parathazham.

5.2.2. Population in India

Selecting the population in India for the responses was a serious and difficult task. Ethnicity, religion, private and public institutions of education, languages, different medical traditions, cultural barriers, the multiplicity in Indian context were serious concerns in the population selection select for the survey. After serious discussions and consultations with the above-mentioned bioethicists and statisticians, I concluded that the institutions of the study (private and public), gender and religions, as well as different regions of India, had to be given ample representation.

At first the research project intended to comprise doctors and healthcare practitioners from Modern Medicine (Allopathy), as well as all the different medical traditions of India including Ayurveda, Yoga, Unani, Siddha and Homeopathy (which is not a tradition originating in India). Later, with the counsel from my tutor and statisticians,

the group of the study was restricted to the healthcare practitioners of modern medicine alone. It was decided that the different systems of medicine in their variety of approaches might complicate the theme of study. A second reason was that, if included, all the systems of medicine in India would be a time constraint. Collection of data had to be done in the restricted time. The inclusion criteria accepted, it would be extremely difficult to do justice to the analysis of all traditions of medicine. And there was also a possibility to make a large population for the study. It was also seen that even in the modern medical colleges and institutions in India, generally there doesn't exist a bioethics curriculum in a formal manner, apart from a very few institutions like St. John's Medical College, Bangalore, and Christian Medical Centre, Vellore. Hence the population for study included the medical doctors, medical students, and nurses who had been studying and practicing in the stream of modern medicine.

The number of the population was also a concern. What would be a valid sample size for such a study? Discussions with the statisticians lead to a conclusion that though India is so large and the number of medical professionals too is a large group, since the study is a survey to find out the trends of medical ethics learning and the future prospective, it would be sufficient to have 500 respondents who studied in India. Among these 500, about 300 could be medical doctors, 100 medical students and 100 nurses.

5.2.2.1. Method of Collecting Responses in India

In India the collection of the responses from different regions and religions was a tough job, keeping in mind that the private or public sector of the institutes where they studied was to be balanced. In the states of Kerala, Tamil Nadu, and Karnataka, I have directly organised the collection of the data. In other regions I have found out some contact persons and sent them the questionnaires and after being answered they have either posted me the questionnaire via courier or have scanned and sent them via e-mail.

A second method of collecting the responses was to directly send the doctors and medical students the questionnaires via e-mail and get the response in reply. 504 replied answers were received after distributing and sending via email around 1,600 questionnaires. Out of which seven replied questionnaires had to be removed with various reasons which didn't come under the inclusion criteria or were not completed

sufficiently well. Hence, at the end the validly filled questionnaire from India numbered 497.

5.2.3. Validation

The validation of the finalized questionnaire was done at St. John's National Academy of Health Sciences, Bangalore, under the guidance of Dr. Paul Parathazham. We have distributed initially around thirty questionnaires and checked whether the answers corresponded legibly to the pattern of the questions asked. This internal validation was found without any disapproval, modification or deletions, and the questionnaire was considered to be ready for the study on a larger group.

5.2.4. Population in Italy

The population in India, as we have seen, was a heterogeneous group in many regards. It was pluralistic concerning the categories of religion, age, designation, private and public sectors, language, culture, etc. Therefore, the control group in Italy was selected from a group that has almost a homogeneous character. Since the number of the population was 497 in India, the statistician Dr. Massimiliano Vitali suggested having a control group counting between 100 - 120. To keep the homogeneous nature of the group, in consultation with the tutor, we selected Campus Bio Medico University of Rome and Sacred Heart Catholic University, Gemelli, Rome. To make it precise, the specializing doctors of these like- minded Catholic institutions were preferably selected for the study.

The directress of the specializing doctors at Campus Bio Medico University of Rome, Prof. Rosanna Alloni, was instrumental in collecting directly from the students the data from the questionnaires distributed. As a result sixty-eight validly filled questionnaires were collected from Campus Bio Medico University, Rome. It was not that easy with the collection of the data from Sacred Heart University. After a series of communications with different university officials, at the end, Prof. Patrizia Meli who was the responsible person for the master and specializing students accepted the request and recommended to complete the survey via email. Thus the questionnaire, with the approval of the ethics committees of Campus Bio Medico University of Rome and

Sacred Heart Catholic University of Rome, along with the form to sign the informed consent, was sent via email to 1,203 specializing students. There was a time limit of 30 days to send the completed questionnaires. From this effort forty valid replies arrived. Out of 43 filled questionnaires three replies were excluded, because one was from a medical student, one nurse, and the third one was a specializing doctor from a country other than Italy. Hence, we had at the end 108 replies from Italy for the control group study.

According to the statistician Dr. Massimiliano Vitali, a second validation of the questionnaire was not necessary since it was already validated in India, and only a contextual conversion was made when it is translated to Italian. Therefore, the internal validation done in India with the English questionnaire was presumed valid also for the questionnaire in Italian.

5.2.5. Statistics Methods

The questionnaire replies from India and Italy were kept under intense study and analysis giving singular attention to every question and the comment given. Non-parametric tests (the *Chi-Square* (X^2) test, *Fischer exact* test and *Kruskal–Wallis* test by ranks) were used to compare responses to the questionnaire. Then the responses were analysed and verified to see if any differences existed among different variables (for example, between the whole population of India and population from Italy, between doctors from India and doctors from Italy etc.). The statistical significance was considered when a "p" value was less than 0.05 ($p > 0.05$). For the statistical analysis, the program used was IBM SPSS version 24.[291] The numbers and graphs given in the following section are the analysis from *Chi-Square* (X^2) test. The statistical evaluations are done by Dr. Paul Parathazham (St. John's National Academy of Health Sciences, Bangalore, India) and Dr. Massimiliano Andrea Vitali (Campus Bio Medico University of Rome, Italy).

[291] SPSS stands for Statistical Package for the Social Sciences. It is a software package to analyze batched and non-batched statistical analysis, now owned by IBM (International Business Machines Corporation, Armonk, New York, United States).

Part II: Statement of the Survey Results

5.3. Stratifications of the Population and Correlation Analyses

This section deals with the results of the survey. It is divided into two parts. In the first, the introductory part of the questionnaire deals with the characteristics of the population and their experience of the bioethics/ medical ethics they had in the respective institutions they studied. In the second part, diverse stratifications from the population i.e., "total groups from India", "doctors from India", "Non-Christians from India" and the "age group from 25-40 from India" are comparatively assessed with the total population in Italy.[292] A diverse stratification, "Christians from India" is studied with the responses of the "Christians from Italy". In addition, the characteristics are also analysed between the stratifications "Christians from India" and "Non-Christians from India", and between "Public Sector" and "Private Sector" in India. Still, a different analysis concentrated on the study between the groups "Non-Christians in India" and the "Total Population of Italy." For better understanding, all these analyses are given in appendices in the form of tables. Any statistical significance noted even in these later groups in their comparative study, I have noted it in the present chapter.

No.	Stratifications	The Group Compared with
1	India's Total Population	Italy's Total Population
2	Doctors from India	Doctors from Italy
3	Christians from India	Christians from Italy
4	Age group 25-40 from India	Italy Total Group
5	Non-Christians from India	Italy Total Group
6	Indian Public Sector	Indian Private Sector
7	Christians from India	Non-Christians from India

Table 1: Stratifications of Population and Groups Compared with

The remaining segment of the discussion section in which I try to analyze the results of the survey conducted in India and Italy follows thereafter. In the first part of this

[292] Total population in Italy means the total respondents of the survey from Italy. This group is same as the "age group 25-40 from Italy" and "doctors from Italy." Hence, even if these names are used interchangeably for this group, it is the same group.

section, I present the total number of responses from India and Italy in tables to understand them easily.

I have already stated that the total number of respondents from India was 497 and from Italy the number was 108. But in the tables the term "Total" indicates the total number of responses received for the particular question. "p value" in the table indicates the comparative statistical significance between the diverse stratifications of the sample analyzed. When the "p value" is less than 0.05, then it indicates that the analysis is statistically significant.

5.4. Statement of the Questionnaire Responses

For the statement of the data we follow more or less the order of questions in the questionnaire with the same numbering for each question. However, for convenience, I have rearranged certain sections, keeping the question number the same as in the questionnaire.

1. Sex

The population in India consisted of 220 males and 274 females and in Italy 63 males and 45 females.

Country	Sex		Total	P value
	Male	Female		
India	220	274	494	.009
Italy	63	45	108	
Total	283	319	602	

Table 2

2. Age:

There were six categories of age groups in India from below 25 years to above 60 years. In Italy the group was limited to two categories: between 25-30 and 31-40 years of age.

Country	Age						Total
	Below 25	25-30	31-40	41-50	51-60	Above 60	
India	133	193	89	29	34	19	497
Italy	0	92	16	0	0	0	108
Total	133	285	105	29	34	19	605

Table 3

3. Religious Affiliation:

The category of religious affiliation of the respondents was specified with all major religions in India; namely, Hindu, Muslim, Sikh, Christian, Buddhist, Jain and Parsi. There was also an option to indicate if the respondent belonged to any other religion. In Italy 101 confessed that they are Christians and the remaining 7 grouped under "others" category.

Country	Religious Affiliation								Total
	Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
India	250	85	16	130	1	13	1	0	496
Italy	0	0	0	101	0	0	0	7	108
Total	250	85	16	231	1	13	1	7	604

Table 4

4. The state/ Region of my origin in India/ Italy:

5. The state in India/ Italy, where I studied Medicine/Nursing:

We have seen earlier that India has 29 states and 7 union territories. We have the responses from 26 states/ union territories, of the origin of respondents and they indicate that they have studied in 23 states/ union territories. The respondents from Italy were from 16 regions (out of 20) of origin and 10 regions of their study.

States/Regions	Of Origin Country		Of Study Country	
	India	Italy	India	Italy
Andhra Pradesh	8		20	
Arunachal Pradesh	1			
Assam				
Bihar	7		2	
Chhattisgarh	5		1	
Goa	16		5	
Gujarat	15		13	
Haryana	8		7	
Himachal Pradesh	9		7	
Jammu & Kashmir	3		1	
Jharkhand	5		2	
Karnataka	81		175	
Kerala	183		98	
Madhya Pradesh	11		8	
Maharashtra	48		63	
Manipur	1			

Meghalaya				
Mizoram				
Nagaland	3			
Odisha (Orissa)	9		6	
Punjab	17		18	
Rajasthan	7		5	
Sikkim				
Tamil Nadu	22		27	
Telangana	7		4	
Tripura				
Uttar Pradesh	8		7	
Uttarakhand	5		1	
West Bengal	5		5	
New Delhi	10		13	
Pondicherry	2		8	
Valle D'Aosta				
Piemonte				
Liguria		2		2
Lombardia				
Trentino-Alto Adige		2		
Veneto		1		1
Friuli- Venezia Giulia				
Emilia Romagna		2		
Toscana		4		3
Marche		3		1
Umbria		4		2
Lazio		26		79
Abruzzo		1		2
Molise		1		
Campania		20		6
Basilicata		2		
Puglia		18		4
Calabria		3		
Sicilia		16		7
Sardegna		1		
Total	**496**	**106**	**496**	**107**

Table 5

6. At present I stay/ work:

The place of occupation was the query in the 6th question. 480 respondents from India answered that they were working in the country while 16 were working outside India. In Italy all the respondents have replied that they work in Italy.

Country	Work Countries		Total
	In the country	Outside the country	
India	480	16	496
Italy	108	0	108
Total	588	16	604

Table 6

7. Designation/Profession

Ten categories were given to specify the designation/ profession of the respondent. Other than the main category doctor, medical student or nurse the respondent could also indicate if he/ she was a bioethicist, theologian, philosopher, religious person, professor/ teacher of bioethics or a member of a medical association for social action.

Designation	India	Italy	Total
Doctor	297	108	405
Medical Student	100		100
Nurse	100		100
Nursing Student			
Bioethicist	3		3
Theologian			
Philosopher	1		1
Religious Person	2		2
Professor/ Teacher of Bioethics	9		9
Member of a Medical Association for Social Action	16	3	19

Table 7

8. Sector of Study

The sector of study indicated whether the respondents studied in a private medical institute (run by private management) or in a public institute (administered by the central or state government). In India 248 respondents have studied in a public institutes and 247 in a private institutes. Whereas, in Italy 43 studied in public institutes and 65 in private institutes.

Country	Sector of study		Total	P value
	Public Institute	Private Institute		
India	248	247	495	.053
Italy	43	65	108	
Total	291	312	603	

Table 8

9. Sector of Work

Sector of work describes whether the respondent is working in a structure which is owned and managed by a private person or group or in an establishment which is directly run by the central or state government. In India the influence of the public sector in the field of education and administering the institutions of healthcare is more than those owned and administered by the public sector.

Country	Sector of working		Total	P value
	Public Sector	Private Sector		
India	87	347	434	.002
Italy	8	98	106	
Total	95	445	540	

Table 9

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

To this question 274 respondents from India answered "yes," 136 respondents "no," and eighty-five respondents were not sure whether they had ethics as part of the medical curriculum. Among the Italian respondents eighty-nine of them answered "yes," eleven answered "no," and eight of them were not sure whether they had ethics as part of their curriculum of medicine.

Country	Bioethics studies			Total	P value
	Yes	No	Not Sure		
India	274	136	85	495	.000
Italy	89	11	8	108	
Total	363	147	93	603	

Table 10

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

Out of 274 who answered "yes" for the previous question from India, 270 responded to the present one. From Italy eighty-nine answered "yes." From India 235 respondents stated that they had less than fifteen lessons devoted to ethics in bachelor's degree, thirty of them indicated that they had between fifteen to thirty classes, and five noted that they had more than thirty lessons. Among the respondents from Italy twenty declared that they had less than fifteen lessons, fifty-six of them stated that they had between fifteen to thirty lessons and thirteen of them pointed out that they had more than thirty lessons during the bachelor's degree course.

Country	lessons during Bachelor's			Total	P value
	Less than 15	Between 15-30	More than 30		
India	235	30	5	270	.000
Italy	20	56	13	89	
Total	255	86	18	359	

Table 11

b. Approximately how many classes were devoted to ethics in Master's degree programme?

The total responses to the question, the number of lessons dedicated in the master's degree programme, were 213, and twenty-two from India and Italy respectively. Out of 213 respondents from India, 208 were of the opinion that they had less than fifteen lessons of which five of them stated they had between fifteen and thirty lessons, and no one stated that there were more than thirty lessons in the Masters' degree course. From Italy out of the twenty-two respondents, eleven declared that they had less than fifteen lessons. Ten noted that there were between fifteen to thirty lessons, and one respondent affirmed that there were more than thirty lessons during the Master's degree course.

Country	lessons during Masters			Total	P value
	Less than 15	Between 15-30	More than 30		
India	208	5	0	213	.000
Italy	11	10	1	22	
Total	219	15	1	235	

Table 12

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)[293]

This question offered a choice out of five categories to mark those that apply. The answers from India and Italy almost matched in the first three categories, namely, "any medical practitioner," "a medical doctor who has specialized in bioethics," and "a non-medical doctor who has specialized in bioethics." Differences in opinion are seen with regard to two other categories: "one who has a PhD in bioethics" and "someone who has specialized in the fields of philosophy, religion, and science (medicine)." As we can see from the table below, most voted category both from India and Italy is "a medical doctor who has specialized in bioethics."

Response "YES"	Country		Total	P value
	India	Italy		
Any medical Practitioner	178	47	225	.133
A medical doctor who has specialized in Bioethics	368	79	447	.848
A non-medical doctor who has specialized in Bioethics	119	25	144	.860
One who has a PhD in Medical Ethics	253	43	296	.037
Someone who has specialized in the fields of philosophy, religion and science (medicine)	127	58	185	.000

Table 13

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in a Bachelor's degree course?

In India, the Bachelor's degree in medicine is called Bachelor of Medicine and Bachelor of Surgery (MBBS). Out of 475 responses from India 186 had the view that it needs only less than fifteen classes per year, 245 suggested between fifteen to thirty classes and forty-four were of the opinion that the course needed to have more than thirty

[293] Questions 12-28, 30, 31 and 33 are presented after the questions 29 and 32 for the sake of convenience.

classes. Whereas in Italy, out of ninety-nine respondents, seventy persons suggested to have between fifteen to thirty classes. Twelve held the opinion that the course needed less than fifteen classes, and seventeen indicated that there needed to be more than thirty classes.

Country	Less than 15	Between 15-30	More than 30	Total	P value
India	186	245	44	475	.000
Italy	12	70	17	99	
Total	198	315	61	574	

Table 14

b. approximately how many classes need to be devoted to this in the Master's degree course?

The number of ethics classes per year for the Master's degree course, according to the respondents from India, was generally below thirty. Out of the 451 respondents, 180 had the view that less than fifteen classes were needed while 201 had the opinion that the course needed between fifteen to thirty classes. Seventy respondents suggested that the course needed more than thirty classes. Out of the ninety-nine respondents from Italy, nineteen of them suggested less than fifteen lessons for the Master's degree course. Fifty-eight respondents felt it needed to have fifteen to thirty classes. Twenty-two suggested the course needed more than thirty classes.

Country	Less than 15	Between 15-30	More than 30	Total	P value
India	180	201	70	451	.001
Italy	19	58	22	99	
Total	199	259	92	550	

Table 15

c. approximately how many classes need to be devoted to this in NURSING course?

A similar trend in the responses can be detected in answers pertaining to the number of ethics classes for the nursing course. India generally voted for "less than fifteen" and "between fifteen and thirty classes": 165 and 164 respectively. Whereas, Italian respondents had a choice for "between fifteen to thirty" (seventy-one persons) and "more than 30" classes (14 persons).

Country	Less than 15	Between 15-30	More than 30	Total	P value
India	165	164	75	404	.000
Italy	10	71	14	95	
Total	175	235	89	499	

Table 16

In the following section of sixteen questions (Numbers 12 to 28), respondents were to mark how true each statement was. The Likert scale is used to mark the option. The choice was given as *very true, true, not so true, not at all true* and *don't know*. The correlation study in this section and the following sections are done with all the categories of the respondents, i.e., total respondents from India with total respondents from Italy, doctors from India with doctors from Italy, Christians from India with Christians from Italy, non-Christians from India with total respondents from Italy. Also there were correlation studies between the categories from India alone. They include the following: those who studied in the public sector with those who studied in the private sector, and Christians from India with non-Christians from India.

The answers were then grouped into two categories *true* and *not true*. The answers *very true* and *true* are added into the category *true;* whereas, *not so true, not at all true* and *don't know* are added into *not true*. In the table below the value is given in percentages. Among the four correlations given in the tables are in the first line the total number of respondents from India and Italy. The second line is the correlation between the doctors from India and the doctors from Italy (the same total number of respondents from Italy because all of them are doctors). The third line is the correlation between Christians from India and the Christians from Italy, and the fourth line is the age group between twenty-four and forty from India and Italy. Where there is a statistical significance of the data found, an asterisk (*) is given in the last column.

Although I present only four correlation analyses in this table, the study is done with all the groups and the statistical significances found are presented in the chapter. The rest of the data with all the correlation analyses is found in the appendices. The questions where "India/ Italy" are given represent only the proper country to which one belongs; namely, for Indians, India and for Italians, Italy.

12. The medical ethics policy of the government of India/ Italy is strong and effective.

To the question whether the medical ethics policy of the proper government is strong and effective, the respondents generally answered "not true." Only the group *Christians from India* had more persons rating this question as "true." There we find a statistical significance with the Christian group from Italy. In a similar way this statistical significance is seen between the responses of Indian Christians and the other religious groups in India.

13. In India/ Italy the majority of the doctors and nurses are ethical in their practice.

Indians generally tended to differ in response to this statement; whereas, the Italian doctors mark it as a true statement making more than 69% of them responding "true." The statistical significance is seen in the correlation study between the total group from India and the total group from Italy; doctors from India and doctors from Italy; the age group between 25-40 from both of the countries, Indian non-Christians and Italian doctors and Indian Christians and non-Christians.

14. The ethics curriculum in the medical colleges in India/Italy is properly designed to encounter the challenges that a medical professional faces in the field.

More than 70% of the Italian doctors in this regard indicate that it is an untrue statement. The stratified groups from India generally have the opinion that this statement is not true. However the comparison between doctors from India and doctors from Italy, Christians from India and Christians from Italy, between Indian Christians and non-Christians and between Indian public sector of study and private sector of study are statistically significant.

15. The unethical practices of other doctors have affected my ethical decisions and practices.

The answer for this question is generally from all the groups are "not true", though we find slight variations. 70.8% of Christians from India says that this statement is not true.

Most other groups have their opinion from 50% to 55% marking the statement not true. The variations in the answers given show a statistical importance between Indian

Christians and Italian Christians, Indian Christians and non Christian group and the public and private sector of study in India.

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Though the doctors in India slightly differ with other groups in their perception to answer this question, generally the answer for this question from all other group is "true." Italian groups have almost 70% agreement that this statement is true, while the Indian groups vary between 46% - 56%. Statistical significance is seen between the total group of India and total group of Italy, doctors from India and doctors from Italy, age group 25-40 from India and Italy and non-Christians from India and total group of Italy.

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

The answer in all the groups generally is "true" which vary from 50% to 69.29% in diverse groups. The statistical significance is seen only between the groups Christians from India and non-Christians from India.

18. In the context of India/ Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

This statement is evaluated as "true" by majority of the respondents in all the groups. But we see statistical significance in the comparison between Indian doctors and Italian doctors, age group 25-40 from India and Italy and the sector of studies between private and public in India. Indian groups vary from 57% to 67.74% for answering the statement "true" while the groups from Italy are more than 72%.

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for examples, Ayurveda, Siddha, Unani etc.).

All the groups in the correlation study had a very high voting for this statement being "true." Percentage-wise the least being the Christians from Italy with 64.35% and the highest being the Christians from India stating the opinion true with a 90.76%. But this

variation also resulted in the statistical significance of the results analyzed. Because answering this question except the study between Christians and non-Christians from India, and between the sectors of study private and public from India, all other groups have made statistical relevance in the correlation analysis.

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms, and so on.

All the groups unanimously agreed with the high percentage agreement that this statement is true. There is no statistical significance in the correlation study made in different groups. Those who answered "true" varied from the Christians from India with 84.61% to non-Christians from India with 90.16%. All other groups come in between these groups agreeing to the statement being true.

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

This was a question which all the groups agreed to be true accepted by than 75% of the members in all the groups. Italian groups tend to be a bit more than 75%; whereas the Indian groups for correlation study had always a percentage between 83% - 87%. The statistical significance is seen in the correlation analysis between the total group from India and the total group from Italy, the Christian group from India and the Christian group from Italy, and the age group from 25-40 from India and Italy.

22. In India and Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

This statement is agreed to be "true" by all the groups with more than 80% of acceptance. No statistical significance of variation is seen in the correlation analysis between different groups. Indian public sector group had an 80.32% of its members agreeing to the statement as true, while the Christian group from India had a high 88.11% of its population accepting the statement as valid. All other groups took the position somewhere ranking in percentages falling between these groups.

23. I think that in the context of India and Italy, certain themes in the present curriculum of medical ethics should be removed and something else should be included. For example: (please specify):

The general response from all the groups seemed to be "not true" because while grouping we had also grouped those who answered "don't know" with "not true" and "not at all true". Only two questions had a remarkable number of answers received: "don't know." They were questions 23 and 28. Therefore, for precision's sake I would like to mark here the percentage of answers received for the option "don't know" here.

Groups/ Stratifications	True %	Not true %	Don't know %
India all	38.63	16.70	40.84
Italy all	32.40	21.29	42.59
Indian Doctors	30.30	14.47	49.83
Indian Christians	41.53	24.61	28.46
Italian Christians	27.72	22.77	45.54
Indian Non-Christians	37.43	14.05	45.23
India age 25-40	38.29	18.08	39.01
India Public Sector	26.90	12.22	57.25
India Private Sector	49.59	20.87	24.69

Table 17

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As we see here in most of the groups the percentage for answering "don't know" is greater than the other values. We shall discuss this issue later in the coming section.

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc. Also suggestions (please specify):

There was a high positive response to this suggestion and was supported with high percentages in agreement. The lowest percentage for supporting this view is given by the total group of Italy with 80.55% agreeing to the proposal. The highest support was given by the Christians from India with 92.30% agreeing to the idea suggested. Although there is a high positive opinion the correlation shows statistical significance in figures and we see that except in the analysis between the Indian Christians and non-

Christians and the sector groups of study in India, both in the public and private sectors. All other groups of analysis show statistical significance.

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

On the question of ongoing ethical formation after the proper medical courses, all the groups have responded positively, accepting it as a good opinion. The groups from Italy had about 75% of agreement to the question while the groups from India had a higher percentage of agreement. Nearly 90% of the respondents in all groups accepted the need to have an ongoing ethical formation in the medical field. About a 15% difference in the opinion from India and Italy made the correlation analysis between these groups statistically significant, while the correlation study between Christians and non-Christians from India and the public and private sectors of study from India did not mark any statistical significance.

26. I have an opinion that from time to time we need to update thecurriculum of medical ethics in the universities.

Updating the ethics curriculum in the universities seemed to be a great suggestion by the respondents. All the groups answered "true" to this statement. Christians from Italy had the least percentage in the affirmative answer as they marked 77.22% of agreement from within the group; whereas, Christians from India had the highest acceptance for this suggestion and 91.53% of them agreed to the statement. All other groups had a percentage of agreement in between these figures. The correlation study shows that except for the comparative study between the Indian doctors and Italian doctors and Indian non-Christians and the Italian total group, all other correlation groups have statistical significance.

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning ethical issues.

Though this statement had a positive agreement from all the groups, the Italian groups tended to have about 68% of positive responses. Indian groups substantiated the statement with a 75.75% to 85.38% positive reply from different groups. The statistical

significance is seen between the total group of India and total group of Italy, Christians from India and Christians from Italy, and the age group between 25-40 from India and Italy.

28. There are books, medical journals, and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

As I have mentioned earlier, question no. 23 was the second one which was marked with the answer "don't know" with a high remarkable percentage. Therefore, it was given in a separate table for better understanding. Only two groups, Indian Christians and Indian private sector of study, exceeded 50% responses to mark the statement "true." The total group from Italy, doctors from India, Christians from Italy, non-Christian group from India age group 25-40 from India, and the public sector of study from India all answered "don't know" more than those who answered "true" or "not true."

Groups/ Stratifications	True %	Not true %	Don't know %
India all	40.84	19.31	36.82
Italy all	25.00	21.30	49.07
Indian Doctors	32.65	19.53	42.42
Indian Christians	52.30	20.77	23.07
Italian Christians	23.76	22.77	49.50
Indian Non-Christians	36.61	18.97	41.68
India age 25-40	37.58	19.86	38.29
India Public Sector	30.12	16.26	50.40
India Private Sector	51.61	21.68	23.07

Table 18

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

The importance of religion as a source of ethics is agreed upon generally by all the groups. The Christian groups from both countries seem to accept it more than the other categories analysed. There were 80.19% of the Italian Christians and 73.07% of the Indian Christians agreeing to this opinion. We see the least agreement within the group *public sector of study* from India with 53.81%. Except for the Christian groups from both India and Italy, all other correlation analyses show statistical significance.

b. Government

Government as a source of ethical behaviour is accepted more by the Indians than the Italians. The Italian total group has only 53.70% agreeing to the opinion that government is an important source of ethics; whereas, the total group of India says with an 88.73% agreement that government is an important source. Spporting this opinion are 93.84% of the Christians from India and 93.54% of the group of private sector of study from India. The correlation analyses show statistical significance in all the groups analysed.

c. Philosophical and social ideologies

Of the total group of India, 81.28% of the total group of India are in agreement, as are 84.25% of the total population from Italy, that philosophical and social ideologies are important sources of ethics in their professional life. This opinion is seen to be the highest unanimously agreed estimation that we see in answering this question of possible sources of ethics. Indian public sector of study is noted to be the group that has voted least accepting the importance of philosophical and social ideologies as possible sources of ethics. Still, 79.51% of its members have agreed to the opinion. There is absolutely no statistical significance seen among the groups studied with the correlation analysis.

d. Associations and social workers

The total group of India and the total group of Italy are diverse in their views in regard to agreeing that associations and social workers are source ethics in their professional life. While 77.66% of the Indian population studied agrees to the opinion, the Italian group has only 66.66% of agreement. 81.53% of the Christian group of India and 81.85% of the group private sector of study from India agree to the importance of associations and social workers as possible sources of ethical practice. Except for the analyses between Indian doctors with Italian doctors and Indian Christians with the non-Christians from India, all other groups show statistical significance in the correlation study.

e. Personal convictions

The question of one's personal convictions being the source of ethics in the professional field was answered by different groups with diverse values. The Christians from India is

seen to be the group not so convinced about the importance of personal convictions as a source of ethics, with only 53.84% of agreement given to the opinion. The doctors from India had a high 78.78% of the group members agreeing to this view. The total group form India had a 69.81% agreement to this point of study and the total group from Italy had 64.81% of agreement. Except for the study between the groups of Christians from India and the Christians from Italy, all other groups show statistical significance analysing the data.

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Hospital policies as a reason for unethical practices was seen to be a serious matter by the whole population of respondents. The lowest percentage was marked with the Indian public sector of study with 81.92%, and the highest percentage is seen with the private sector of study from India with 94.35% of its members accepting the view that hospital policies are a matter of concern regarding their ethical professional practices. The total population of India supported this view with an 88.53% of its respondents voting it "serious" and 93.51% of the total group from Italy had a similar view. Except for the correlation analysis result between the private and public sector of India, no other groups show figures of statistical significance regarding this opinion.

b. Government policies

Comparing the response between the Italian doctors and Indian doctors, there is a statistical significance in the opinion of government policies being a serious reason for unethical practices in the medical field. Of the Italian doctors, 88.88% accepted this opinion but only 76.76% of the doctors from India agreed to this view. Of the total respondents from India, 80.68% had a positive reply. The least percentage is seen with the public sector of study from India among whom only 75.90% of its members agreed to this opinion.

c. Personal problems (tiredness, family issues etc.)

There was a drastic change in the responses from Italy and India, regarding the view that personal problems like tiredness, family issues, and others influenced compromises

in professional ethical practice. Of the total respondents from India, 52.11% regarded this as a serious issue while 78.70% of the total respondents from Italy viewed it that way: serious issues created unethical behaviour. Christians from India tended to be a group that did not see this as a serious issue resulting in an ethical dilemma. Only 46.15% of them saw it as a serious matter of concern. In the correlation analyses, except for the studies between the Christian from India group with that of non-Christians from India and the group of public sector of study from India and that of private sector of study from India, all other groups mark statistical significance in the results.

d. Economic issues

An economic motive, as a matter of compromising ethical behaviour, was seen to be a serious problem generally by all groups. 71.62% of the total group of India and 85.18% of the total group from Italy say that it was a serious issue. The Christians from India had only 63.07% of agreement from the group to this point of view. Likewise, the members of the private sector of study from India had only 66.12% of agreement to the present matter of study. The members of all other groups from India had approximately 71% to 78% conformity. Correlation analyses demonstrate statistical significance in most of the groups except the comparison between the doctors' groups from India and Italy and both the age groups between 25-40 from India and Italy.

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of life

Value of life was seen to be a very important theme in biomedical ethics curriculum by all the groups we have studied. More than 92% of the respondents from each group said that this was an important theme. Statistical significance is seen in the correlation analyses between the total group of India and the total group of Italy. We also noticed a statistical significance in the comparison of the data between the doctor groups from India and from Italy as well as the age group between 25-40 from both of the countries India and Italy.

b. Value of human life

More than 91% of the respondents from all the groups agreed to include "value of human life" as a topic to learn in the biomedical ethics curriculum in India and Italy. The total population of Italy agreed 91.66% with a positive opinion to this present point of reference. Of the total group in India, positive responses to this opinion were a bit higher at 96.78% of the total group. In other words, 96.78% of its respondents supported the subject to be included in the curriculum. The statistical significance in the analyses was seen only between the total group from India and the total group from Italy.

c. Dignity of the human person

Dignity of the human person as a topic for ethical formation was agreed by all the groups with more than 93% of the respondents from each group positively answering to the query. 95.77% of the total respondents from India have a positive opinion to this subject while 93.51% of the total group from Italy agreed. The highest vote was seen with the Christians from India having 96.15% of its members agreeing to the present suggestion. There is absolutely no statistical significance seen in the correlation analyses done among the different groups.

d. Ethics in financial matters

Ethics in financial matters was not seen to be a popular topic compared to the other suggested themes to be included in the medical ethics curriculum in India and in Italy. None of the groups voted with more than 90% support, which, on the other hand, we saw in all other topics suggested. The total respondents from India had a 79.47% agreement to the theme and the total group from Italy had 87.03% of positive reply. With 68.46% of its members agreeing, the Christians from India is the group that least agreed to include this theme in the curriculum. Statistical significance in analyses was seen in the study between the total group from India with the total group of Italy, Christians from India with Christians from Italy, Christians from India with non-Christians from India and the studied sectors, public and private, from India.

e. Ethics of medical treatment

Doctors from India agreed with 91.91% support from the group to include "ethics of medical treatment" as a topic in the medical ethics curriculum, and this is the least

supporting group in this category. Christians from India has the highest agreement to the theme, with 97.69% of its members accepting the importance of the topic in the curriculum. There is no statistical significance noticed in the correlation analyses between diverse groups.

f. Doctor-patient relationship

The topic doctor-patient relationship had more than 92% of agreement from all the groups. The Christians from India group had 97.69% of the respondents from the group support this theme as important, which made it the highest value in this category. The lowest figure noted was 92.92% by the doctors from India. The correlation analyses between the groups Christians from India and non–Christians from India, and, the age group 25-40 from India and that of Italy, reveal statistical significance. Since there was no reply for the option "not important" from both the Christian groups from India and Italy the *p value* is not seen in the analysis.

g. Doctor-doctor relationship

The relationship between doctors to other doctors was also regarded by all the groups as an important theme in the curriculum. Every group supported this view with more than 91% of its members accepting it as a worthy theme. There was no statistical significance in the correlation analyses done between different groups. The total group of India had the positive opinion of 93.96% its respondents. At the same time, the total Italian group accepted this theme with 91.66% of its members willing to accommodate the theme in the medical ethics curriculum.

h. Doctor–other healthcare professionals relationship

The relationship between doctors and other healthcare professionals was also seen as an important subject to be included in the curriculum, according to the respondents of the survey. As we evaluated the positive responses to the query, the group of doctors from India was found to be the least supporting group with 89.56%, hardly a weak agreement from the group. The highest percent of supporters came from the Christian group of India with 93.07%. There was no statistical significance found in the comparative analyses between groups.

i. Laws and ethical practice

The respondents from every group supported this theme to be included in the curriculum with more than 88% of its members answering positively to the suggestion. The total group of India supported the theme with 95.17% of its respondents having a positive opinion to the theme. But the total Italian group was a bit low with 88.88% of members supporting the theme's inclusion in the core curriculum. The comparative analyses shows statistical significance between the groups doctors from India and doctors from Italy, Christians from India with Christians from Italy, and between the age group from 25 to 40 from both countries.

j. Ethics of healthcare

Ethics of healthcare as a theme to be included in the curriculum of medical ethics was considered important by all the groups. The total group of India supported this view with 95.97% of its members accepting. At the same time, 90.74% of the total group of Italy accepted it as a valid theme to be taught in the medical ethics course and this was found to be the lowest values from a group percentagewise. Generally speaking, there was a positive response from 90-96% of members accommodating the theme in the medical ethics study plan. It was also noted that there was no statistical significance between the results of groups analyzed.

k. Ethics of human research

The total group of India has a positive opinion to this subject as 90.54% of its respondents accepting the theme to be included in the curriculum. At the same time the total group from Italy has 90.74% of its members accepting the topic as a valid theme to be taught in the medical ethics education. There are statistical significances between the Christians group and the non-Christian group from India and the group of private sector of study and public sector of study from India. The least supporting team to this theme was the group of doctors from India who had 86.53% of its members raising positive opinion for the theme.

l. Public heath ethics

It is noted that there is between 88% and a bit less than 93% support from each group to this theme to be included in the curriculum. The total group of India supports this theme with 91.75% of its members; whereas, the total Italian group has 88.88% approval from

its respondents. It was also noted that there were no statistical significances in the comparative analyses between the data from the groups studied.

The following tables are the presentation of the data we have already seen in from the question no. 12 to 28, 30, 31 and 33 and their sub sections.

	India		Italy		
	True	Not True	True	Not True	P value
12. The medical ethics policy of the government of India/ Italy is strong and effective.	40.0	58.8	35.2	63.9	0.336
Doctors	32.0	65.0	35.2	63.9	0.637
Christians	50.0	47.7	35.6	63.4	0.022 *
Age 25-40	42.9	55.7	35.2	63.9	0.153
13. In India/ Italy majority of the doctors and nurses are ethical in their practice.	43.9	55.5	69.4	30.6	0 *
Doctors	36.0	61.6	69.4	30.6	0 *
Christians	60.8	38.5	69.3	30.7	0.204
Age 25-40	45.0	54.3	69.4	30.6	0 *
14. The ethics curriculum in the medical colleges in India/ Italy are properly designed to encounter the challenges that a medical professional faces in the field.	28.8	69.8	29.6	70.4	0.927
Doctors	16.8	79.8	29.6	70.4	0.008 *
Christians	42.3	56.9	29.7	70.3	0.044 *
Age 25-40	25.2	73.0	29.6	70.4	0.426
15. The unethical practices of other doctors have affected my ethical decisions and practices.	40.6	55.7	44.4	54.6	0.611
Doctors	44.4	50.5	44.4	54.6	0.731
Christians	28.5	70.8	44.6	54.5	0.011 *
Age 25-40	44.7	51.7	44.4	54.6	0.797
16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.	51.7	45.9	70.4	29.6	0.001 *
Doctors	46.8	49.5	70.4	29.6	0 *
Christians	56.2	40.0	69.3	30.7	0.091
Age 25-40	50.4	47.5	70.4	29.6	0.001 *
17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.	52.9	40.0	58.3	41.1	0.898
Doctors	59.3	37.7	58.3	41.1	0.687
Christians	50.0	49.2	59.4	39.6	0.147
Age 25-40	59.9	39.0	58.3	41.1	0.761

18. In the context of India, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.	62.8	36.0	72.2	27.8	0.087	
Doctors	57.2	39.7	72.2	27.8	0.016	*
Christians	65.4	33.1	73.3	26.7	0.263	
Age 25-40	58.9	40.1	72.2	27.8	0.020	*
19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).	85.7	13.1	64.8	35.2	0	*
Doctors	83.2	13.5	64.8	35.2	0	*
Christians	90.8	8.5	64.4	35.6	0	*
Age 25-40	78.7	19.5	64.8	35.2	0.002	*
20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.	88.7	10.1	89.8	8.3	0.596	
Doctors	87.9	9.1	89.8	8.3	0.787	
Christians	84.6	13.1	89.1	8.9	0.315	
Age 25-40	89.0	9.9	89.8	8.3	0.646	
21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.	86.5	12.7	75.9	20.4	0.026	*
Doctors	83.5	13.8	75.9	20.4	0.097	
Christians	88.5	10.8	75.2	20.8	0.026	*
Age 25-40	86.2	12.8	75.9	20.4	0.045	*
22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.	83.3	14.5	88.0	11.1	0.334	
Doctors	83.2	13.1	88.0	11.1	0.525	
Christians	84.6	10.8	88.1	10.9	0.945	
Age 25-40	82.8	15.8	88.0	11.1	0.695	
23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.	38.6	57.5	32.4	63.9	0.217	
Doctors	30.3	64.3	32.4	63.9	0.762	
Christians	41.5	53.1	27.7	68.3	0.022	*
Age 25-40	38.3	57.1	32.4	63.9	0.247	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.	88.9	8.9	80.6	18.5	0.004 *
Doctors	88.9	7.1	80.6	18.5	0.001 *
Christians	92.3	4.6	83.2	16.8	0.003 *
Age 25-40	91.5	6.7	80.6	18.5	0.001 *
25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.	91.8	7.2	75.0	22.2	0 *
Doctors	90.6	7.1	75.0	22.2	0 *
Christians	93.1	4.6	73.3	23.8	0 *
Age 25-40	93.3	5.3	75.0	22.2	0 *
26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.	86.5	11.9	78.7	20.4	0.02 *
Doctors	84.2	13.1	78.7	20.4	0.084
Christians	91.5	6.2	77.2	21.8	0.001 *
Age 25-40	86.9	11.3	78.7	20.4	0.023 *
27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.	79.7	19.7	68.5	30.6	0.012 *
Doctors	75.8	22.2	68.5	30.6	0.095
Christians	85.4	13.8	67.3	31.7	0.001 *
Age 25-40	80.5	19.1	68.5	30.6	0.014 *
28. There are books. medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.	40.8	56.1	25.0	70.4	0.003 *
Doctors	32.7	62.0	25.0	70.4	0.123
Christians	52.3	43.8	23.8	72.3	0 *
Age 25-40	37.6	58.2	25.0	70.4	0.019 *

Table 19

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

	India		Italy		
	Not Important	important	Not Important	important	P value
a. Religion	34.60	61.36	22.22	76.85	.007 *
Doctors	35.69	57.57	22.22	76.85	.003 *
Christians	25.38	73.07	18.81	80.19	.226
Age 25-40	36.87	60.99	22.22	76.85	.005 *
b. Government	08.45	88.73	44.44	53.70	.000 *
Doctors	08.41	87.54	44.44	53.70	.000 *
Christians	03.07	93.84	43.56	54.45	.000 *
Age 25-40	05.67	92.19	44.44	53.70	.000 *
c. Philosophical and social ideologies	15.49	81.28	14.81	84.25	.787
Doctors	11.78	83.50	14.81	84.25	.499
Christians	13.84	83.07	13.86	85.14	.951
Age 25-40	14.89	82.26	14.81	84.25	.927
d. Associations and social workers	19.51	77.66	31.48	66.66	.007 *
Doctors	22.89	72.05	31.48	66.66	.112
Christians	16.15	81.53	30.69	68.31	.010 *
Age 25-40	20.92	76.95	31.48	66.66	.029 *
e. Personal convictions	22.13	69.81	33.33	64.81	.036 *
Doctors	11.11	78.78	33.33	64.81	.000 *
Christians	40.76	53.84	31.68	66.33	.101
Age 25-40	19.50	71.27	33.33	64.81	.013 *

Table 20

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

	India		Italy		
	Not serious	Serious	Not serious	Serious	P value
a. Hospital policies	10.06	88.53	05.55	93.51	.140
Doctors	11.11	86.19	05.55	93.51	.085
Christians	10.76	87.69	05.94	93.06	.191
Age 25-40	06.02	92.55	05.55	93.51	.851
b. Government policies	16.29	80.68	10.18	88.88	.093
Doctors	18.51	76.76	10.18	88.88	.031 *
Christians	15.38	82.30	09.90	89.10	.204
Age 25-40	17.73	78.72	10.18	88.88	.053
c. Personal problems (tiredness, family issues etc.)	45.87	52.11	20.37	78.70	.000 *
Doctors	40.06	56.22	20.37	78.70	.000 *
Christians	52.30	46.15	21.78	77.22	.000 *
Age 25-40	47.87	49.64	20.37	78.70	.000 *
d. Economic issues	25.75	71.62	13.88	85.18	.007 *
Doctors	17.50	78.11	13.88	85.18	.315
Christians	35.38	63.07	13.86	85.14	.000 *
Age 25-40	20.56	76.24	13.88	85.18	.108

Table 21

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

	India		Italy		P value
	Not Important	important	Not Important	important	
a. Value of life	00.60	95.77	02.77	92.59	.037 *
Doctors	00.33	93.26	02.77	92.59	.030 *
Christians	0	97.69	01.98	93.06	.102
Age 25-40	00.35	96.45	02.77	92.59	.031 *
b. Value of human life	01.00	96.78	3.70	91.66	.032 *
Doctors	01.01	94.27	3.70	91.66	.066
Christians	0	97.69	01.98	93.06	.102
Age 25-40	01.06	97.16	3.70	91.66	.071
c. dignity of the human person	02.01	95.77	01.82	93.51	.940
Doctors	01.68	93.26	01.82	93.51	.913
Christians	01.53	96.15	00.99	94.05	.732
Age 25-40	01.77	96.09	01.82	93.51	.933
d. Ethics in financial matters	16.49	79.47	08.33	87.03	.032 *
Doctors	04.04	88.55	08.33	87.03	.098
Christians	27.69	68.46	07.92	87.12	.000 *
Age 25-40	13.47	81.56	08.33	87.03	.158
e. Ethics of medical treatment	02.01	95.17	01.85	92.59	.943
Doctors	03.03	91.91	01.85	92.59	.523
Christians	0	97.69	01.98	92.07	.100
Age 25-40	03.19	93.61	01.85	92.59	.495

	India		Italy		
	Not Important	important	Not Important	important	P value
f. Doctor patient relationship	02.21	95.77	0	95.37	.124
Doctors	02.35	92.92	0	95.37	.107
Christians	0	97.69	0	95.04	nil
Age 25-40	04.25	94.62	0	95.37	.040 *
g. Doctor – doctor relationship	03.62	93.96	03.70	91.66	.933
Doctors	04.04	91.24	03.70	91.66	.876
Christians	01.53	96.15	03.96	91.08	.236
Age 25-40	05.31	92.19	03.70	91.66	.534
h. Doctor – other healthcare professionals relationship	05.63	92.15	02.77	92.59	.240
Doctors	05.38	89.56	02.77	92.59	.268
Christians	04.61	93.07	02.97	92.07	.548
Age 25-40	06.02	92.19	02.77	92.59	.211
i. Laws and ethical practice	02.41	95.17	06.48	88.88	.204
Doctors	01.68	92.92	06.48	88.88	.012 *
Christians	00.01	96.92	05.94	89.10	.021 *
Age 25-40	01.06	96.45	06.48	88.88	.002 *
j. Ethics of healthcare	02.01	95.97	03.70	90.74	.260
Doctors	01.68	93.60	03.70	90.74	.217
Christians	01.53	96.15	03.96	90.09	.231
Age 25-40	02.48	95.74	03.70	90.74	.473

	India		Italy		
	Not Important	Important	Not Important	Important	P Value
k. Ethics of human research	07.24	90.54	03.70	90.74	.204
Doctors	08.41	86.53	03.70	90.74	.105
Christians	02.30	95.38	03.96	90.09	.436
Age 25-40	06.38	91.48	03.70	90.74	.338
l. Public heath ethics	04.02	91.75	05.55	88.88	.457
Doctors	02.69	89.89	05.55	88.88	.175
Christians	03.07	92.30	05.94	88.11	.278
Age 25-40	02.83	92.55	05.55	88.88	.189

Table 22

5.5. Stratifications, Correlation Analyses and Interpretations

This section of the chapter deals with the discussion on the survey results. Here we analyze in depth the significance of the outcome that emerged from the data collected and studied. In the introductory part of the questionnaire, only the total population from India and total population from Italy are analyzed and data discussed (question no.1-11). After the introductory part, the comments are assisted with graphic representations for a better understanding (from question no.12). In this section, as we have seen in the earlier part the three groups from India i.e., "total group of India," "doctors from India," "age group 25-40 from India" are compared with the "total group from Italy" and the "Christians from India" is compared with the "Christians from Italy." These four comparisons are seen in the graphs presented. If any statistical significance is seen with the other groups (comparison between "non-Christians from India with total group of Italy," "non-Christians from India with Christians from India," and the groups of "public sector of study" with "private sector of study" from India)," it is specifically stated in the discussion. This segment proceeds with the same order of questions in the questionnaire.

1. Sex

The study's population in India consisted of 220 males and 274 females and in Italy sixty-three males and forty-five females. The male-female ratio in both countries are different. According to the statisticians, sex is not an important factor in such a survey. Therefore, we assume that the results are not much influenced by the perception of the gender.

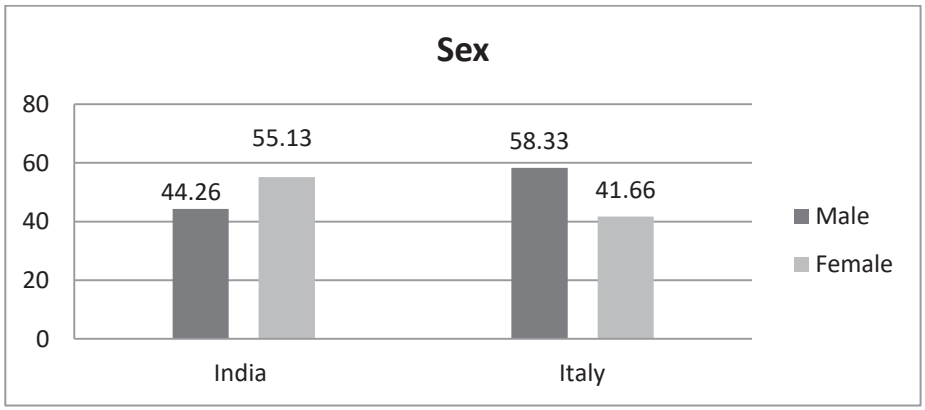

Figure 1

2. Age

There were six categories of age groups in India from below 25 years to above 60 years. In Italy the group was limited to two categories: between 25-30 and 31-40 years of age. There is a concentration of the majority of the respondents from the age below 25 up to 40 years. In Italy the group was specifically the specializing doctors and normally none of them were above 40 years old. In India the data was collected also from certain respondents who are aware of the field of bioethics in India. Concentration on the age below 40 also would help to better understand the situation of bioethics in the institutions in recent years.

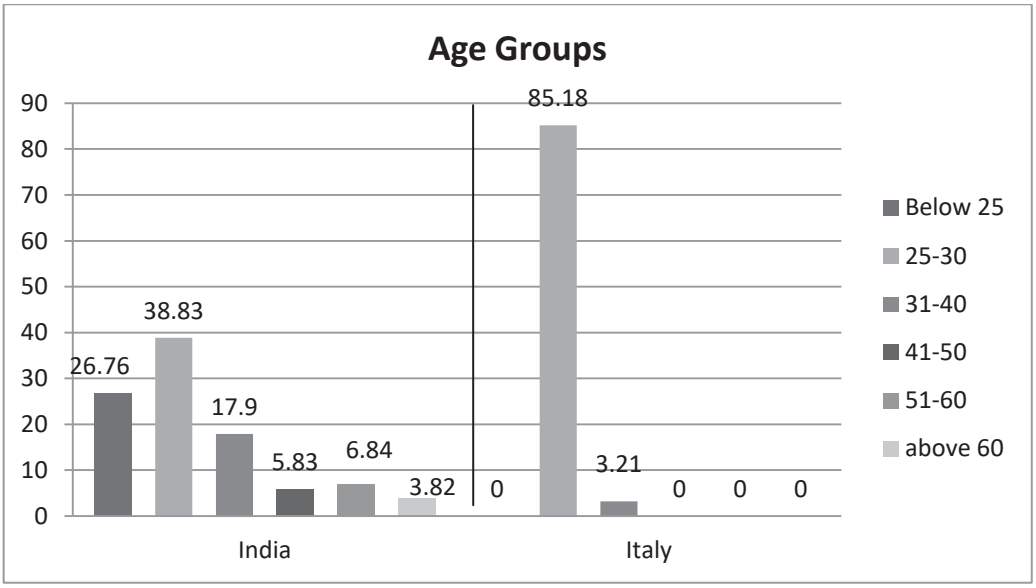

Figure 2

3. Religious Affiliation

While collecting the responses from the multi religious context of India, I tried to get the representation of every major religion from India among the respondents of the questionnaire. At the end it turned out to be with a majority from the Hindu religion and Christian religion. The Third largest group were the Muslims. It was a random sampling from various public and private medical education institutions and hospitals from India. The presumed responses for the survey was 500 from India. Hence, reaching this number we have started with the survey analysis. Christians are 2.3% of the whole population of India. But for survey purposes to compare the Christians from India and the control group of Christians from Italy, it was also necessary to have a good number of responses by the Christians from India.

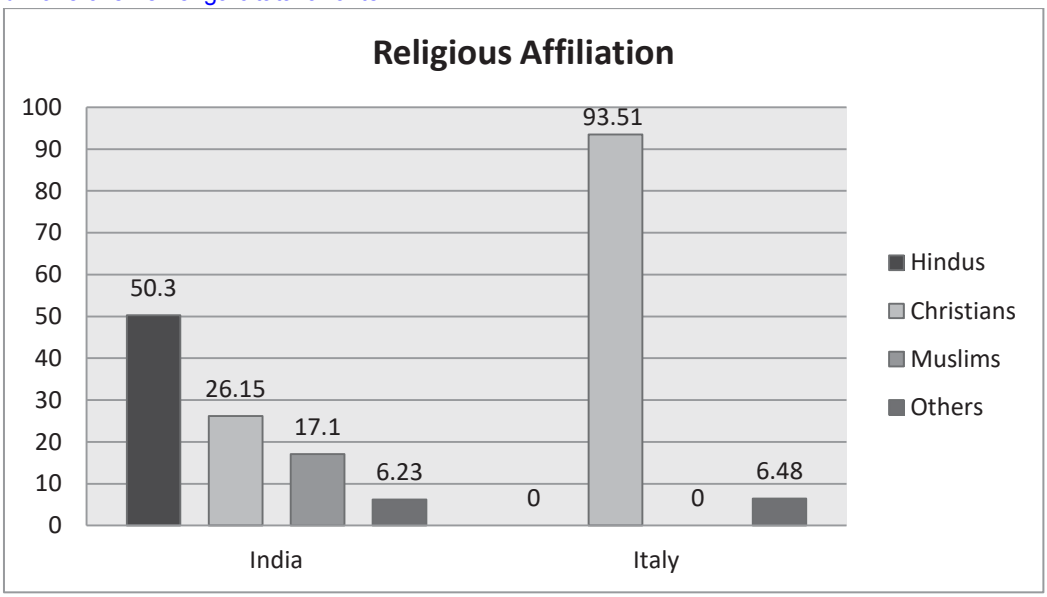

Figure 3

4. The state/Region of my origin in India/Italy

5. The state in India/Italy, where I studied Medicine/Nursing

We have seen earlier that India has twenty-nine states and seven union territories. We had responses from twenty-six states/union territories, of the origin of respondents and they indicate that they have studied in twenty-three states or union territories. The respondents from Italy were from sixteen regions (out of twenty) of origin and ten regions of their study. There was also an intentional venture to collect responses from Northern, Southern, Eastern, and Western regions of India. The responses were collected as far as possible as the time and means permitted. In Italy the survey was done form two medical universities and the respondents were mainly from Lazio, Campania, Puglia and Sicilia. Of these, seventy-nine of them studied in the region of Lazio where these two universities exist.

6. At present I stay/work

Of the respondents from India, 480 were working in the country while 16 of them were working outside India. In Italy all the respondents answered that they work in Italy. The intention of the questionnaire was to evaluate the medical education in different institutions in India and for the control group, the selected institutions in Italy. So the present place of their work did not very much influence the responses. The possibility of sending questionnaires via email made it also probable that the respondents could also live abroad, though they had their studies in a particular country. It is noted that a

good number of Indian nationals worked outside the country. Therefore, getting a representation from them was also a motive. This information served the purpose of knowing how many persons worked outside of India though they studied in India. If we had a greater number, we could have also evaluated their responses separately.

7. Designation/Profession

Ten categories were given to specify the designation/profession of the respondent. Other than the main category of doctor, medical student or nurse, the respondent could also indicate if he/she was a bioethicist, theologian, philosopher, religious person, professor/teacher of bioethics or a member of a medical association for social action. (Table no.7). The respondents from Italy were all doctors specializing in different branches of medicine. Three of them were working in an association for social action. Among the respondents from India nine were professors or teachers of bioethics and sixteen were working with the associations of social action. Many of these respondents contributed to the comment part in the questionnaire with valuable notes and suggestions. Since the anonymity of the questionnaire replies was promised, we later added the comments attributing them to anyone personally.

8. Sector of Study

The sector of study indicated whether the respondents studied in a private medical institute (run by a private management) or in a public institute (administered by the central or state government). In India 248 respondents have studied in a public institute and 247 in a private institute. That makes the two groups almost equal in number of responses received. In India the public institutes and private institutes are diverse in style of administration as the private institutes have more opportunity to include certain aspects like ethics education, extracurricular formation, and so on. This was one of the central aspects in comparing the public institutes and private institutes from India regarding their bioethics education made available to the students. In Italy forty-three studied in public institutes and sixty-five in private institutes. Italy also had certain differences in the public and private universities in their administration and formative courses offered.[294] But this was not seen as evidently as the difference between the public and private institutes in India.

[294] Ref. *Medicina: università pubblica o privata?*, retrieved on 24.06.2017 from http://www.obiettivo-test-ammissione.it/medicina-universita-pubblica-privata/; also *Università Private in Italia: costi università private e quale scegliere*, retrieved on 24.06.2017 from

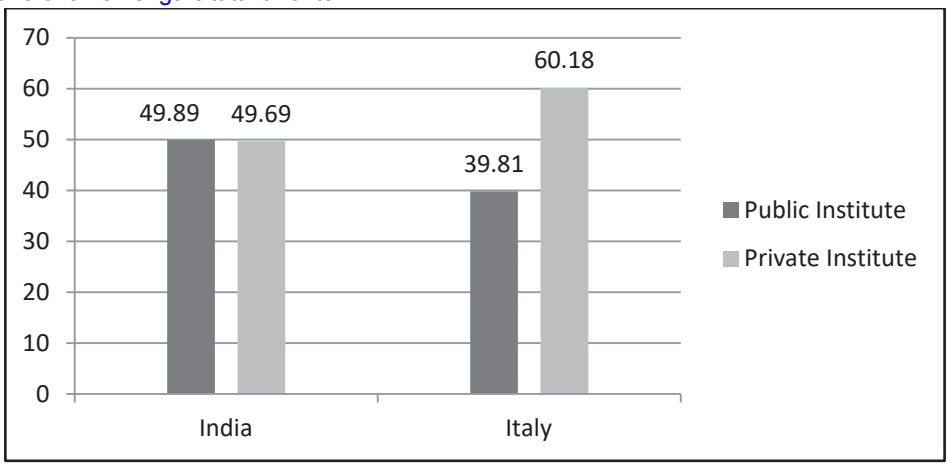

Figure 4

9. Sector of Work

Sector of work describes whether the respondent is working in a structure which is owned and managed by a private person or group or in an establishment which is directly run by the central or state government. As we analyzed, most of the respondents work in the private institutions. The population from Italy are obviously from two like-minded private universities selected. Still, 7.4% of them have stated that they work in the public sector, which I think is an error occurred because of confusion. In this regard, there is no difficulty for the respondents to mark their educational institution or the sector of work private or public.

It is also a fact that around 80% of the healthcare in India is supplied by the private sector.[295] It is also an indication that though almost 50% of the respondents from India had studied in public institutes, a good number of them were working in the private healthcare sector. Only 17.5% stated that they were working in the public sector. To this question only 434 persons responded from India that they contribute to the missing percentage in the graph presented.

https://www.controcampus.it/2014/04/universita-private-in-italia-costi-universita-private-quale-scegliere/.

[295] National Rural Health Mission- The Progress So Far. [updated on 2008 Apr 19], retrieved on 17.06.2017 from http://mohfw.nic.in/NRHM/NRHM%20-%20THE%20PROGRESS%20SO%20FAR.htm; Arun K. Aggarval, *Indian Journal of Community Medicine*, 33(2), Apr. 2008 pp. 69-70 ; Purohit B. C., "Private Initiatives and Policy Options: Recent Health System Experience in India", *Health Policy and Planning*, 16(1), Mar. 2001, pp. 87-97.

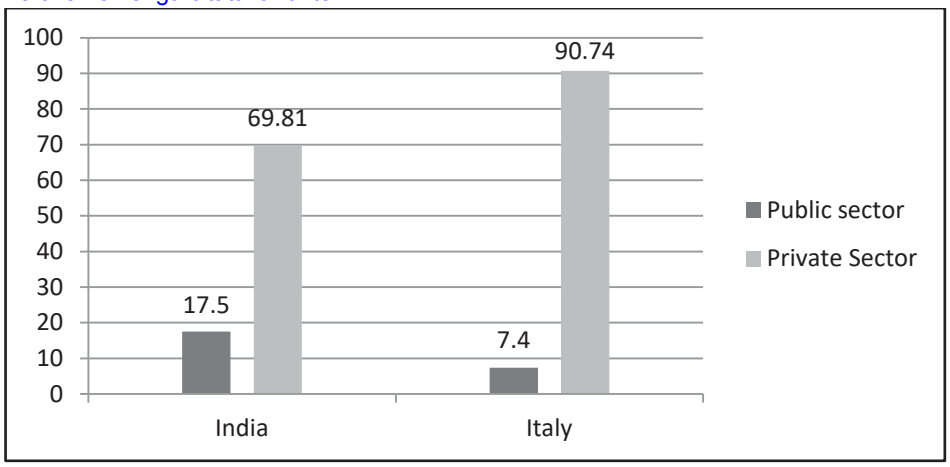

Figure 5

10. Was Ethics/Bio-medical Ethics part of your curriculum in the institution you have studied?

To this question 55.13% respondents from India answered "yes," 27.36% respondents answered "no," and 17.10% respondents were not sure whether they had ethics as part of the medical curriculum. Among the Italian respondents, 82.40% of them answered "yes," 10.18% answered "no," and 7.40% of them were not sure whether they had ethics as part of their curriculum of medicine. It clearly shows that though there is an instruction from the Medical Council of India to include ethics as part of the curriculum in the medical institutions, it is not yet a reality in many medical institutions in India. In Italy too, it is noted that above 17% didn't have or didn't know whether they had ethics courses in the university they studied.

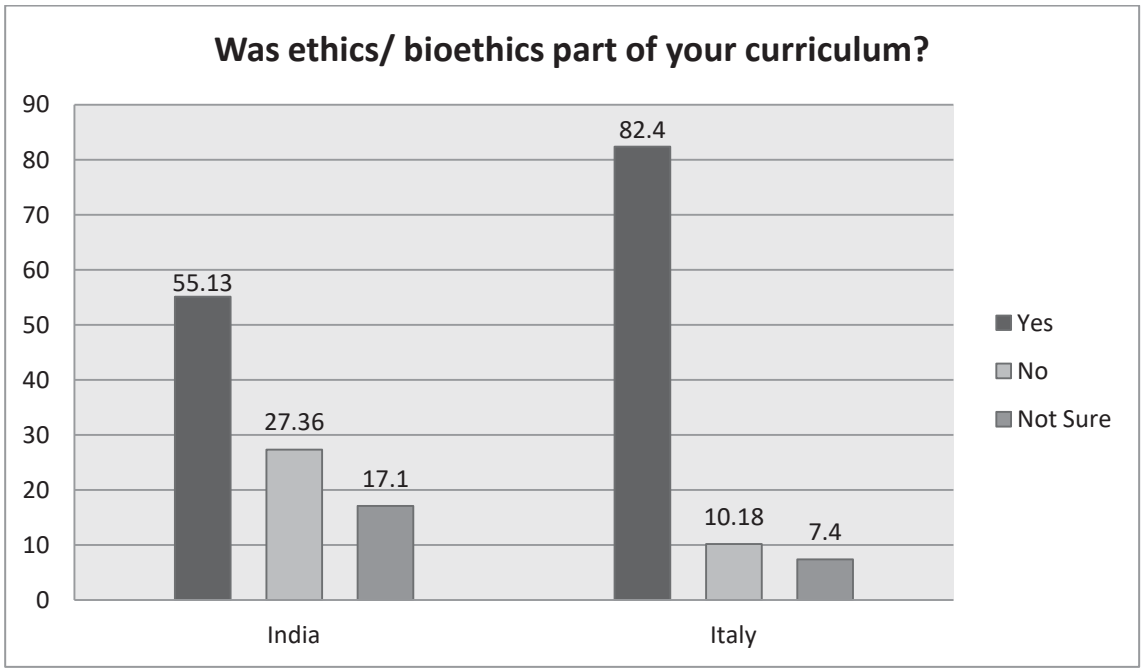

Figure 6

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

From India 270 responded to the present question, out of which 85.76% of the respondents said they had less than fifteen classes, 12.77% marked that they had more than fifteen lessons during the bachelors course. From Italy eighty-nine answered "yes." Among the respondents from Italy, 22.47% declared that they had less than fifteen lessons, 62.92% of them stated that they had between fifteen to thirty lessons, and 14.6% of them pointed out that they had more than thirty lessons during the bachelor's degree course. When we calculated these figures with the total population from India, 47.28% said they had less than fifteen lessons, and 7.04% stated they had more than fifteen lessons. Of the total group of Italian respondents, 63.88% declared that they had more than fifteen lessons in ethics in the bachelor's degree course. This clearly shows that something needs improvement in the medical education system of India.

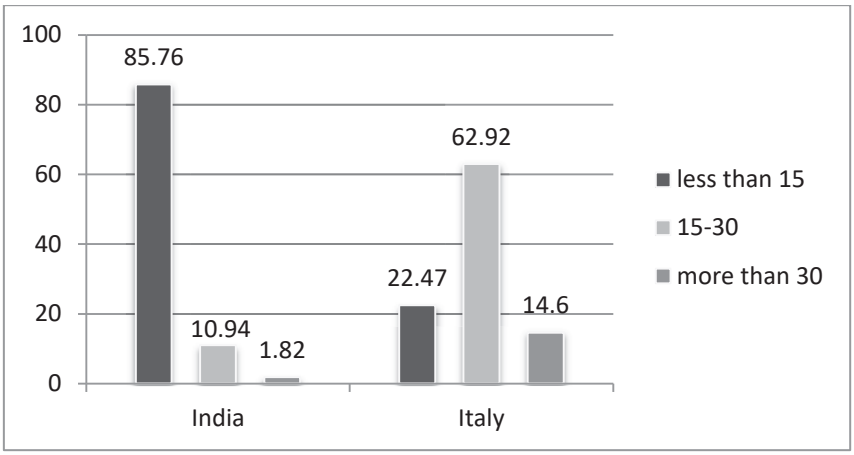

Figure 7

b. approximately how many classes were devoted to ethics in master's degree programme?

The total responses to the question the number of lessons dedicated in the master's degree programme were 213 and twenty-two from India and Italy respectively. Out of 213 respondents from India, 97.65% were of the opinion that they had less than fifteen lessons, while the rest of them stated they had lessons between fifteen to thirty and no one marked that there were more than thirty lessons in the master's degree. From Italy out of the twenty-two respondents, eleven declared that they had less than fifteen lessons, ten noted that there were between fifteen to thirty lessons and one respondent affirmed that there were more than thirty lessons during the master's degree course.

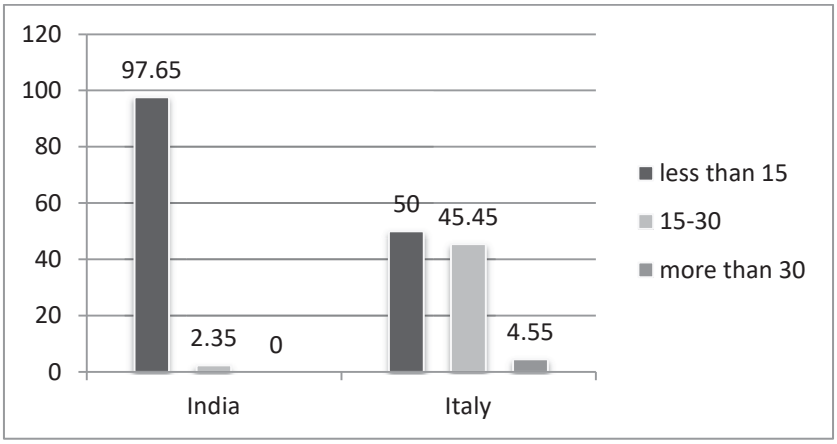

Figure 8

The following section is explained with bar diagrams to more easily understand the percentages of responses. I presented four comparisons among different groups as we earlier presented the data in tables. These groups can be easily identified with the particular pattern given to each of them in the chart. The control group from Italy differed only in the comparison with the Christian group from India which was compared with the Christian group from Italy. All other comparisons were done practically with the total Italian group. As we pointed out earlier, there are two comparisons done between the groups from India, i.e., between the Christian group from India compared with the non-Christian group from India, and the group of private sector of study from India compared with the group of public sector of study. If any statistical importance occurs with these groups not shown in the diagram, it is explained in the text. The values in the graphs are given in percentage.

12. The medical ethics policy of the government of India/ Italy is strong and effective.

To this question at least 50% of the Christian group from India considered this statement true. All other groups disagreed with this statement that the medical ethics policy of the proper government is strong and effective. It points to certain changes in the policy making and effective implementation on the part of specific authorities to enact appropriate laws that would introduce and maintain appropriate ethical policies in the medical field.

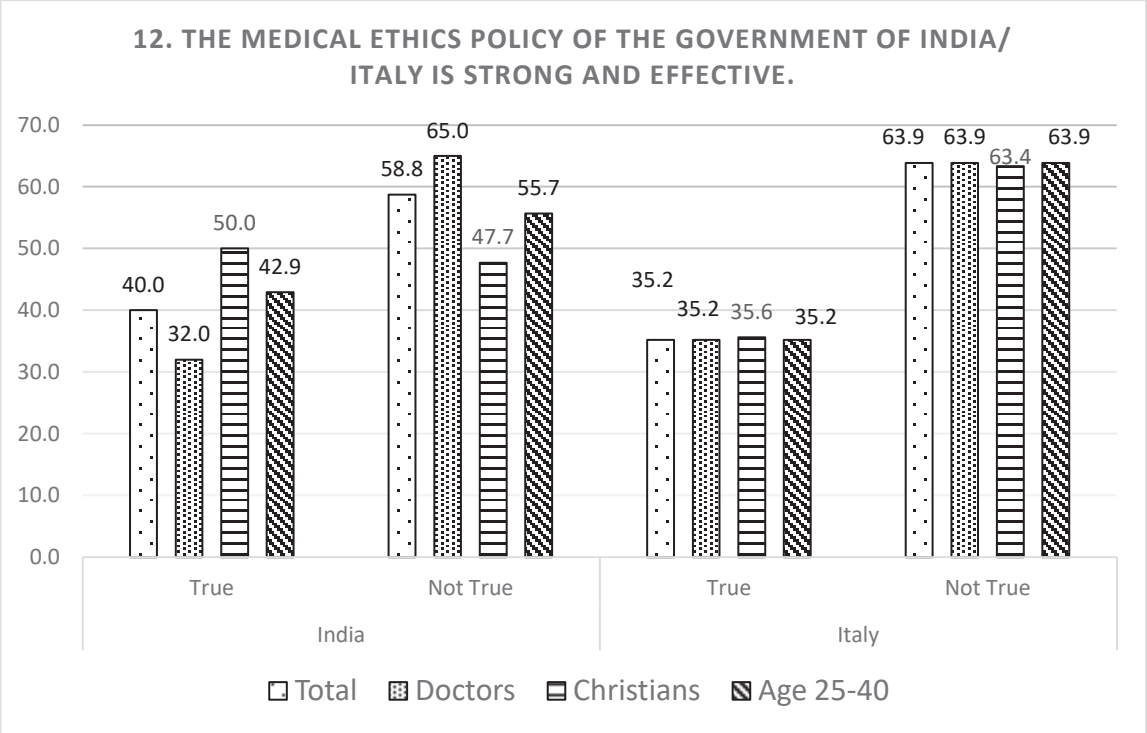

Figure 9

13. In India/Italy majority of the doctors and nurses are ethical in their practice.

Here again responding to this question, a majority of the Christian group from India believed this statement to be true. For all other groups from India, in most part, this is an untrue statement according to the greater part. Italy affirmed with more than 69% that the statement is true. Therefore, except for the Christian groups from India and Italy, the comparative study shows statistical significance when compared to the Italian group. It is also noted that there is no statistical significance between the groups of public and private sector of study from India. The situation in India with regard to the ethical practices by the healthcare professionals needs to be improved according to the majority of respondents from India.

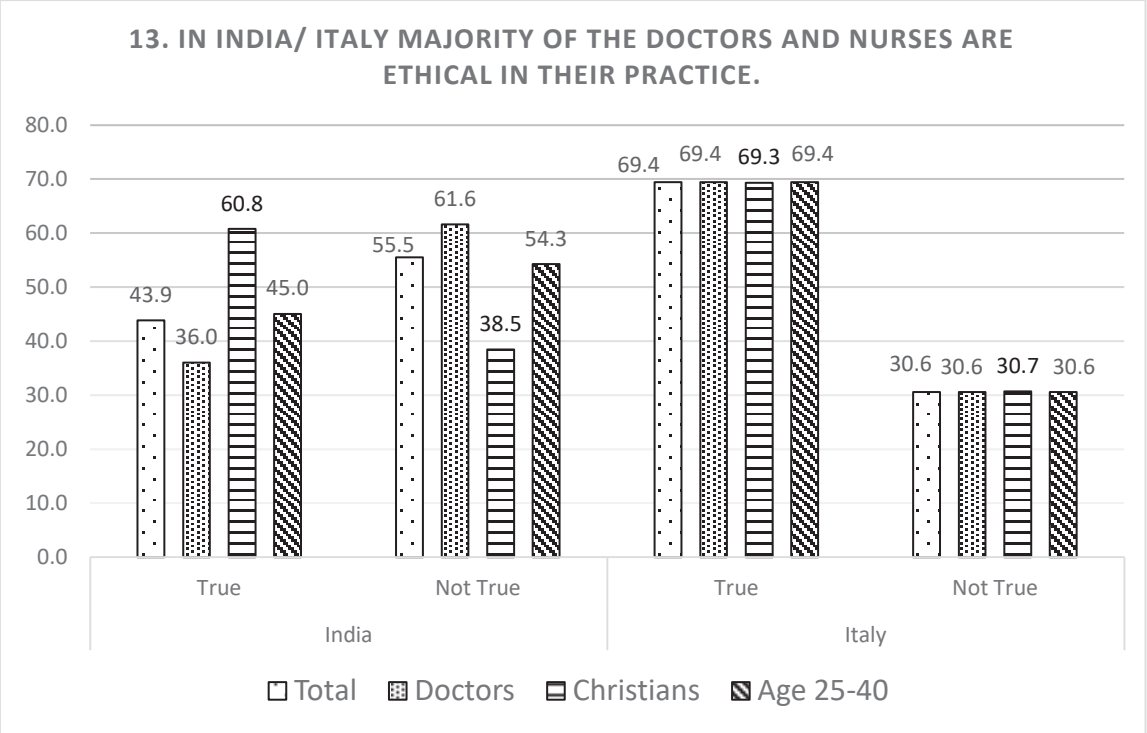

Figure 10

14. The ethics curriculum in the medical colleges in India/Italy are properly designed to encounter the challenges that a medical professional faces in the field.

This statement is evaluated to be untrue by the majority of the respondents. The responses varied from 56.30% to 79.79% in different groups to affirm that this statement is not true. The doctors group from India (79.79%) and Indian public sector of study (76.30%) are the two groups that marked the highest disagreement to this statement. Again, a view asserted the need of formulating a well-equipped course curriculum for medical ethics in India. I would also take into consideration the percentage of responses from the Indian private sector of study (62.90%). There was a statistical significance between the private sector and the public sector, which may indicate a positive need in the private sector for greater attention given to the medical ethics teaching. On the other side of the same coin, institutions in the public sector should concentrate more on the insemination of ethics among their students.

This was also a point to note: that the majority in the Italian group is not happy with the present design of medical ethics curriculum. Hence, what is required is a better design of updated course contents and methods with a view to the possible challenges a medical professional would face in the present scenario to equip them more efficiently in the professional field.

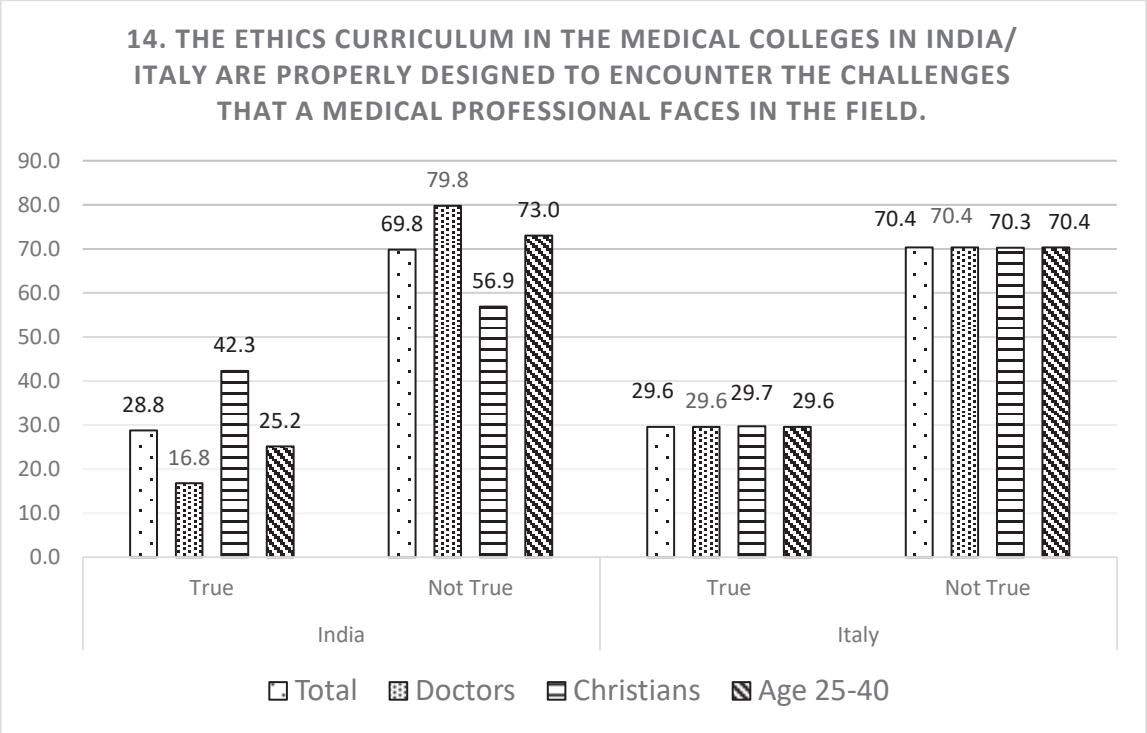

Figure 11

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Christians from India had the strongest disagreement to this statement among all the groups evaluated. More than 70% of them said that the unethical practices of other doctors did not influence their decisions. Generally, the majority from all groups stated that it is an untrue statement. Still in India, other than the Christian group and the group of private sector of study, all the groups had above 40% of its members affirming that their decisions are influenced by the unethical behavior of other doctors. In Italy too, this scenario is seen as more than 44% of the respondents from the group confessed that they have been influenced by the unethical practices of other doctors.

In any medical college, the practical formation of the students happens with much interaction between the co-workers, mainly their own professors or senior doctors who assist their studies and practical clinical knowledge. This points mainly to the professors of medicine to be role models for the students, and in the whole structure of the institution, a well-developed system of ethical behavior must be kept up to safeguard and foster a strong sense of ethical conscience. This is why we need powerful laws and hospital policies that encourage ethical behavior in all persons related to the specific institutions of healthcare.

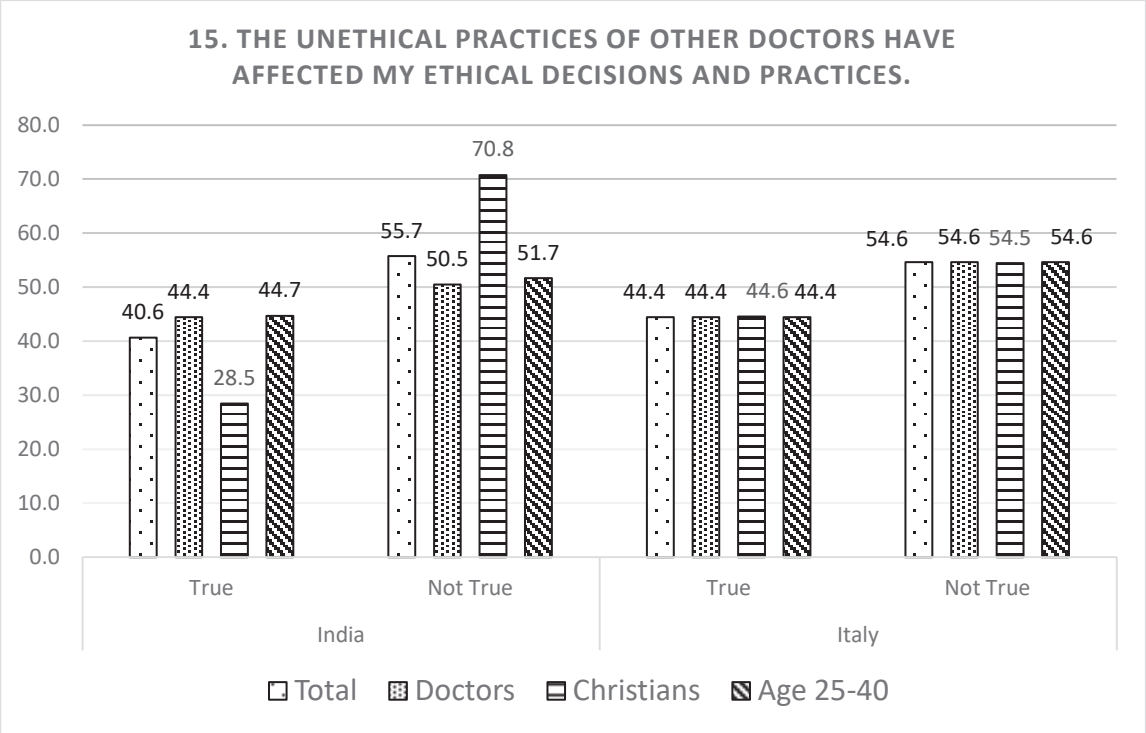

Figure 12

16. In India/Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Except for the doctors group from India, all other groups have a majority opinion to affirm that one's personal religious beliefs influence the ethical medical profession. Religion, as we know, is a strong source of ethics. Italians tended to say a stronger "yes" to the statement than what the Indians do. The Christian group in India had a majority opinion in percentage than other groups from India.

In practical teaching, therefore, the ethics that emerges from the religions are to be considered with appropriate care and attention. In a multi-religious context like that of India where plurality of ethical concerns exists, this theme needs cautious and in-depth study to assimilate the values of a religion and present it in a manner which is not contradictory to the value system of other religions. I will be dealing with this point in the coming questions which are related to this subject.

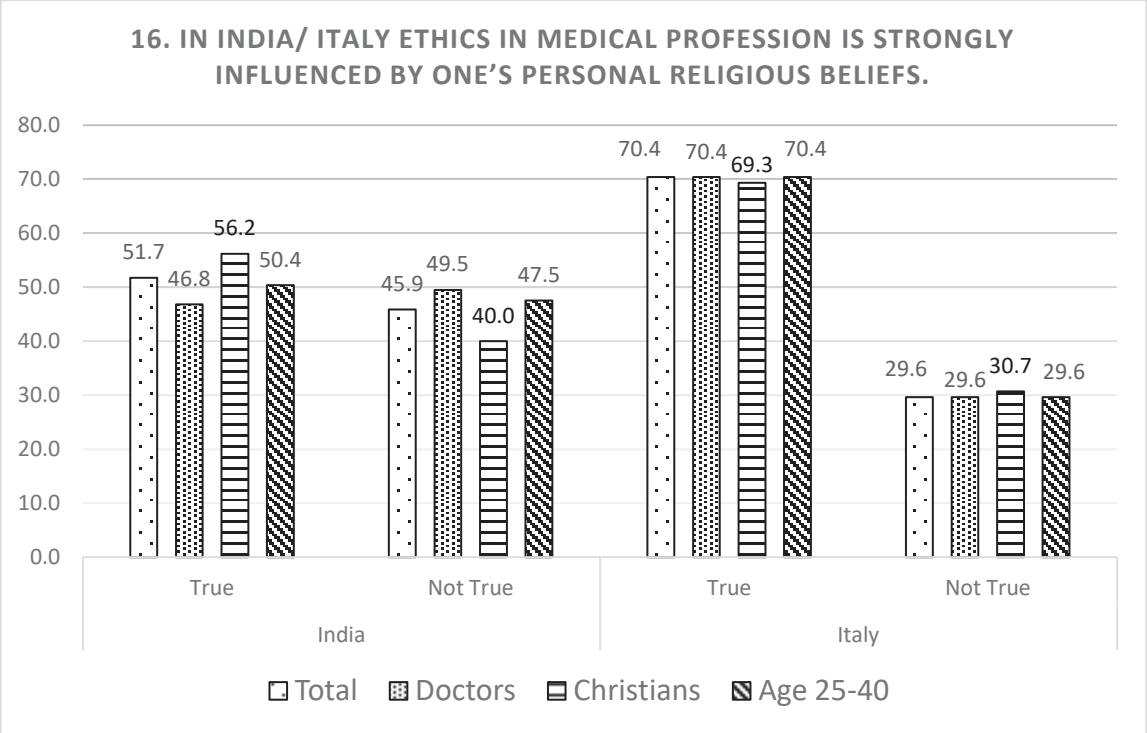

Figure 13

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/Italy today.

There is a 50% (Christians from India) to 62.3% (non-Christians from India) agreement to this statement from diverse groups analyzed. The statistical significance is seen between the Christian and non-Christian groups from India. Comparing this answer with the responses to question no. 22 in the questionnaire, we find out that more than 82% of the respondents from every group had affirmed that a better medical ethics education would create a better ethical practice in the medical profession. The respondents probably have a few other reasons that cause the unethical practices in the medical field other than the adequate formation in the field of ethics.

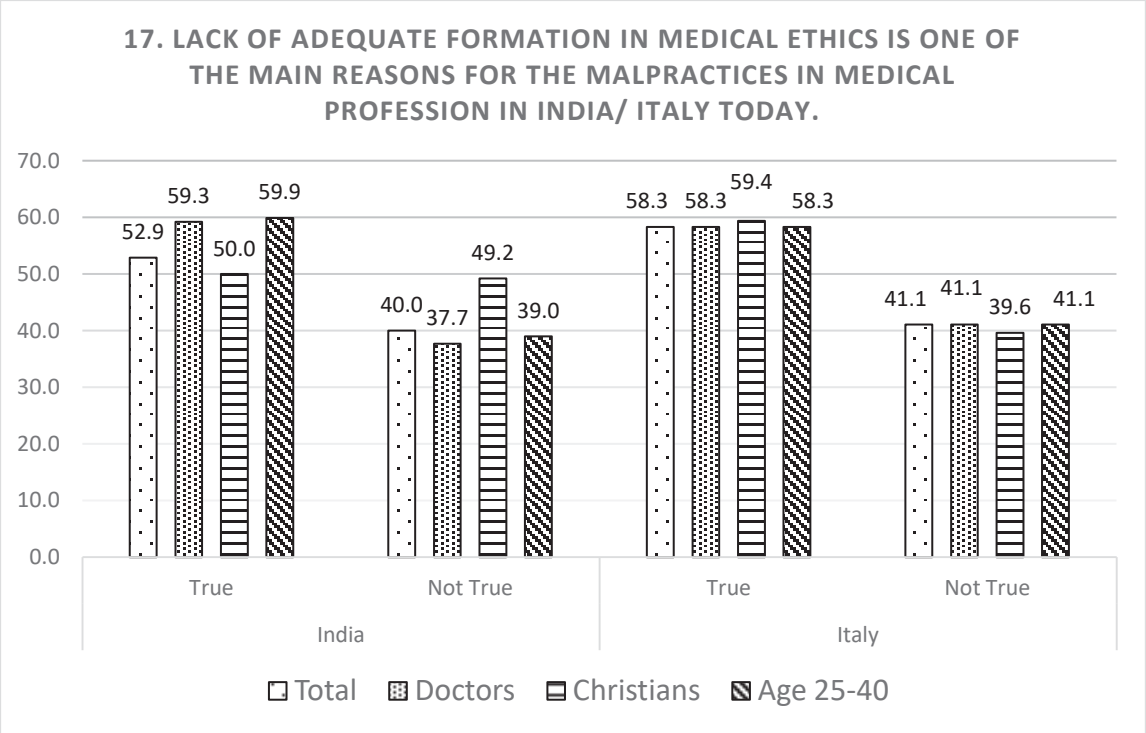

Figure 14

18. In the context of India, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Italy seemed more convinced with this argument (more than 72%) than the groups from India. The majority agreement of the groups from India varied from 57% to 67%. Still, this is a valuable theme upon which to reflect. The importance of this argument is more relevant in the context of India as it experiences a plurality in religious and cultural values. Integrating these values in the Indian context is a challenging endeavor. There is an argument that the present structure and instruction of bioethics in India has a "Western" colour. This point makes it clear that India needs a bioethics/ medical ethics which rooted in the Indian tradition and culture. The method of assimilating these values in a harmonious way is the challenging part of the infrastructure that we create for a stronger foundation for bioethics in India. We have also noticed that responding to question no.16, the majority agreed to the statement that in India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs. Therefore, the task of creating an ethics curriculum in the context of medical education in India requires adequate attention and awareness on the diverse facets of Indian culture and tradition.

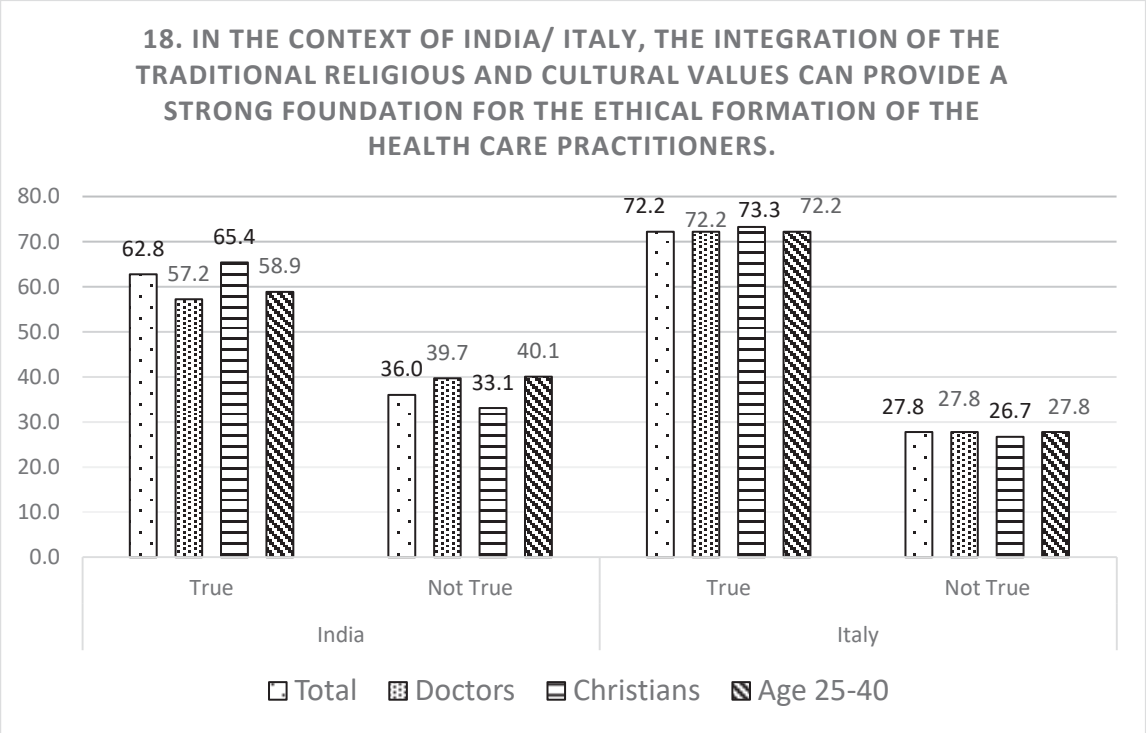

Figure 15

19. In the Indian/Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg., Ayurveda, Siddha, Unani etc.).

All the groups that were analyzed from India had given more than 78% agreement to this statement while in Italy it was just above 64%. This variation is understood, considering the fact that the existence of the traditional medical practices in India such as *Ayurveda, Siddha, Unani* etc. is not so prominent in the context of Italy. In India each of these disciplines have prescribed curriculum and structured university degrees like bachelor's degree, master's degree, nurse's degree, diploma courses, PhD, and others. This reality may not be understood in Italy as easily as in India. The respondents from India, therefore, made an affirmation of the statement that in India it is necessary to have a bioethics study plan in all the medical traditions.

There was no statistical significance seen among the Indian groups compared; neither between the public and private sector of study nor between the religious classifications of Christians and non-Christians. All the Indian groups that were compared with the Italian groups show statistical significance because of the variation in the data received. Still, in Italy there is a 64% conformity to the statement that it is essential to have ethics education in the medical practices in whichever tradition they are.

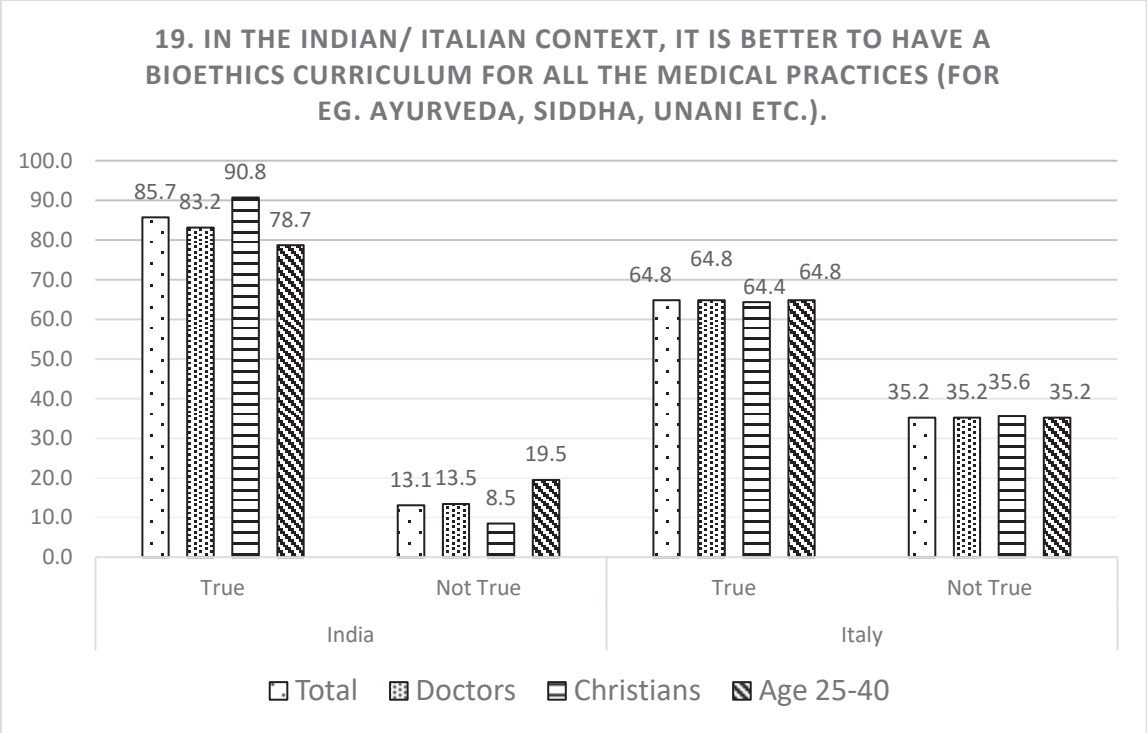

Figure 16

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, government norms and so on.

This was one of the statements with which no groups generally disagreed. Among the correlation analyses, no groups compared showed statistical significance. The least agreement was with the Christian group from India which, in fact, had a majority agreement of 84.6%. One of the central findings of this survey was this: Though there was an argument by the majority for having a foundation inculcating the traditional religious and cultural values, a vast majority of the respondents to the questionnaire do not want these ideals to be taught in the religious colour. This aspect will be explained later in the section of research findings.

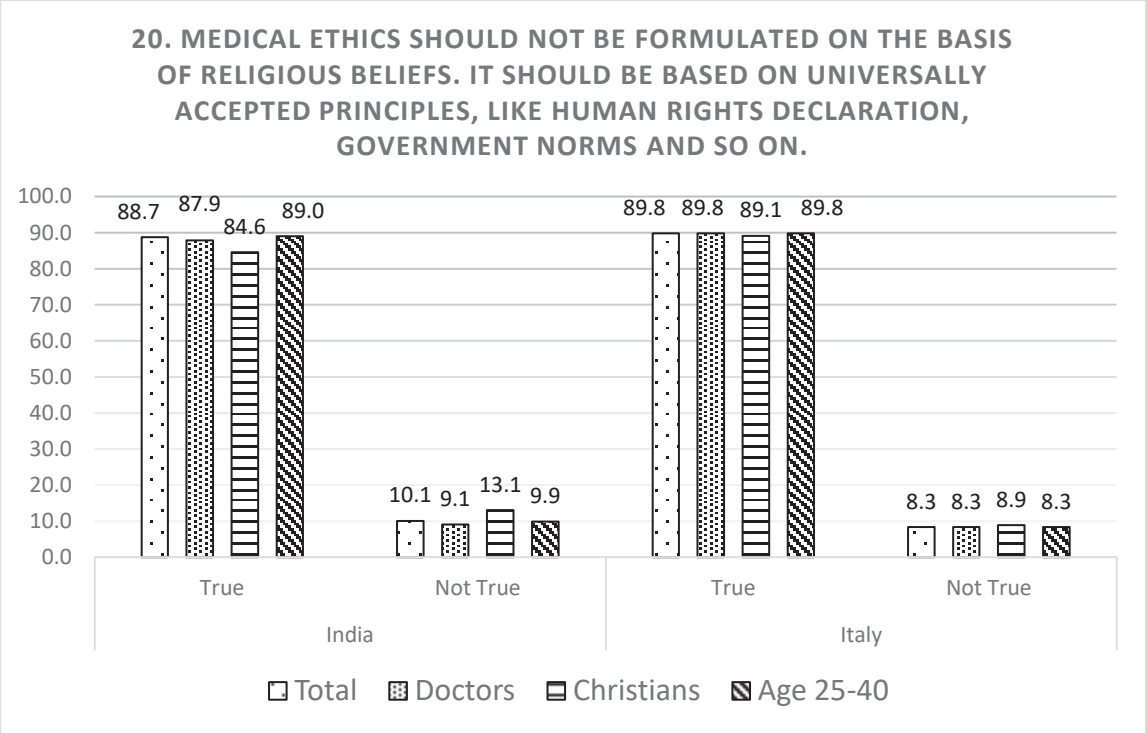

Figure 17

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

More than 75% concurred from each group replying to this statement. Question nos. 30(b) and 31(b) also gave sufficient evidence from the survey that the respondents think government is a powerful source and government policies fundamentally influential with regard to the ethical practices in the medical field.

The existence of an moderating ethics panel or committee with efficient persons would guarantee better ethics education and hence, better ethical practices in the healthcare system in the country. This committee could at certain times formulate and update the curriculum when the need arises. Monitoring their ethical standards, it could also supervise different healthcare institutions and medical colleges and universities in the country.

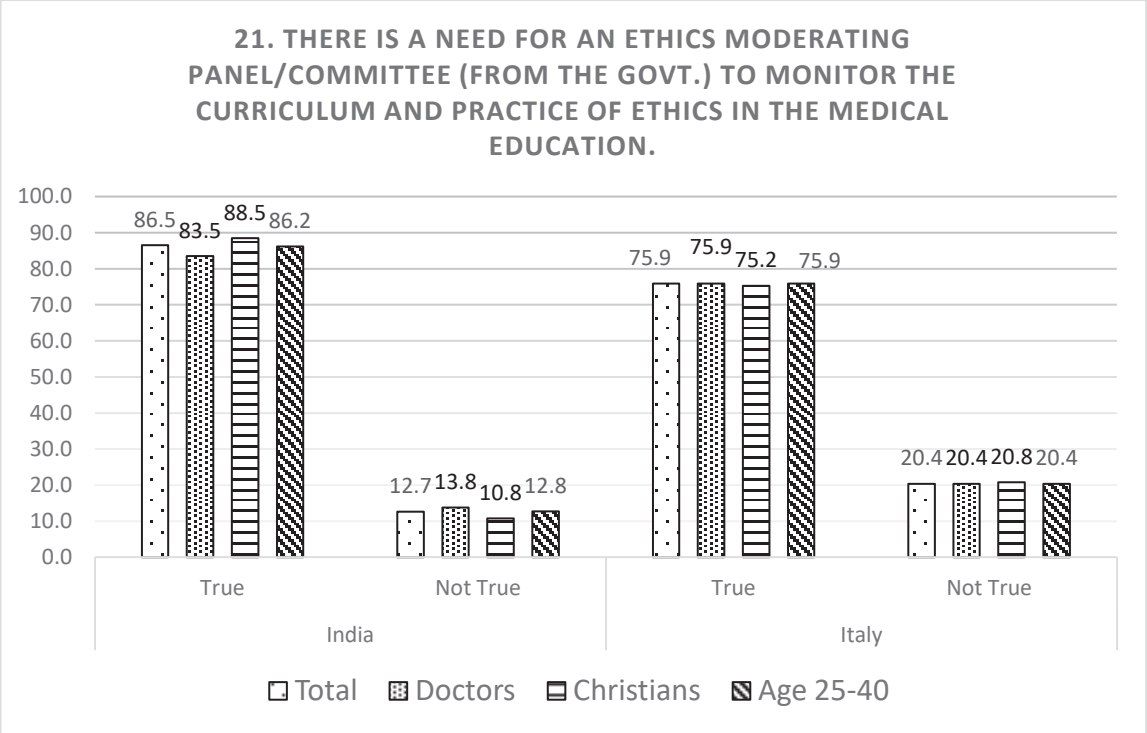

Figure 18

22. In India/Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

As we have mentioned this result earlier, there was a greater concordance among all the groups evaluated to the statement that a better medical ethics education could create an effective ethical medical practice among the healthcare practitioners in India and in Italy. As we have seen, more than 80% of all group members agreed to this assertion. This points to the renewal and revitalization of imparting medical ethics in the educational institutions in the respective countries.

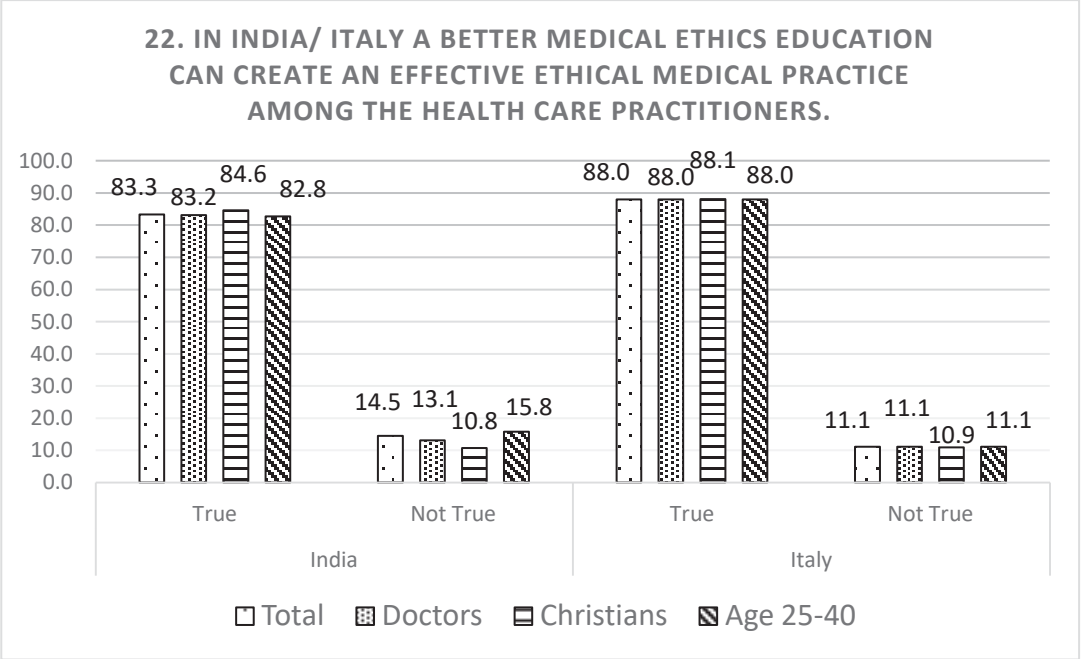

Figure 19

23. I think that in the context of India/Italy, certain themes in the present curriculum of medical ethics should be removed and some other themes should be included.

This was one of the questions that created a bit of difficulty for the respondents to answer "true" or "not true" ; consequentially, many of them marked "don't know." A presumable lack of sufficient information exists about what is actually taught in the universities and medical colleges. In the context of India, where 44.46% of the respondents didn't have or didn't know that they had ethics education in the institution they studied, it is understandable that they either opted for a "yes" or "don't know." This question had an option for the respondents to suggest the subjects that can be included in the curriculum. Those comments will be included in the section where I present the comments received from the survey.

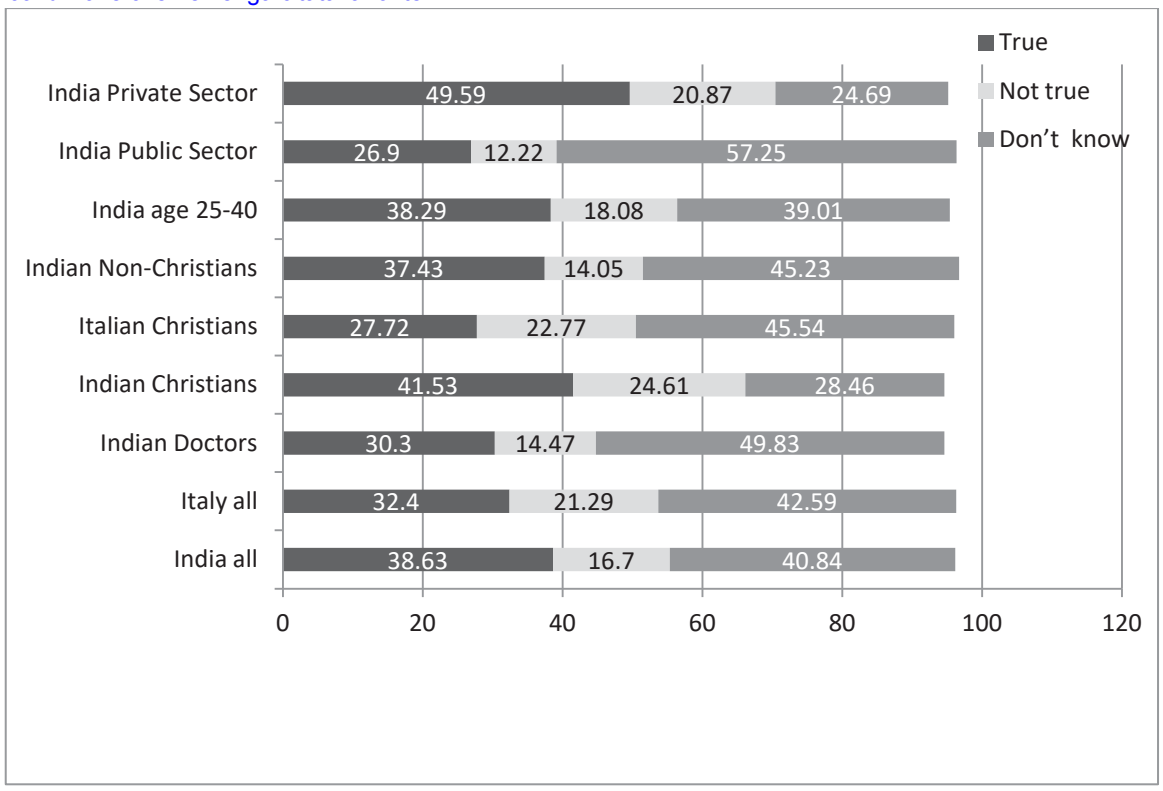

Figure 20

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Preference for better techniques in the teaching of bioethics include video presentation, discussions, practical situation analysis, experience sharing, workshops, and other methods, which would be accepted with a soaring majority (more than 80%) by all the groups. Ethics is after all to be lived, not just to be learned. Therefore, the integration into the personality is the effect of the teaching program that is presupposed. It is noted that a higher rate of agreement was seen with the Indian groups than the Italian groups that had also resulted in the statistical significance on the comparisons done between the Indian and Italian groups. Still, when there is more than 80% agreement to the statement from each group, it shows the acceptance of the suggestion posed.

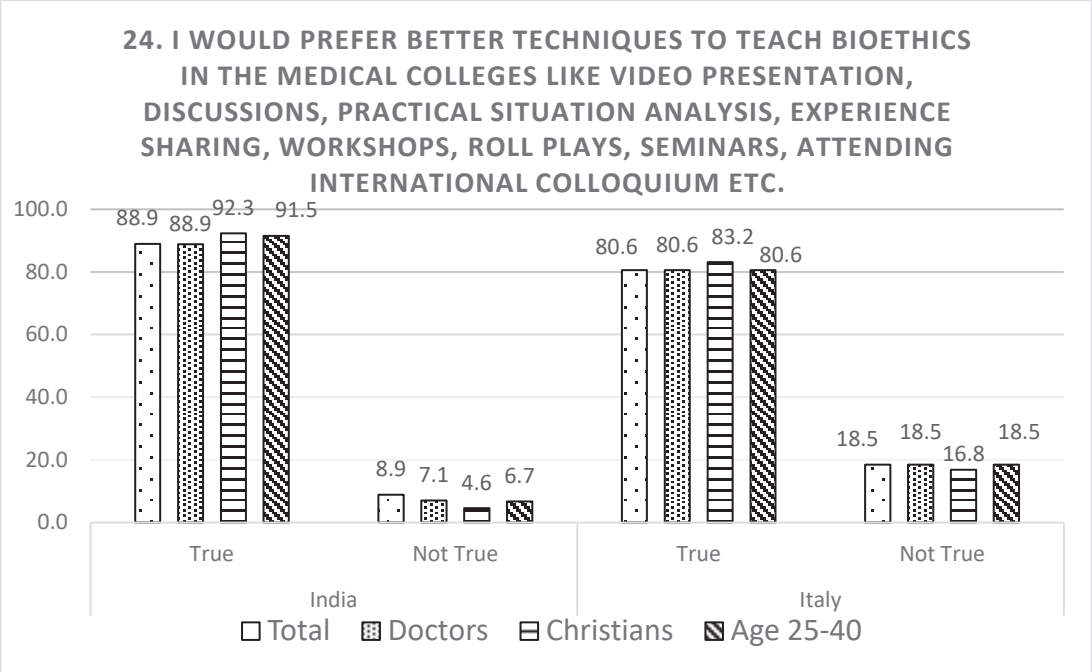

Figure 21

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Italian groups have an agreement of about 73% to 75% and Indian groups are well above 89% affirming the statement to be true. That shows in the statistical analyses a significance in the comparisons. Need for an ongoing ethical formation is a necessity as the new technologies and diverse situations in the medical field bring dilemmas in ethical decision-making. The measures to renew the ethics data base in the healthcare professional are to be clearly thought out and implemented. Using the modern means of information technology online, education also can be considered to be an easier and more accessible method of imparting and updating knowledge in the field of medical ethics, especially for those professionals who are not able to attend courses in the universities.

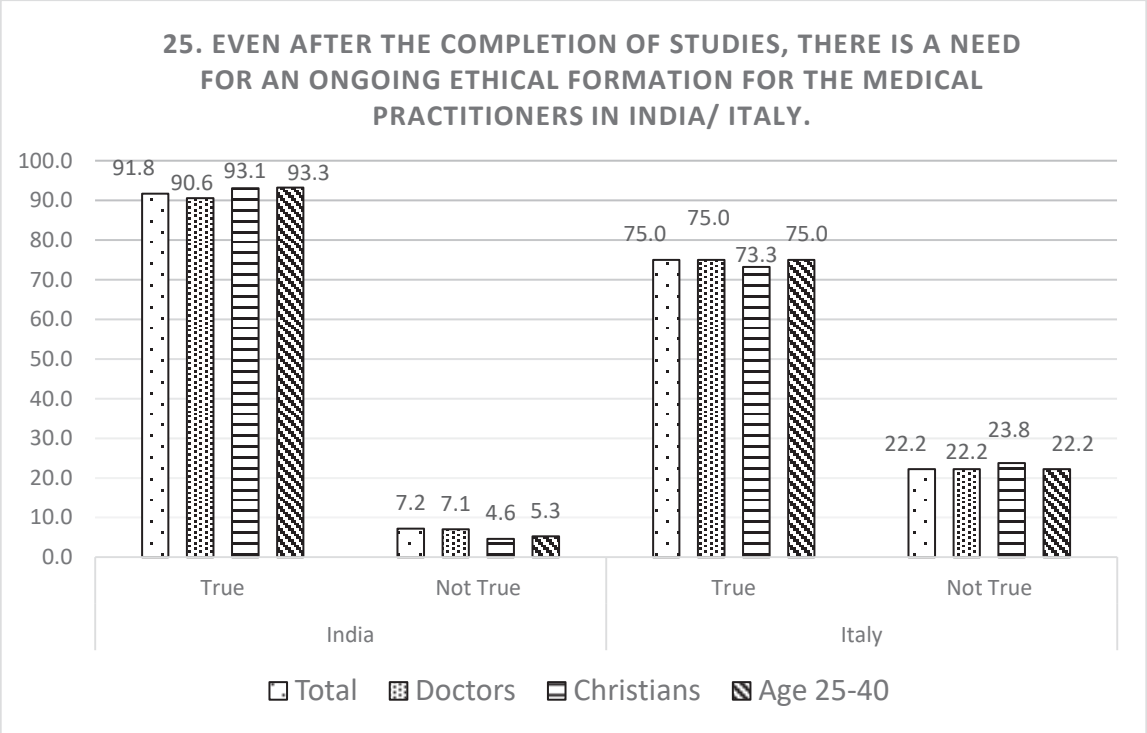

Figure 22

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Updating the curriculum in the universities is a need of time. As we have seen with the previous question, the changing social and cultural circumstances bring with them a situation which compels every professional to confront new challenges in the specific field of operation. Updating the curriculum and the methodology can to an extent keep to the standards the ethical formation of the students who will soon be in the professional medical field. The vast majority of the respondents from both countries viewed this statement as true and valid as an argument to read the signs of the times and keep to the standards the ethical formation of the healthcare professionals of the future.

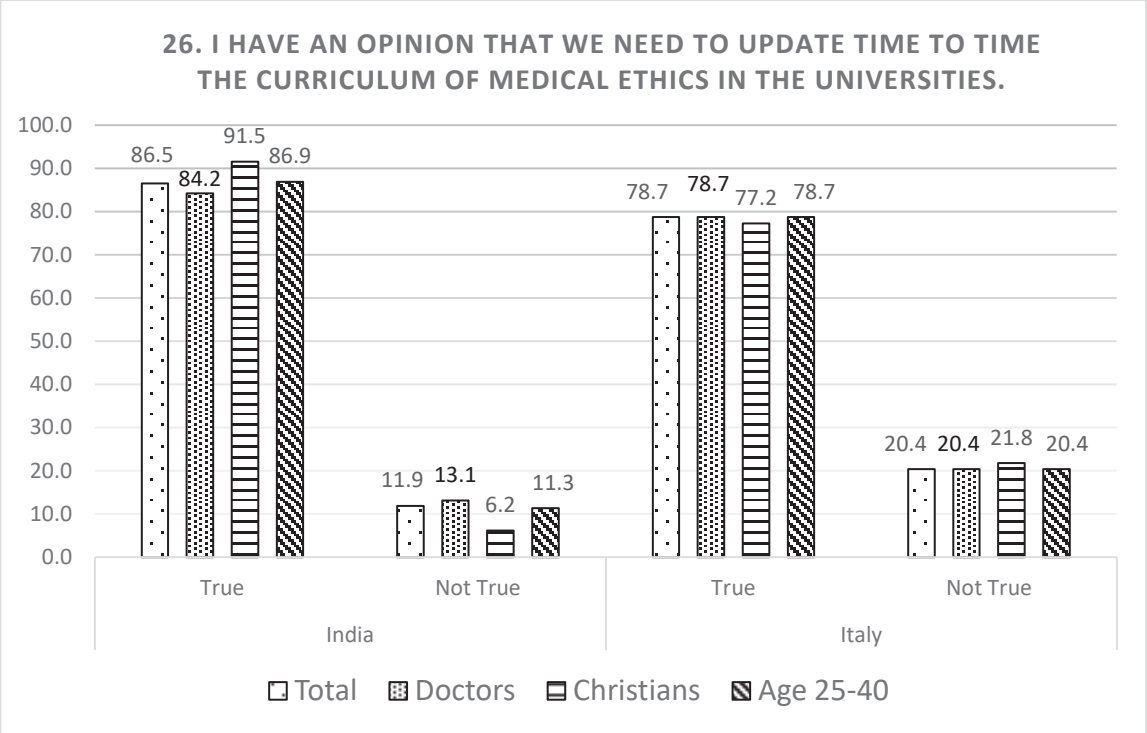

Figure 23

27. It is very useful to have a philosophy of science/bioethics/medical ethics faculty in every medical college for better learning in ethical issues.

The responses to the questionnaire from India affirmed the need of a faculty of philosophy of science/bioethics/medical ethics in every medical college for better learning in those ethical issues they confront. At first hand, I think it is a need arising in India in the present scenario when in most universities and medical colleges; there are no experts in bioethics or professors who have specialized in the medical ethical issues to be resource persons to the students who are under formation.[296] In recent years the students and medical professionals hear a lot about bioethics and medical ethics but without a direct involvement in any course, seminar, workshop or lectures and programmes done in the field of bioethics in the context of India. Though there are new initiatives from different agencies to promulgate and expand the network of bioethics in different institutions in the country, the need for more professionally equipped persons is still a problem. Once this block is overcome, at least by having a notable number of specialized persons in bioethics/medical ethics there can also be a gradual growth in

[296] Anuradha Rose, Kuryan George, Arul Dhas T., Anna Benjamin Pulimood, *Gagandeep Kang, Survey of Ethical Issues Reported by Indian Medical Student*s, p.26.

formulating certain faculties or structures in different universities and medical colleges that assist the students and all personnel in their ethical formation.

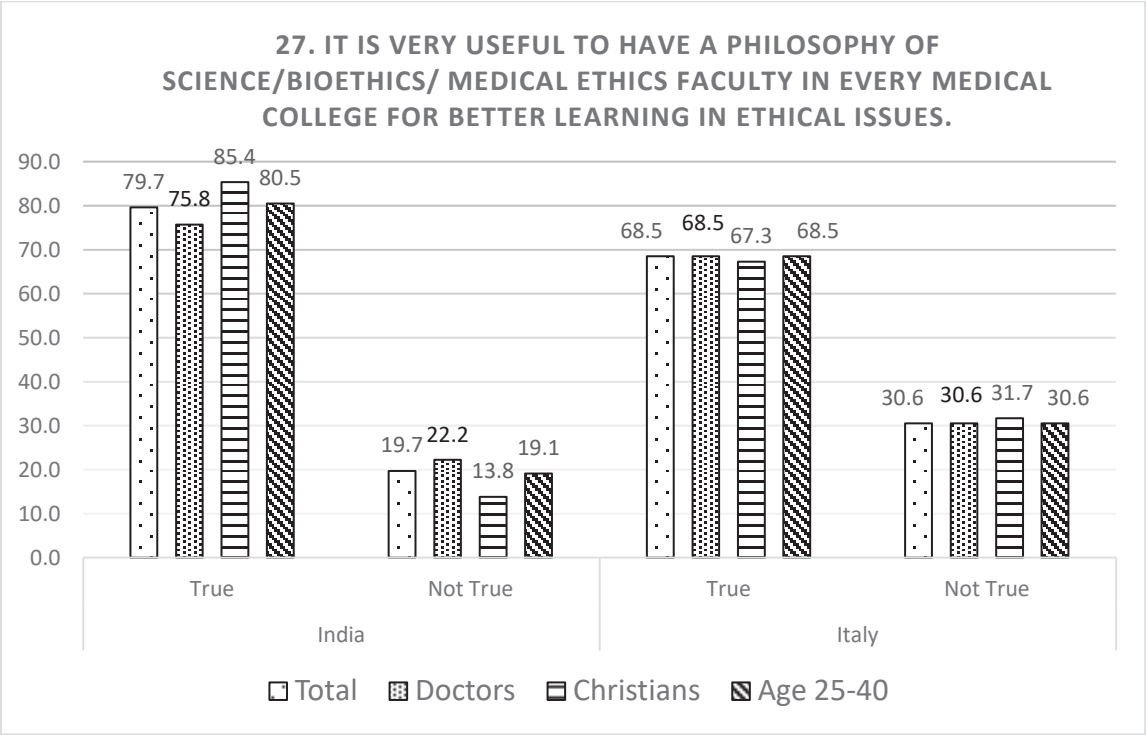

Figure 24

28. There are books, medical journals and other publications that are relevant to the Indian/Italian context regarding ethical matters in healthcare.

To this question more respondents answered "don't know" than the other options. It was clearly evident that most of the respondents could not recognize or were aware of a publication of ethical value in medical field. Only the Christian group from India and the private sector of study from India showed a just above 50% of responses affirming the acquaintance with such a publication/ publications.

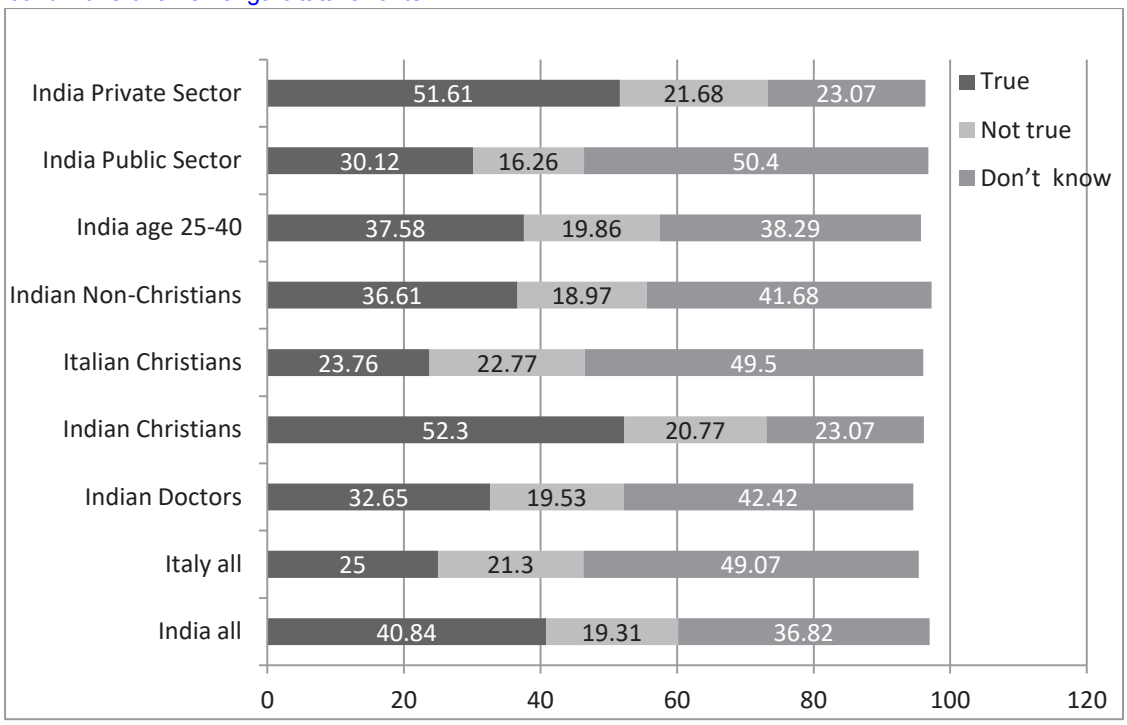

Figure 25

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Who is eligible to teach bioethics? This is a question many were asking as bioethics was slowly taking roots in the academic stream. The responses tended to say that the one who has a specialization in bioethics/ medical ethics is a better choice. The option of the majority moved with "a medical doctor who is specialized in bioethics" in the first place. The total group from India chose "one who has a PhD in medical ethics" in the second place. The Italian group opted for "someone who has specialized in the fields of philosophy, religion and science (medicine)" in the second place and "any medical practitioner" in the third place. These are the options with at least 40 % of agreement.

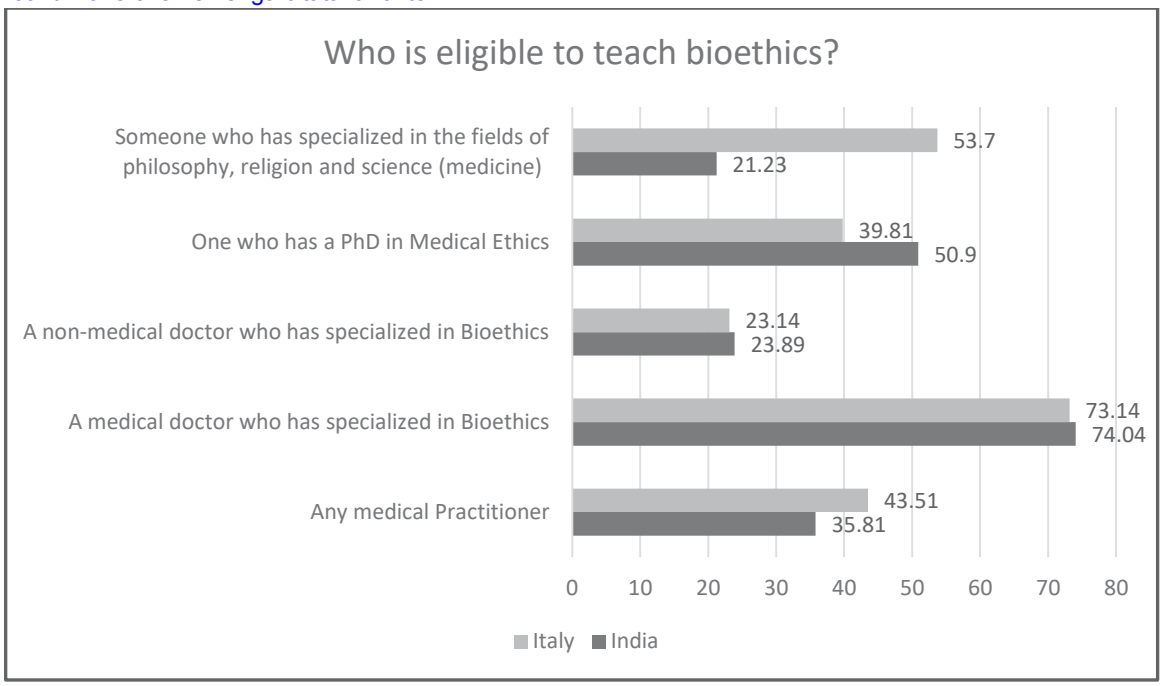

Figure 26

30. Below are listed certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Italian groups were more convinced than the Indian groups with the suggestion that religion is a possible source of ethics. In India the Christian group had a higher majority which states that religion is an important source of ethics. Christians from both countries were likely to agree with this opinion, while the non-Christians, public sector of education in India, and the doctors group from India had the lowest affirmation to the suggestion that religion is important as a basis of ethics.

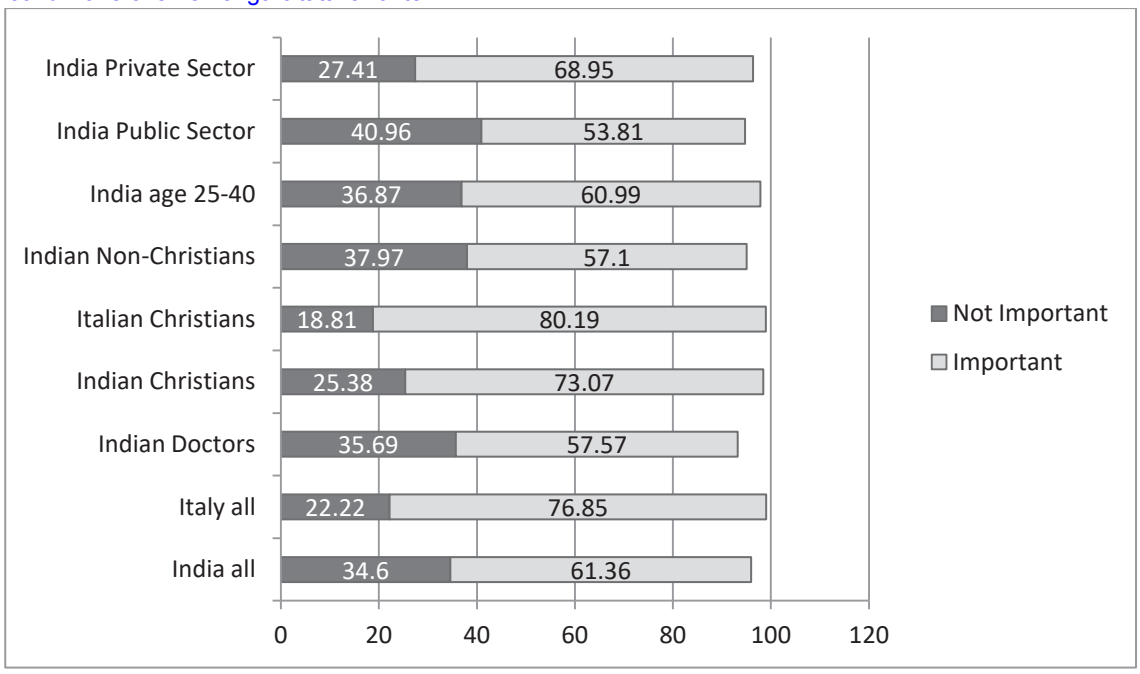

Figure 27

b. Government

Though the majority said "yes" to the suggestion, Italians differed drastically with the Indian groups in saying that government is an important source of ethics. All the comparisons in this category are seen with statistical significance. All the groups from India had more than 83% majority of the population in the particular groups. This clearly showed that the people in India are cautious of the laws and policies made by the government who influence the ethical behavior of the healthcare professionals. We will discuss the consequences of this aspect later in this chapter.

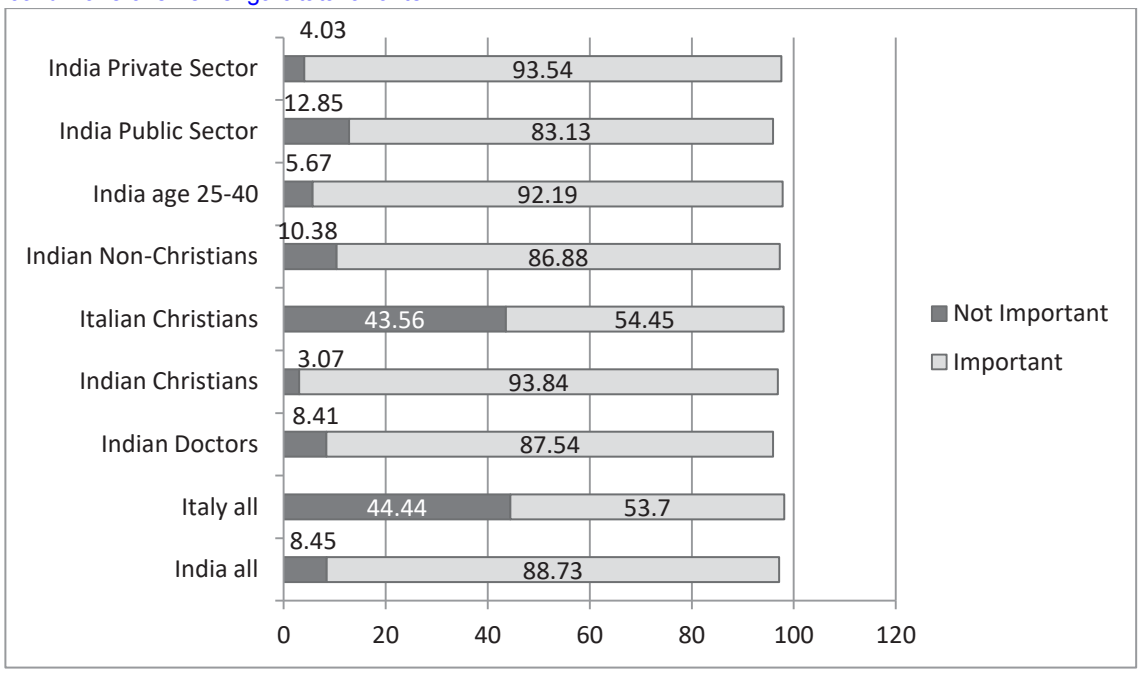

Figure 28

c. Philosophical and Social Ideologies

We find here that all the groups except the public sector of study from India (with 79.51%) have more than 80% agreement to the suggestion that philosophical and social ideologies are important sources of ethics. We also associated these responses with those of question no. 20 to which the respondents made their wish to have a bioethics based not on religions but philosophical ideologies, human rights declarations, and so on. It is important to note than the universal value systems have always been accepted by the societies at large, which normally arise from social ideologies and humanitarian concern.

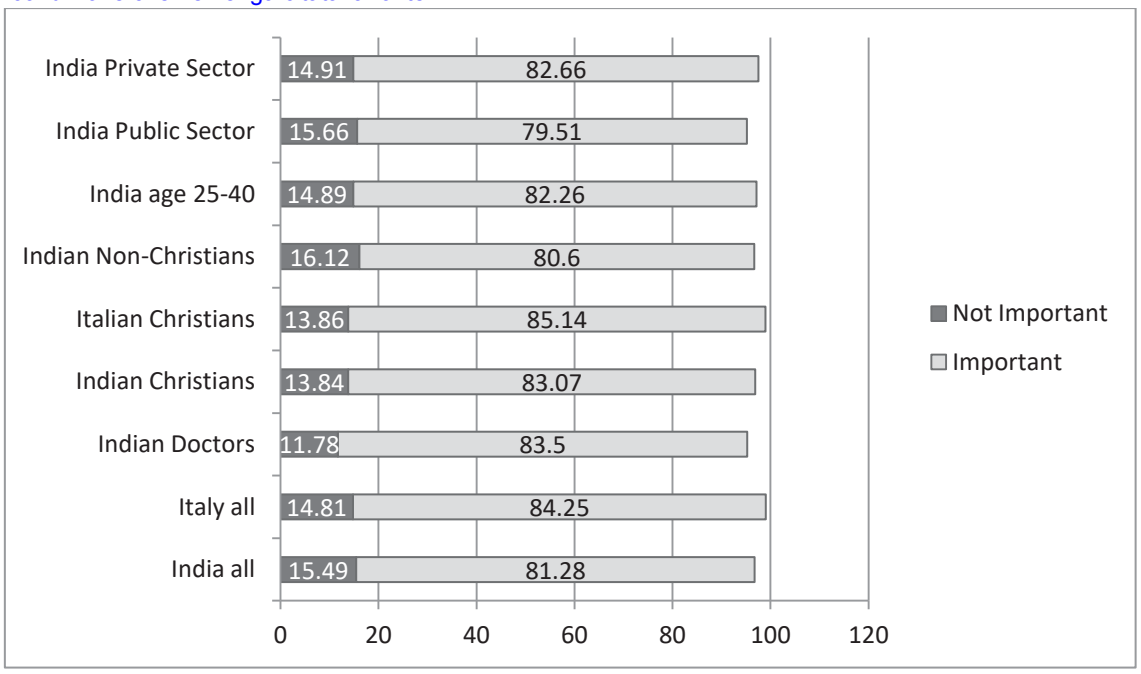

Figure 29

d. Associations and Social Workers

The Christian group from India and the private sector of study were more inclined to state that associations and social workers do contribute to the ethical behaviour of individuals in the medical field. It is a fact that there are diverse groups that are working for the just practice of medicine in India. We have described the important groups in CHAPTER IV. Their ideologies and motives are brought forth in a view to cleanse the corruption and unjust elements in the healthcare system of India. The groups from Italy differed with this perception of Indian groups and showed a lesser number of supporters to the suggestion. One of the reasons could be the difference in the nature of the associations and social works in India and Italy. In India there is a serious concern within the society on the part of social workers and associations of social actions because the social challenges created by poverty, illiteracy, inadequacy for the basic means of life, nutrition and healthcare, corruption from the part of the authorities, all pose grave difficulties for them in the field of their social activism. In such a situation someone who ventures to act upon such a daring need selflessly is always a model and can make an impact on the co-workers too, inspiring them to become more open and selfless in servicing the needy. We have certain brave initiatives in India.[297] By this argument I do not want to state that in Italy the associations are not as selfless as those

[297] Maithreyi, Towards a History of Bioethics in India, pp. 39-44.

in the Indian scenario. I mean to say that the social and healthcare concerns differ in these two countries and where there exists a more challenging situation, there could also be a more vibrant and positive response to the social needs, and this response in action would make the people more aware of the state of affairs.

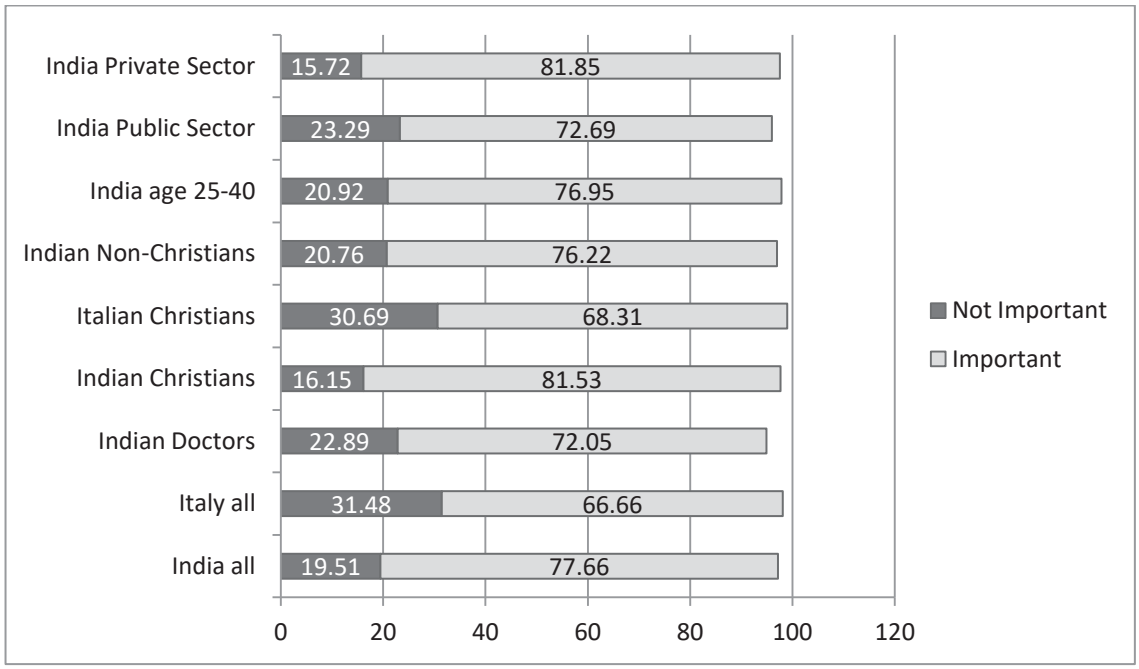

Figure 30

e. Personal Convictions

Christians from India compared to other groups did not have much of a concordance with the idea that personal convictions were possible sources of ethics. Only 53.84% of them agreed to this thought; whereas, 66.33% of the Christians from Italy saw personal convictions as a valid point of reference regarding ethical life. More than 75% of Non-Christians from India respondents believe that personal conviction contributes to ethical behaviour. Doctors from India showed the highest agreement to the suggestion with 78.78% of the group accepting it as a fact.

The question here is: where do the personal convictions come from? There is no doubt that the above-mentioned possible sources of ethics, i.e., religion, government, social and philosophical ideologies, associations, and social workers contribute much to the personal convictions one constructs. There can also be other persons, or inspiring individuals like Mother Teresa, Florence Nightingale, Albert Schweitzer or such persons who can be influential in creating a personal conviction for one's life. Values obtained from the family and education, motivations received from certain

circumstances of life, inspirational readings: all these can contribute to the personal convictions.

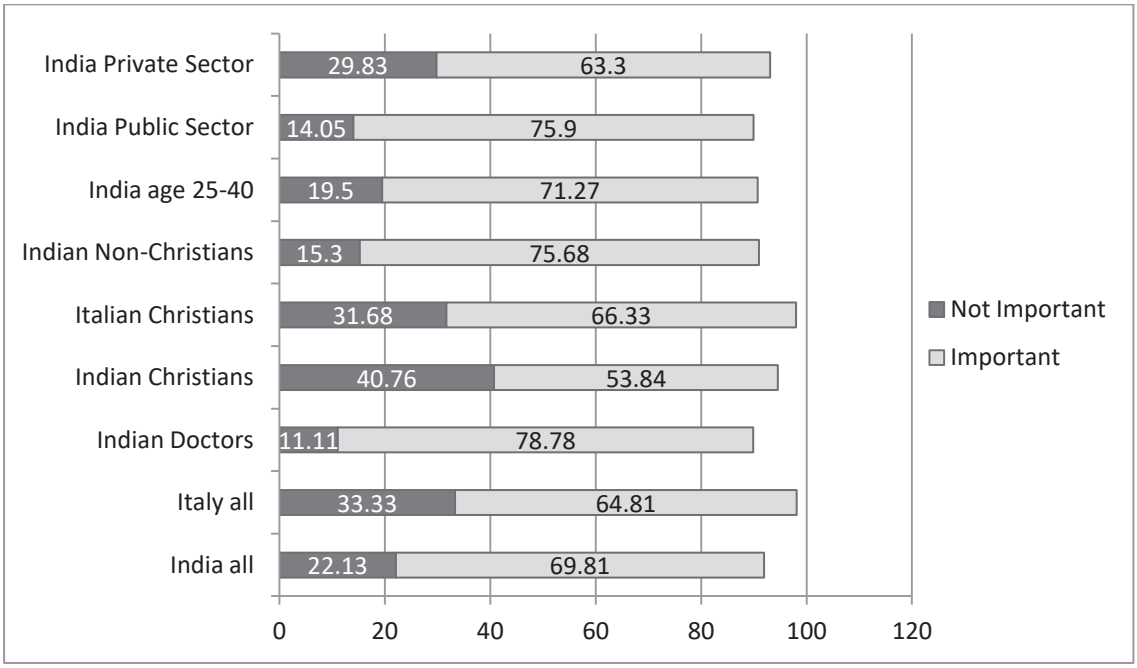

Figure 31

31. Given below are some possible reasons for unethical practices in the medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Though more than 80% of all group members accepted hospital policies being a possible reason for unethical practices in the medical field, it was evaluated drastically different by the private sector and public sector of study from India. The policies of the hospitals in the private sector influenced its health professionals more than those in the public sector. When the point was evaluated in the context of hospital policies and unethical practices, it also pointed to professional ethics that should prevail in any healthcare institution. In its absence the government should interfere with disciplinary actions so that the policies in the private sector did not oppose the public common good. It is also a matter of one's autonomy that helps the individual to decide for himself with certain values in a given situation. If this freedom is curtailed by the hospital policies, the cooperation that the person renders in the professional field, whether material or

formal, it poses a question to the integrity of the person. This ethical conscience can only be fortified with a person's strong value system.

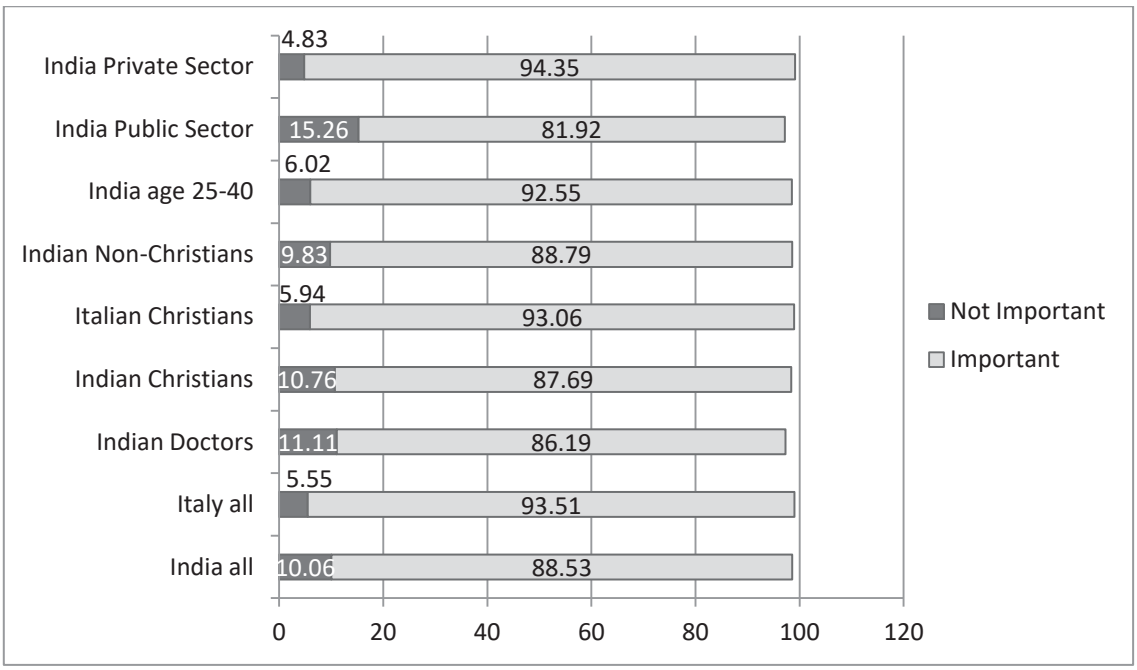

Figure 32

b. Government policies

Italian groups tended to say that government policies create serious ethical dilemmas. Another factor we saw in the correlation analyses was the absence of statistical significance found in the comparison studies. All the groups believed with a high percentage that government policies were serious matters of concern with reference to the professional ethical scenario.

The laws of the government are also made for the well-being of the public in the professional field. But a number of circumstances arise where the personal freedom is decreased to make a decision in certain issues. For example, the Catholic Christians in India are strongly against abortion. But, if the government of India has a policy that says when a woman seeks abortion in any hospital the institution is bound to do that, then a crisis arises. Consider the situation of the Catholic nurses working in non-Catholic hospitals who are forced to assist in abortions, contraception, and so on. In these circumstances the person should have the freedom of choice to abstain from certain activities that he or she thinks unethical. The institutions also should have the legal choice to undertake or not to undertake policies that radically oppose their

religious values. This of course creates a serious difficulty on the part of the government to make laws that are developmental and at the same time value-bound.

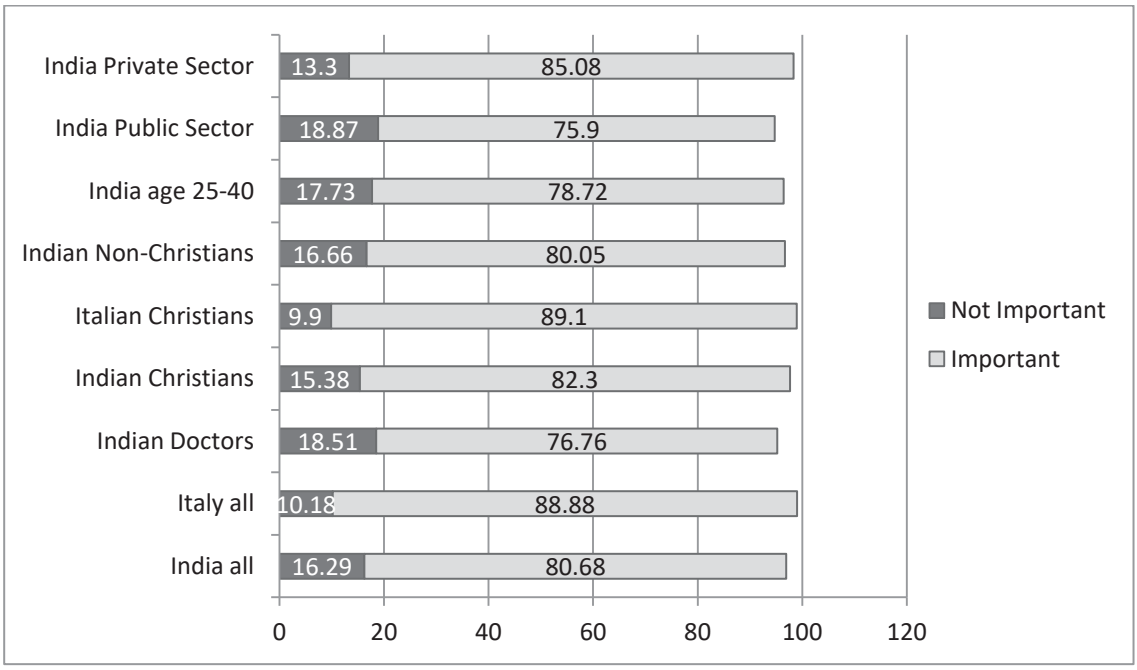

Figure 33

c. Personal problems (tiredness, family issues etc.)

Personal problems are not a serious issue for the respondents from India as it is for the Italian respondents. All the groups from India that had a correlation study with the Italian groups clearly showed a difference in the view of Italians and Indians regarding this point. Dedication in any professional field by each individual is a serious matter for the maintenance of the total system of affairs. Therefore, physical and mental integrity and commitment to the duty cannot be compromised. At times there can also be situations that render certain discomforts in the profession. One can be preoccupied with illness, lack of proper rest, problems with colleagues, and family issues. Alcoholism, drug addiction, and the like can strongly contribute to the unethical behavior of a person in his professional field.

The survey shows that though there is a majority affirmative opinion in different groups from India, it is not as grave a concern in Italy. Still, it is a matter of importance that is to be studied with careful attention in order to promote the personal integrity in the professional medical field.

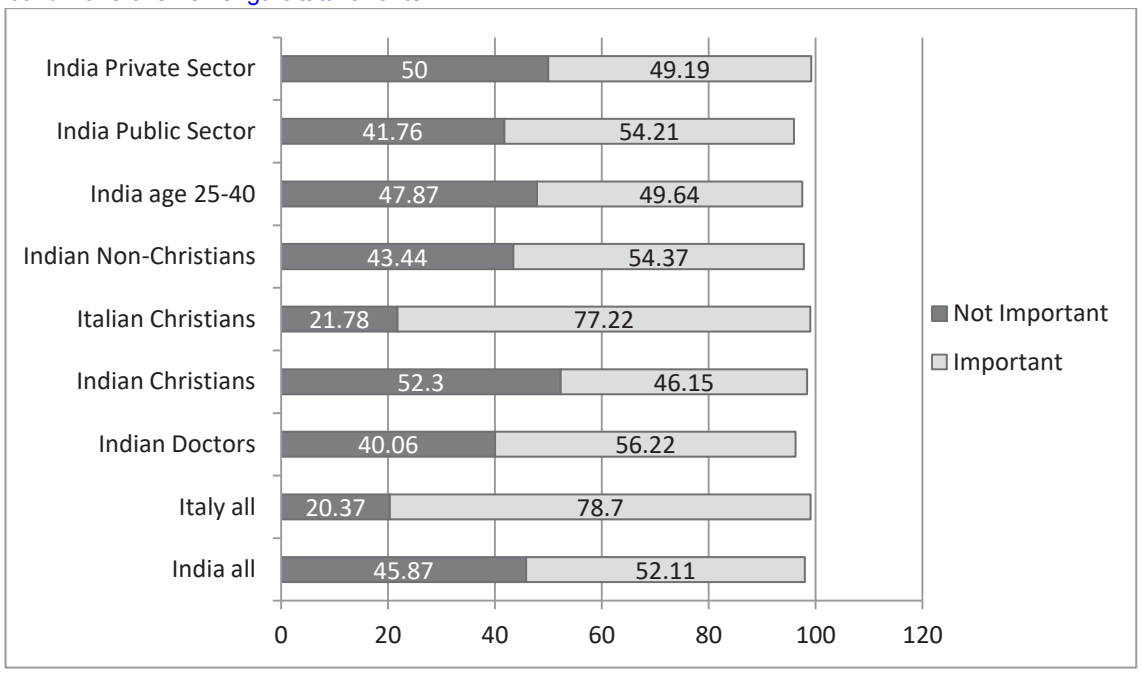

Figure 34

d. Economic reasons

More than personal problems, the economic motives were seen to be a more serious reason that causes unethical behaviour: more than 71% from each group studied from India and Italy demonstrates this point of view. Like the previous point, also here, the Italian groups saw this as a more serious reason than the Indian groups. More than 85% of the Italian respondents said that it is a serious reason.

Economic reasons here could be understood as financially corruptive practices in the professional field. It could be a result of economic reasons, both personal and structural. It can be the result of government or hospital policies or the influence of external forces like pharmaceutical companies, x-ray and scanning centres and so forth, adding to the likelihood of unethical practices like corruption, as well as unjust and unnecessary medical treatment. This was seen to be a serious concern in the medical and healthcare system of India. The disparities between public sector and private sector medical centres comprise the vast majority of people in India deprived of basic healthcare benefits. The situation that sanctions, "if you have money, you will get treated" is not part of a fair system. As we have seen, the major share of the doctors and healthcare practitioners work in the private sector where they earn more profit. Taking into consideration the nation's need to have more healthcare professionals in the rural and marginal areas, we make out the fact that these geographic areas are not served adequately, especially because of the financial motives. Also, there are a good number

of doctors, nurses, and other medical professionals who go abroad each year and never return to their country to provide their services. The present need is to hold professionals accountable to the nation and to the education they received to help the marginal and the needy. They need to recognize their responsibility to justice and to social concerns. It is also an important point at this juncture to specify that the medical professionals in India have to be paid reasonably according to their professional expertise. To get rid of corruption on the personal level, the individual needs a structurally strong value system, along with adequate government measures can to ensure justice and fairness.

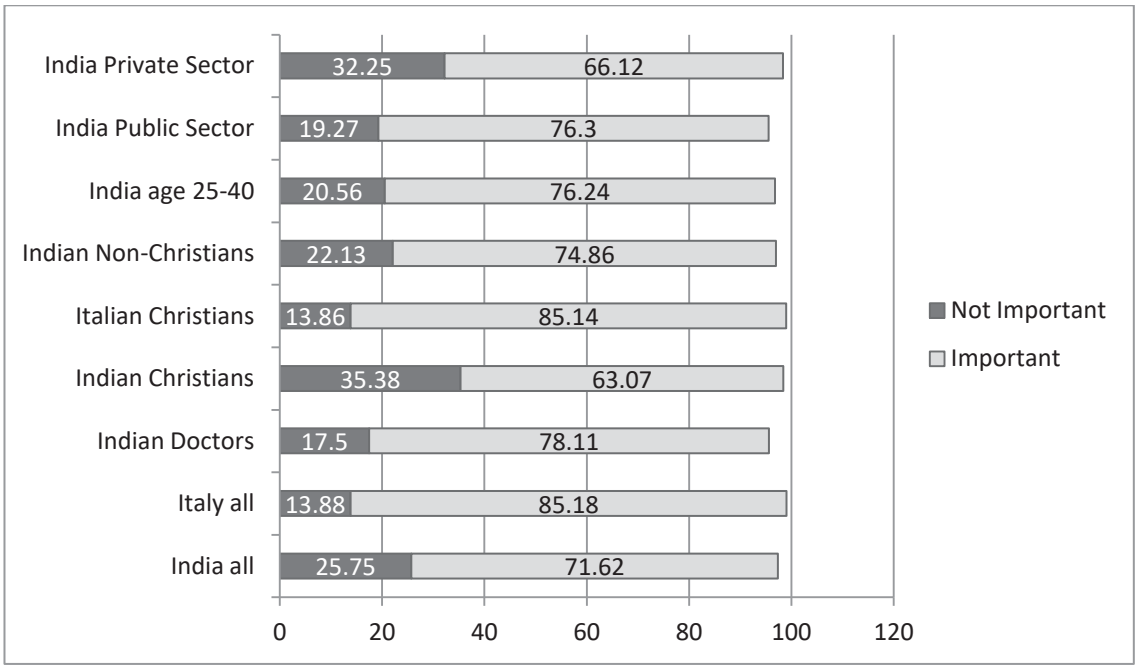

Figure 35

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?
b. approximately how many classes need to be devoted to this in MASTERS degree course?
c. approximately how many classes need to be devoted to this in NURSING course?

I would like to present how the total Indian and the Italian groups responded to this question of how many lessons would be sufficient for respective courses. I also

included the doctors group from India, mainly because they have completed the studies in medicine and are now in a better position to talk on this point than the other groups.

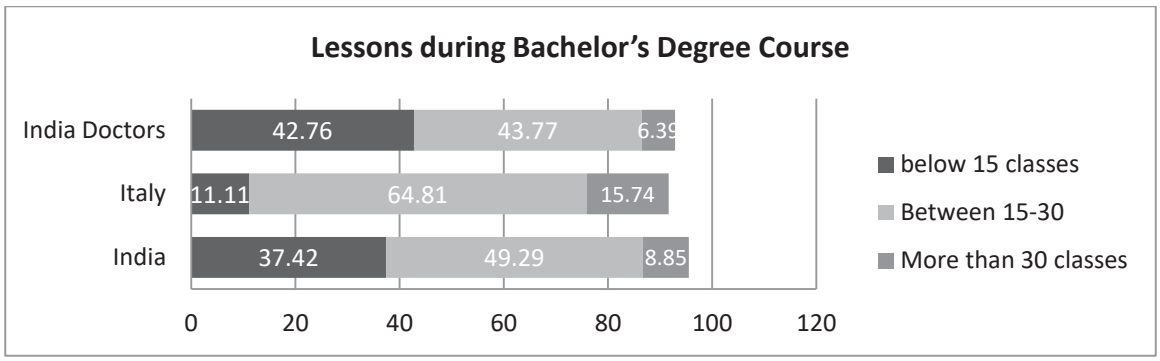

Figure 36

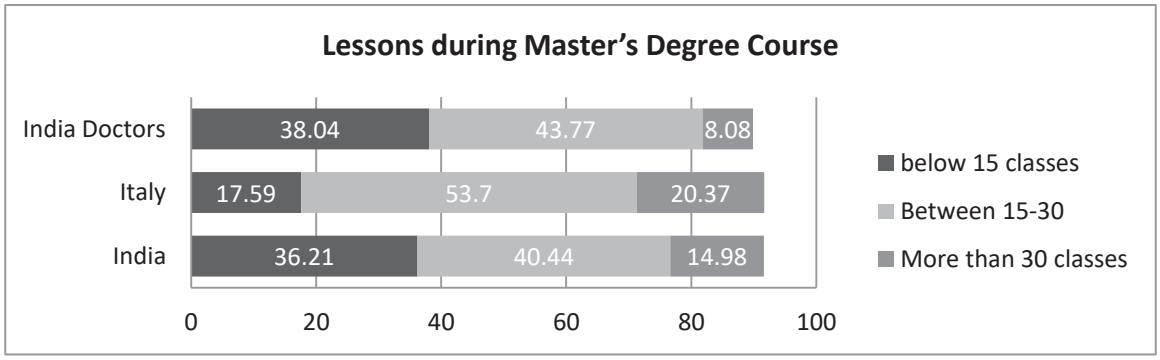

Figure 37

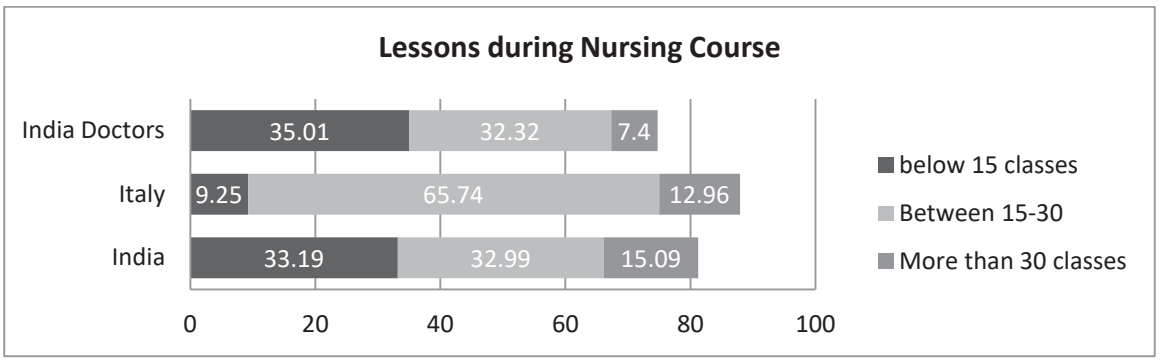

Figure 38

As we see in the graphs, the Italian group stated there should be more than fifteen to thirty lessons in all three courses. The majority from the Indian groups believed that no more than thirty lessons were needed, of which half said fifteen classes were sufficient for all three courses.

It is true that of themselves the number of lessons do not matter. We have to take into consideration the quality of the input that is given to the students. Therefore, the course content, the resource person, an appropriate number of lessons and a suitable methodology for the input are to be incorporated in the course curriculum. There was a

forty-hour ethics teaching plan for St. John's National Academy of Health Sciences, Bangalore. This was achieved through classroom teaching, bedside teaching, demonstrations by examples and interactions with patients, patient relatives, colleagues and the public.[298]

Referring different national initiatives and feedbacks, Karuna Rameshkumar states in her article that the Surgeons of Canada requires medical ethics to be taught as a condition of accreditation of a postgraduate program and has developed model curriculums in various specialties.[299] Peter Singer is of the opinion that the best time to teach medical ethics may be during postgraduate education or continuing professional development.[300]A study conducted in Japan among the sixteen teaching hospitals that provide a general internal medicine residency program, it was shown that 75% of the participant postgraduates wanted to have a more comprehensive education in medical ethics.[301] Also a study done in the department of Surgery in the United States showed that even though the surgeons had ethical formation in their undergraduate formation, surgical residents welcomed formal instruction on numerous ethical issues pertinent to surgical practice.[302] The importance of nurses and paramedical staff in the healthcare activities and their increased roles in diagnosis and treatment procedure create a need for certain ethical principles to be inculcated in students of medical, nursing, and paramedical courses so that the system holds together and remains trustworthy, while still providing a personal approach to patients. As the World Medical Association points out in its document, some procedures, formerly performed by physicians, are now routinely done by medical technologists, nurses, and paramedics.[303] The importance of having a proper curriculum for the formation of every healthcare professional is a global need. Still, in the given context of each country, certain features

[298] Karuna Rameshkumar, "Ethics in Medical Curriculum; Ethics by the Teachers for Students and Society", *Indian Journal of Urology*, July-September, 25 (3), 2009, p. 337.
[299] Referring *Royal College of Physicians and Surgeons of Canada*, "Bioethics Curricula", Karuna Rameshkumar, "Ethics in Medical Curriculum", 2009, p. 337.
[300] Peter A Singer, "Recent Advances Medical Ethics", *British Medical Journal*, vol. 321, 29 July 2000, p. 284. also available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1118276/pdf/282.pdf, retrieved on12.06.2017.
[301] Asai A., Kishino M., Fukui T., Masano T., "Postgraduate Education in Medical Ethics in Japan", *Medical Education*, Jan. 32(1), pp. 100-104.
[302] Angelos P., DaRosa D. A., Derossis A. M., Kim B., "Medical Ethics Curriculum for Surgical Residents: Results of a Pilot Project", *Surgery*, Oct. 126(4), pp. 701-705; "Discussion", pp. 705-707.
[303] World Medical Association, *ME Manual*, WMA Ethics Unit, 2005, 2015 retrieved on 12.06.2017 from https://www.wma.net/what-we-do/education/medical-ethics-manual/ethics_manual_3rd_nov2015_en_1x1/.

can be added or discarded. It is also noted from these above references that ethical formation is an ongoing process in the life of a healthcare practitioner.

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

All the groups from India and Italy appreciated the importance of the suggested themes, as we have seen in the result statements of the survey. I would like to make a short explanation of the results we have arrived at from the survey in India and the control group in Italy. In this part, all the groups analyzed are given a graphical representation. As I deliberate these themes in the next chapter I will be explaining the themes and its components and sub-topics in detail.

a. Value of Life

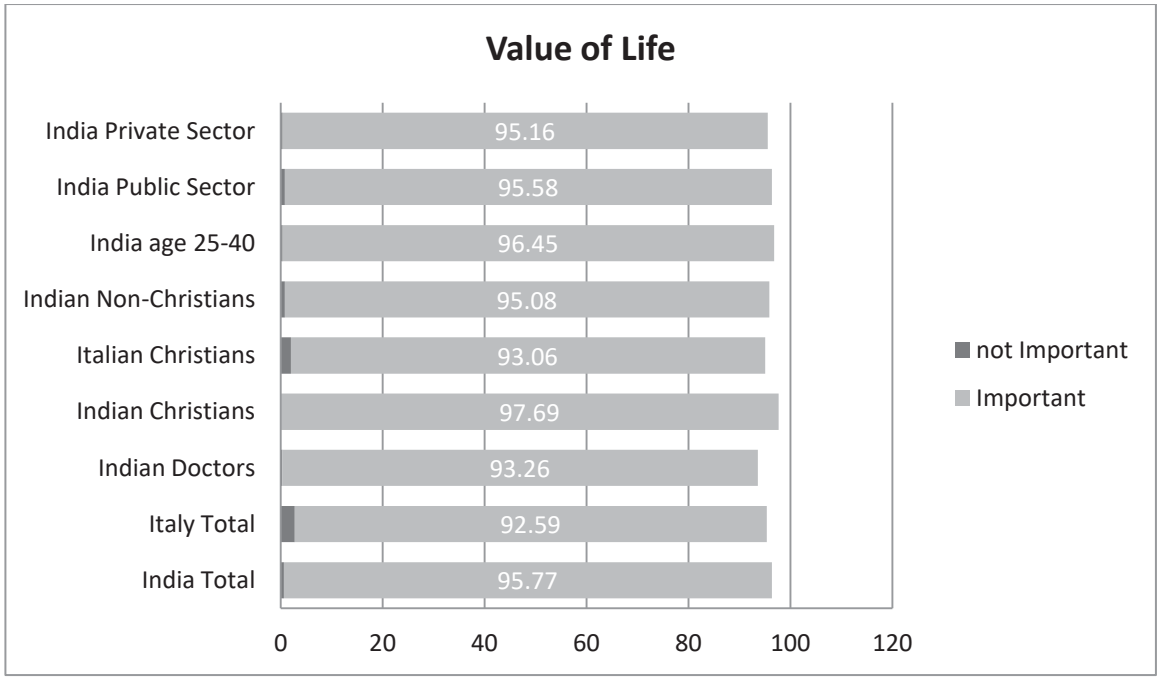

Figure 39

This theme, without any doubt, was highly appreciated by more than 92% of the respondents from each group. The question on the beginning and end of life as ethical dilemmas surrounding these phases have been vastly discussed themes from the beginning of philosophical thinking in bioethics. I would like to combine it with the second point here.

b. Value of Human Life

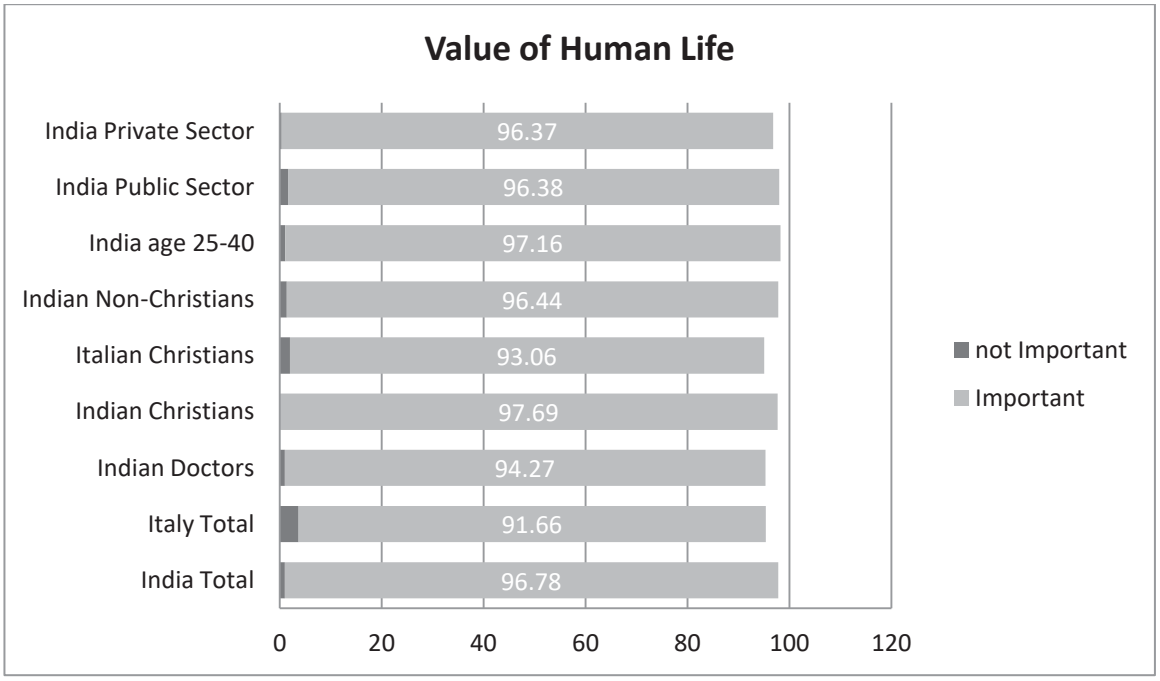

Figure 40

The questionnaire presented both themes, the value of life and the value of human life, each separately and together. Both themes were accepted by more than 91% from each group. This showed the view of bioethics, not as an ethics of life pertaining to only human beings, but to all other living beings as well. That is why it is important to talk about nature, animals used in research, chemical pollution, and so forth, with much care and concern. Life in all its forms is to be ethically treated.

c. Dignity of the Human Person

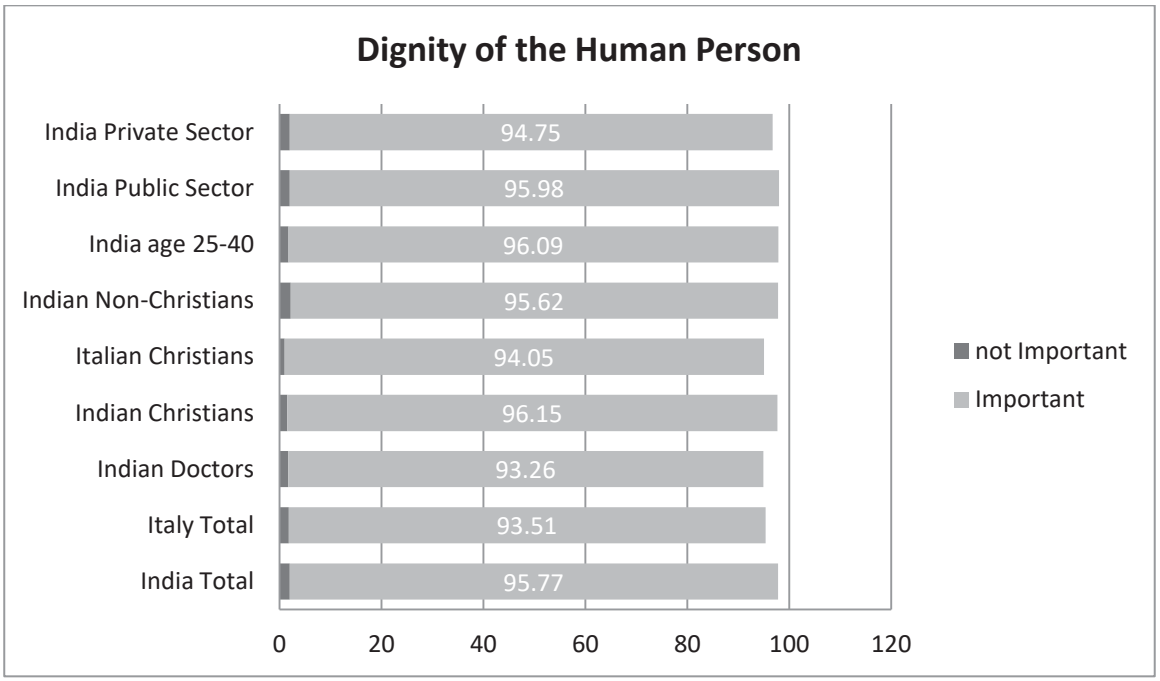

Figure 41

Do all religions and philosophical enterprises accept the personhood of human beings? The question goes on in different realms of philosophy, religion, social sciences, and other studies. But this theme was rated highly appreciated by the respondents of each group who in fact voted with more than 93% of a majority this theme, as something that can and should be taught in the curriculum. Human dignity and human rights are becoming widely discussed themes. The question dealing with the status of the embryo, comatose states, terminal illness, and euthanasia are complex issues in this topic that bring to our attention much concern. I will discuss this in the next chapter as a theme to be included in the curriculum.

d. Ethics in Financial Matters

Surprisingly, a theme that is not very popular among all the groups, is ethics in financial matters. Corruption is a well-admitted malice in the Indian medical system. Bribery, corrupt teachers, under-the-table deals with politicians, and other realities are widespread in India.[304] Integrity and honesty in financial matters are necessary values

[304] "Corruption in Medical Education and Licensing in India", *British Medical Journal*, 352(i291), January 2016 retrieved on 16.06.2017 from http://www.bmj.com/content/352/bmj.i291/rr-3; "Vyapam, India's Deadly Medical School Exam Scandal", *BBC News*, 8 July 2015 retrieved on 16.06.2017 from http://www.bbc.com/news/world-asia-india-33421572; "Indian Medical Education System is Broken,

on the part of a physician. Earlier we have seen that in India the traditional physicians were not receiving any compensation for their services. They performed them as an act of saving life.[305] As time changed, money motives began to rule the whole system of healthcare. At present, the privatization of healthcare, temptations from the pharmaceutical companies, corruption in the educational institutions, acquisitive doctors accepting a cut of payments from the diagnostic and technological labs have all become common in the country. Sunil K. Pandya comments on the new Code of Medical Ethics by the Medical Council of India: that it is swayed by the organized bodies of doctors. He mentions this as he writes:

> A clause in the code (clause 6.8), last modified in 2009, forbade individual medical practitioners and professional associations of doctors from receiving any gift, travel facilities, hospitality, cash, or monetary grants from industry or their sales people or representatives. The clause also specifies the conditions under which research projects can be funded by industry.
>
> Now, in February 2016, the title of clause 6.8 has been revised to remove a reference to "professional association of doctors." No reason is offered. This means that associations can receive gifts, travel facilities, hospitality, cash, or monetary grants from industry and their salespeople or representatives without restriction.
>
> The Council has long kowtowed to pressure groups in the profession. Its links with industry have also been criticized in the past (Nagral and Roy 2010).[306] It has allowed itself to be swayed by organized bodies of doctors. Industry pays for these bodies of doctors to hold innumerable conferences, seminars, workshops and other academic meetings.
>
> Also, the ban on gifts, travel facilities, hospitality, cash, or monetary grants to individual doctors have now been watered down, permitting each doctor to receive gifts and travel facilities valued up to a currency of Rs. 1,000 without limitation. Since there is no restriction on the frequency of such gifts and facilities, doctors could receive them daily and escape action.[307]

Plato argues in *The Republic*, "Is the physician, taken in that strict sense of which you are speaking, a healer of the sick or a money maker?" and he reminds us that he is

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Reuters Investigation Finds", *British Medical Journal*, 350(h3324), 18 June 2015 retrieved on 16.06.2017 from http://www.bmj.com/content/350/bmj.h3324,

[305] Dagmar Wujastyk, *Well-Mannered Medicine*, p. 118.

[306] J. Nagral and N. Roy, "The Medical Council of India Guidelines on Industry-Physician Relationship: Breaking the Conspiracy of Silence", *National Medical Journal of India*, 23(2), Mar.-Apr. 2010, pp. 69-71.

[307] Sunil K. Pandya, "The Indian Medical Council's New Code of Ethics Favours Industry", *The BMJ Opinion*, March 15.2016, retrieved on 15.06.2017 from http://blogs.bmj.com/bmj/2016/03/15/sunil-k-pandya-the-indian-medical-councils-new-code-of-ethics-favours-industry/.

talking about the true physician'.[308] Being a physician is considered to be a socially qualified, highly paid job in India today. It is also noted that the private sector in India and the Christian group from India are the groups that, comparative to the other groups, do not prefer the subject ethics in financial matters as a theme to be taught in the medical ethics curriculum. Christians in Italy at the same time have an 87.12% support for the theme. Therefore, we can also say that it is not a global Christian phenomenon. Probably, as we analyze the data, we understand that most of the Christians studied in the private sector and the Indian scenario of private sector in specialized courses like this would cost much more than that a student pays in the public sector institutions. Is it the larger amount of money the student pays, that later makes the one say, "I would like to get my money back as soon as possible from my profession?" The question then is, what is the just limit of one's acquiring monetary compensation to a profession like healthcare? This is where we need clarifications in the conceptual framework of every healthcare professional to exercise his/her duties based on human values and more selfless service mindedness.

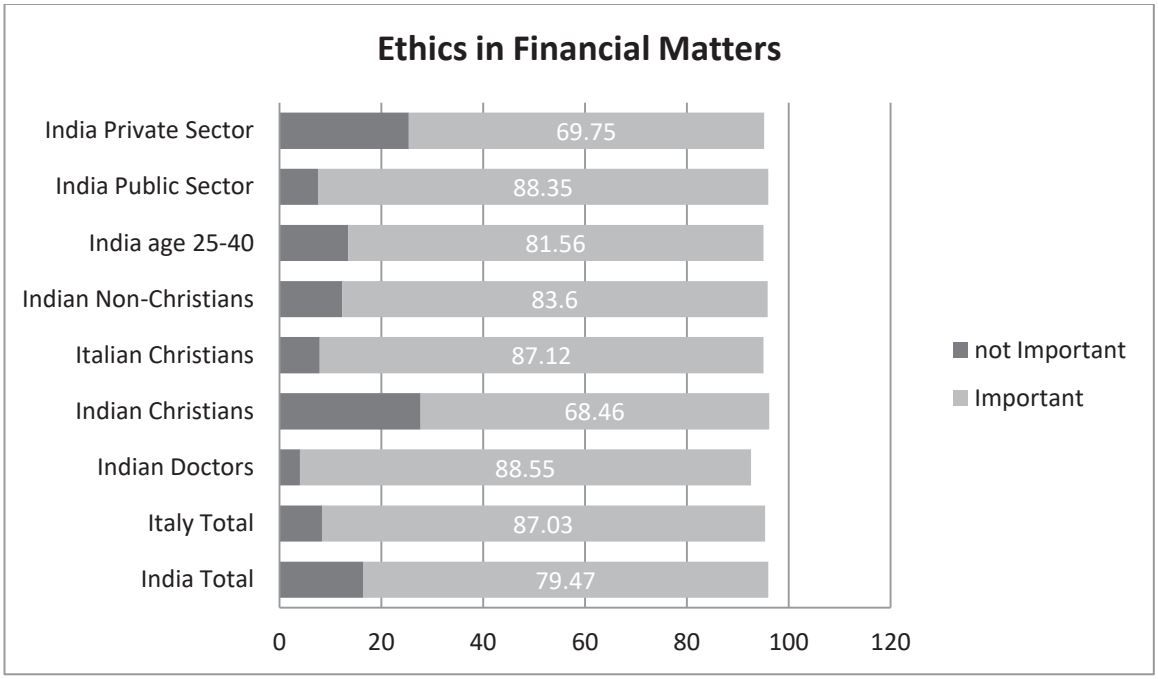

Figure 42

[308] Ref.: in certain texts it is stated "physician is a ruler and governor of the bodies; not a money maker". (342e) Plato, "The Republic", *Perseus Digital Library*, Gregory R. Crane, Tufts University, retrieved on 16.06.2017 from http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0168%3Abook%3D1.

e. Ethics of Medical Treatment

A majority over 91% in all groups support this theme. Medical treatment is intended to heal the patient in the best possible way available: diagnosis, respecting the patient's rights and dignity, prescribing medicine only in necessary circumstances, providing the patient with the best possible method of treatment available, treating infectious patients (for example, HIV/AIDS) who deserve serious medical attention. There is also a concept of patient equality to treatment. WMA gives guidelines in this matter as it states the *Declaration of Geneva* and United Nation's *Universal Declaration of Human Rights* (1948).[309]

Respect for the patient, justice, the value of compassion, the avoidance of placing the patient in any possible risk or harm are concerns of the physician and the assisting healthcare professionals who guarantee ethical practices on personal and institutional levels. It is also important to note the reminder WMA puts forward here: "Studies have shown that many patients suffer harm and even death because of inadequate procedures for infection control (including hand hygiene), accurate record keeping, understandable medicine labels, and safe medicines, injections, and surgical procedures. The *WMA Declaration on Patient Safety* calls on physicians to "go beyond the professional boundaries of healthcare and cooperate with all relevant parties, including patients, to adopt a proactive systems approach to patient safety."[310]

[309] World Medical Association, *Medical Ethics Manual*, 3 Ed., 2015, pp. 37-38 retrieved on 16.06.2017 from https://www.wma.net/wp-content/uploads/2016/11/Ethics_manual_3rd_Nov2015_en_1x1.pdf.
[310] World Medical Association, Medical Ethics Manual, 3 Ed., 2015, p. 39 retrieved on 16.06.2017 from https://www.wma.net/wp-content/uploads/2016/11/Ethics_manual_3rd_Nov2015_en_1x1.pdf.

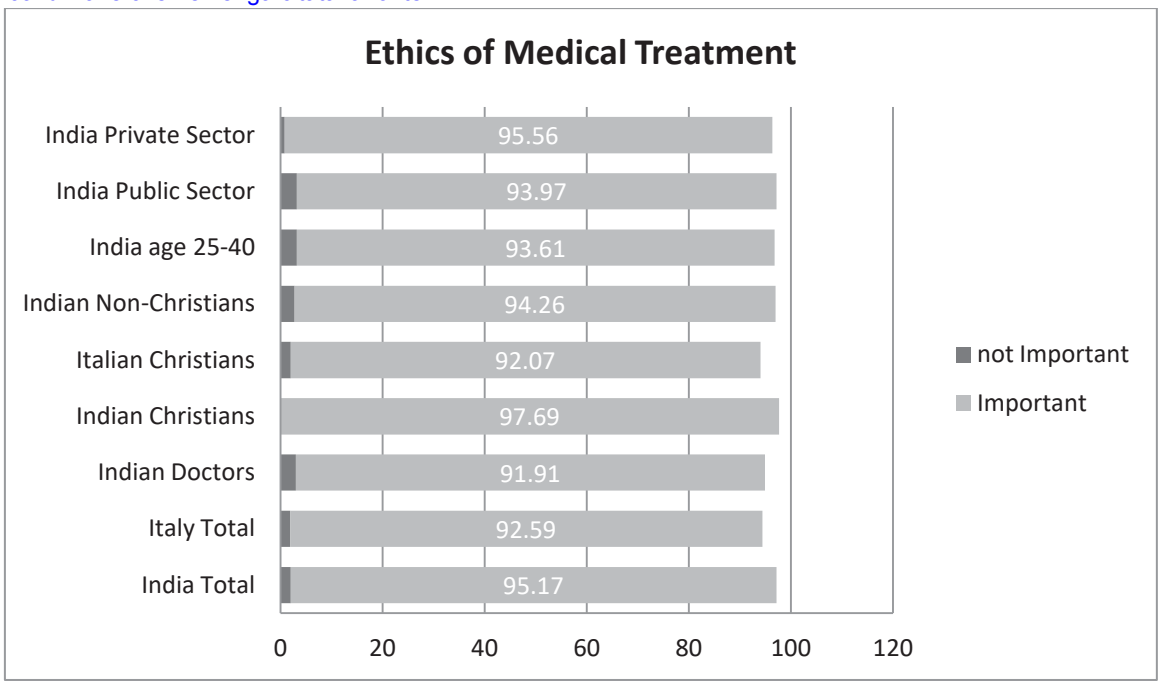

Figure 43

f. Doctor - Patient Relationship

From the onset, doctor-patient relationship is seen to be one of the central themes in bio-medical ethics. *The Declaration of Geneva* requires of the physician that "the health of his/her patient will be his/her first consideration," and the *International Code of Medical Ethics* states, "A physician shall owe his/her patients complete loyalty and all the scientific resources available to him/her."[311] Autonomy, confidentiality, sense of respect and proper communication are keystones of this relationship. Lipkin M. Jr. et al. write, "It is the medium in which data are gathered, diagnoses and plans are made, compliance is accomplished, and healing, patient activation, and support are provided."[312] About the therapeutic use of doctor-patient relationship and the necessity to impart it to the future physicians, Dennis H. Nowak notes, "if using the healing power of the doctor-patient relationship is an art, physicians could become more skilful artists. By identifying the therapeutic elements of their clinical encounters with the patients, they might use them more consistently and appropriately. Also, in teaching medical students and residents, it is useful to have a conceptual framework and an

[311] Ibid, p. 36 retrieved on 16.06.2017 from https://www.wma.net/wp-content/uploads/2016/11/Ethics_manual_3rd_Nov2015_en_1x1.pdf.

[312] Mack Lipkin Jr., Richard M. Frankel, Howard B. Beckman, Rita Charon, Oliver Fein, "Performing the Interview", in Lipkin M. Jr., Putnam S.M., Lazare A., **Carroll** J.G., **Frankel** R.M., **Keller** A., **Klein** T., **Williams** P.K., Eds. *The Medical Interview: Clinical Care, Education, and Research*. New York, NY: Springer-Verlag; 1995, p. 65. Pp. 65-82.

organised approach."[313] This theme holds a central position in the teaching of medical ethics. And as we see in the graph more than 92% of the respondents from each group selected this theme to be taught in the curriculum.

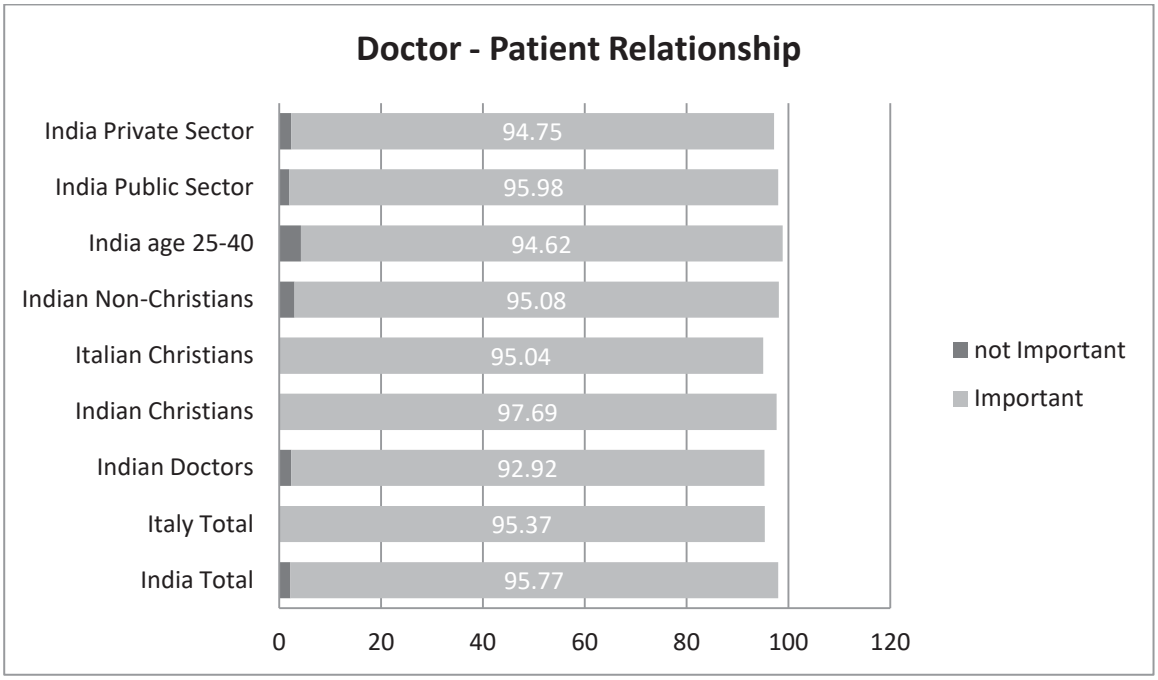

Figure 44

g. Doctor-Doctor Relationship

As we have seen earlier this theme also is given much importance by the respondents of the questionnaire. More than 91% from each group agreed that this is to be a subject to be included in the medical ethics curriculum. The ethical relationship of physicians with other physicians is weakened by unhealthy competitions among them, making destructive professional criticism, holding back any possible information to the other doctor when a patient is handed over, stealing the patients from other doctors as well as important treatment information or other matters that regard the privacy of another patient or physician.

The World Medical Association Declaration of Geneva includes the pledge, "my colleagues will be my sisters and brothers."[314] But situations arise, as Dr. Vijay Thawani notes, "like other members in the society, doctors are caught in the pursuit of

[313] Dennis H. Novak, "Therapeutic Aspects of the Clinical Encounter", in Lipkin M. Jr., Putnam S.M., Lazare A., **Carroll** J.G., **Frankel** R.M., **Keller** A., **Klein** T., **Williams** P.K., Eds. *The Medical Interview: Clinical Care, Education, and Research*. New York, NY: Springer-Verlag; 1995, p. 33.
[314] World Medical Association, Medical Ethics Manual, 3 Ed., 2015, p. 88 retrieved on 16.06.2017 from https://www.wma.net/wp-content/uploads/2016/11/Ethics_manual_3rd_Nov2015_en_1x1.pdf.

money and prestige. Like any other economic enterprise, medical practice too is vulnerable to groupism and power struggles. Doctors can knowingly or unknowingly behave in a manner that detrimentally affects the position of their colleagues. They must respond to this problem by reestablishing ethical principles, because self-regulation is better than forced external controls through laws".[315] Therefore, learning values and integrating them into the profession is a basic need in the formative process period of a physician.

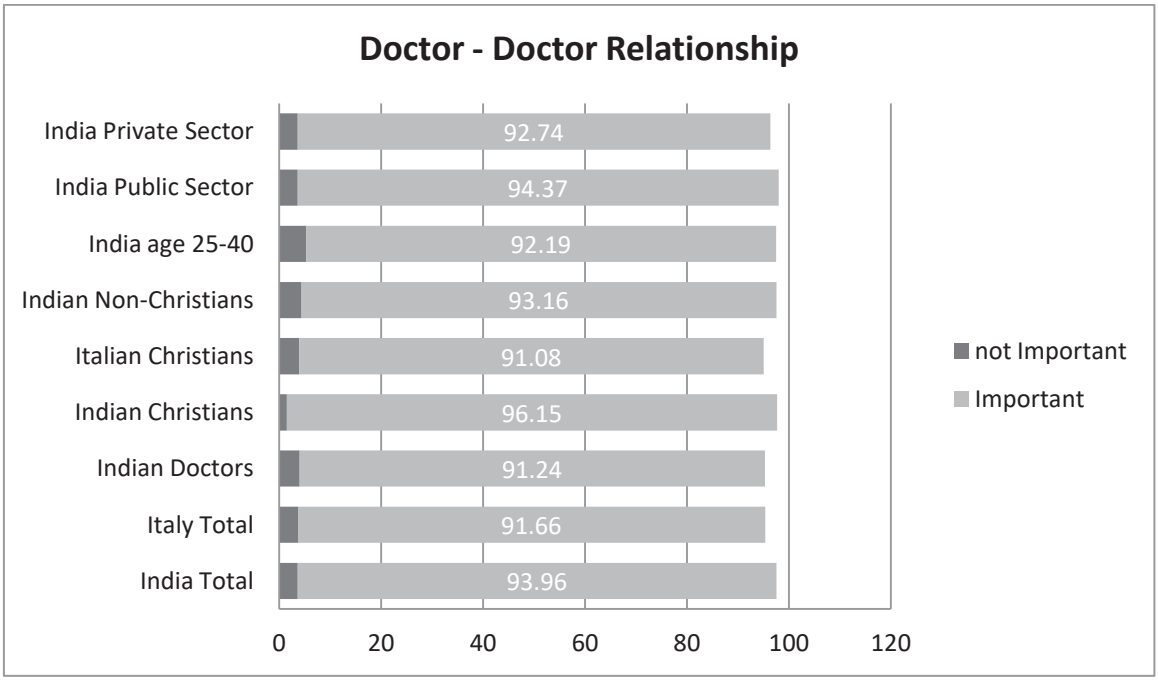

Figure 45

h. Doctors - Other Healthcare Professionals Relationship

As we have seen in the previous topic, the ethical relation among doctors is also important to safeguard a good and ethical relationship among doctors and other medical professionals like nurses, paramedical assistants, technical assistants, pharmacists, and so on. The respondents to the questionnaire viewed this as an important theme to be taught as more than 89% of the population from each group supported the topic.

The World Medical Association's Declaration of Geneva, as we have seen earlier, proclaims the pledge that, "my colleagues will be my sisters and brothers."[316] Further, the Indian Medical Association's pledge includes the statement, "I will treat my

[315] Vijay Thawani, "The Doctor-Doctor Relationship: Professional Criticism", *Issues in Medical Ethics*, VIII (3) July-September 2000, p. 82.
[316] World Medical Association, *Medical Ethics Manual*, 3 Ed., 2015, p. 88 retrieved on 16.06.2017 from https://www.wma.net/wp-content/uploads/2016/11/Ethics_manual_3rd_Nov2015_en_1x1.pdf.

colleagues with all respect and dignity".[317] This ethical collaborative aspect of the medical profession is very important in the professional scenario of the whole healthcare system.

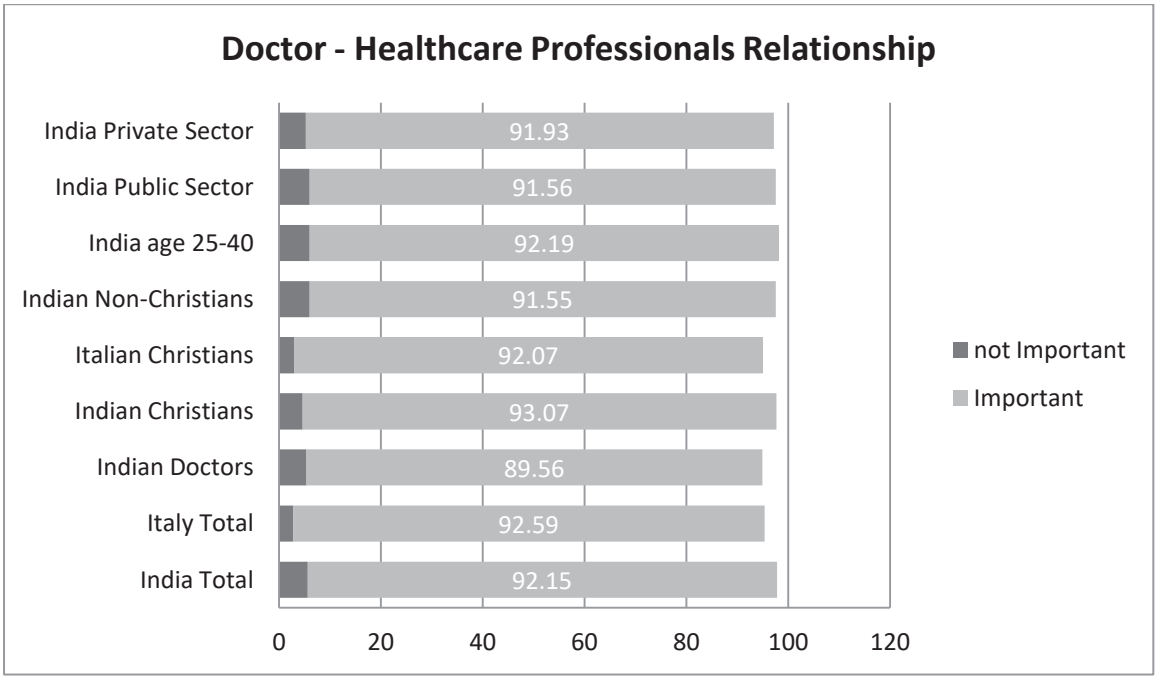

Figure 46

i. Laws and Ethical Practice

As we have seen earlier, more than 88% from each group agreed that laws and ethical practice was an important topic to be taught in the curriculum of medical ethics. We have also seen government as a source of ethics and government policies affect ethical decisions. Therefore, a deeper and more appropriate understanding of the laws of the country regarding the medical practice is very essential to any healthcare professional.

To make the topic clearer, I have listed below the laws enacted for the proper functioning of the healthcare system in India, by the central and state governments (in bracket are the number of laws in each section):

Law Related to Governing the Commissioning of Hospital (25)

Laws Governing the Qualifications / Practice and Conduct of Professionals (19)

Law Governing Storage / Sale of Drugs and Safe Medication (19)

Law Governing Biomedical Research (2)

Law Governing to Management of Patients (21)

Law Governing Medico Legal Aspects (11)

[317] Indian Medical Association, *Pledge* retrieved on 16.06.2017 from http://www.ima-india.org/ima/free-way-page.php?pid=18.

Law Governing The Safety of Patients, Public and Staff within the Hospital Premises and Environmental Protection (23)

Law Governing the Safety of Patients, Public and Staff within the Hospital Premises(25)

Laws Governing the Employment of Manpower (28)

Law Governing to Professional Training and Research (4)

Regulations Governing the Business Aspects of Hospital (15)[318]

Italian respondents seem to be a bit lower in agreement with the Indian respondents on this topic. To speak about the Italian medical laws, Carlo Petrini and Walter Ricciardi write:

> The earliest "Code of Medical Conduct" in Italy was drawn up by a committee established by the Federazione Nazionale degli Ordini dei Medici (FNOM, National Federation of Physicians' Associations) in 1953 and approved in 1954.[319] Although the code was initially conceived above all as a means of reciprocal guarantees, over the years it has increasingly become a guide for physicians. The current version was adopted by the National Federation of Physicians' and Dentists' Associations (FNOMCeO) on 24th May 2014. On 19th June 2016[320] article 56, regarding "informational advertising in the health sector" (which had been challenged by the Data Protection Authority on 24th September 2014)[321] was amended. This is certainly true of the "Principles of European Medical Ethics"[322] adopted by the European Conference of Medical Orders (CEOM) on 6th January 1987 (to which an Appendix was added on 6th February 1995), and of the European Charter of Medical Ethics"[323] adopted on 11th June 2011

[318] Research Foundation of Hospitals and Healthcare Administration, *Medical Laws and Ethics in India* retrieved on 16.06.2017 from http://www.rfhha.org/index.php?Itemid=51&id=1&option=com_content&view=article.

[319] Ref.: Patruzzo S., *Storia del Codice di deontologia medica. Dalle origini ai nostri giorni*, Torino: Edizioni Minerva Medica; 2014. (Reference by authors: footnote at the end of the paragraph cited)

[320] Ref.: Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri (FNOMCeO), *Codice di deontologia medica*. 18 maggio 2014, modificato il 19 maggio 2016. Available from: https://portale.fnomceo.it/fnomceo/downloadFile.dwn?id=148778&version=7. (Reference by authors)

[321] Ref.: Autorità Garante della Concorrenza e del Mercato, "Provvedimento n. 25078. I738. Restrizioni deontologiche FNOMCeO (Intese e abuso di posizione dominante)", *Bollettino settimanale* - Autorità Garante della Concorrenza e del Mercato, 24(37), 24 settembre 2009, pp. 5-31. (Reference by authors)

[322] Ref.: European Conference of Medical Orders (CEOM), "Principles of European Medical Ethics adopted on 6 January 1987 (with Appendix of the Principles adopted on 6 February 1995)". Available from: www.ceom-ecmo.eu/sites/default/files/documents/european_medical_ethics_principles-1987-1995_ceom_cio_0.pdf. (Reference by authors)

[323] Ref.: European Conference of Medical Orders (CEOM), *European Charter of Medical Ethics*. 10 June 2011. Available from: http://www.ceom-ecmo.eu/sites/default/files/documents/en-european_medical_ethics_charter-adopted_in_kos.pdf. (Reference by authors)

> by the CEOM in the wake of the "Sanremo consensus document"[324] promoted by the FNOMCeO.[325]

In this context, we are reminded that the codes of conduct made by such forums or associations lead to rulings in the administrative level. Though the supreme court in Italy at first stated that the Codes of Conduct made by the associations or colleges could not be taken into legal status if they had no legislation on it, later this view was changed. Petrini and Ricciardi continue:

> This approach, however, was overturned by the same Court in its ruling no. 26810/07, which stated that breaches of regulations laid down in professional codes should be treated as breaches of the law. In other words, the Court considered such codes as rules of law with which members of professional associations must comply and which complement objective law for the purposes of identifying disciplinary offences.[326] With this ruling breaches of regulations contained in codes of good practice are considered in the same way as ordinary legislation, and carry the same consequences.
> This approach was again confirmed by the Court of Cassation in ruling no.16145/08, which stated that disciplinary measures "are to be treated as legislation supplementary to general clauses, which are to be interpreted taking account of different legislative sources, albeit of infra-legislative rank, such as regulations of professional ethics" and that the "Code of Medical Conduct" "represents a legal source that can be qualified as a 'legal standard' whose legitimate interpretation is a *quaestio iuris*".[327,328]

What is important for us here at this point is that to differentiate between codes of ethics promulgated by administrative systems of state or union governments or the national and international associations make it necessary for the medical professionals to understand the legal and ethical features of their line of work. Therefore, it is essential to have the knowledge of the legal system and its ties with the medical practice in each country.

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[324] Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri (FNOMCeO), European Conference of Medical Orders (CEOM), *The Sanremo 2010 consensus document*, 15 February 2010. (Reference by authors)
[325] Carlo Petrini and Walter Ricciardi, "The Relationship between Medical Ethics and the Legal System in Italy: Food for Thought", *Annali dell'Istituto Superiore di Sanità*, Vol. 52(4), p. 583.
[326] Ref.: Corte di Cassazione (Sezioni unite civili), *Sentenza n. 26810/07* del 20 dicembre 2007. (Reference by authors)
[327] Corte di Cassazione (Terza Sezione penale), *Sentenza n. 16145/08* del 5 marzo 2008. (Reference by authors)
[328] Carlo Petrini and Walter Ricciardi, "The Relationship between Medical Ethics and the Legal System in Italy: Food for Thought", p. 584.

Figure 47

j. Ethics of Healthcare

More than 90% of the respondents from both countries accepted the topic ethics of healthcare or healthcare ethics to be included in the curriculum. The ruling principles of healthcare ethics are given fundamental consideration in any medical treatment. They are: *autonomy, justice, beneficence and non-maleficence*. Creating a safe and supportive environment for the patient is the aim behind actualizing these principles. Healthcare practitioners should perform their duty with respect of the patient as a person, valuing his/her rights with dignity and concern. Making decisions in dilemmas where different values come face to face in a particular medical scenario is handled by a physician or a healthcare practitioner in a suitable manner when one has a deeper and clearer vision of these ground principles of medical ethics. This also envisages the philosophical and ideological part of professional conduct.

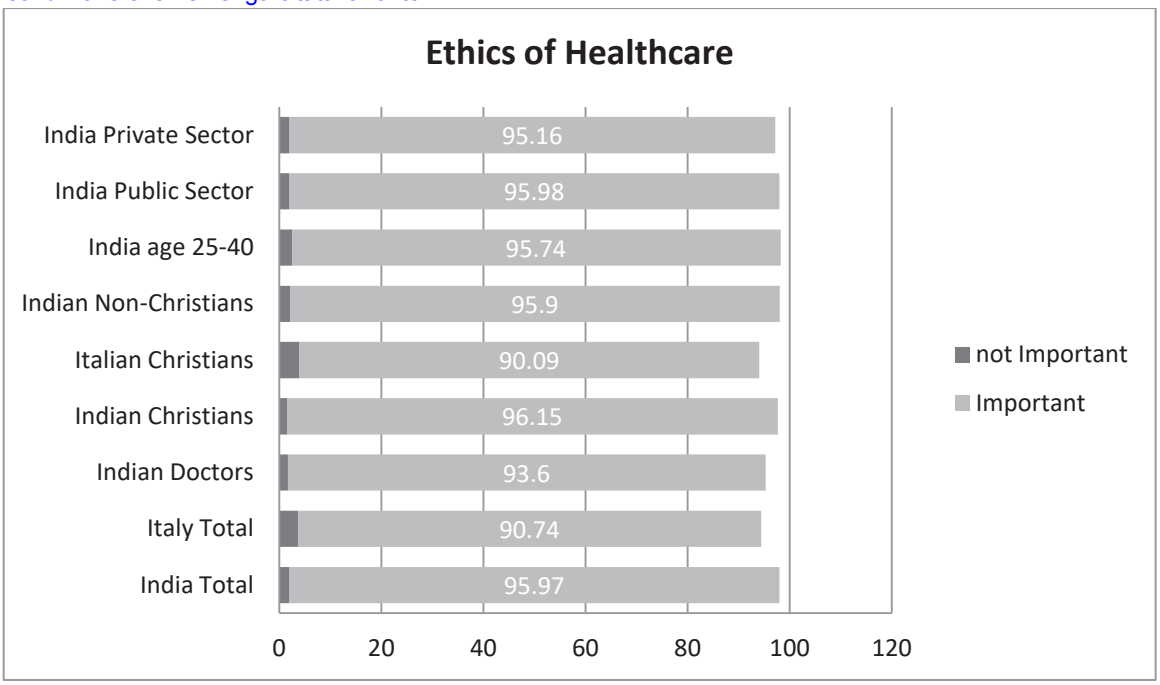

Figure 48

k. Ethics of Human Research

We have seen that there is more than 86% agreement to include this topic in the curriculum. Indian doctors, Indian public sector of study, and Indian non-Christians supported the present theme by less than a 90% majority. There was statistical importance in the analysis between Indian private sector of study and Indian public sector of study. Also, we saw a statistical significance between Indian Christian group and the Indian non-Christian group. It was noticed earlier that in the private sector of study there was a good number of Christians and in the public sector a good number of non-Christians. Therefore, these groups made almost a linear assessment to the present suggestion of including this topic in the curriculum.

Human research involves doing direct research on or about human beings. As Jhama Mandal et. al. indicate, "human research involves significant risks and it is possible for things to go wrong. Despite the best of intentions and care in planning and practice, sometimes things go awry. Now and then mishaps may arise because of technical errors or an ethical insensitivity, neglect or disregard".[329] There, various regulations and norms made worldwide are applied to the human subject research. Understanding the principles of safeguarding human dignity, physical safety and performing the research

[329] Jhama Mandal, Srinivas Acharya and Subhash Chandra Parija, "Ethics in Human Research", *Tropical Parasitology*, 1 (1), January-June 2011, p. 2.

ethically require a deep sense of the reality the human being is. I would like to link this topic and its importance in the next chapter.

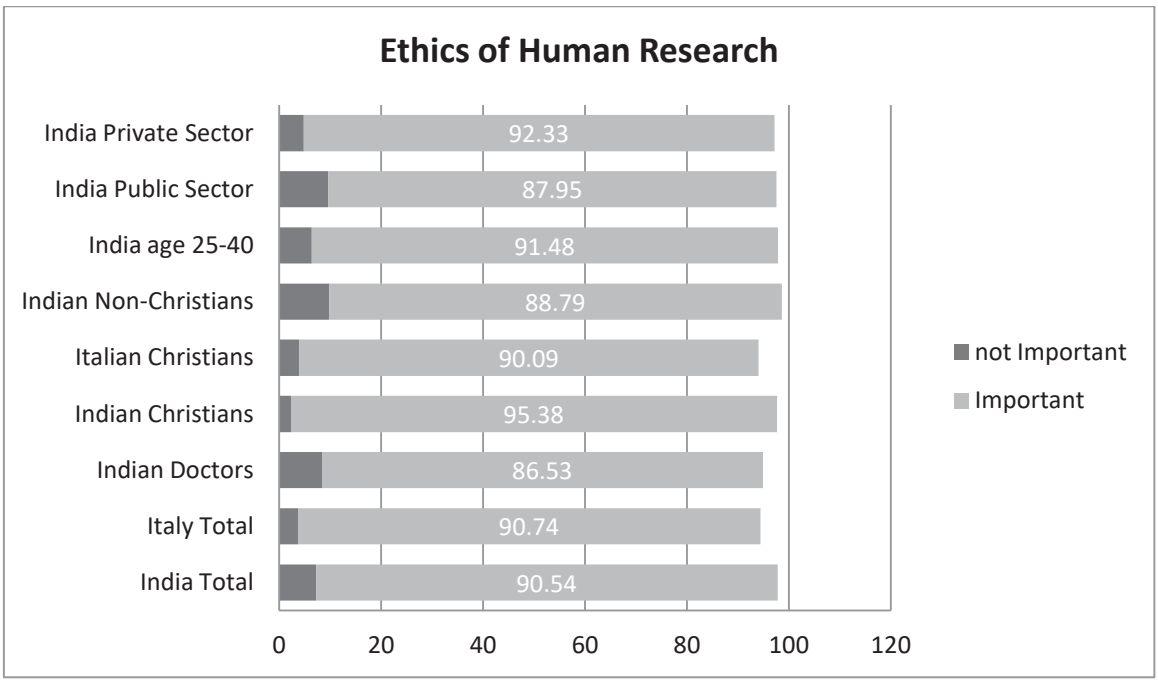

Figure 49

l. Public Health Ethics

In the correlation study the first thing is to note that there was a high majority positive appraisal on this theme of public health ethics and there was no statistical significance among the groups evaluated. The theme was appreciated by more than 86% of the respondents from each group. An increasing concern over the subject has been noted in recent years. In principle the World Medical Association states in its *Statement on Health Promotion*: "Medical practitioners and their professional associations have an ethical duty and professional responsibility to act in the best interests of their patients at all times and to integrate this responsibility with a broader concern for and involvement in promoting and assuring the health of the public".[330]

State and central governments often undertake public health actions and address the population as a whole. It is understood that the principles and values which guide public health can differ from those which guide actions in biology and clinical medicine (bioethics and medical ethics) which are more patient or individual-cantered.[331]As a

[330] World Medical Association, 2015, p. 77.
[331] Office of the Associate Director for Science (OADS), Centers for Disease Control and Prevention, *Public Health Ethics*, retrieved on 16.06.2017 from https://www.cdc.gov/od/science/integrity/phethics/index.htm.

field of practice, public health ethics is the application of relevant principles and values to public health decision making. The ethics framework of public health ethics has three core functions: (1) identifying and clarifying the ethical dilemma posed; (2) analyzing it in terms of alternative courses of action and their consequences; and (3) resolving the dilemma by deciding which course of action best incorporates and balances the guiding principles and values.[332]

Pati S. et. al., after conducting a study in India, remarks, "The results of this study indicate that ethics courses are yet to find their rightful place in the teaching of public health in India. The curricula vary across institutes in terms of the time and content devoted to the teaching of public health ethics. It is suggested that public health programmes in India develop and incorporate ethics courses so as to keep pace with the emerging challenges in the field. An interdisciplinary consortium should preferably be formed at the national level to take up this academic endeavour".[333]

Donato Greco and Carlo Petrini of the Higher Institute of Health in Italy (Istituto Superiore di Sanità) observe that at present, specific courses on human rights in the field of the formation of in public health are not that widespread.[334] They also remark that like many other nations, there is no specific identity for a public health professional in Italy. The text reads, "There is probably a reason for this deficiency, at least in Italy. In fact, although in some countries the public health professional form one precise category, in others, including Italy, do not exist a unique identity of the public health operator, as professional categories are shared heterogeneous. The convergence of diverse disciplines among themselves, most of them having a proper code of ethics makes it difficult the redaction of a unified code.[335] They also remark that the need to

[332] Office of the Associate Director for Science (OADS), "Public Health Ethics", retrieved on 16.06.2017 from https://www.cdc.gov/od/science/integrity/phethics/index.htm.
[333] Pati S., Sharma A. and Zodpey S., "Teaching Public Health Ethics in India: A Mapping Exercise", *Indian Journal of Medical Ethics*, 11(3), July-September 2014, pp. 185-190.
[334] Donato Greco and Carlo Petrini, "Alcuni aspetti di etica in sanità pubblica", *Annali dell'Istituto Superiore di Sanità*, 40 (3), 2004, p. 369. Retrieved on 17.06.2017 from http://www.iss.it/publ/anna/2004/3/403363.pdf. The Italian text reads, "al momento corsi specifici sui diritti umani nell'ambito di precorsi di formazione in sanità pubblica sono però ancora poco diffusi".
[335] Donato Greco and Carlo Petrini, "Alcuni aspetti di etica in sanità pubblica", p. 369, retrieved on 17.06.2017 from http://www.iss.it/publ/anna/2004/3/403363.pdf. The text in Italian is: "Esiste probabilmente un motivo per questa carenza, almeno in Italia. Infatti, sebbene in alcune nazioni i professionisti nella sanità pubblica costituiscano una precisa categoria, in altre, tra cui l'Italia, non esiste un'identità univoca dell'operatore di sanità pubblica, in quanto vengono accomunate categorie professionali eterogenee. Il convergere di discipline diverse tra loro, molte delle quali hanno un proprio codice deontologico, rende difficile la redazione di un codice unificante".

address the questions of ethics posed in public health and to offer a formation to the healthcare workers is much felt, and that itself is an object of study.[336]The growing awareness in the field of public health ethics is hopefully a sign of the more serious concerns the healthcare system would like to realize in the future.

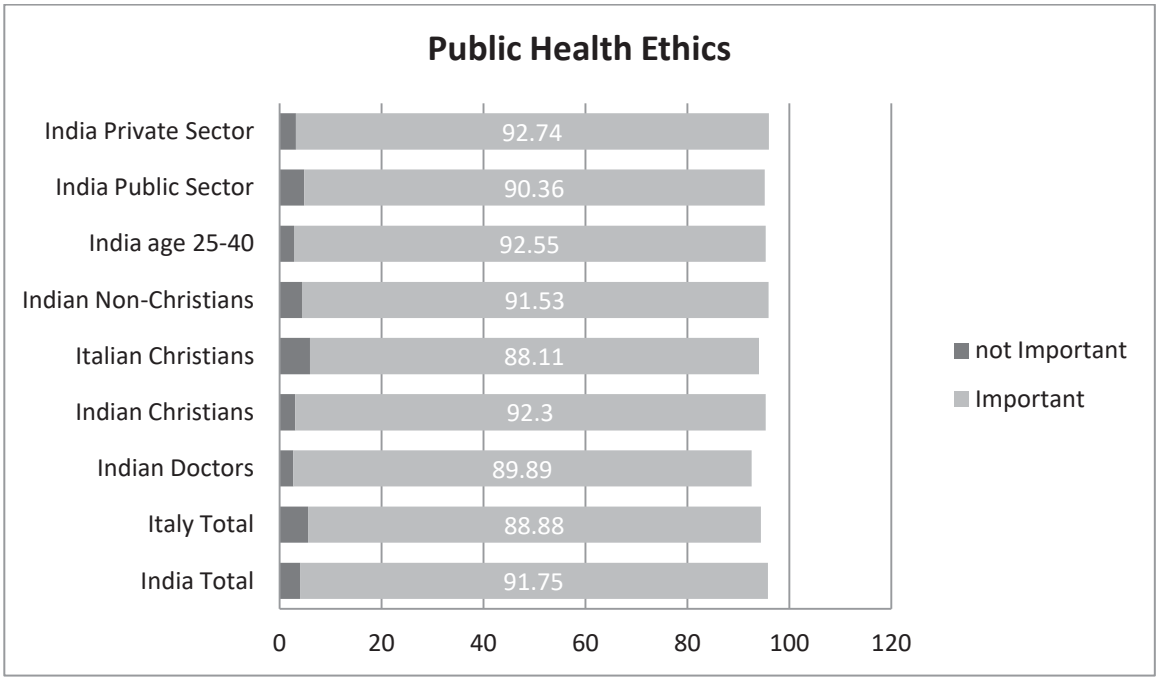

Figure 50

5.6. Comments and Suggestions Received from the Questionnaire

As I have mentioned earlier, the questionnaire was semi-structured with the possibility for the respondents to write their own comments and views in specific areas of concern. Here I would like to present the main points which I have gathered from the comments by different doctors, first from India and then from Italy. The comments here are presented thematically and not in the same order as in the questionnaire. The whole set of comments in the order of the questionnaire is found in *Appendix XVI* (from India) and *Appendix XVII* (from Italy).

[336] Donato Greco and Carlo Petrini, "Alcuni aspetti di etica in sanità pubblica", p. 365, retrieved on 17.06.2017 from http://www.iss.it/publ/anna/2004/3/403363.pdf. Quotting Sandrin-Berthon B., "Éthique et éducation pour la santé", *Echanges Santé-Social,* 86, 1997, pp. 37-39. Italian text reads: "La necessità di affrontare i quesiti di etica che si pongono nella sanità pubblica e di offrire una formazione agli operatori è sentita, ed è essa stessa oggetto di studio".

5.6.1. Important Comments from India

1. There is no medical ethics curriculum formally approved and implemented for India and it is necessary to put it into practice.
2. Integrity in the personal level and formation in values safeguards a professional in doing his duty ethically.
3. There isn't any literature regarding medical ethics that reaches to most of the doctors in our country.
4. There are few efficient teachers in the field of bioethics in India. We need more qualified professors. (9)

There is a greater scarcity of the bioethicists/those who are specialized in bioethics in our country; we need more trained and equipped persons. (5)

5. Privatization of medicine in India, pharmaceutical companies, insurances, lawyers etc. influence doctor's ethical practice negatively. (2)

6. The unethical practices of other doctors especially of their own professors affect one's ethical behavior.

7. There should be an ongoing formation in medical ethics from the undergraduate level. Some even say that this should begin in the school as character formation.

8. Government should have more careful attention in enacting policies to safeguard the ethical practices in profession and institutions.

9. Institutional Ethics Committees are to be formed and they should function properly.

10. With the teaching of bioethics in the curriculum the institutions/ medical colleges there should also be the assurance of ethical practices in the hospitals where the students practice.

5.6.2. Important Comments from Italy

1. The publications in medical ethics are to be reached more to the students of medicine.
2. Personal integrity and individual formation are more important than academic learning.

3. Respect for human life and dignity from its beginning is seen to be an important

4. Conscience is to be strengthened to make good decisions.

5. Medical ethics curriculum should help to deepen one's knowledge and ethical practice of professional healthcare.

6. Ethical technological assistance in medicine is to be taught.

5.7. Results of the Survey: Main Findings

1. A core curriculum based on philosophical and sociological ideologies other than ethics based on religion.

We have already seen that the question number 20 was based on the statement which *Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.* To this question, more than 86% from each group, from India and from Italy, answered that it is a true statement. And there is no statistical significance in the analysis between groups.

When we analyzed question no. 30 which stated, *below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is*. And the option *c* was *philosophical and sociological ideologies*, more than 79% from each group said that it was important; in fact, it was the most voted category in the list by all groups together. And there was no statistical significance found in the correlation analysis.

In the interviews done in India, more than three bioethicists suggested this idea, based on the fact that the influence or pre-dominance of a particular religious view in bioethics would hinder the ethical formation of the students from other religious groups in their personal ethical formation. We also saw comments from India and Italy that supported this view. We took into consideration the fact that if the bioethics teacher is not convinced of the religious content he teaches, because he/she doesn't belong to the same religion, it may not do justice to the course that he/she offers. Therefore, the values that are given without a religious colour would help bioethics teaching have a better result in India, especially in its multi religious context.

We also have the example given by the first medical college that began bioethics teaching in the curriculum, which is none other than St. John's Medical College and the pioneering teachers in bioethics Dr. G. D. Ravindran et al. state: "though the medical college is run by the Catholic Church, the course content is not purely 'religious ethics'. The medium for conveying values at work in the medical profession is the use of concepts from behavioral sciences and analyses of these values for human fulfillment. "Nothing that is human is alien to a Christian"; therefore, this principle in no way contradicts the tenets of Catholic medical ethics. On the other hand, this sound basis gives more credibility to the ethical values and norms that the church proposes for the medical profession".[337]

2. The one who is more eligible to teach bioethics is seen to be a medical doctor with specialization in bioethics.

Question No. 29 had 5 options and the respondents could mark all that apply as an answer to the question and the question had to do with *the person who eligible to teach bioethics in medical colleges*. From India, 74.04%; from Italy, 73.14% of respondents had a choice for *a medical doctor with specialization in bioethics*. The second choice was for *a person who has a PhD in bioethics*. We take this preference with the words of Dr. Prof. Mario Vas who also states that the bioethicists apart from their religious and philosophical backgrounds should also be capable of understanding precisely the scientific and medical process that is happening in a medical intervention or a specific medical dilemma. In the comments section from India, a few stated that it was better that their own professors gave instruction in bioethics than someone from the outside who would only teach bioethics. This also pointed to the fact that more interested and efficient physicians were needed in the field of education in bioethics. There should be adequate programs organised to train these doctors or medical practitioners, also nurses in the case of bioethics education to the nursing students, to cope with societal needs.

[337] G. D. Ravindran, T. Kalam, S. Lewin and P. Pais, "Teaching Medical Ethics: A Model", *National Medical Journal of India*, 10, 1997, p. 289.

3. All the suggested themes were highly appreciated

We have seen that the question number 33 was about the possible themes to be included in the bioethics curriculum in India. All 12 themes suggested were highly valued by the respondents both from India and Italy. It was also noted that *ethics in financial matters* is the theme least popular among certain groups. It was seen as a question of personal integrity. In the context of widespread corruption in India, I would say that, this would be a theme that needs to be given ample consideration. All these suggested themes have various other subjects connected to or part of them, which I shall discuss in the next chapter.

4. There is an urgent need for creating a core curriculum and implementing it in the medical education system in India.

From the questionnaire survey, interviews, and comments we have already seen this fact clearly. In the questionnaire to the Question no. 12, the answer of the respondents was that the government medical ethics policy in India and Italy are not strong. The answer to Question no. 14 from both countries stated *that the ethics curriculum in the medical colleges in India/ Italy is NOT properly designed to encounter the challenges that a medical professional faces in the field*. In response to Question no. 17, the majority from India and Italy said: *lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today*.

We have also seen the answer to Question no. 22 where the respondents with a high majority from India and Italy stated that *in India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners*. Question no. 11 was to discover if the medical undergraduate and post graduate degrees had ethics lessons part of it. Only 55% from India said, "yes"; others didn't have or didn't know whether they had a course or lessons at all. Out of the 274 persons who answer "yes" 85% says that they had less than fifteen lessons. In Italy these percentages are high and they have more than fifteen lessons in each course. Question number 32 points to the fact that the Indian group had an opinion for having up to thirty lessons in the bachelor's degree course to which 49.29% agree, and 8.85% support having more than thirty lessons. Likewise, for the master's degree course fifteen to thirty lessons

were better, said 40.44% of the Indian population responding. Opting for more than thirty lessons were 14.98% of the respondents.

Further, of the interviewed bioethicists, almost all agreed that there was no bioethics curriculum for all India that was effectively implemented, though the Medical Council of India was trying to make it mandatory in the medical colleges. The comments from India as we have seen, had a number of persons state that there exists no curriculum in India, if not in St. John's Medical College and CMC, Vellore, and the steps taken by Rajive Gandhi Health University, Karnataka. According to Dr. Russell D'Souza, as I pointed out earlier, about forty medical colleges accepted the UNESCO bioethics core curriculum. But that amounted to about 10% of the number of allopathic medical colleges in India. Therefore, I affirm that the present system is inadequate and there should be an urgent concern in implementing a core curriculum for bioethics in India.

5. There is a need for more persons specialized to teach bioethics.

The lack of specialized professionals to teach in the field of bioethics is a serious concern expressed by the bioethicists interviewed in India. We have also seen the initiatives taken by ICMR under the leadership of Dr. Nandini Kumar, and the UNESCO program for bioethics in training bioethicists to teach in the medical colleges in India. Still, the inadequacy of the number of experts in this field is felt seriously in India. Unfortunately, the ICMR projects on training bioethicists were closed down after a few years. At present Yenepoya University, Mangalore, and Indira Gandhi National Open University (IGNOU),[338] New Delhi, are trying to provide certificate, diploma, and post-graduate courses in bioethics. What is needed are more national and international collaboration to train more who are specialized in the field of bioethics in the context of India.

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[338] IGNOU programme of bioethics is available at http://www.ignouonline.ac.in/icmrproject/ProgrammeGuide.aspx. Accessed on 16.06.2017.

6. Publications in the field of bioethics are to be promoted and widely propagated.

This is a reality in India and Italy as we have seen with the 28th question of the questionnaire. The large majority of the respondents did not know whether there existed publications in the field of bioethics. And those who were aware, knew just a couple of them at most. Hard copies may not be available due to various reasons pertaining to publication in printed copies and circulation. It is also true that in India there are few publications in the field of bioethics. A notable one is the presence of Indian Journal of Medical Ethics. Books on the subject are a very scarce reality.

A feasible option is to use the web publications on the internet, which also needs proper guidance from the part of the users, because without an introduction into the subject of bioethics and medical ethics, the diverse disciplines which are components of bioethics may not be so easily accessible and understandable for an undergraduate student.

Another fact is that the context of India is different from that of the West. So a bioethics functional in the West may not be so in the Indian context, which needs clarifications on a deeper level.

Still, another truth is that, publications, articles, features, and the like, published in the Indian context, are less compared to the Western world. However, in recent years we have seen an increase in these publications, their need to be of qualitative content and ample propagation to these publications in India. The libraries in the medical colleges can make them available for students. Of course, it gets better attention when accompanied by a proper ethics course attended by the student during his/her formation.

7. A better medical ethics education can create a better healthcare system.

More than 82% from every group agreed to this point that a *better medical ethics education can create a better healthcare system* in the country as we see in the response to the Question no.22. When we evaluated the questions prior to it and saw the fact that in India, there was a shortage of ethics courses offered and less availability of specialized persons in the field, we realize this problem must be tackled with the implementation of a proper medical ethics curriculum and the training of a sufficient number of experts in the field of bioethics. Surprisingly, in Italy more than 88% of the

respondents affirmed the statement in Question no. 22 to be true, but it also made clear that the medical ethics education in Italy too can be improved.

Added to this point is the response to Question no. 26 which states, *I have an opinion that we need to update time to time the curriculum of medical ethics in the universities*. Responding positively were 77-79% of the respondents from Italy and more than 84% from every group in India. A definite need exist in updating the course contents as the changing needs arise in the medical field. The ethical formation of the healthcare professionals can be made better and this would result in a better ethical practice in the medical profession.

8. Government laws and hospital policies are very important in maintaining ethical practices in the medical field.

Question no. 31 was a query on *some possible reasons for unethical practices in medical profession.* And the respondents had to indicate how serious a problem each of the following is in their opinion. The first two options were *(a) hospital policies and (b) government policies.* More than 81% from every group from India and Italy confirmed that hospital policies are important factors that influence their ethical decisions. Likewise, more than 75% from each group from both countries agreed to the view that government policies were influential in their ethical decisions. Therefore, the policies formulated by the hospitals and government must be strongly ethical in value and in their implementation.

9. There is a need for an ongoing formation in ethics.

More than 90% of the respondents from India and more than 73% of the respondents from Italy had the opinion that an ongoing formation in ethics is needed for the professionals in the medical field. WHO has already initiated continued medical education programmes worldwide, also in diverse centres in India.[339] This course can also include bioethics topics which would keep the doctors up-to-date with the scenario in question. Various universities in different countries organise seminars, colloquiums,

[339] Ref.: O. Bishakha De Sarkar and Sanjai Kumar, World Health Organization, "Continuing Medical Education in India", retrieved on 18.06.2017 from http://www.who.int/bulletin/volumes/82/2/feature0204/en/index1.html.

consortiums, workshops, and the like maintain the bioethics education current with the working medical professionals.[340] Some also offer online courses in medical ethics. These methods can also be adopted in India to evaluate the competence of the institution that provides it and the course content and methodology it follows.

10. It is better to have a medical ethics curriculum in all the medical systems of India.

Though diverse in nature and methods, all medical traditions should have a medical ethics learning programme, according to the majority from India and Italy. As we have seen earlier in the discussion part of Question no. 19, for the Italian group this topic may not be a concern as serious as it is for India. Indians have affirmed this statement with more than 78% of all groups agreeing to the statement. The modality may be different but including variations that suit the traditions of these medical systems, the value system of the medical professionals can be upheld to meet the ethical standards through introducing and implementing an ethics education proper to the particular medical stream.

11. Diverse technologies and methods can be used for an effective teaching of bioethics.

Question no. 24 dealt with this query whether it is better to use diverse methods to impart the knowledge in bioethics. The answer from both the countries confirm with more than 80% of the respondents supporting the statement from each group analysed. The means suggested in the statement were video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium, etc. There were people from India who suggested in the "comments" that even spiritual meditation, Yoga, etc. could contribute to the formation

[340] Ref.: World Federation for Medical Education, "Continuing Professional Development (CPD) of Medical Doctors", *WFME Global Standards for Quality Improvement*, 2003, available at http://wfme.org/standards/cpd/16-continuing-professional-development-cpd-of-medical-doctors-english/file; http://bioethics.pitt.edu/continuing-education; http://bioethics.hms.harvard.edu/; http://medicalethicshealthpolicy.med.upenn.edu/online-learning etc.

of a good personality which would help one act ethically because personality formation is seen to be very important in the professional field.

We have also seen the practical example given by Dr. Nandini Kumar (statement in the interview, Chapter IV) that when she had conducted the bioethics training programme, she also had organized Yoga sessions, meditation, and input from different spiritual and medical traditions. And this was found very helpful for the trainees.

12. Personal integrity and self-formation is seen to be very important in ethical behaviour in the medical field.

This would be a strong point that we could decipher from the comments that we have received from the questionnaire. The question about personal convictions as sources of ethics was evaluated with 53% to 79% agreement by different groups analysed in the survey. Compared to the other sources of ethics, government policies or hospital policies may be seen less important but in the comments many people argued that it is in forming the personality with good ethical convictions that professionalism in ethics can survive.

There were also respondents who argued that this character formation should begin in the family and in the school. Some even argued that it was necessary to begin bioethics formation in the schools because only an ethical personality can perform the duties of an ethical medical student and later an ethical professional.

5.8. Interviews Conducted

This section obviously contains also the interviews conducted in India to gather the opinion of a number of eminent bioethicists in the country. I have dealt with this topic in Chapter IV, where I have presented the persons, collaborations, and interviews done in this context. Moreover, I have also inserted the observations and remarks from those interviews in various parts of the current chapter. Since we have already treated those annotations and proposals, I am not repeating those data here.

Chapter VI

Towards a Core Curriculum of Bioethics in India

Bioethics/ medical ethics is seen to be according to their nature an applied ethics today. It is in no doubt to be taught in a broader professional context. As the scientific, philosophical concerns grew more on the scrutiny, that of evidence based theories and practices, bioethics too can adapt these features with its various methodologies of imparting knowledge and building up the value system that make the professional efficient enough to handle a situation ethically. Moreover, as Nathan Emmerich notes, as it is certainly related to wider developments, it is also important that we see such education in its native context and relate the medical students' ethical education to their wider medical 'apprenticeship' and moral socialization.[341]

6.1. Interdisciplinary Nature of Bioethics in the Context of India

In the context of India, where the plurality concentrates a major concern in medical education in its diverse quarters there is no question of having a bioethics in India without an interdisciplinary nature. Researchers found different challenges in implementing bioethics education in medical curriculum in different countries. An international study conducted in China, Hong Kong, Taiwan, Korea, Mongolia, Philippines, Thailand, Malaysia, Singapore, Indonesia, Sri Lanka, Australia and New Zealand by M. Miyasaka et. al. uncovered that around 89 medical colleges have a formal ethics course in their medical curriculum.[342] It was found that teaching formal medical ethics in curriculum is a general practice in the area where the study is conducted, though the preferences of the respondents differed place to place. Most deans reported that physician's obligations and patients' rights were the most important topics for the students.[343] A study in Japan showed that bioethics education in the country suffers from lack of theoretical and organizational basis of interdisciplinary

[341] Nathan Emmerich, *Medical Ethics Education: An Interdisciplinary and Social Theoretical Perspective*, Cham, Heidelberg etc.: Springer, 2013, p. vii.
[342] Miyasaka M., Akabayashi A., Kai I., Ohi G., "An International Survey of Medical Ethics Curricula in Asia", *Journal of Medical Ethics*, 25(6), Dec. 1999, pp. 514-521.
[343] Ibid.

fields extending over medicine, humanities and the social sciences, a weakness that has been understood in terms of the breach between the structure of Japanese academic activity and the interdisciplinary character of ethics.[344] These studies bring forward a question which is very relevant in this context: whether there is any universal method of teaching ethics which is applicable worldwide to medical schools, especially those in non Western developing countries as the culture, religion, and practices are diverse and the content of the curriculum should be sensitive to this.[345]

These facts bring to our attention a greater awareness of taking into consideration the particular Indian context with regard to the implementation of the bioethics teaching in medical colleges. The reality that we need to keep in mind is that it is not only in treating the medical students in their process of learning that we need to give emphasis to the diverse characteristics of Indian society. But, after their medical and ethical formation, the healthcare professionals need to be capable of understanding a patient and the concerned persons in his/her/their specific cultural and religious set up, evaluate their specific values and give medical assistance being sensitive to their particular belief systems.

6.2. Goals of Medical Ethics Curriculum

It is necessary that the core curriculum for medical ethics in India is to be planned strategically in order to meet the needs of the time and the particular healthcare context. As Karuna Rameshkumar says, the structure of the curriculum has to be closely monitored and the curriculum goals have to be well defined. The final objectives of the course is to make the students realize the humanistic and ethical components of healthcare and to translate and integrate ethical principles into clinical practice.[346]

It is also noted that the existing international codes of ethics in the medical field are formulated and time to time revised in order to meet the new challenges arising in the

[344] Miyasaka M., Akabayashi A., Kai I., Ohi G., "An International Survey of Medical Ethics Curricula in Asia", pp. 514–515; Asai A., Kishino M., Fukui T., Masano T., "Postgraduate Education in Medical Ethics in Japan", pp.100–104.
[345] Karuna Rameshkumar, "Ethics in medical Curriculum; Ethics by the Teachers for Students and Society", *Indian Journal of Urology*, 25(3), Jul.-Sep. 2009, pp. 337-339, retrieved on 15.06.2017 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2779957/#CIT8.
[346] Ramesh K., "Start Sensitising Medical Students", *Indian Journal of Medical Ethics*, 4(2), Apr.-Jun. 2007, p. 64.

context of the practice of healthcare in different countries. Likewise in many countries including India, the codes of conduct is prepared in order to keep the profession up to the standards. The Hippocratic Oath, being accepted by the medical professionals worldwide has its own reputation. In India, as we have seen, the Ayurveda and Siddha traditions also hold to the Oath of Initiation in Charaka Samhita. Apart from these, there are also important guiding principles like the WMA Declaration of Geneva[347], WMA Declaration of Helsinki[348], International Code of Medical Ethics[349], Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations 2002[350] etc. to be kept in mind while considering the ethical behavior in medical profession.

The Declaration of Geneva was adopted at the WMA's Second General Assembly in 1948 and has been revised several times till date making important revisions in 1949, 1968, 1983 and 2006. The second important declaration was on human research which is known as the Declaration of Helsinki in 1964. This document was also put unto many revisions till 2013. Apart from these WMA also makes policy statements which are ethical in character. It has adopted such policy statements on more than 100 specific issues on medical ethics, physician role on environmental ethics, medical education, health systems and other socio-medical topics.[351]

It is significant here also to note that in a curriculum formation the 'target group' is always to be considered. Their cultural, social and educational backgrounds will certainly be a matter of concern while teaching the course contents. It could be a 'profession centered' or 'student centered' education plan. For example, Prof. W.G. Irwin in various occasions reminds the need for a student centered education pattern that helps them to provide a patient centered care in medical profession. Referring the

[347] *WMA Declaration of Geneva*, accessed on 20.06.2017, available at https://www.wma.net/policies-post/wma-declaration-of-geneva/.
[348] *WMA Declaration of Helsinki-Ethical Principles for Medical Research Involving Human Subjects*, accessed on 20.06.2017 from https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/.
[349] *WMA International Code of Medical Ethics*, accessed on 20.06.2017 from https://www.wma.net/policies-post/wma-international-code-of-medical-ethics/.
[350] Indian Medical Council (Medical Council of India), *(Professional Conduct, Etiquette and Ethics) Regulations, 2002*, (Published in Part III, Section 4 of the Gazette of India, dated 6th April, 2002), retrieved on 20.06.2017 from https://www.maharashtramedicalcouncil.in/Files/Code-of-Medical-Ethics-Regulations.pdf.
[351] Ref. World Medical Association, *Ethics Manual*, 3rd Ed., 2015, retrieved on 20.06.2017 from https://www.wma.net/wp-content/uploads/2016/11/Ethics_manual_3rd_Nov2015_en_1x1.pdf.

work *Human Values in Healthcare*[352] by Richard A. Wright, he points out the course objectives as follows:

> 1. To help the student to analyse competently a clinical situation or problem;
> 2. To help the student to identify moral issues inherent in clinical situations;
> 3. To introduce a range of moral concepts, principles and codes used frequently in the discussions of medical ethics and to relate them to everyday morality;
> 4. To encourage the student to examine his or her own values, beliefs and attitudes and to relate to those of others;
> 5. To encourage the student to give his own views based on reasoned moral argument, on moral issues related to practice.[353]

Medical ethics curriculum is to be formulated in view of enabling and encouraging the medical professionals do their respective duties in any given situation. This approach includes didactic formation as well as practical sessions which equip the students with real situations in a professional scenario. The professional formation accordingly student centred, also calls for a healthcare setting which is more patient centred. This is unquestionably a requirement for the health professionals who work in the pluralistic environment of India. This principle of selfless service keeping patient at the centre was also seen in ancient Indian medical tradition, as Dr. Sunil K. Pandya notes, "the teacher and student were reminded that the profession existed for the welfare of the patient. Whilst fair compensation was not frowned upon, the physician was constantly reminded that the primary goal was not fortune for self and family but the care of the sick."[354]

One of the significant points to be noted from the personal interviews and questionnaire suggestions was the topic of character formation of the medical students. From different angles this opinion arises specifying that the ultimate goal of moral education in a medical school is not simply to teach moral principles, but also to craft moral behaviour.[355] We also remember in this context, that in the ancient medical systems of

[352] Ref: Richard A. Wright, *Human Values in Healthcare: The Practice of Ethics*, New York, USA: McGraw-Hill, 1987.
[353] W. G. Irwin, R. J. McClelland, R. W. Stout and M. Stchedroff, "Multidisciplinary Teaching in a Formal Medical Ethics Course for Clinical Students", *Journal of Medical Ethics,* 14(3), 1988, pp. 125–128.
[354] Sunil K. Pandya, "History of Medical Ethics in India", *Eubios Journal of Asian and International Bioethics*, 10, 2000, p. 40.
[355] Cherdsak Iramaneerat, "Moral Education in Medical Schools", Journal of the Medical Association of *Thailand*, 89(11), 2006, p. 1987. pp. 1987-1993; Gross M. L., "Medical Ethics Education: to What Ends?", *Journal of Evaluation in Clinical Practice*, 7, 2001, pp. 387-397; Gross M. L., "Ethics Education and Physician Morality", *Social Science and Medicine*, 49, 1999, pp. 329-342; McCullough L. B.,

India, the character of the student who aspires to become a medical professional was held in high esteem. The candidates had to possess certain physical, moral and intellectual endowments. Dr. Sunil Pandya cites the requirements from a student as given in *Caraka* and *Sushruta Samhita*:

- noble by nature, devoted to truth, intelligent, of a thoughtful disposition, courageous, compassionate;
- excellent character; pure in his behaviour; devoted, clever and compassionate to all;
- endowed with broad understanding, power of judgement and memory, liberal mind;
- disposed to solitude, fond of study, devotedly attached to both the theory and practice of medicine;
- self-control;
- seeks the good of all creatures;
- free from haughtiness, pride, wrath, cupidity, sloth;
- free from those faults which are grouped under the *vyasanas* - hunting; gambling with dice; sleeping during the day; speaking ill of others; infatuation with women; addiction to singing, dancing and instrumental music; purposeless sauntering...[356]

6.3. Models of Curriculum so far Implemented

It is worth analyzing the curriculums that are so far in use in different institutions in India. I have already stated that it was St. John's Medical College, Bangalore which inserted a formal study programme for medical ethics in its undergraduate curriculum for medical students. The second institution of this kind was Christian Medical College, Vellore, Tamil Nadu. As time passed more studies are done on the themes and methodology adopted in teaching bioethics in these institutions. There were later study schemes adopted by Indian Council of Medical Research, IGNOU, Yenepoya University, Manipal University and UNESCO allied universities and institutions that entered in bioethics teachings. A few of these institutions also taught the physicians and able persons to be teachers of bioethics. I would like to bring the attention into the bioethics/ medical ethics curriculums so far used and being used in various institutions in the country.

"Philosophical Challenges in Teaching Bioethics: the Importance of Professional Medical Ethics and Its History for Bioethics", *The Journal of Medicine and Philosophy*, 27, 2002, pp. 395-402.

[356] Sunil K. Pandya, "History of Medical Ethics in India", retrieved on 12.05.2016 from http://www.eubios.info/EJ102/EJ102E.htm.

6.3.1. St. John's Bioethics Programme

St. John's National Academy of Health Sciences, Bangalore, Karnataka State is a Catholic Medical Institution. We have seen its characteristic in detail in the fourth chapter. The St. John's programme of teaching medical ethics in the medical curriculum in the words of Dr. Karuna Rameshkumar:

> The history of medical ethics in India began at St. John's Medical College, which was one of the first institutions at St. John's National Academy of Health Sciences dating back to 1963. As recently as 1998, St. John's Medical College was the only Medical College in India teaching medical ethics as a regular part of its undergraduate curriculum. Some of the topics are addressed by the Department of Forensic Medicine. Interns are required to attend monthly clinical ethics sessions in which cases involving ethical issues are presented and discussed by faculty and members of the department of medical ethics. The Rajiv Gandhi University of Health Sciences (RGUHS), to which the college is affiliated, has recently incorporated medical ethics into its syllabus, using the St. John's template and requiring 40 hours over the period of the MBBS program. Phase I of the 6 hours in the preclinical period has to be covered by the departments of anatomy, physiology, and biochemistry and Phase II of the 6 hours in the paraclinical period are covered by pharmacology, pathology, and microbiology departments. In Phase III, 28 hours have to be covered by the opthalmology, ENT, medicine, surgery, OBG, and other clinical departments. These will be achieved through classroom teaching, bedside teaching, demonstrations by examples and interactions with patients, patient relatives, colleagues and the public.[357]

At the initial stages of its inception medical ethics was taught by the theologians in the institutions. Later there were discussions and a formal structure was made for teaching bioethics in the medical college. The St. John's Programme of medical ethics so far implemented in its essential contents is given below.

[357] Karuna Rameshkumar, "Ethics in medical Curriculum", pp. 337-339 retrieved on 15.06.2017 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2779957/#CIT8.

Table 1 **Curriculum on Medical Ethics for Undergraduates**
Introduction to Medical Ethics
Definition of Medical Ethics
Approaches to Medical Ethics
Perspectives to medical ethics
Ethics of the individual
The ethics of human life
The family and society in medical ethics
Death and dying
Professional ethics
Research Ethics
Ethical work-up of cases
Special situations in Christian bioethics

Table II **Topics for Value Classes in the Pre-Clinical Years**
Adjustment
Knowing myself
My religious beliefs
My value system
Concern for the needy
The need for each other
Sharing
Meaning to life
Character and temperament
Love

Table III **Topics for the Clinical Ethics Meeting for Interns**
Ethical work up of a case
Truth and confidentiality
Ethics at the beginning of life
Ethics at the end of life
Resource allocation
Transplant Ethics
Research ethics
Pharmaceutical ethics
Doctor-patient relationship
Doctor-doctor relationship

The books by George Lobo named *Current Problems in Medical Ethics*[358] and by C. M. Francis named *Medical Ethics*[359]were used for reference in ethical issues. At present the Book published by Olinda Timms namely, *Biomedical Ethics*[360] is considered as the text book of bioethics at St. John's Medical College.

6.3.1.1. Contents of the Book by C. M. Francis, *Medical Ethics* 2nd Edition in 2004.

It was certainly a commendable effort by Dr. C. M. Francis to publish a textbook for medical ethics for the teachers and students in the area of healthcare. It was the first of its kind which was published in India. I would like to mention the topics included in the revised edition of this text book in medical ethics which was published for the Indian students. The thematic arrangement of the book is as follows:

SECTION 1: INTRODUCTION

1. Medical Ethics: Some Basic Issues
2. Teaching/Learning Medical Ethics
3. Codes of Conduct

[358] George Lobo, *Current Problems in Medical Ethics*, Allahabad: St. Paul's Publications, 1980.
[359] C. M. Francis, *Medical Ethics*, New Delhi: Jaypee Brothers, 1993; 2nd Edition in 2004.
[360] Olinda Timms, *Biomedical Ethics*, New Delhi: Elsevier, 2016.

SECTION 2: PROFESSIONAL AND PERSONAL

4. Malpractice and Negligence
5. Confidentiality (Professional Secrecy)
6. Irrational Drug Therapy

SECTION 3: ETHICS OF TRUST VS ETHICS OF RIGHTS

7. Autonomy and Informed Consent
8. Rights of Patients

SECTION 4: BEGINNING OF LIFE

9. Right to Life
10. Sex Pre-selection and Female Foeticide
11. Assisted Reproductive Technologies

SECTION 5: END OF LIFE

12. Care of the Terminally Ill
13. Euthanasia

SECTION 6: HEALTH POLICY AND HEALTHCARE

14. Health Policy
15. Distributive Justice in Healthcare
16. Technology

SECTION 7: EMERGING ISSUES

17. Alternate Medicine
18. Organ Transplantation
19. HIV/AIDS
20. Genetics

SECTION 8: HUMAN EXPERIMENTATION AND RESEARCH

21. Human Experimentation
22. Clinical Trials

6.3.1.2. Contents of the Book *Biomedical Ethics* by Olinda Timms

Comparing to the text book published by Dr. C. M. Francis, the newer version of a textbook in medical ethics by Dr. Olinda Timms, namely, *Biomedical Ethics* included much more than the traditional outlook of a textbook. There were many interesting features like case studies, reflective questions, discussion sessions, suggestions for video clips and movies on the topic of bioethics etc. have made the book

methodologically advanced and more user-friendly with its colour scheme and layout. We take a look into the arrangement of topics in this book:

Chapter 1: INTRODUCTION TO MEDICAL ETHICS

- Why do we need medical ethics?
- Who is a professional?
- History of Medical Ethics
- Indian Tradition in medical ethics: a legacy

Chapter 2: PRINCIPLES OF MEDICAL ETHICS

- How do we decide what is ethical?
- Theories of morality
- Principles of medical ethics
- Religious beliefs and medical ethics

Chapter 3: CODES OF MEDICAL ETHICS

- Codes and laws
- Oath of initiation (Charaka Samhita)
- The Hippocratic Oath
- WMA Declaration of Geneva
- International Code of Medical Ethics
- Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations 2002

Chapter 4: THE DOCTOR-PATIENT RELATIONSHIP

- What is unique about the doctor-patient relationship?
- Expectations of the patient
- Rights
- Physician autonomy versus patient autonomy
- Communication and informed consent
- Vulnerable groups
- Privacy and confidentiality in healthcare

Chapter 5: ETHICS AT THE BEGINNING OF LIFE

- The abortion debate
- The medical Termination of Pregnancy act 1971
- Contraception

- Assisted reproductive techniques
- Prenatal diagnosis and genetic testing
- Severely defective neonates

Chapter 6: ETHICS AT THE END OF LIFE

- Ethical dilemmas at the end of life
- Death, dying, and the doctor
- Euthanasia
- Brain death and states of altered consciousness
- Religious views on euthanasia and death
- Breaking bad news
- Ethical decisions at the end of life

Chapter 7: RESEARCH ETHICS

- History of research ethics
- Codes of ethics in research
- Principles of research ethics
- Ethics in epidemiology and community research
- Ethical treatment of animals in research

Chapter 8: EMERGING MEDICAL TECHNOLOGIES: ETHICAL CONCERNS

- Introduction
- Genetics
- Medical biotechnology
- Stem cell therapy
- Cloning
- Robotics in medicine

Chapter 9: ETHICS OF ORGAN DONATION

- Introduction
- Types of transplant
- Ethical considerations
- Amendments to Transplantation of Humans Organs Act 1994

Chapter 10: PUBLIC HEALTH ETHICS

- Moral theories and principles of public health ethics
- Ethics of epidemiological research

- Challenges in public health ethics
- Distributive justice
- Resource allocation
- Global health

Chapter 11: MEDICAL ERRORS AND NEGLIGENCE

- Medical Errors
- Medical negligence
- Is unethical behavior linked to medical liability?

Chapter 12: THE MEDICAL PROFESSIONAL AND SOCIETY

- Social expectations
- Social roles and responsibilities
- Doctor in the health team
- Physicians as teachers
- Working with doctors from other systems of medicine
- Appropriate use of technology
- Ethical prescription of drugs
- Boundary violations

Chapter 13: PUBLICATION ETHICS

- Why is it important to publish ethically?
- Areas of misconduct in publication
- Ethical guidelines in review and publication
- Benefits of peer review
- Action on research misconduct

CONCLUSION

Being the newest of its kind, the book *Biomedical Ethics* makes its move in the medical education spheres in India. It would hopefully give a boost in the curriculum making process of the administrative structures in the health and education departments in central and state governments. As I have mentioned earlier, also taking into account the words of Dr. Ravi Narayan, St. John's National Academy of Health Sciences, SOCHARA and the Rajiv Gandhi University of Health Sciences Karnataka are trying together to formulate a core curriculum for bioethics for the University. In the all India

bioethics networks this task is jointly taken by St. John's Bangalore and Christian Medical College, Vellore.

6.3.2. Bioethics Curriculum of Christian Medical College, Vellore

Christian Medical Centre, Vellore in the Southern State of Tamil Nadu in India is a non Catholic Christian healthcare institution. The institution has adopted ethical formulations in the administrative and curricular spheres in a later stage as compared to St. John's Medical College, Bangalore. The institution gave importance to the character formation of the candidates through various methods including spiritual inputs. We have seen these in detail in Chapter 4. The curriculum formation of Christian Medical College also has gone through various stages until it reached the present form. The basic structure of the course includes a minimum of 40 hours (not including bedside teaching and clinical rounds). They are distributed through the 4.5 years of medical school, structured as modules. Teaching methods used are various in each module. Small group discussions are used for case based teaching, in addition there are role plays, structured controversies, bed-side clinic, patient narratives, games for teaching, ethics based movies like *Wit* and didactic teaching.[361]

Table 4: CMC Modules in Bioethics[362]

Introduction to Ethics Professionalism Principles in Medical Ethics Ethical Reasoning Historical Perspectives Legal Issues, codes, and guidelines Doctor patient relationship Boundaries in medicine	**Clinical Ethics** Use of frameworks Conflicts of interest Informed consent in clinical care Clinical ethics committees Dealing with pharma confidentiality
Diversity in Ethics Roles of family and society Culture, religion and ethics	**Resource Allocations in Health** Distributive justice Technology in medicine

[361] Christian Medical College, Vellore, *An Integrated Bioethics Curriculum for Health Personnel in India*, retrieved on 10.06.2017 from http://www.cmch-vellore.edu/WeeklyNews/othernews/LT2014/awards/pdf/bioethics.pdf.
[362] Ibid

Use of Limited Resources Distributive justice Justice in everyday medicine Transplant ethics Poverty and medical care Duty to rescue	**Issues with Capacity to Consent** Parental decision making Substitute decision making The Mentally ill patient The unconscious patient Rights of children
Death and Dying Allowing death, and the right to refuse care Physician assisted suicide Withholding life saving treatment, termination of life Sustaining treatment Pain and alleviating pain	**Student Specific Issues** Team work Honesty Dealing with unethical behaviour Medical malpractice and disclosure
Justice and Infectious Disease Ethics of HIV, TB and other infectious diseases The right to health The rationale for mutual caring	**Public Health Ethics** Duty to protect the public Human rights
Global Health Health patterns in an unequal world Social determinants of health Health systems	**Unequal Relationships** Gender and health Poverty and health
Ethics and New Life Reproductive medicine ethics Termination of pregnancy The interests of the child being born and living life Sex selection	**Research in Developing Countries** Autonomy Privacy and confidentiality Voluntary and informed consent Obligations to the community Standard of care, Post trial access Community in Research
Research Ethics Principles of research ethics Ethical issues in research Standard of care, post trial access, ancillary care IRB, DSMB and compensation Informed consent Research misconduct and authorship ethics	

Dr. Anuradha Rose, Dr. Kurian George, Dr. Sunil Chandy and Rev. Arul Dhas are instrumental in having a ground survey and finalizing this scheme for bioethics for Christian Medical College, Vellore. They also affirm that it still an ongoing project.

6.3.3. IGNOU - ICMR Bioethics Course Content[363]

ICMR organised this session of Bioethics training with the School of Health Sciences (SOHS) in designing the curriculum, programme development as well as framing the guidelines for various aspects of the implementation process in consultation with the concerned divisions. Besides, they monitored the program to ensure the quality training. The responsibilities were divided by the two organisers as SOHS is responsible for admission of learners, maintenance of progress report and evaluation (both continuous and Term-End-Examination) and ICMR being responsible for organizing the contact session programs. These sessions were not done for the undergraduates in medicine in the medical colleges. It was intended to deepen the knowledge in bioethics and equip more personnel in engaging in the themes relevant to the context of bioethics and medical ethics in India so as to make use of them in disseminating the principles nationwide.

The Course Syllabus

COURSE I – Introduction to Bioethics

Block I : Foundation of Bioethics
Unit 1 : History of Bioethics
Unit 2 : Codes, Covenants, Declaration and Guidelines in bioethics

Block II : Philosophy
Unit 1 : Indian Philosophy
Unit 2 : Western Philosophy
Unit 3 : Philosophy in Indian traditional systems of medicine

Block III : Social Sciences
Unit1 : Basics of Social Sciences

Block IV : Justice Law & Society
Unit1 : Constitutional governance and legal system
Unit 2 : Legal & Ethical accountability of Doctors

COURSE II – Clinical Ethics (Optional)

Block I : Basics of Medical Ethics
Unit 1 : Doctor-Patient Relationship

[363] Ref: http://www.ignouonline.ac.in/icmrproject/ProgrammeGuide.aspx

Unit 2 : Consent Privacy & Confidentiality
Unit 3 : Medical Negligence

Block II : Care of Vulnerable Group
Unit 1 : Beginning of Life
Unit 2 : Death and Dying
Unit 3 : Critical Care Ethics
Unit 4 : Care in HIV/AIDS

Block III : Care of Special Group
Unit 1 : Mentally Incapacitated
Unit 2 : woman's Health
Unit 3 : Organ Transplantation

COURSE III – Social Science Research Related to Health (optional)

Block I : Social Sciences related to health I
Unit 1 : Community Culture and Social Institutions
Unit 2 : Cross/ trans-cultural ethics
Unit 3 : Issues related to Gender

Block II : Social Sciences related to health II
Unit 1 : Issues related to Adolescents
Unit 2 : Addressing issues of same sex desiring people
Unit 3 : Disability and Masculinity
Unit 4 : Ethical Issues in Care of Addicts

COURSE IV – Research Methodology

Block I : Quantitative Research Methods
Unit 1 : Introduction to Research Methodology
Unit 2 : Epidemiology, causal associations and measures of disease frequency
Unit 3 : Observational Studies
Unit 4 : Diagnostic and Screening tests
Unit 5 : Clinical Trials

Block II : Qualitative Research Methods
Unit 1 : Basics of Qualitative Research
Unit 2 : Qualitative Research Analysis

Block III : Biostatistics
Unit 1 : Introduction to Biostatistics
Unit 2 : Probability
Unit 3 : Sampling & Sample Size Estimation

Unit 4 : Inferential Statistics
Unit 5 : Correlation

COURSE V – Educational Technology and Communication

Block I : Fundamental concepts of Educational Technology
Unit1 : System Approach to Education & Curriculum planning
Unit 2 : Educational Objectives and Taxonomy
Unit 3 : Curriculum Planning

Block II : Teaching & Learning methods
Unit 1 : Teaching and Learning methods
Unit 2 : Assessment

Block III : Communication Skills
Unit 1 : Writing Skills
Unit 2 : How to make Oral presentations an Interesting & Learning experience
Unit 3 : Communication with patient

COURSE VI – Research Ethics I

Block I : General Ethical Principles
Unit 1 : General Principles
Unit 2 : General Ethical Issues

Block II : Pillars of Human Protection
Unit 1 : Ethical Review Committee procedures
Unit 2 : Informed Consent

COURSE VII – Research Ethics II

Block I : Specific Principles
Unit 1 : Clinical Evaluation of Drugs, Devices, Diagnostics Vaccines and Herbal Remedies
Unit 2 : Epidemiological Studies
Unit 3 : Human Genetics and Genomics Research
Unit 4 : Research in Transplantation
Unit 5 : Assisted Reproductive Technologies

COURSE VIII – Special Issues in Research Ethics

Block I : Miscellaneous
Unit 1 : International Collaborative Research
Unit 2 : Animal Ethics
Unit 3 : Publication Ethics
Unit 4 : Ethical issues related to Internet & e learning

COURSE IX – Bioethics and Law

Block I

Unit 1 : Doctor-Patient relationship: Legal& ethical accountability
Unit 2 : Regulation related to Clinical trials
Unit 3 : Bioethics and Regulation I
Unit 4 : Bioethics and Regulation II
Unit 5 : Human Rights foundation on types of rights in healthcare with case studies

We can see that these themes are dealt in depth in 9 courses as bioethics is concerned. It is not only medical and clinical ethics that are treated; but bioethics in its wider concern including animal ethics, ecological concerns, research and its particular details etc.

6.3.4. UNESCO Core Curriculum in Bioethics

It was on 19 October 2005 the 33rd session of the General Conference of UNESCO adopted the *Universal Declaration on Bioethics and Human Rights*, which includes a set of bioethical principles that has been agreed by 191 Member States of UNESCO. This move was done with a vision of making a common platform for bioethics in its dissemination and promotion for the practical purposes in all the nations of the world. The core curriculum formulated for this purpose included two sections: 1. It includes the core contents with objectives, syllabus and teacher manual for each unit of the curriculum. 2. Contains the proposed study materials for each unit of the curriculum.[364]

Table 5: Section 1 – Syllabus - Ethics Education Programme

	CORE CURRICULUM CONTENT	
Unit 1	What is ethics?*	2 hours
Unit 2	What is bioethics?*	2 hours
Unit 3	Human dignity and human rights (Article 3)	2 hours
Unit 4	Benefit and harm (Article 4)	2 hours
Unit 5	Autonomy and individual responsibility (Article 5)**	1 hour
Unit 6	Consent (Article 6)**	2 hours
Unit 7	Persons without the capacity to consent (Article 7)**	2 hours
Unit 8	Respect for human vulnerability and personal integrity (Article 8)	1 hour

[364] United Nations Educational, Scientific and Cultural Organization, *Bioethics Core Curriculum: Section 1 – Syllabus Ethics Education Programme*, Paris: UNESCO Division of Ethics of Science and Technology, 2008, p.3.

Unit 9	Privacy and confidentiality (Article 9)	2 hours
Unit 10	Equality, justice and equity (Article 10)	2 hours
Unit 11	Non-discrimination and non-stigmatization (Article 11)	2 hours
Unit 12	Respect for cultural diversity and pluralism (Article 12)	2 hours
Unit 13	Solidarity and cooperation (Article 13)***	2 hours
Unit 14	Social responsibility and health (Article 14)***	2 hours
Unit 15	Sharing of benefits (Article 15)***	2 hours
Unit 16	Protecting future generations (Article 16)****	1 hour
Unit 17	Protection of the environment, the biosphere and biodiversity (Article 17)****	1 hour

Total: 30 hours; Content Note (1 hour = 60 minutes)

{* Units 1 and 2 are tied together; ** Units 5, 6, and 7 are tied together; *** Units 13, 14, and 15 are tied together; **** Units 16 and 17 are tied together.}[365]

The UNESCO bioethics programme has 30 hours of teaching consisting of 17 units. In the second part of the project UNESCO also provides a study material for each of these topics so that one who teaches can better assimilate the ideals and impart it to the students. As we have come to know, from Dr. Prof. Russell D'Souza, the in-charge of South Asia Region for UNESCO Bioethics dissemination, the network of colleges those who adopt the UNESCO Basic Bioethics Curriculum increases year after year. At present it has more than 40 institutions which have adopted this scheme of bioethics to their medical education programme.

6.3.5. Excerpts from Olinda Timms' Book *Biomedical Ethics* on "Teaching Medical Ethics – an Integrated Approach"[366]

With the support of her research and experience Dr. Olinda Timms says that teaching hours of medical ethics can be allocated in the first years of lectures and discussions. In

[365] Ibid.

[366] This section is taken from Olinda Timms, "Appendix B", *Biomedical Ethics*, pp. 382-387; Ref. also: Revised Ordinance Governing MBBS Degree Course and Curriculum of Phase I and 2 Subjects 2004. Section 5 – "Teaching of Medical Ethics in MBBS", Karnataka: Rajiv Gandhi University of Health Sciences, 2004; "Case Conference, How do we teach Medical Ethics?", *Journal of Medical Ethics*, 7, 1981, pp. 92-94; S. M. Glick, "The Teaching of Medical Ethics to Medical Students", *Journal of Medical Ethics*, 20, 1994, pp. 239-243; M. D. Jewell, "Teaching Medical Ethics", *British Medical Journal*, 289(6441), pp. 364-365; E. D. Pellegrino, "Teaching Medical Ethics: Some Persistent Questions and Some Responses", *Academic Medicine*, 64(12), 1989, 701-703.

the later years this can be integrated with the clinical subjects. It is better that a clinician who is trained to do the organisation of bioethics course systematize the course content and methodology in the medical college with the help of other teachers in the medical college. Ethics should not be disconnected from theory and practice. Therefore, classroom teaching, discussions and practical inputs from the wards and clinical sessions would reinforce the ethical learning.

Bedside teaching the light of the academic sessions the students had in the class rooms would be a living experience in the formation of the medical professional. This would also make every faculty of medicine involve in the ethics teaching. Along with this the personal experiences of the professors can also give profound insights in the ethical decisions of the students.

As teaching methods, case studies, movies and videos, workshops, slide shows can be included. There can also be guest lectures by experts in medical and ethical field. Occasional visits to haemophilia clinics, genetic counselling centres, or medical outreach programs are also options to give an ideal setting of ethical formation for the students. She also suggests the subjects that can be taught in the pre clinical and clinical years including the diverse faculties that can give an orientation to particular subjects.

I. Pre Clinical Years
Why did I choose this profession?
Brief History of Medicine
History of Medicine in India (and the College)
Who is a good doctor?
Who is a professional?
Principles of Ethics
Codes of Ethics
Indian Tradition and Medical Ethics
Effective Communication

Table 6

II. Clinical Years
Topics common to all clinical years are as follows:
Informed Consent
Confidentiality
Communication – Breaking Bad News
Allocation of Resources
Respect for Patient Autonomy
Role of the Family
Patient as a Participant in Research
Conflict of Interest in Tests and Drug Prescriptions

Table 7

She also suggests the *Subjects that can be taught in specific related clinical subjects:*

Pathology:
Ethics of research on Stored Samples
Bio banking
Ethics of Cord Blood Banking

Microbiology:
Ethics of HIV Testing
Ethics of Samples and Nondisclosure
Vaccines and Clinical Trials

Pharmacology:
Research Ethics
Clinical Trials
Medical Representatives
Unethical Prescription Practices

Forensic Medicine:
Medical Errors
Patient Safety
Medical Litigation
Rights and Duties of a Doctor
Patient Rights

Psychiatry:
Capacity for Consent
Surrogate Consent
Mental Health Act
Ethical Treatment of Psychiatric Patients

Pediatrics:
Surrogate Decisions
Assent and Consent
Pre-implantation Genetic Diagnosis
Prenatal Testing
Child Abuse and Laws
Ethics in Research Involving Children

Obstetrics and Gynaecology:
Ethical Issues Related to Abortion
Medical Termination of Pregnancy Act
Sterilization Camps
Assisted Reproduction Techniques
Ethical Issues with Surrogacy
Prenatal Diagnosis Tests
PCPNDT Act

Community Health Medicine:
Public Health Ethics
Social Role of the Doctor
Ethics Related to Epidemiological Studies
Allocation of Resources.
National Health Priorities
Global Health, Migrating Doctors, Medical Tourism

Medicine, ICU:
Euthanasia
Unconscious Patients
Diagnosis of Death, Organ Donation
Advance Directives/ Do Not Resuscitate
Breaking Bad News
Over-diagnosis and Unethical Prescription Practices

Surgery:
Communication and Informed Consent
Patient Autonomy
Ethics of Surgical Training
Patients as Teachers
Conflict of Interest in Implants and Devices

Table 8

Dr. Olinda Timms also suggests that there should be a form of evaluation or assessment of the student regarding his/her ethical formation received in the medical academic years. She has an expanded series of videos and movies, that she denotes, are related to specific themes of bioethics and are given at reference section at the end of the book.

6.4. Core Curriculum in the Context of India

The Medical Council of India in its Code of Medical Ethics describes the Character of the Physician:

> The prime object of the medical profession is to render service to humanity; reward of financial gain is a subordinate consideration. Whosoever chooses this profession, assumes the obligation to conduct himself in accord with its ideals. "A physician should be an upright man, instructed in the art of healing". He must keep himself pure in character and be diligent in caring for the sick, he should be modest, sober, patient, prompt to do this whole duty without anxiety; pious without going so far as superstition conducting himself with propriety in his profession and in all the actions of his life.[367]

The responsibilities of a medical practitioner in the Indian context need special attention. There are various sectors of the society falling into the category of "vulnerable groups". Healthcare if not seen as a service, it is not easy that all the needs of the society in the healthcare sector are satisfied. What we believe in creating a core-

[367] Ref: Medical Council of India, *Code of Medical Ethics*, (Printed by Karnataka Medical Council).

curriculum for bioethics in the context of India, is with this purpose of making good professionals in the field of medical care in the society. The thrust from the interviews, comments and the survey in this regard showed the fact that only a person with an integrated personality can function as a good medical practitioner. Moreover, the survey and the comments from it including the interviews assert the opinion that a better medical ethics education can create a better ethical practice in medicine in India.

This core-curriculum which is being proposed doesn't argue to be 100% perfect in this regard. It is an initiative in the light of the research done in various modes, to give certain evidences and stabilize an indispensable constituent that is lacking in the context of medical education in India. There are no "inviolable" rules proposed by medical ethics in this way. It is more of an invitation to the teachers and students to be more enriched by certain outlooks and principles from law, philosophy, social sciences, religions, different medical traditions etc. to deepen their practical knowledge in medicine so as to foster a better concern to individuals and the society in practicing their profession of healthcare.

6.4.1. Teaching Methodologies

Nathan Emmerich states in his research book that, "there has been limited bioethical research on how, and to what effect, medical ethics is taught to nascent medical professionals. It is also a concern to study what research is undertaken to understand the psychological development of the medical students. Also little research has been taken place to a wider research into the pedagogic process, of education, teaching and learning".[368] Teaching methodology already suggested in the questionnaire was highly appreciated. It included video presentations, group discussions, practical situation analyses, experience sharing, workshops, role plays, seminars, attending international colloquiums etc. We have the examples from the new text book Biomedical Ethics by Olinda Timms, the Bioethics programmes organised by Dr. Prof. Nandini K. Kumar for Manipal University (Appendix XVIII) and the programme organised by Dr. Amar Jesani, Dr. Vina Vaswani and team For Yenepoya University, Mangalore (Appendix XIX) include various discussions, presentations, films etc. These are very appealing

[368] Nathan Emmerich, *Medical Ethics Education: An Interdisciplinary and Social Theoretical Perspective*, p. vii.

way of imparting principles in bioethics. There are a number of movies and videos listed in the book of Olinda Timms, *Biomedical Ethics*.[369]

It is worth analysing the 'SPICES' model[370] of Medical Education proposed by R. M. Harden et. al., which is also significant in the context of medical ethics education. According to their findings, there are six education strategies which have been identified relating to the curriculum in a medical school. Each model is represented as a spectrum or continuum: *Student-centred/ teacher-centred, Problem-based/ information-gathering, Integrated/ discipline-based, Community-based/ hospital-based, Elective/ uniform* and *Systematic/ apprenticeship-based.*

In this analysis the factors supporting an orientation towards each end of the continuum are presented for each strategy. Newer institutions of medical education tend to be more to the left on the continuum, traditional and established schools more to the right. Each school, however, has to evaluate where it stands on each concern and to establish its own profile.

In the formation of a specific curriculum in medical ethics, the SPICES model of curriculum strategy analysis can be used in planning or review, in tackling problems relating to the curriculum and in providing guidance relating to teaching methods and assessment. It is also an essential part of any curriculum to develop methodologies and strategies adequate to the imparting of knowledge in a given situation. Therefore, keeping the curriculum up to date with its scientific and ethical contents is an indispensable aspect of the formation of medical professionals.

6.4.2. Number of Lessons

The questionnaire survey indicated that the number of classes to be devoted per year for bioethics learning is almost 20 lessons per year and 60 hours for the bioethics course in the whole 4 years of undergraduate course. This also depends on the other courses being taught in the medical colleges. At present there are serious reasons raised from different corners on inclusion of another "subject" in the medical curriculum when the

[369] Olinda Timms, *Biomedical Ethics*, pp. 397-400.
[370] R. M. Harden, Susette Sowden and W. R. Dunn, "Educational Strategies in Curriculum Development: the SPICES Model", *Medical Education*, 18(4), 1984, pp. 284-297.

work load is so heavy on the medical students with their class room and bedside learning. Still, 15 hours dedicated to bioethics learning in each year of their formation will do its results if the endeavour is taken seriously. Viewing movies, videos, bedside sessions etc. can be included in the learning programme as time and circumstances permit.

6.4.3. Who Can Teach Bioethics/ Medical Ethics?

Recollecting the initial stages and growth of medical ethics in America and the United Kingdom, Jonsen comments that the early development of medical ethics in the UK can be contrasted with the development of Bioethics in America where predominantly theologically inclined outsiders inserted themselves into medical schools and hospitals and then managed to receive 'official' appointments.[371] These individuals soon became medical insiders and their *bioethics* a part of the official curriculum.[372] In India the situation was not much different as we consider the first institution which began to teach a formal medical ethics course in a medical college, i.e., at St. John's Medical College, Bangalore. We have seen that the first resource persons in ethics education in the medical college were the chaplains of the college.

One of the main concerns in teaching medical ethics that we have seen from the survey and its comments was that the person who teaches ethics should be a role model. He/ she should not in teaching and in his/her practice gives scandals to the students. Also the view was so strong that one who is a practicing medical doctor with a specialization in bioethics is more eligible to teach bioethics. It is because he uses the clinical language that the students can recognize and understand better and since he is a physician, the inputs are readily accepted by the medical students.[373] On the other hand we need to also evaluate medical ethics, or with its wider concerns bioethics, is an interdisciplinary enterprise. Therefore, as many have suggested in the comment section of the questionnaire experts from the fields of psychology, psychiatry, law, and other social science departments can also take part with competence in teaching bioethics.

[371] A. R. Jonsen, *The Birth of Bioethics*, New York: Oxford University Press, 1998, p. 36.
[372] Nathan Emmerich, pp. 42-43.
[373] Ramesh K., "Start Sensitising Medical Students", p. 64.

There were also observations like the Yoga sessions and religious meditation practices would help the medical students and professionals to have personal integrity and modesty in their behaviour. Though it stands as an "unscientific" comment to prove, as I have noted earlier, Dr. Nandini Kumar in her interview brought my attention to the fact that in her ICMR Bioethics Education Programme she had positive results from the students who had yoga, and other religious sessions. Dr. Anuradha Rose in her interview noted that there are spiritual sessions conducted for the students including annual spiritual retreats that help students to follow a better ethical standard in their medical practice.

6.4.3.1. Importance of the 'Hidden Curriculum'

There is a severe criticism raised against the medical practitioners who indulge in corruption and malpractices. It means that though a good number of the medical professionals are literate or skilled in their respective departments, they are not educated or cultured enough to be able to transcend their delicate negative impulses. This factor is extremely important when it comes to the assessment of the character of the educators in the medical field. Therefore, the contemporary researchers in the field of medical education do speak of a 'hidden curriculum'; the unseen educational content which the students learn during their curricular activities and later practice in the medical field.

In the field of Medical Ethics this theme is of vital importance, because, when character formation of the medical students being the area under discussion, it implies that the teachers themselves must be role models to the students. The students do appreciate these positive role models and declare that these professors/lecturers have an encouraging and motivating impact on their character formation. Teachers' commitment to teaching and to communicating with students, patients, and colleagues are highly rated by the students.[374] Hence, the selection and formation of teachers in the medical field is of fundamental importance.

[374] Heidi Lempp, Clive Seale, "The Hidden Curriculum in Undergraduate Medical Education: Qualitative Study of Medical Students' Perceptions of Teaching", *British Medical Journal*, 329, 2004, p. 771.

Dr. Sunil K. Pandya states that not all persons can become good teachers. The following are amongst the requirements of the teacher listed by *Caraka* and *Sushruta*:

- compassionate towards those who approach him;
- pure of conduct;
- clever, experienced, well-disposed towards disciples and disposed to teach them;
- without malice or a wrathful disposition;
- capable of bearing privations and pain;
- capable of communicating his ideas to pupils seeking his instructions;
- knowledge of the medical sciences has been supplemented by knowledge of other branches of study.[375]

Dr. Pandya also mentions that the student was not to be made to limit his studies to Ayurveda alone but was to include as much as possible of all other branches of science and philosophy which must be known for a true understanding of the human being. The student was also made to understand that the formal training is only the minimum equipment of the physician. It is only after adequate experience through years of practice, observations, further study and discussions that a person can aspire to be worthy of the profession. If he failed to keep up this schedule of constant improvement, he was to be regarded not as a true physician but merely as an impostor.[376] Therefore, the academic formation is merely a beginning of an ongoing formation in an interdisciplinary context, to become a true physician.

6.4.4. Themes in the Core Curriculum

Proposal of the themes in medical ethics/bioethics was kept to be the central concern in this whole research. This is done in the light of the surveys and interviews completed in India and Italy. But to a major share of the contributions come from the vast literary analysis especially the existing curriculums in bioethics nationally and internationally. I have given a special consideration to the context of India which I think is indispensable in this context. The themes certainly demonstrate their interdisciplinary character expanding from the medical field to animal welfare and environmental concerns for a better protection to healthcare.

[375] Sunil K. Pandya, "History of Medical Ethics in India".
[376] Ibid.

6.4.4.1. Bioethics for the Undergraduate Students of Medicine

To speak frankly, the medical ethics core-curriculum that is to be inserted in the medical curriculum in India should include all the physicians in the allopathic medical colleges, dental colleges, psychiatry department, veterinary college etc. But in this core-curriculum that division is not seen. The core curriculum here is divided into *pre clinical years* and *clinical years* of learning. The introductory part can be the basic for all and other themes are to be handled with appropriate modules those are adaptable for the specialization one is engaged in. I would also try to propose the themes for Masters Degree and for the Nursing Course. Including the special techniques for teaching is left to the discretion of the one who teaches bioethics. Each theme can be dealt with an introduction posing a case study that is in direct relation with the theme.

1. Pre Clinical Years		
Units	**Theme**	**Sub Topics**
1	Introduction to Bioethics/Medical Ethics	-History of Medicine and Bioethics -History of Medicine -Bioethics in India -Basic principles of Bioethics -Philosophical foundations -Indian culture and traditional values -Codes of medical ethics
2	Professional Ethics	-The meaning of being a physician/ healthcare professional -Who can be a "good professional in healthcare?" -Ethics of "duty/job well-done"[377] -Effective communication: Breaking bad news
3.	Value of Life, Human Life	-Introduction to value of life and human life -Respect for human life -Human Rights

Table 9

2. Clinical Years		
Units	**Theme**	**Sub Topics**
1	Value of Life Value	-Beginning of life issues: termination of pregnancy,

[377] The "work well done" (in Italian "lavoro ben fatto") is a philosophical reflection in bioethics that envisages doing the duty in its fullest sense of goodness to be achieved. It is to be clearly understood what the method of doing the profession in a "good" manner is. The concern here is not just on the results the work produces, but also the manner in which the work is done with all its academic and virtuous qualifications.

	of Human Life	embryonic stem cell research, pre implantation diagnosis, artificial reproductive technologies -End of life issues: euthanasia, unconscious patients, palliative care, organ donation
2	Dignity of the Human Person	-Dignity and principles that guide in treating patients -Patient as a person and his rights
3	Ethics of Medical treatment, Ethics of Healthcare	-Critical Care -Infectious diseases, HIV -Unethical prescription practices -Equality, Justice and principles of treatment
4	Research Ethics	-Ethics of human research -Research involving children, mentally challenged -Vaccines and clinical trials -Ethics of treatment of animals -Ecological concerns -Publication ethics -Use of Internet and social media
5	Laws and Ethical Practice	-Indian and international legal system in medical field -Medical errors and patient safety -Medical litigation -Rights and duties of doctors -Patient rights
6	Public Health Ethics	-Duty towards the society/public -Bioethics of prevention, preservation and promotion[378]
7	Professional Relationships	-Doctor-patient relationship -Informed consent, confidentiality, mentally challenged patients -Doctor-doctor relationship -Doctors-other healthcare professionals relationship
8	Ethics in Financial Matters	-Corruption, cut practices, unjust and unethical prescriptions -Pharmaceutical companies

Table 10

[378] This is a suggestive topic. Bioethics is not just to be finished by the teaching of ethical practices with regard to the clinical activities. It should have a view of re-vitalizing the society. As the principle says, "prevention is better than cure". Bioethics should try also to make the society healthy preventing it from epidemics and possible diseases. It should also try to preserve the health of the whole atmosphere so that the people living in it can live a more healthy life.

6.4.4.2. Bioethics for Master's Programme

The proposal for bioethics/ medical ethics course for the master students in medicine is for a deepening of the knowledge and disposition that they have already received in the undergraduate medical course. As an initiative newly taken this has to be dealt with an introduction and presentation of the themes in the undergraduate bioethics course in the pre-clinical and clinical years of learning because, as we have seen most of the medical colleges that teach medicine are not engaged in ethics education in their institutions. Therefore, it is necessary to introduce the basic principles to those who are new to the subject.

Masters Programme		
	Introduction to Ethics	Philosophical foundations: Western and Eastern Oaths, Covenants, Regulations
3	Ethics of Medical treatment, Ethics of Healthcare	Critical Care Unethical prescription practices Equality, Justice and principles of treatment
4	Research Ethics	Ethics of human research Ethics in Genomics, neuro-science Research involving children, mentally challenged Vaccines and clinical trials Ethics of treatment of animals Ecological concerns Publication ethics Use of Internet and social media
5	Laws and Ethical Practice	Indian and international legal system in medical field Medical errors and patient safety Medical litigation Rights and duties of doctors Patient rights

6	Public Health Ethics	Duty towards the society/public Bioethics of prevention, preservation and promotion[379]
7	Professional Relationships	-Doctor-patient relationship -Informed consent, confidentiality, mentally challenged patients -Doctor-doctor relationship -Doctors-other healthcare professionals relationship
8	Ethics in Financial Matters	Corruption, cut practices, unjust and unethical prescriptions Pharmaceutical companies

Table 11

6.4.4.3. Scheme of Bioethics for the Nursing Course

The various enquiries made during this research show that not even in the medical undergraduate level there is a satisfactory number of institutions those are engaged in teaching bioethics to its students. The Nursing Colleges and nursing schools which are more than double in number than the medical colleges in India in all the healthcare traditions, have little to do with ethics in their institutions. There are government run public institutes as well as many more private institutes in the field of nursing education. They provide undergraduate degrees course in general nursing and Bachelor of Science (B.Sc.) in Nursing. There are also post graduate courses in nursing Master of Science (M. Sc.) in Nursing. We don't keep aside various courses that are very much active in the healthcare sector like the paramedical courses. Most of them treat the course in Forensic Medicine to speak a few words on ethical behaviour with regard to law and the forthcoming consequences. Therefore, it is argued that there should be a clearly defined course structure for bioethics for the nursing students too. It will equip them to evaluate ethically in different phases of their professional circumstances and also would make them aware of their rights and duties towards the patients, other healthcare professionals and the society. The basic themes are not widely different from that of the medical undergraduate students. The themes, case studies, contextual analyses etc. make the ethics learning vital for the nursing students to understand the various ethical challenges in their professional context. In the same way for the

[379] Ref: Footnote no. 358.

paramedical students too this scheme can be applied with adequate adaptations in the respective disciplines they are engaged in. The basic principle of respect for every human person and every being, for nature, the principle of justice, autonomy, doing no harm, intending the benefits of the patient, being human in practice and interaction, honest and gentle with the colleagues etc. are essential in any profession. Contextualizing these principles as virtues that guide the medical profession would eventually make one a better medical professional in whatever field he/she serves the healthcare system.

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Bioethics for Nurses		
1	Introduction to Bioethics/Medical Ethics	-History of Medicine, Nursing and Bioethics -Bioethics in India -Basic principles of Bioethics -Philosophical foundations -Indian culture and traditional values -Codes of medical ethics
2	Professional Ethics	-The meaning of being a nurse/ healthcare professional -Who can be a "good professional in healthcare?" -Ethics of "duty/job well-done" -Effective communication: Breaking bad news, dealings with patients and relatives
3.	Value of Life, Human Life	-Introduction to value of life and human life -Respect for human life -Human Rights
4	Value of Life Value of Human Life	-Beginning of life issues: termination of pregnancy, artificial reproductive technologies, woman's health -End of life issues: euthanasia, unconscious patients, palliative care
5	Dignity of the Human Person	-Dignity and principles that guide in treating patients -Patient as a person and his rights
6	Ethics of Medical treatment, Ethics of Healthcare	-Critical Care -Infectious diseases, HIV -Equality, Justice and principles of treatment
7	Laws and Ethical Practice	-Indian and international legal system in medical field -Medical errors and patient safety -Medical litigation -Rights and duties of nurses -Patient rights
8	Public Health Ethics	-Duty towards the society/public

9	Professional Relationships	-Nurse-patient relationship -Nurse-doctor relationship -Confidentiality, mentally challenged patients, minors

Table 12

These topics, as I have mentioned earlier, are not just a closed in structure in itself. Modifications according to the context are always welcome. It is also encouraged that with each topic a theme based video, movie, group discussion, bed-side learning, case studies etc. can be demonstrated in order that the theme gets a deeper understanding and the students become better equipped to critically analyse and resolve a situation that needs ethical consideration in their practice. As handling the core challenges in bioethics in the undergraduate level the master students in medicine are better equipped to face new challenges and stabilize their views on ethical practice of medicine. There can be more active participation in debates on contemporary challenges in bioethics and in the practice of medicine, deepening the central principles of bioethics so as to equip themselves to teach medical ethics/bioethics in the medical institutions.

Equipping a medical professional for the critical evaluation of a particular situation and to take an ethical decision beyond the "forces" and tendencies the situation demands is the central concern of the ethics education. The character formation of the person, his/her historical background, the quality of the education that he/she received, religious beliefs, cultural influences, the policies of the institution that he/she works in, colleagues etc. can come into play in an ethical decision making. Primarily the person needs the information of the topics in the particular professional context. As it is often said, to a greater extent, "ethics is caught, not taught".[380] Therefore, along with the informative content the teaching institutes provide in various topics in ethics, they should also be trying to modify the methods of imparting ethics to the students in order that they are formed through a learning and integration practice that would help the future healthcare professions ethical in their every activity.

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[380] After her various researches in the field of ethics education and after writing the book, *Biomedical Ethics*, Dr. Prof. Olinda Timms has the conviction to say this that more than the classroom lectures and the information bundled inside the person, ethics should "touch" the person and become part of his/her day today life.

Conclusion

India and its multi religious, multi cultural, multi lingual and multi ethical characteristics are peculiar to the nation that is not seen in any other countries. Resolving the challenges in the field of bioethics is becoming more complicated as the technology and new innovations in the medical field find their ways in many different methods and approaches of practice and develop to more complex realms of healthcare as a whole in its theoretical and practical grounds. Bioethics education in a systematic and revised manner can contribute to a large extent the necessity to face the ethical dilemmas in the medical field. It is in this view of capacitating the medical students and healthcare practitioners to perform their duties in an acceptable ethical manner the bioethics core curriculum is formulated to be included in the medical education.

The studies done in this regard in India clearly show the lacking of a discipline which is very important in the formation of a healthcare professional. Many had the opinion that they didn't have a course of bioethics or had very few of them. The bioethics policy of the nation is not so strong, but they had a view that with the implementation of a more effective curriculum for bioethics can create a better healthcare system in the country.

The tradition of India with all its religious influences in the ethical evaluation make it really important for the healthcare professional to be sensitive to the religious and cultural values the patients have. Historically, *paternalism*[381] had an upper hand in making ethical decisions and in the contemporary scenario it is seen as inadequate. Today the medical practitioners are more encouraged and obliged to better understand the patient in his/her cultural, religious and social milieu to provide a better ethical healthcare.

It was noted that though there are more than 400 Medical Colleges that are functional in the field of allopathic medicine in India there are a very few who have adopted a scheme to teach bioethics during the undergraduate, postgraduate and nursing courses. The core curriculum proposed has many subjects common to the present, existing curriculums in the very few medical institutions in India. It is an attempt to propose the expansion of the dissemination of bioethics in India with the strong assistance of

[381] Paternalism is explained as the way in which the doctor or the relatives (father or the 'responsible' person) of the patient taking decision for the patient. It assumes that the doctor or the responsible person has more knowledge and authority over the patient to make a decision for him/her. This concept is seen as inadequate today and therefore, in research, medical treatments etc. the necessity of "informed consent" from the part of the patient, or the subject who is treated.

properly guided policies by the Central and State Governments. The core curriculum suggests the topics that can be treated in the preclinical, clinical and internship programmes of the formation of a medical professional. Likewise in the deeper formation of a post graduate medical student, and proposes the necessary knowledge in bioethics for the nursing student. It doesn't mean that this framework is a fully defined and structured formula. It can be seen as a basic foundation of bioethics formation a medical practitioner should have in assessing and taking decisions with sufficient knowledge and diligence. The topics may be expanded by the professors according to the need of the time and circumstances. Improvised and contextualized explanations of the topics for the better integration of the students would always find its fruits when it is done in the right manner. Different techniques apart from the lectures done in the classes are also encouraged, provided they impart a better understanding of the themes in discussion. We have already suggested movies, videos, documentaries, panel discussions, bed side active case studies etc. to foster a better learning in bioethics.

It is already seen that the teacher/professor who imparts the knowledge of bioethics is to be a role model for the students in practicing ethics. We have also noted that there is a scarcity of medical practitioners who are specialized in bioethics. This necessitates the institutions and government agencies to take due steps to train more persons adaptable for the propagation of bioethics in the country.

As the UNESCO bioethics core curriculum in its *Introduction* to the topics suggests, "the curriculum is meant to provide the students to have a way of getting them into reflections upon the ethical dimensions and human rights considerations of medicine, healthcare and science, including the personal, social and community issues. Therefore, it is a prerequisite to teach bioethics in the medical curriculum and it is better to be taught throughout the entire university curriculum".[382] Formal structures like Medical Council of India, Indian Medical Association, and Indian Council of Medial Research can provide a strong base for the establishment of bioethics education in all the medical educational institutions in the country.

The comparative studies done with the control group from Italy has provided a global outlook of certain themes in bioethics that can be commonly adopted in bioethics

[382] United Nations Educational, Scientific and Cultural Organization, *Bioethics Core Curriculum: Section 1 – Syllabus Ethics Education Programme*, Paris: UNESCO Division of Ethics of Science and Technology, 2008, pp.4-5.

education. Certain elements showed the difference between the cultural and religious outlooks of the two nations and the necessity to be more concerned about the specific features governing the ethical principles and views of medical professionals in respective countries.

WMA in its introducing the new Medical Ethics Education Manual hoped to have a universal medical ethics education programme.[383] It is understandable that there are universal principles in medical ethics learning. Contextualizing these principles is to be taken with adequate knowledge and care according to the different frameworks of each nation. To accomplish this, the government agencies, ministries and governing bodies that occupy competence in the medical and healthcare sector have to be diligent in administering laws, rules and regulations and timely updated codes and guidelines to ensure the learning and practice of healthcare in an ethical manner.

It is very important to state here that bioethics, as we have seen, has a wider range of concerns that are beyond medical ethics alone. At the same time there are also issues that a healthcare professional have to comprehend in his/her practice of medicine. These themes include the concern for the environment (environmental ethics), ethical treatment of animals (animal ethics), ethical use of technologies (techno ethics) etc. These are alarming concerns which need active attention and pro-active cooperation from the part of a healthcare professional. The 2006 WMA Statement on the Role of Physicians in Environmental Issues states that "The effective practice of medicine increasingly requires that physicians and their professional associations turn their attention to environmental issues that have a bearing on the health of individuals and population".[384] 2009 WMA Declaration of Delhi on Health and Climate Change also affirms that climate change contributes a major share to the global burden of disease and premature deaths.[385] As the deterioration of the environment is an alarming threat to the whole health system, it is also a concern for those who work in the healthcare sector to facilitate health by going to the roots to heal it, i.e., preservation of the nature to prevent from diseases. In the same way ethical treatment of animals and giving respect to other creatures is also a vital concern in scientific research and further procedures where the animals are included in treatments. Especially in the context of India, where

[383] Delon Human, Secretary General, World Medical Association, "Forward", *Medical Ethics Manual*, 3rd Ed., 2015.
[384] *WMA Medical Ethics Manual*, 3rd ed., 2015.
[385] Ibid.

the majority of the population believes in the divine nature/character of animals it needs a critical concern in the ethical treatment of animals. WMA declarations also warns about the manner in which the environment and the animal eco-system is endangered for example, by air, water and soil pollution, unsustainable deforestation and fishing, and the proliferation of hazardous chemicals in consumer products. These would contribute to the deterioration of the natural habitat of many animals and disturb the whole eco-system which would in result bring risks in healthcare of the human beings. Therefore, a wider concern in medical ethics, including themes in the broader concept of "bioethics" is very much essential to make it a discipline "interdisciplinary" in its true sense.

It is positive in this regard to see that most of the bioethics curriculums that are formulated in the context of India include also the ethical treatment of the animals and ecological concerns. In a deeper and wider level it gives the traditional oriental view regarding health and healthcare, i.e., safeguarding health is not just in curing the diseases, but also in preventing them. For this prevention all the elements of life should function harmoniously and in proportion. It considers not only the physical features of health, but the human person as a whole with his/her physical and spiritual attributes. And this "holistic" approach is not an end there in himself, rather, he/she is connected with the whole universe and therefore, as he/she tries to keep the equilibrium around him/her, healthier he/she becomes.

Bioethics being interdisciplinary and the multi faceted healthcare system of India being unique in its nature, the situation demands therefore, a deeper and clearer awareness of the important elements that are influential in healthcare and healthcare ethics. A sincere and mutual cooperation among various components like traditional medicine, religious philosophies, legal system, scientific enterprises, social sciences etc., need to prompt and suitable actions from the part of the Central and State Governments and different administrative systems in establishing codes of conduct, rules and regulations, guidelines, laws etc. should initiate measures to safeguard the healthcare system from abusive elements. Likewise, it is fast achievable to formally establish a system of ethics education in all the medical colleges of all healthcare traditions in India. This scheme of ethics formation is to be evaluated and updated from time to time when necessary and the government as a guardian should be vigilant in keeping up the standards and quality of education in all these institutions.

Appendix I

Questionnaire Survey (*English*)*

Dear and Resp. Sir/ Madam,

I am Nixon Joseph Palathara, native of Kerala, India and at present a PhD student of Bio Medical Campus, Rome (Italy) doing my research in Biomedical Ethics in collaboration with St. John's National Academy of Health Sciences, Bangalore, India. As part of my studies I need to collect some data on medical ethics education in India. The findings of this research will make a contribution to develop a strong ethically founded healthcare system in our country. I hope you would be kind enough to spend a few minutes to complete this questionnaire and participate in this effort.

Sincerely yours,

Nixon Joseph Palathara

Nixon Joseph

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Date: 2018.03.01 13:33:12 +05'30'

1. <u>Personal Details</u>

For the following comments please mark (x) your choice.

1. I am a:

Male		Female	

2. Age:

Below 25		25-30		30-40		40-50		50-60		Above 60	

3. Religious Affiliation:

Hindu		Muslim		Sikh		Christian	
Buddhist		Jain		Parsi		Others	

4. The state of my origin in India: _____

5. The state in India, where I studied Medicine/Nursing: _____

6. At present I stay/ work:

In India		Outside India	

7. I am a: (you may choose one or more if applicable)

Doctor		Medical Student		Nurse		Nursing Student	
Bioethicist		Theologian		Philosopher		Religious Person	
Professor/ teacher of Medical Ethics		Member of a Medical Association for Social Action					

8. I studied medicine/ nursing (for healthcare professionals):

In a Public Institute		In a Private Institute	

9. Now I am working (for healthcare professionals):

In the Public Sector		In the Private Sector	

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

YES		NO		NOT SURE	

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

Below 15		Between 15-30		Above 30	

b. approximately how many classes were devoted to ethics in Masters degree programme?

Below 15		Between 15-30		Above 30	

Given below are certain statements on Bio-Medical Ethics in Healthcare Practices. Please indicate how true each of these statements is by marking (x) your selection. ***(Very True, True, False, Very False or Don't Know)***

No.	Statement	Very True	True	Not so True	Not at all True	Don't Know
12	The medical ethics policy of the government of India is strong and effective.					
13	In India majority of the doctors and nurses are ethical in their practice.					
14	The ethics curriculum in the medical colleges in India are properly designed to encounter the challenges that a medical professional faces in the field.					
15	The unethical practices of other doctors have affected my ethical decisions and practices.					

16	In India ethics in medical profession is strongly influenced by one's personal religious beliefs.					
17	Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India today.					
18	In the context of India, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.					
19	In the Indian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).					
20	Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.					
21	There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.					
22	In India a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.					
23	I think that in the context of India certain themes in the present curriculum of medical ethics should be removed and something else should be included. For eg. (please specify):					
24	I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc. Also suggestions (please specify):					
25	Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India.					
26	I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.					
27	It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.					
28	There are books, medical journals and other publications that are relevant to the Indian context regarding ethical matters in healthcare.					
	If so, please specify the name of the publication:					

Any other comment to share:

29	In my opinion the ones who are eligible to teach medical ethics are: (*Mark all that apply*)	
	a	Any medical practitioner
	b	A medical doctor who has specialized in bioethics
	c	A non- medical doctor who has specialized in bioethics
	d	Someone who has a PhD in medical ethics
	e	someone who has specialized in the fields of philosophy, religion and science (medicine)
	f	*Or suggestions (please specify):*

30	Below listed are certain possible sources of ethics in the medical field. Please indicate ***(X)*** how important a source each of these is.	Very Important	Important	Not so Important	Not at all Important	Don't Know
	a	Religion					
	b	Government					
	c	Philosophical and Social ideologies					
	d	Associations and Social Workers					
	e	Personal Convictions					
	f	*Others (please specify):*					

31	Given below are some possible reasons for unethical practices in medical profession. Please indicate ***(X)*** how serious a problem each of the following is in your opinion.	Very Serious	Serious	Not Very Serious	Not at all Serious	Don't Know
	a	Hospital policies					
	b	Government policies					
	c	Personal problems (tiredness, family issues etc.)					
	d	Economic reasons					
e	*Any other comment to share*:						

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Below 15		Between 15-30		Above 30	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Below 15		Between 15-30		Above 30	

c. approximately how many classes need to be devoted to this in NURSING course?

Below 15		Between 15-30		Above 30	

33	Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate ***(X)*** how important each of these is.		Very important	Important	Not Important	Don't Know
	a	Value of Life				
	b	Value of Human Life				
	c	Dignity of the Human Person				
	d	Ethics in financial matters				
	e	Ethics of medical treatment				
	f	Doctor patient relationship				
	g	Doctor-doctor relationship				
	h	Doctors-other healthcare professionals relationship				
	i	Laws and ethical practice				
	j	Ethics of healthcare				
	k	Ethics of human research				
	l	Public health ethics				
		Others please specify:				

Please use the space below for any additional observations and suggestions on biomedical ethics education in India.

* The Questionnaire with the same content was set in four pages format. For the purpose of creating printed version of the thesis to submit in the university the margins were reset. Hence, it resulted in the addition of a page.

Appendix II

Questionario (*Italian*)*

Gentile Dottore/ Dottoressa,

Sono Nixon Joseph Palathara. Sto facendo il dottorato di ricerca in bioetica presso l'università Campus Bio-Medico di Roma. Come parte del mio studio ho condotto un'indagine tra i medici e studenti di Medicina in India. Ora, per la valutazione abbiamo bisogno di aiuto per confrontare i nostri risultati. Pertanto, Le chiedo gentilmente di rispondere a queste domande e partecipare a questa joint-venture per creare un programma di studio in bioetica nelle Facoltà di Medicina in India. Le chiedo in fine di avere pazienza in quanto la prima stesura del questionario che Le presento è stata fatta specificatamente per la realtà indiana per cui alcune domande potrebbero risultarLe strane.

RingraziandoLa in anticipo,

Nixon Joseph Palathara

1. Dettagli personali

Indicare con la (✗) le scelte.

1. Io sono un/a: | Maschio | | Femmina | |

2. Età:

Meno di 25		25-30		30-40		40-50		50-60		Più di 60	

3. Religione:

Hindu		Islamica		Sikh		Cristiana	
Buddista		Jain		Parsi		Altro (atei, etc.)	

4. La regione di nascita in Italia: _____

5. La regione in Italia dove ho studiato Medicina: _____

6. Io lavoro/ abito..:

In Italia		Fuori dall'Italia	

7. Io sono un : (Può scegliere più di una risposta)

Medico		Studente di medicina		infermiere		Studente di infermieristica	
Bioeticista		Teologo		Filosofo		Religioso	
Professore/ insegnante di bioetica		Membro di un'associazione medica per l'azione sociale					

8. Io ho studiato/ sto studiando medicina:

In un istituto pubblico		In un istituto privato	

9. Adesso io lavoro :

In un istituto pubblico		In un istituto privato	

10. è stata inserita etica/bioetica nel curriculum di Medicina che Lei ha studiato?

Sì		No		Non sono sicuro/a	

11. Se la risposta è **Sì**,

a. Quante lezioni sono state dedicate all'etica nel corso di laurea?

Meno di 15		Tra 15-30		Più di 30	

b. Quante lezioni sono state dedicate all'etica nel corso di Masters?

Meno di 15		Tra 15-30		Più di 30	

Si prega di indicare con una (X) quanto si percepisca come vera ognuna delle seguenti affermazioni riguardo ad alcune posizioni bioetiche in campo clinico/assistenziale

N°		Molto vero	vero	falso	Molto falso	Non lo so
12	La politica del governo Italiano riguardo l'etica medica è forte ed efficace.					
13	In Italia la maggior parte di medici e di infermieri si comporta eticamente nella attività professionale.					
14	I corsi di etica nelle università di Medicina in Italia sono adeguatamente progettati per preparare alle sfide che un professionista affronta nella professione.					
15	Il comportamento non eticamente corretto di altri medici ha influenzato le mie decisioni e la mia attività.					
16	In Italia l'etica nella professione medica è fortemente influenzata dalla proprie convinzioni religiose personali.					
17	Oggi in Italia la mancanza di adeguata formazione in etica medica è uno dei motivi principali per cui si osservano attività professionali scorrette in ambito sanitario.					
18	Nel contesto italiano, l'integrazione dei valori religiosi e culturali tradizionali può fornire una solida base per la formazione etica dei professionisti sanitari.					

19	Nel contesto italiano, sarebbe meglio avere corsi di bioetica specifici per tutte le specializzazioni e per le medicine non convenzionali (omeopatia, ecc)					
20	L'Etica medica non dovrebbe essere formulata a partire dalla religione. Essa dovrebbe essere basata su principi universalmente accettati, come la dichiarazione dei diritti umani, le norme governative e così via.					
21	È necessario un comitato di esperti per monitorare i corsi di Etica e la loro parte pratica nella formazione medica.					
22	In Italia, una migliore educazione etica può migliorare la pratica dell'etica medica da parte degli operatori sanitari.					
23	Credo che, nel contesto italiano alcuni temi degli attuali programia di etica medica dovrebbero essere rimossi e altri dovrebbe essere inseriti. Per esempio: (per favore specificare):					
24	Preferirei tecniche migliori di insegnamento della bioetica nelle facoltà mediche come presentazione di video, dibattiti, analisi di situazioni reali, condivisione di esperienze, laboratori, giochi di ruolo, seminari, partecipazione a convegni internazionali ecc. Altri suggerimenti (specificare):					
25	È necessaria una formazione etica permanente, anche dopo il termine degli studi, per i professionisti sanitari in Italia.					
26	Penso che sia necessario aggiornare di volta in volta il corso di etica medica nelle università.					
27	E' molto utile avere una facoltà di filosofia della scienza / bioetica / etica medica in ogni università accanto alla facoltà di Medicina per un migliore apprendimento delle questioni etiche.					
28	Ci sono libri, riviste e altre pubblicazioni rilevanti per il contesto italiano in merito alle questioni etiche e di assistenza sanitaria.					
	In caso affermativo, si prega di specificare i nomi dalle pubblicazioni:					

altri commenti:

29	A mio parere dovrebbero insegnare l'etica medica : (*Segna tutte le risposte pertinenti*)	
	a	Un medico
	b	Un laureato medico specializzato in bioetica
	c	Un laureato non medico specializzato in bioetica
	d	Chi ha un dottorato di ricerca in etica medica
	e	Chi si è specializzato nel campo della filosofia, religione e scienza (Medicina)
	f	*Altri suggerimenti:*

30	Qui di seguito sono elencate alcune possibili fonti di etica in campo medico. Si prega di indicare (X) quanto è importante ognuna di queste fonti.	Molto importante	Importante	Non così importante	Senza importanza	Non lo so
a	Religione					
b	Governo					
c	Ideologie filosofiche e sociali					
d	Associazioni e assistenti sociali					
e	Convinzioni personali					
f	*Le altre fonti (specificare per favore):*					

31	Di seguito sono riportate alcune possibili cause di pratiche non etiche nella professione medica. Si prega di indicare (X) quanto è grave l'influenza di ognuna.	Molto grave	Grave	Non così grave	Niente grave	Non lo so
a	politiche ospedaliere					
b	politiche del governo					
c	problemi personali (stanchezza, problemi familiari, ecc.)					
d	motivi economici					
e	*Qualche altro commento*:					

32. Si prega di indicare il numero delle lezioni/anno che devono essere dedicate all'insegnamento di bioetica per i seguenti corsi:

a. Approssimativamente quante lezioni devono essere dedicate in un corso di laurea?

Meno di 15		Tra 15-30		Più di 30	

b. Approssimativamente quante lezioni devono essere dedicate in un corso di MASTERS?

Meno di 15		Tra 15-30		Più di 30	

c. Approssimativamente quante lezioni devono essere dedicate in corso di infermieristica?

Meno di 15		Tra 15-30		Più di 30	

33		Qui di seguito alcuni temi che potrebbero essere inseriti in un programma di studi di etica biomedica. Si prega di indicare (X) quanto sia importante ciascuno di questi.	Molto importante	Importante	Non importante	Non lo so
	a	Valore della vita				
	b	Valore della vita umana				
	c	Dignità della persona umana				
	d	Etica in materia finanziaria				
	e	Etica del trattamento medico				
	f	Rapporto medico - paziente				
	g	Relazione medico - medico				
	h	Rapporto tra medici ed altri operatori sanitari				
	i	Leggi e pratica etica				
	j	Etica dell'attività clinica				
	k	Etica della ricerca su esseri umani				
	l	Etica della sanità pubblica				
		Atri temi importanti:				

Si prega di utilizzare lo spazio sottostante per eventuali osservazioni e suggerimenti supplementari in materia di istruzione etica biomedica in Italia.

* The Questionnaire with the same content was set in four pages format. For the purpose of creating printed version of the thesis to submit in the university the margins were reset. Hence, it resulted in the addition of a page.

Appendix III

Informed Consent Form (*English*)

Dear Sir/ Madam,

I am a researcher at the Campus Bio-medical University of Rome, Italy. My name is Nixon Joseph Palathara and can be contacted at *palathara@gmail.com*.

I'm doing my PhD in Bioethics. My research is aimed at creating a model core curriculum for teaching bioethics at medical colleges in India. As a requirement, of course, I'm working on a project where I need to gather information about how doctors, medical students, and nurses evaluate the teaching of bioethics/medical ethics in the institutes. This data will be cross studied with the data collected from the control group in Italy. So I ask you kindly, if you could agree to participate in my research by answering this questionnaire.

The questionnaire is semi structured and has 33 questions and should last about 10 minutes to complete.

I state that:

1. You are free to participate in this initiative and even if you agree now, you can interrupt your participation at any time without prejudice.

2. It is also not necessary to answer individual questions that you do not want to answer.

3. Your name will not be attached to the questionnaire and will ensure that your participation remains confidential. (This form of consent will be kept separate from the questionnaire for all participants.)

4. Your answer may be included in the written/published work at the end of this task. However, the answers would be anonymous and no one can link the responses with you as an individual.

5. An advantage by participating in this study may be a greater understanding of your perceptions/feelings about teaching bioethics at medical colleges/universities.

6. With the participation in this study, you may be at risk of being disturbed/ uncomfortable by the questions you are asked.

If you have any questions or concerns, do not hesitate to contact me at *palathara@gmail.com* or my professors, Dr. Paul Parathazham of the St. John's National Academy of Health Sciences Bangalore at *parathazham@gmail.com* or Prof. Vittoradolfo Tambone of the University Campus Bio-Medico di Roma, Rome, Italy at *v.tambone@unicampus.it*.

(Note that if you participate, you can keep a copy of this form.)

PhD student: Nixon Joseph Palathara

Signature: _____ Date: 08 November 2016

Participant:

Signature: _____ Date: _____

Nixon Joseph Digitally signed by Nixon Joseph Date: 2018.03.01 13:51:39 +05'30'

Appendix IV

Modulo di Consenso Informato (*Italian*)

Gentile Dottore,

Sono un ricercatore universitario all'Università Campus Bio-medico di Roma. Il mio nome è Nixon Joseph Palathara e può essere contattato all'indirizzo palathara@gmail.com.

Sto facendo il mio dottorato di ricerca in Bioetica. Il mio tema consiste in creare un modello del curriculum per insegnare bioetica nelle scuole/ università in India. Come requisito naturalmente, sto lavorando su un progetto in cui ho bisogno di raccogliere informazioni su come i medici, studenti della medicina e le infermiere valutano l'insegnamento della bioetica/ etica medica nelle istitutioni. Io ne ho già fatto con 500 persone in India, e dovrei fare uno studio con un gruppo di controllo in Italia. Per cui ho scelto le istitutioni Università Campus Bio-Medico di Roma e Università Cattolica del Sacro Cuore A. Gemelli, Roma, di avere un numero di 100-120 questionari compilati dai medici specializzandi. Quindi Le chiedo cortesamente, se si accetta di partecipare alla mia ricerca rispondendo a un questionario.

Il questionario è semi strutturato e ha 33 domande e dovrebbe durare circa 10 minuti per completare.

Affermo che:

1. è libero/a a partecipare a questa iniziativa e anche se è d'accordo ora, è possibile interrompere la partecipazione in qualsiasi momento, senza pregiudizi.

2. inoltre non è necessario rispondere alle domande individuali che non si desidera rispondere.

3. il Suo nome non verrà allegato al questionario e farà in modo che la Sua partecipazione rimane riservata. (Questo modulo di consenso sarà tenuto separato dal questionario per tutti i partecipanti.)

4. la Sua risposta può essere inclusa nel lavoro scritto/ publicato a conclusione di questo compito; tuttavia, le risposte sarebbero anonime e nessuno può collegare le risposte con Lei come un individuo.

5. un vantaggio partecipando a questo studio può essere una maggiore conoscenza delle Sue percezioni/ sentimenti riguardo l'insegnamento di bioetica in scuole/ università della Medicina.

6. con la partecipazione a questo studio, si può rischiare di essere sconvolto/a messo/a a disagio dalle domande poste.

Se ha domande o dubbi, non esita a contattarmi a palathara@gmail.com o il mio professore, il Prof. Vittoradolfo Tambone dal Università Campus Bio-Medico di Roma al v.tambone@unicampus.it.
(Si nota che, se si partecipa, si può tenere una copia di questo modulo.)

Dottorando: Nixon Joseph Palathara

Firma:_____ Data:_____

Partecipante:

Firma:_____ Data:_____

Nixon Joseph Digitally signed by Nixon Joseph Date: 2018.03.01 13:56:29 +05'30'

Appendix V

Request to St. John's National Academy of Health Sciences for Collaboration in the Research

POLICLINICO UNIVERSITARIO
ENDOCRINOLOGIA E DIABETOLOGIA

Rome, 10 October 2014

From

Dr. Paolo Pozzilli
Coordinator of Doctoral Research in Integrated Biomedical Sciences and Bioethics
Università Campus Bio-Medico di Roma
Via Alvaro del Portillo, 21, 00128
Rome, Italy

To

Rev. Dr. Paul Parathazham
Director,
St. John's National Academy of Health Sciences
Sarjapur Road, 560 034
Bangalore, Karnataka, India

Sub: Request for Collaboration in Doctoral Research for Nixon Joseph Palathara

Dear Rev. Dr. Paul Parathazham,

I would like to formally introduce our doctoral research student Nixon Joseph Palathara who is a student of Biomedical University Campus of Rome. His doctoral research progresses with the theme "*The Indispensability of an Inter-disciplinary Approach in Bioethics for India: a Scheme for Bioethics Education in the Universities and Medical Colleges in India.*" As foreseen a field analysis very important for his research work, we feel the need of a few months study in India.

Our researcher, previously being your student of Philosophy in India, has particularly suggested your name as the suitable person to assist his studies in India. We sincerely acknowledge that you, being a learned and efficient professor in Sociology and Philosophy, a well-known statistician and being the honourable director of the prestigious St. John's Academy of Health Sciences Bangalore, is the most appropriate person that we strongly consider in this project and we recommend our student Nixon Joseph Palathara for your able guidance for his survey and studies in India.

We also hope that you would be willing to be his Co-tutor in his doctoral research and we kindly request you the same.

Thank you in advance for your time and consideration.

Yours sincerely,

Prof. Dr. Paolo Pozzilli
Coordinator of the Docatoral Research in
Integrated Biomedical Sciences and Bioethics

Prof. Dr. Vittoradolfo Tambone
Research Guide

Università Campus Bio-Medico

Via Alvaro del Portillo n° 21- 00128 ROMA Tel. (+39) 06225419160 Fax (+39) 06 22541456 Sito internet www.unicampus.it

Appendix VI

Certificate Received from St. John's National Academy of Health Sciences

ST. JOHN'S NATIONAL ACADEMY OF HEALTH SCIENCES
St. John's Medical College
St. John's Medical College Hospital
St. John's College of Nursing
St. John's Research Institute
St. John's Institute of Health Management & Paramedical Studies

Rev. Dr. Paul Parathazham
L.Ph, L.Th., M.A., Ph.D. (Sociol, USA)
DIRECTOR

To,
The Coordinator of Ph.D. Programmes
Università Campus Bio-Medico di Roma
Via Alvaro del Portillo, 21, 00128
Rome, Italy

CERTIFICATE

I hereby certify that **NIXON JOSEPH PALATHARA**, XXIX cycle Ph.D. student of Integrated Biomedicine and Bioethics, of the Rome Bio-medical Campus University, has completed his Ph.D. research programme in India under my guidance from 10 January 2015 to 28 February 2015 in the academic year January - December 2015, and from 7th January 2016 to 28 February 2016 in the academic year January - December 2016 in collaboration with St. John's National Academy of Health Sciences, Bangalore, Karnataka, India.

Bangalore
28.02.2016

Dr. PAUL PARATHAZHAM
DIRECTOR

DIRECTOR
ST.JOHN'S NATIONAL ACADEMY OF HEALTH SCIENCES
SARJAPUR ROAD, BANGALORE - 560 034

BANGALORE - 560 034, INDIA
☎ *Office :* 080 - 2550 5555, *Secretary :* 080 - 2627 4011, 2627 4012
Fax : 080 - 2553 1786 *E-mail :* dirsjnahs@stjohns.in *Website :* www.stjohns.in

Appendix VII

Project Approval from Bio-Medical Campus University Rome

UNIVERSITA CAMPUS BIO-MEDICO DI ROMA
COMITATO ETICO

Università Campus Bio-Medico di Roma
Prof. Vittoradolfo Tambone
FAST
Univ. Campus Bio Medico

Roma, 25/01/2016
Prot: **04.16 TS**. ComEt CBM

Oggetto: Nulla-osta allo studio di tesi dal titolo: **"The indispensability of an Inter-disciplinary Approach in Bioethics for India**
Promotore: Università Campus Bio-Medico di Roma;
Sperimentatore: Prof. Vittoradolfo Tambone

In merito allo studio indicato in oggetto, di cui sono stati forniti ed esaminati i seguenti documenti:

1. Protocollo (Versione del 23.12.15);
2. Questionnaire survey (vers. del 23.12.15).

il Comitato Etico in data 26/01/2016 dà il nulla osta per la conduzione dello studio presso l'Università Campus Bio Medico di Roma.

Il Comitato Etico richiede:

- **di essere informato per iscritto dallo sperimentatore dell'inizio** *(reclutamento primo paziente)* **e della fine della sperimentazione**, come pure della sua eventuale sospensione anticipata con la relativa indicazione dei motivi;
- di essere informato di ogni successivo emendamento al protocollo, degli eventi avversi, seri o inattesi, insorti nel corso dello studio, di ogni elemento che potrebbe influire sulla sicurezza dei soggetti o sul proseguimento dello studio;
- che non vengano avviate deviazioni dal protocollo, né modifiche allo stesso, senza che il CE abbia espresso per iscritto parere favorevole ad uno specifico emendamento, eccetto quando ciò sia necessario per eliminare i rischi immediati per i soggetti o quando la/le modifica/che riguarda/riguardano esclusivamente aspetti logistici o amministrativi dello studio;
- che lo sperimentatore invii un rapporto annuale sull'andamento dello studio e un rapporto finale sullo studio completato.

Il CE si riserva, come previsto dal suo regolamento, di effettuare uno o più monitoraggi nel corso della sperimentazione.

I componenti del Comitato Etico dell'Università Campus Bio-Medico di Roma

Membri Esterni:

Prof. Claudio Buoni	Presidente del Comitato Etico (clinico)
Prof. Alessandro Calisti	Primario Chirurgia Pediatrica (Pediatra)
Prof.ssa Fiorella Gurrieri	Esperta di Genetica

Università Campus Bio-Medico di Roma
Via Álvaro del Portillo, 21 - 00128 Roma Tel (+39) 06.22.54.11 Fax (+39) 06.22.541.456 Sito Internet: www.unicampus.it

Dott. Giovanni Marino	Medico di medicina di base. Rappresentante medicina del territorio
Dott.ssa Gemma Napoli	Rappresentante del Volontariato
Dott. Giuseppe V. La Spina	Neurologo (Clinico)
Membri Interni	
Dott. Modesto D'Aprile	Oncologo (Clinico)
Dott. Giuseppe La Monaca	Esperto in Materie Giuridiche
Prof. Giorgio Minotti	Farmacologo
Dott.ssa Maddalena Pennacchini	Esperta di Bioetica
Dott.ssa Valentina Pepe	Farmacista
Prof. Paolo Pozzilli	Biostatistico
Dott. Giovanni Sironi	Farmacista
Dott. Lorenzo Cammelli	Direttore Sanitario
Dott.ssa Daniela Tartaglini	Infermiera (Rappresentante delle Professioni Sanitarie)
Dott.ssa Domenica Tassielli	Farmacista (Esperta in dispositivi medici)
Membri a Chiamata	
Dott.ssa Sara Emerenziani	Esperta in Nutrizione
Dott. Francesco Di Matteo	Esperto clinico procedure diagnostiche e tecniche invasive
Prof. Salvatore Sciuto	Ingegnere Clinico

Cordiali saluti,

Per Il Presidente del Comitato Etico
(Prof. Claudio Buoni)
Il responsabile della segreteria
(Dott. Giovanni Mottini)

Appendix VIII

Project Approval from Sacred Heart University, Gemelli

Gemelli

Comitato Etico

FONDAZIONE POLICLINICO GEMELLI
PROTOCOLLO UNICO

Tipo Atti: In Uscita
Prot N. 0030455/16 - Del 25/07/2016
SEGRETERIA COMITATO ETICO

Prot. cm 30431/16

Rev. Dr. Nixon Joseph Palathara
Università Campus Biomedico di Roma

Oggetto: Tesi di dottorato "The indispensability of an Inter-disciplinary Approach in Bioethics for India".

Reverendo Dottore,

si comunica che il Comitato Etico ha preso atto ed approvato il modulo di consenso informato da Lei inviato con mail del 4 luglio u.s. in risposta a quanto richiesto dal CE con lettera del 30 giugno 2016 in merito al progetto in oggetto.

Cordiali saluti

Il Presidente del Comitato Etico
Prof. Salvatore Mansueto

Fondazione Policlinico Universitario A. Gemelli
Università Cattolica del Sacro Cuore

Largo Agostino Gemelli 8, 00168 Roma
T +39 06 3015 6124 - 5556
etico@fm.unicatt.it - PEC: comitatoetico.gemelli@pec.it
www.policlinicogemelli.it

Sede Legale
Largo Francesco Vito 1, 00168 Roma
Sede Operativa
Largo Agostino Gemelli 8, 00168 Roma

Codice Fiscale e Partita IVA 13009681000

Appendix IX
Comparison: India Total Group with Italy Total Group

1. Sex

		Sex		Total
		Male	Female	
Country	India	220	274	494
	Italy	63	45	108
Total		283	319	602

2. Age:

		Age						Total
		Below 25	25-30	31-40	41-50	51-60	Above 60	
Country	India	133	193	89	29	34	19	497
	Italy	0	92	16	0	0	0	108
Total		133	285	105	29	34	19	605

3. Religious Affiliation:

		Religious Affiliation								Total
		Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
Country	India	250	85	16	130	1	13	1	0	496
	Italy	0	0	0	101	0	0	0	7	108
Total		250	85	16	231	1	13	1	7	604

4. The state of my origin in India/ Italy:

5. The state in India/ Italy, where I studied Medicine/Nursing:

States/Regions	Of Origin Country		Of Study Country	
	India	Italy	India	Italy
Andhra Pradesh	8		20	
Arunachal Pradesh	1			
Assam				
Bihar	7		2	
Chhattisgarh	5		1	
Goa	16		5	
Gujarat	15		13	
Haryana	8		7	
Himachal Pradesh	9		7	
Jammu & Kashmir	3		1	
Jharkhand	5		2	
Karnataka	81		175	

Kerala	183		98	
Madhya Pradesh	11		8	
Maharashtra	48		63	
Manipur	1			
Meghalaya				
Mizoram				
Nagaland	3			
Odisha (Orissa)	9		6	
Punjab	17		18	
Rajasthan	7		5	
Sikkim				
Tamil Nadu	22		27	
Telangana	7		4	
Tripura				
Uttar Pradesh	8		7	
Uttarakhand	5		1	
West Bengal	5		5	
New Delhi	10		13	
Pondicherry	2		8	
Valle D'Aosta				
Piemonte				
Liguria		2		2
Lombardia				
Trentino-Alto Adige		2		
Veneto		1		1
Friuli- Venezia Giulia				
Emilia Romagna		2		
Toscana		4		3
Marche		3		1
Umbria		4		2
Lazio		26		79
Abruzzo		1		2
Molise		1		
Campania		20		6
Basilicata		2		
Puglia		18		4
Calabria		3		
Sicilia		16		7
Sardegna		1		
Total	**496**	**106**	**496**	**107**

6. At present I stay/ work:

		Work Countries		
		In the country	Outside the country	Total
Country	India	480	16	496
	Italy	108	0	108
Total		588	16	604

7. Designation/Profession

Designation	India	Italy	Total
Doctor	297	108	405
Medical Student	100	0	100
Nurse	100	0	100
Nursing Student	0	0	0
Bioethicist	3	0	3
Theologian	0	0	0
Philosopher	1	0	1
Religious Person	2	0	2
Professor/ Teacher of Bioethics	9	0	9
Member of a Medical Association for Social Action	16	3	19

8. Sector of Study

		Sector of study		
		Public Institute	Private Institute	Total
Country	India	248	247	495
	Italy	43	65	108
Total		291	312	603

9. Sector of Work

		Sector of working		
		Public Sector	Private Sector	Total
Country	India	87	347	434
	Italy	8	98	106
Total		95	445	540

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

		Bioethics studies			
		Yes	No	Not Sure	Total
Country	India	274	136	85	495
	Italy	89	11	8	108
Total		363	147	93	603

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

		lessons during Bachelor's			
		< 15	15-30	>30	Total
Country	India	249	30	5	284
	Italy	20	56	13	89
Total		269	86	18	373

b. approximately how many classes were devoted to ethics in Master's degree programme?

		lessons during Masters			
		< 15	15-30	>30	Total
Country	India	208	5	0	213
	Italy	11	10	1	22
Total		219	15	1	235

Indicate Very True, True, Not True, Not at all True, Don't Know for the questions below:

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	19	51	222	193	6	491
Italy	10	9	50	37	1	107
Total	29	60	272	230	7	598

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	18	31	227	205	13	494
Italy	2	2	29	72	3	108
Total	20	33	256	277	16	602

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	46	102	199	84	59	490
Italy	15	4	57	29	3	108
Total	61	106	256	113	62	598

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	22	147	108	177	25	479
Italy	1	19	39	42	6	107
Total	23	166	147	219	31	586

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	45	71	112	212	45	485
Italy	4	9	19	61	15	108
Total	49	80	131	273	60	593

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	20	33	146	208	85	492
Italy	13	7	24	56	7	107
Total	33	40	170	264	92	599

18. In the context of India/ Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	40	14	125	253	59	491
Italy	9	3	18	62	16	108
Total	49	17	143	315	75	599

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	20	5	40	257	169	491
Italy	13	3	22	56	14	108
Total	33	8	62	313	183	599

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	2	11	37	150	291	491
Italy	2	0	7	52	45	106
Total	4	11	44	202	336	597

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	9	15	39	210	220	493
Italy	10	0	12	65	17	104
Total	19	15	51	275	237	597

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	14	8	50	268	146	486
Italy	7	2	3	69	26	107
Total	21	10	53	337	172	593

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	203	12	71	131	61	478
Italy	46	2	21	32	3	104
Total	249	14	92	163	64	582

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	26	7	11	259	183	486
Italy	6	3	11	67	20	107
Total	32	10	22	326	203	593

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	12	4	20	292	164	492
Italy	9	3	12	66	15	105
Total	21	7	32	358	179	597

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	19	8	32	221	209	489
Italy	5	5	12	69	16	107
Total	24	13	44	290	225	596

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	13	12	73	240	156	494
Italy	5	6	22	62	12	107
Total	18	18	95	302	168	601

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	183	8	88	160	43	482
Italy	53	3	20	20	7	103
Total	236	11	108	180	50	585

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Response "YES"	Country		Total	P value
	India	Italy		
Any medical Practitioner	178	47	225	.133
A medical doctor who has specialized in Bioethics	368	79	447	.848
A non-medical doctor who has specialized in Bioethics	1419	25	144	.860
One who has a PhD in Medical Ethics	253	43	296	.037
Someone who has specialized in the fields of philosophy, religion and science (medicine)	127	58	185	.000

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	2	49	121	182	123	477
Italy	1	6	17	57	26	107
Total	3	55	138	239	149	584

b. Government

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	8	5	29	209	232	483
Italy	1	8	39	44	14	106
Total	9	13	68	253	246	589

c. Philosophical and Social ideologies

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	6	8	63	277	127	481
Italy	2	1	13	65	26	107
Total	8	9	76	342	153	588

d. Associations and Social Workers

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	22	13	62	289	97	483
Italy	2	4	28	64	8	106
Total	24	17	90	353	105	589

e. Personal Convictions

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	8	26	76	134	213	457
Italy	2	16	18	41	29	106
Total	10	42	94	175	242	563

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	6	8	36	210	230	490
Italy	2	2	2	50	51	107
Total	8	10	38	260	281	597

b. Government policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	7	20	54	212	189	482
Italy	1	2	8	40	56	107
Total	8	22	62	252	245	589

c. Personal problems (tiredness, family issues etc.)

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	8	37	183	181	78	487
Italy	1	1	20	50	35	107
Total	9	38	203	231	113	594

d. Economic reasons

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	9	18	101	182	174	484
Italy	2	0	13	49	43	107
Total	11	18	114	231	217	591

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Country	< 15	15-30	>30	Total	P value
India	186	245	44	475	.000
Italy	12	70	17	99	
Total	198	315	61	574	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Country	< 15	15-30	>30	Total	P value
India	180	201	70	451	.001
Italy	19	58	22	99	
Total	199	259	92	550	

c. approximately how many classes need to be devoted to this in NURSING course?

Country	< 15	15-30	>30	Total	P value
India	165	164	75	404	.000
Italy	10	71	14	95	
Total	175	235	89	499	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Don't know	Not important	Important	Very important	Total
India	0	3	161	315	479
Italy	3	0	28	72	103
Total	3	3	189	387	582

b. Value of Human Life

Country	Don't know	Not important	Important	Very important	Total
India	0	5	141	340	486
Italy	3	1	17	82	103
Total	3	6	158	422	589

c. Dignity of the Human Person

Country	Don't know	Not important	Important	Very important	Total
India	0	10	203	273	486
Italy	2	0	12	89	103
Total	2	10	215	362	589

d. Ethics in financial matters

Country	Don't know	Not important	Important	Very important	Total
India	7	75	216	179	477
Italy	4	5	69	25	103
Total	11	80	285	204	580

e. Ethics of medical treatment

Country	Don't know	Not important	Important	Very important	Total
India	1	9	139	334	483
Italy	1	1	33	67	102
Total	2	10	172	401	585

f. Doctor patient relationship

Country	Don't know	Not important	Important	Very important	Total
India	11	137	339	487	11
Italy	0	0	21	82	103
Total	11	158	421	590	11

g. Doctor-doctor relationship

Country	Don't know	Not important	Important	Very important	Total
India	1	17	204	263	485
Italy	0	4	38	61	103
Total	1	21	242	324	588

h. Doctors-other healthcare professionals relationship

Country	Don't know	Not important	Important	Very important	Total
India	3	25	183	275	486
Italy	0	3	49	51	103
Total	3	28	232	326	589

i. Laws and ethical practice

Country	Don't know	Not important	Important	Very important	Total
India	4	8	173	300	485
Italy	2	5	49	47	103
Total	6	13	222	347	588

j. Ethics of healthcare

Country	Don't know	Not important	Important	Very important	Total
India	2	8	192	285	487
Italy	2	2	43	55	102
Total	4	10	235	340	589

k. Ethics of human research

Country	Don't know	Not important	Important	Very important	Total
India	8	28	287	163	486
Italy	2	2	49	49	102
Total	10	30	336	212	588

l. Public health ethics

Country	Don't know	Not important	Important	Very important	Total
India	9	11	228	228	476
Italy	2	4	53	43	102
Total	11	15	281	271	578

Part II
Grouped Answers[386]

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	199	40.04	292	58.75	491	.336
Italy all	38	35.18	69	63.88	107	
Total	237	44.13	361	59.66	598	

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	218	43.86	276	55.53	494	.000
Italy all	75	69.44	33	30.55	108	
Total	293	48.42	309	51.07	602	

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	143	28.77	347	69.81	490	.927
Italy all	32	29.62	76	70.37	108	
Total	175	28.92	423	69.91	598	

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	202	40.64	277	55.73	479	.611
Italy all	48	44.44	59	54.62	107	
Total	250	41.32	336	60.49	586	

[386] Grouped values are made by adding the values (very true+true) titled "true" and (not true+not at all true+don't know) titled "not true". If there exists a notable percentage in the "don't know" answer, it is explained with special note in the text. Qty.= Quantity; % = percentage.

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	257	51.71	228	45.87	485	.001
Italy all	76	70.37	32	29.62	108	
Total	333	55.04	260	42.97	593	

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	293	52.91	199	40.04	492	.898
Italy all	63	58.33	44	40.74	107	
Total	356	58.84	243	40.16	599	

18. In the context of India/Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	312	62.77	179	36.01	491	.087
Italy all	78	72.22	30	27.77	108	
Total	390	64.46	209	34.54	599	

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	426	85.71	65	13.07	491	.000
Italy all	70	64.81	38	35.18	108	
Total	496	81.98	103	17.02	599	

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	441	88.73	50	10.06	491	.596
Italy all	97	89.81	9	08.33	106	
Total	538	88.92	59	09.75	597	

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	430	86.51	63	12.67	493	.026
Italy all	82	75.92	22	20.37	104	
Total	512	84.62	85	14.04	597	

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	414	83.29	72	14.48	486	.334
Italy all	95	87.96	12	11.11	107	
Total	509	84.13	84	13.88	593	

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	192	38.63	286	57.54	478	.217
Italy all	35	32.40	69	63.88	104	
Total	227	37.52	355	58.67	582	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	442	88.93	44	08.85	486	.004
Italy all	87	80.55	20	18.51	107	
Total	529	87.43	64	10.57	593	

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	456	91.75	36	07.24	492	.000
Italy all	81	75.00	24	22.22	105	
Total	537	88.76	60	09.91	597	

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	430	86.51	59	11.87	489	.020
Italy all	85	78.70	22	20.37	107	
Total	515	85.12	81	13.38	596	

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	396	79.67	98	19.71	494	.012
Italy all	74	68.51	33	30.55	107	
Total	470	77.68	131	21.65	601	

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India all	203	40.84	279	56.13	482	.003
Italy all	27	25.00	76	70.37	103	
Total	230	38.01	355	58.67	585	

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	172	34.60	305	61.36	477	.007
Italy all	24	22.22	83	76.85	107	
Total	196	32.39	388	64.13	584	

b. Government

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	42	08.45	441	88.73	483	.000
Italy all	48	44.44	58	53.70	106	
Total	90	14.87	499	82.47	589	

c. Philosophical and Social ideologies

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	77	15.49	404	81.28	481	.787
Italy all	16	14.81	91	84.25	107	
Total	93	15.37	495	81.81	588	

d. Associations and Social Workers

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	97	19.51	386	77.66	483	.007
Italy all	34	31.48	72	66.66	106	
Total	131	21.65	458	75.70	589	

e. Personal Convictions

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	110	22.13	347	69.81	457	.036
Italy all	36	33.33	70	64.81	106	
Total	146	24.13	417	68.92	563	

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India all	50	10.06	440	88.53	490	.140
Italy all	6	05.55	101	93.51	107	
Total	56	9.25	541	89.42	597	

b. Government policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India all	81	16.29	401	80.68	482	.093
Italy all	11	10.18	96	88.88	107	
Total	92	15.20	497	82.14	589	

c. Personal problems (tiredness, family issues etc.)

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India all	228	45.87	259	52.11	487	.000
Italy all	22	20.37	85	78.70	107	
Total	250	41.32	344	56.85	594	

d. Economic reasons

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India all	128	25.75	356	71.62	484	.007
Italy all	15	13.88	92	85.18	107	
Total	143	23.63	448	74.04	591	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	3	00.60	476	95.77	479	.037
Italy all	3	02.77	100	92.59	103	
Total	6	00.99	576	95.20	582	

b. Value of Human Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	5	01.00	481	96.78	486	.032
Italy all	4	03.70	99	91.66	103	
Total	9	01.48	580	95.86	589	

c. Dignity of the Human Person

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	10	02.01	476	95.77	486	.940
Italy all	2	01.82	101	93.51	103	
Total	12	01.98	577	95.37	589	

d. Ethics in financial matters

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	82	16.49	395	79.47	477	.032
Italy all	9	08.33	94	87.03	103	
Total	91	15.04	489	80.82	580	

e. Ethics of medical treatment

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	10	02.01	473	95.17	483	.943
Italy all	2	01.82	100	92.59	102	
Total	12	1.98	573	94.71	585	

f. Doctor patient relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	11	02.21	476	95.77	487	.124
Italy all	0	0	103	95.37	103	
Total	11	01.81	579	95.70	590	

g. Doctor-doctor relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	18	03.62	467	93.96	485	.933
Italy all	4	03.70	99	91.66	103	
Total	22	03.63	566	93.55	588	

h. Doctors-other healthcare professionals relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	28	05.63	458	92.15	486	.240
Italy all	3	02.77	100	92.59	103	
Total	31	05.12	558	92.23	589	

i. Laws and ethical practice

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	12	02.41	473	95.17	485	.024
Italy all	7	06.48	96	88.88	103	
Total	19	03.14	569	94.04	588	

j. Ethics of healthcare

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	10	02.01	477	95.97	487	.260
Italy all	4	03.70	98	90.74	102	
Total	14	02.31	575	95.04	589	

k. Ethics of human research

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	36	07.24	450	90.54	486	.204
Italy all	4	03.70	98	90.74	102	
Total	40	06.61	548	90.57	588	

l. Public health ethics

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India all	20	04.02	456	91.75	476	.457
Italy all	6	05.55	96	88.88	102	
Total	26	04.29	552	91.23	578	

Appendix X
Comparison between Doctors from India and Doctors from Italy

1. Sex

		Sex		
		Male	Female	Total
Country	India	159	130	289
	Italy	63	45	108
Total		222	175	397

2. Age:

		Age						
		Below 25	25-30	31-40	41-50	51-60	Above 60	Total
Country	India	15	125	78	27	30	17	292
	Italy	0	92	16	0	0	0	108
Total		15	217	94	27	30	17	400

3. Religious Affiliation:

		Religious Affiliation								Total
		Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
Country	India	168	51	12	49	1	10	1	0	292
	Italy	0	0	0	101	0	0	0	7	108
Total		168	51	12	150	1	10	1	7	400

4. The state of my origin in India/ Italy:
5. The state in India/ Italy, where I studied Medicine/Nursing:

States/Regions	Of Origin Country		Of Study Country	
	India	Italy	India	Italy
Andhra Pradesh	5		7	
Arunachal Pradesh				
Assam				
Bihar			1	
Chhattisgarh	3		1	
Goa	13		3	
Gujarat	12		13	
Haryana	8		7	
Himachal Pradesh	7		7	
Jammu & Kashmir	3		1	
Jharkhand	3		2	
Karnataka	48		76	
Kerala	76		58	
Madhya Pradesh	7		6	
Maharashtra	46		56	
Manipur				

Meghalaya				
Mizoram				
Nagaland	1			
Odisha (Orissa)	5		5	
Punjab	13		14	
Rajasthan	5		5	
Sikkim				
Tamil Nadu	10		8	
Telangana	4		1	
Tripura				
Uttar Pradesh	4		6	
Uttarakhand	4		1	
West Bengal	5		5	
New Delhi	9		6	
Pondicherry			2	
Valle D'Aosta				
Piemonte				
Liguria		2		2
Lombardia				
Trentino-Alto Adige		2		
Veneto		1		1
Friuli- Venezia Giulia				
Emilia Romagna		2		
Toscana		4		3
Marche		3		1
Umbria		4		2
Lazio		26		79
Abruzzo		1		2
Molise		1		
Campania		20		6
Basilicata		2		
Puglia		18		4
Calabria		3		
Sicilia		16		7
Sardegna		1		
Total	**291**	**106**	**291**	**107**

6. At present I stay/ work:

		Work Countries		
		In the country	Outside the country	Total
Country	India	291	1	292
	Italy	108	0	108
Total		399	1	400

7. Designation/Profession

Designation	India	Italy	Total
Doctor	292	108	400
Medical Student	0	0	0
Nurse	0	0	0
Nursing Student	0	0	0
Bioethicist	3	0	3
Theologian	0	0	0
Philosopher	1	0	1
Religious Person	2	0	2
Professor/ Teacher of Bioethics	9	0	9
Member of a Medical Association for Social Action	15	3	18

8. Sector of Study

		Sector of study		
		Public Institute	Private Institute	Total
Country	India	172	119	291
	Italy	43	65	108
Total		215	184	399

9. Sector of Work

		Sector of working		
		Public Sector	Private Sector	Total
Country	India	77	208	285
	Italy	8	98	106
Total		85	306	391

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

		Bioethics studies			
		Yes	No	Not Sure	Total
Country	India	164	92	36	292
	Italy	89	11	8	108
Total		253	103	44	400

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

		lessons during Bachelor's			
		< 15	15-30	>30	Total
Country	India	162	9	5	176
	Italy	20	56	13	89
Total		182	65	18	265

b. approximately how many classes were devoted to ethics in Master's degree programme?

		lessons during Masters			Total
		< 15	15-30	>30	
Country	India	152	3	0	155
	Italy	11	10	1	22
Total		163	13	1	177

Indicate Very True, True, Not True, Not at all True, Don't Know for the questions below:

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	14	37	142	95	0	288
Italy	10	9	50	37	1	107
Total	24	46	192	132	1	395

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	16	18	149	99	8	290
Italy	2	2	29	72	3	108
Total	18	20	178	171	11	398

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	27	70	140	49	1	287
Italy	15	4	57	29	3	108
Total	42	74	197	78	4	395

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	10	59	81	116	16	282
Italy	1	19	39	42	6	107
Total	11	78	120	158	22	389

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	29	52	66	117	22	286
Italy	4	9	19	61	15	108
Total	33	61	85	178	37	394

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	8	25	79	138	38	288
Italy	13	7	24	56	7	107
Total	21	32	103	194	45	395

18. In the context of India/ Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	32	9	77	135	35	288
Italy	9	3	18	62	16	108
Total	41	12	95	197	51	396

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	13	0	27	145	102	287
Italy	13	3	22	56	14	108
Total	26	3	49	201	116	395

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	0	7	20	103	158	288
Italy	2	0	7	52	45	106
Total	2	7	27	155	203	394

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	6	11	24	144	104	289
Italy	10	0	12	65	17	104
Total	16	11	36	209	121	393

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	3	7	29	167	80	286
Italy	7	2	3	69	26	107
Total	10	9	32	236	106	393

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	148	5	38	52	38	281
Italy	46	2	21	32	3	104
Total	194	7	59	84	41	385

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	17	2	2	137	127	285
Italy	6	3	11	67	20	107
Total	23	5	13	204	147	392

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	7	1	13	158	111	290
Italy	9	3	12	66	15	105
Total	16	4	25	224	126	395

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	14	7	18	148	102	289
Italy	5	5	12	69	16	107
Total	19	12	30	217	118	396

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	6	8	52	164	61	291
Italy	5	6	22	62	12	107
Total	11	14	74	226	73	398

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	126	1	57	76	21	281
Italy	53	3	20	20	7	103
Total	179	4	77	96	28	384

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Response "YES"	Country		Total	P value
	India	Italy		
Any medical Practitioner	111	47	158	.317
A medical doctor who has specialized in Bioethics	212	79	291	.913
A non-medical doctor who has specialized in Bioethics	72	25	97	.755
One who has a PhD in Medical Ethics	138	43	181	.184
Someone who has specialized in the fields of philosophy, religion and science (medicine)	72	58	130	.000

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Don't know	Not at all important	Not so important	Important	Very important	Total
India	2	25	79	115	56	277
Italy	1	6	17	57	26	107
Total	3	31	96	172	82	384

b. Government

Country	Don't know	Not at all important	Not so important	Important	Very important	Total
India	7	3	15	145	115	285
Italy	1	8	39	44	14	106
Total	8	11	54	189	129	391

c. Philosophical and Social ideologies

Country	Don't know	Not at all important	Not so important	Important	Very important	Total
India	2	5	28	169	79	283
Italy	2	1	13	65	26	107
Total	4	6	41	234	105	390

d. Associations and Social Workers

Country	Don't know	Not at all important	Not so important	Important	Very important	Total
India	9	11	48	161	53	282
Italy	2	4	28	64	8	106
Total	11	15	76	225	61	388

e. Personal Convictions

Country	Don't know	Not at all important	Not so important	Important	Very important	Total
India	5	9	19	92	142	267
Italy	2	16	18	41	29	106
Total	7	25	37	133	171	373

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	4	5	24	138	118	289
Italy	2	2	2	50	51	107
Total	6	7	26	188	169	396

b. Government policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	4	15	36	146	82	283
Italy	1	2	8	40	56	107
Total	5	17	44	186	138	390

c. Personal problems (tiredness, family issues etc.)

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	1	29	89	115	52	286
Italy	1	1	20	50	35	107
Total	2	30	109	165	87	393

d. Economic reasons

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	6	13	33	120	112	284
Italy	2	0	13	49	43	107
Total	8	13	46	169	155	391

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Country	< 15	15-30	>30	Total	P value
India	127	130	19	276	.000
Italy	12	70	17	99	
Total	139	200	36	375	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Country	< 15	15-30	>30	Total	P value
India	113	130	24	267	.000
Italy	19	58	22	99	
Total	132	188	46	366	

c. approximately how many classes need to be devoted to this in NURSING course?

Country	< 15	15-30	>30	Total	P value
India	104	96	22	222	.000
Italy	10	71	14	95	
Total	114	167	36	317	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Don't know	Not important	Important	Very important	Total
India	0	1	73	204	278
Italy	3	0	28	72	103
Total	3	1	101	276	381

b. Value of Human Life

Country	Don't know	Not important	Important	Very important	Total
India	0	3	59	221	283
Italy	3	1	17	82	103
Total	3	4	76	303	386

c. Dignity of the Human Person

Country	Don't know	Not important	Important	Very important	Total
India	0	5	106	171	282
Italy	2	0	12	89	103
Total	2	5	118	260	385

d. Ethics in financial matters

Country	Don't know	Not important	Important	Very important	Total
India	4	8	137	126	275
Italy	4	5	69	25	103
Total	8	13	206	151	378

e. Ethics of medical treatment

Country	Don't know	Not important	Important	Very important	Total
India	0	9	88	185	282
Italy	1	1	33	67	102
Total	1	10	121	252	384

f. Doctor patient relationship

Country	Don't know	Not important	Important	Very important	Total
India	0	7	91	185	283
Italy	0	0	21	82	103
Total	0	7	112	267	386

g. Doctor-doctor relationship

Country	Don't know	Not important	Important	Very important	Total
India	1	11	99	172	283
Italy	0	4	38	61	103
Total	1	15	137	233	386

h. Doctors-other healthcare professionals relationship

Country	Don't know	Not important	Important	Very important	Total
India	2	14	110	156	282
Italy	0	3	49	51	103
Total	2	17	159	207	385

i. Laws and ethical practice

Country	Don't know	Not important	Important	Very important	Total
India	4	1	111	165	281
Italy	2	5	49	47	103
Total	6	6	160	212	384

j. Ethics of healthcare

Country	Don't know	Not important	Important	Very important	Total
India	0	5	125	153	283
Italy	2	2	43	55	102
Total	2	7	168	208	385

k. Ethics of human research

Country	Don't know	Not important	Important	Very important	Total
India	2	23	151	106	282
Italy	2	2	49	49	102
Total	4	25	200	155	384

l. Public health ethics

Country	Don't know	Not important	Important	Very important	Total
India	2	6	155	112	275
Italy	2	4	53	43	102
Total	4	10	208	155	377

Part II
Grouped Answers[387]

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	95	31.98	193	64.98	288	.637
Italy	38	35.18	69	63.88	107	
Total	133	32.83	262	64.69	395	

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	107	36.02	183	61.61	290	.000
Italy	75	69.44	33	30.55	108	
Total	182	44.93	216	53.33	398	

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	50	16.83	237	79.79	287	.008
Italy	32	29.62	76	70.37	108	
Total	82	20.24	313	77.28	395	

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	132	44.44	150	50.50	282	.731
Italy	48	44.44	59	54.62	107	
Total	180	44.44	209	51.60	389	

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	139	46.80	147	49.49	286	.000
Italy	76	70.37	32	29.62	108	
Total	215	53.08	179	44.19	394	

[387] Grouped values are made by adding the values (very true+true) titled "true" and (not true+not at all true+don't know) titled "not true". If there exists a notable percentage in the "don't know" answer, it is explained with special note in the text. Qty.= Quantity; % = percentage.

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	176	59.25	112	37.71	288	.687
Italy	63	58.33	44	40.74	107	
Total	239	59.01	156	38.51	395	

18. In the context of India/Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	170	57.23	118	39.73	288	.016
Italy	78	72.22	30	27.77	108	
Total	248	61.23	148	36.54	396	

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	247	83.16	40	13.46	287	.000
Italy	70	64.81	38	35.18	108	
Total	317	78.27	78	19.25	395	

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	261	87.87	27	09.09	288	.787
Italy	97	89.81	9	08.33	106	
Total	358	88.39	36	08.88	394	

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	248	83.50	41	13.80	289	.097
Italy	82	75.92	22	20.37	104	
Total	330	81.48	63	15.55	393	

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	247	83.16	39	13.13	286	.525
Italy	95	87.96	12	11.11	107	
Total	342	84.44	51	12.59	393	

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	90	30.30	191	64.30	281	.762
Italy	35	32.40	69	63.88	104	
Total	125	30.86	260	64.19	385	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	264	88.88	21	07.07	285	.001
Italy	87	80.55	20	18.51	107	
Total	351	86.66	41	10.12	392	

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	269	90.57	21	07.07	290	.000
Italy	81	75.00	24	22.22	105	
Total	350	86.41	45	11.11	395	

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	250	84.17	39	13.13	289	.084
Italy	85	78.70	22	20.37	107	
Total	335	82.71	61	15.06	396	

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	225	75.75	66	22.22	291	.095
Italy	74	68.51	33	30.55	107	
Total	299	73.82	99	24.44	398	

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	97	32.65	184	61.95	281	.123
Italy	27	25.00	76	70.37	103	
Total	124	30.61	260	64.19	384	

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	106	35.69	171	57.57	277	.003
Italy	24	22.22	83	76.85	107	
Total	130	32.09	254	62.71	384	

b. Government

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	25	08.41	260	87.54	285	.000
Italy	48	44.44	58	53.70	106	
Total	73	18.02	318	78.51	391	

c. Philosophical and Social ideologies

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	35	11.78	248	83.50	283	.499
Italy	16	14.81	91	84.25	107	
Total	51	12.59	339	83.70	390	

d. Associations and Social Workers

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	68	22.89	214	72.05	282	.112
Italy	34	31.48	72	66.66	106	
Total	102	25.18	286	70.61	388	

e. Personal Convictions

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	33	11.11	234	78.78	267	.000
Italy	36	33.33	70	64.81	106	
Total	69	17.03	304	75.06	373	

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	33	11.11	256	86.19	289	.085
Italy	6	05.55	101	93.51	107	
Total	39	09.62	357	88.14	396	

b. Government policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	55	18.51	228	76.76	283	.031
Italy	11	10.18	96	88.88	107	
Total	66	16.29	324	80.00	390	

c. Personal problems (tiredness, family issues etc.)

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	119	40.06	167	56.22	286	.000
Italy	22	20.37	85	78.70	107	
Total	141	34.81	252	62.22	393	

d. Economic reasons

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	52	17.50	232	78.11	284	.315
Italy	15	13.88	92	85.18	107	
Total	67	16.54	324	80.00	391	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	1	00.33	277	93.26	278	.030
Italy	3	02.77	100	92.59	103	
Total	4	00.98	377	93.08	381	

b. Value of Human Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	3	01.01	280	94.27	283	.066
Italy	4	03.70	99	91.66	103	
Total	7	01.72	379	93.58	386	

c. Dignity of the Human Person

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	5	01.68	277	93.26	282	.913
Italy	2	01.82	101	93.51	103	
Total	7	01.72	378	93.33	385	

d. Ethics in financial matters

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	12	04.04	263	88.55	275	.098
Italy	9	08.33	94	87.03	103	
Total	21	05.18	357	88.14	378	

e. Ethics of medical treatment

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	9	03.03	273	91.91	282	.523
Italy	2	01.82	100	92.59	102	
Total	11	02.71	373	92.09	384	

f. Doctor patient relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	7	02.35	276	92.92	283	.107
Italy	0	0	103	95.37	103	
Total	7	01.72	379	93.58	386	

g. Doctor-doctor relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	12	04.04	271	91.24	283	.876
Italy	4	03.70	99	91.66	103	
Total	16	03.95	370	91.35	386	

h. Doctors-other healthcare professionals relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	16	05.38	266	89.56	282	.268
Italy	3	02.77	100	92.59	103	
Total	19	04.69	366	90.37	385	

i. Laws and ethical practice

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	5	01.68	276	92.92	281	.012
Italy	7	06.48	96	88.88	103	
Total	12	02.96	372	91.85	384	

j. Ethics of healthcare

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	5	01.68	278	93.60	283	.217
Italy	4	03.70	98	90.74	102	
Total	9	02.22	376	92.83	385	

k. Ethics of human research

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	25	08.41	257	86.53	282	.105
Italy	4	03.70	98	90.74	102	
Total	29	07.16	355	87.65	384	

l. Public health ethics

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	8	02.69	267	89.89	275	.175
Italy	6	05.55	96	88.88	102	
Total	14	03.45	363	89.62	377	

Appendix XI

Comparison between Christians in India and Christians in Italy

1. Sex

		Sex		Total
		Male	Female	
Country	India	44	86	130
	Italy	59	42	101
Total		103	128	231

2. Age:

		Age						Total
		Below 25	25-30	31-40	41-50	51-60	Above 60	
Country	India	35	59	14	4	11	7	130
	Italy	0	86	15	0	0	0	101
Total		35	145	29	4	11	7	231

3. Religious Affiliation:

		Religious Affiliation								Total
		Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
Country	India				130					130
	Italy				101					101
Total					231					231

4. The state of my origin in India/ Italy:

5. The state in India/ Italy, where I studied Medicine/Nursing:

States/Regions	Of Origin Country		Of Study Country	
	India	Italy	India	Italy
Andhra Pradesh	3		7	
Arunachal Pradesh				
Assam				
Bihar				
Chhattisgarh	2			
Goa	4			
Gujarat	1			
Haryana	2		2	
Himachal Pradesh	1			
Jammu & Kashmir				
Jharkhand	2		1	
Karnataka	9		63	
Kerala	88		30	

Madhya Pradesh	2		2	
Maharashtra	1		3	
Manipur	1			
Meghalaya				
Mizoram				
Nagaland	2			
Odisha (Orissa)	2		1	
Punjab			4	
Rajasthan				
Sikkim				
Tamil Nadu	8		12	
Telangana	1			
Tripura				
Uttar Pradesh				
Uttarakhand				
West Bengal				
New Delhi	1		2	
Pondicherry			2	
Valle D'Aosta				
Piemonte				
Liguria		2		2
Lombardia				
Trentino-Alto Adige		2		
Veneto		1		1
Friuli- Venezia Giulia				
Emilia Romagna		2		
Toscana		4		3
Marche		3		1
Umbria		4		2
Lazio		25		73
Abruzzo		1		2
Molise		1		
Campania		19		6
Basilicata		2		
Puglia		16		3
Calabria		2		
Sicilia		14		7
Sardegna		1		
	130	**99**	**129**	**100**

6. At present I stay/ work:

		Work Countries		
		In the country	Outside the country	Total
Country	India	117	12	129
	Italy	101	0	101
Total		218	12	230

7. Designation/Profession

Designation	India	Italy	Total
Doctor	50	101	
Medical Student	16		
Nurse	64		
Nursing Student			
Bioethicist	1		
Theologian			
Philosopher			
Religious Person			
Professor/ Teacher of Bioethics	2		
Member of a Medical Association for Social Action	3	2	

8. Sector of Study

		Sector of study		
		Public Institute	Private Institute	Total
Country	India	42	88	130
	Italy	41	60	101
Total		83	148	231

9. Sector of Work

		Sector of working		
		Public Sector	Private Sector	Total
Country	India	17	107	124
	Italy	7	92	99
Total		24	199	223

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

		Bioethics studies			
		Yes	No	Not Sure	Total
Country	India	79	34	17	130
	Italy	83	10	8	101
Total		162	44	25	231

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

		lessons during Bachelor's			Total
		< 15	15-30	>30	
Country	India	62	14	5	81
	Italy	17	55	11	83
Total		79	69	16	164

b. approximately how many classes were devoted to ethics in Master's degree programme?

		lessons during Masters			Total
		< 15	15-30	>30	
Country	India	51	1	0	52
	Italy	10	10	1	21
Total		61	11	1	73

Indicate Very True, True, Not True, Not at all True, Don't Know for the questions below:

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	5	14	43	65	0	127
Italy	9	8	47	35	1	100
Total	14	22	90	100	1	227

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	3	2	45	77	2	129
Italy	2	2	27	67	3	101
Total	5	4	72	144	5	230

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	7	23	44	16	39	129
Italy	14	4	53	27	3	101
Total	21	27	97	43	42	230

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	6	68	18	36	1	129
Italy	1	16	38	39	6	100
Total	7	84	56	75	7	229

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	12	17	23	60	13	125
Italy	4	9	18	57	13	101
Total	16	26	41	117	26	226

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	6	11	47	49	16	129
Italy	13	7	20	54	6	100
Total	19	18	67	103	22	229

18. In the context of India/ Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	7	2	34	74	11	128
Italy	9	1	17	59	15	101
Total	16	3	51	133	26	229

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	0	2	9	88	30	129
Italy	13	3	20	52	13	101
Total	13	5	29	140	43	230

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	0	5	12	29	81	127
Italy	2	0	7	50	40	99
Total	2	5	19	79	121	226

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	0	6	8	46	69	129
Italy	10	0	11	61	15	97
Total	10	6	19	107	84	226

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	2	3	9	75	35	124
Italy	7	1	3	66	23	100
Total	9	4	12	141	58	224

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	37	4	28	46	8	123
Italy	46	2	21	26	2	97
Total	83	6	49	72	10	220

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	1	0	5	78	42	126
Italy	6	3	8	65	19	101
Total	7	3	13	143	61	227

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	0	0	6	83	38	127
Italy	9	3	12	60	14	98
Total	9	3	18	143	52	225

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	1	3	4	48	71	127
Italy	5	5	12	64	14	100
Total	6	8	16	112	85	227

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	0	5	13	40	71	129
Italy	4	6	22	58	10	100
Total	4	11	35	98	81	229

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	30	5	22	53	15	125
Italy	50	3	20	18	6	97
Total	80	8	42	71	21	222

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Response "YES"	Country		Total	P value
	India	Italy		
Any medical Practitioner	35	43	78	.013
A medical doctor who has specialized in Bioethics	109	75	184	.073
A non-medical doctor who has specialized in Bioethics	31	24	55	.988
One who has a PhD in Medical Ethics	77	42	119	.008
Someone who has specialized in the fields of philosophy, religion and science (medicine)	34	55	89	.000

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	0	18	15	43	52	128
Italy	1	4	14	57	24	100
Total	1	22	29	100	76	228

b. Government

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	0	2	2	48	74	126
Italy	1	7	36	43	12	99
Total	1	9	38	91	86	225

c. Philosophical and Social ideologies

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	0	4	14	85	23	126
Italy	2	1	11	63	23	100
Total	2	5	25	148	46	226

d. Associations and Social Workers

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	4	0	17	86	20	127
Italy	2	3	26	63	6	100
Total	6	3	43	149	26	227

e. Personal Convictions

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	3	12	38	20	50	123
Italy	2	13	17	40	27	99
Total	5	25	55	60	77	222

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	3	0	11	37	77	128
Italy	2	2	2	46	48	100
Total	5	2	13	83	125	228

b. Government policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	1	6	13	48	59	127
Italy	1	1	8	36	54	100
Total	2	7	21	84	113	227

c. Personal problems (tiredness, family issues etc.)

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	2	8	58	44	16	128
Italy	1	1	20	47	31	100
Total	3	9	78	91	47	228

d. Economic reasons

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	2	2	42	42	40	128
Italy	2	0	12	45	41	100
Total	4	2	54	87	81	228

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Country	< 15	15-30	>30	Total	P value
India	31	76	16	123	.052
Italy	11	66	15	92	
Total	42	142	31	215	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Country	< 15	15-30	>30	Total	P value
India	48	41	27	116	.001
Italy	18	55	19	92	
Total	66	96	46	208	

c. approximately how many classes need to be devoted to this in NURSING course?

Country	< 15	15-30	>30	Total	P value
India	32	54	28	114	.000
Italy	9	67	12	88	
Total	41	121	40	202	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Don't know	Not important	Important	Very important	Total
India	0	0	60	67	127
Italy	2	0	24	70	96
Total	2	0	84	137	223

b. Value of Human Life

Country	Don't know	Not important	Important	Very important	Total
India	0	0	59	68	127
Italy	2	0	14	80	96
Total	2	0	73	148	223

c. Dignity of the Human Person

Country	Don't know	Not important	Important	Very important	Total
India	0	2	63	62	127
Italy	1	0	11	84	96
Total	1	2	74	146	223

d. Ethics in financial matters

Country	Don't know	Not important	Important	Very important	Total
India	2	34	58	31	125
Italy	4	4	64	24	96
Total	6	38	122	55	221

e. Ethics of medical treatment

Country	Don't know	Not important	Important	Very important	Total
India	0	0	26	101	127
Italy	1	1	30	63	95
Total	1	1	56	164	222

f. Doctor patient relationship

Country	Don't know	Not important	Important	Very important	Total
India	0	0	24	103	127
Italy	0	0	20	76	96
Total	0	0	44	179	223

g. Doctor-doctor relationship

Country	Don't know	Not important	Important	Very important	Total
India	0	2	63	62	127
Italy	0	4	35	57	96
Total	0	6	98	119	223

h. Doctors-other healthcare professionals relationship

Country	Don't know	Not important	Important	Very important	Total
India	0	6	49	72	127
Italy	0	3	45	48	96
Total	0	9	94	120	223

i. Laws and ethical practice

Country	Don't know	Not important	Important	Very important	Total
India	0	1	31	95	127
Italy	2	4	46	44	96
Total	2	5	77	139	223

j. Ethics of healthcare

Country	Don't know	Not important	Important	Very important	Total
India	0	2	41	84	127
Italy	2	2	40	51	95
Total	2	4	81	135	222

k. Ethics of human research

Country	Don't know	Not important	Important	Very important	Total
India	1	2	77	47	127
Italy	2	2	46	45	95
Total	3	4	123	92	222

l. Public health ethics

Country	Don't know	Not important	Important	Very important	Total
India	0	4	44	76	124
Italy	2	4	49	40	95
Total	2	8	93	116	219

Part II

Grouped Answers[388]

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	65	50.00	62	47.69	127	.022
Italy	36	35.64	64	63.36	100	
Total	101	43.72	126	54.54	227	

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	79	60.76	50	38.46	129	.204
Italy	70	69.30	31	30.69	101	
Total	149	64.50	81	35.06	230	

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	55	42.30	74	56.92	129	.044
Italy	30	29.70	71	70.29	101	
Total	85	36.79	145	62.77	230	

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	37	28.46	92	70.76	129	.011
Italy	45	44.55	55	54.45	100	
Total	82	35.49	147	63.63	229	

[388] Grouped values are made by adding the values (very true+true) titled "true" and (not true+not at all true+don't know) titled "not true". If there exists a notable percentage in the "don't know" answer, it is explained with special note in the text. Qty.= Quantity; % = percentage.

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	73	56.15	52	40.00	125	.091
Italy	70	69.30	31	30.69	101	
Total	143	61.90	83	35.93	226	

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	65	50.00	64	49.23	129	.147
Italy	60	59.40	40	39.60	100	
Total	125	54.11	104	45.02	229	

18. In the context of India/Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	85	65.38	43	33.07	128	.263
Italy	74	73.26	27	26.73	101	
Total	159	68.83	70	30.30	229	

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	118	90.76	11	08.46	129	.000
Italy	65	64.35	36	35.64	101	
Total	183	79.22	47	20.34	230	

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	110	84.61	17	13.07	127	.315
Italy	90	89.10	9	08.91	99	
Total	200	86.58	26	11.25	226	

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	115	88.46	14	10.76	129	.026
Italy	76	75.24	21	20.79	97	
Total	191	82.68	35	15.15	226	

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	110	84.61	14	10.76	124	.945
Italy	89	88.11	11	10.89	100	
Total	199	86.14	25	10.82	224	

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	54	41.53	69	53.07	123	.022
Italy	28	27.72	69	68.31	97	
Total	82	35.49	138	59.74	220	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	120	92.30	6	04.61	126	.003
Italy	84	83.16	17	16.83	101	
Total	204	88.31	23	09.95	227	

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	121	93.07	6	04.61	127	.000
Italy	74	73.26	24	23.76	98	
Total	195	84.41	30	12.98	225	

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	119	91.53	8	06.15	127	.001
Italy	78	77.22	22	21.78	100	
Total	197	85.28	30	12.98	227	

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	111	85.38	18	13.84	129	.001
Italy	68	67.32	32	31.68	100	
Total	179	77.48	50	21.64	229	

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	68	52.30	57	43.84	125	.000
Italy	24	23.76	73	72.27	97	
Total	92	39.82	130	56.27	222	

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	33	25.38	95	73.07	128	.226
Italy	19	18.81	81	80.19	100	
Total	52	22.51	176	76.19	228	

b. Government

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	4	03.07	122	93.84	126	.000
Italy	44	43.56	55	54.45	99	
Total	48	20.77	177	76.62	225	

c. Philosophical and Social ideologies

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	18	13.84	108	83.07	126	.951
Italy	14	13.86	86	85.14	100	
Total	32	13.85	194	83.98	226	

d. Associations and Social Workers

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	21	16.15	106	81.53	127	.010
Italy	31	30.69	69	68.31	100	
Total	52	22.51	175	75.75	227	

e. Personal Convictions

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	53	40.76	70	53.84	123	.101
Italy	32	31.68	67	66.33	99	
Total	85	36.79	137	59.30	222	

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	14	10.76	114	87.69	128	.191
Italy	6	05.94	94	93.06	100	
Total	20	08.65	208	90.04	228	

b. Government policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	20	15.38	107	82.30	127	.204
Italy	10	09.90	90	89.10	100	
Total	30	12.98	197	85.28	227	

c. Personal problems (tiredness, family issues etc.)

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	68	52.30	60	46.15	128	.000
Italy	22	21.78	78	77.22	100	
Total	90	38.96	138	59.74	228	

d. Economic reasons

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	46	35.38	82	63.07	128	.000
Italy	14	13.86	86	85.14	100	
Total	60	25.97	168	72.72	228	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	0	0	127	97.69	127	.102
Italy	2	01.98	94	93.06	96	
Total	2	00.86	221	95.67	223	

b. Value of Human Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	0	0	127	97.69	127	.102
Italy	2	01.98	94	93.06	96	
Total	2	00.86	221	95.67	223	

c. Dignity of the Human Person

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	2	01.53	125	96.15	127	.732
Italy	1	00.99	95	94.05	96	
Total	3	01.29	220	95.23	223	

d. Ethics in financial matters

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	36	27.69	89	68.46	125	.000
Italy	8	07.92	88	87.12	96	
Total	44	19.04	177	76.62	221	

e. Ethics of medical treatment

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	0	0	127	97.69	127	.100
Italy	2	01.98	93	92.07	95	
Total	2	00.86	220	95.23	222	

f. Doctor patient relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	0	0	127	97.69	127	nil
Italy	0	0	96	95.04	96	
Total	0	0	223	96.53	223	

g. Doctor-doctor relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	2	01.53	125	96.15	127	.236
Italy	4	03.96	92	91.08	96	
Total	6	02.59	217	93.93	223	

h. Doctors-other healthcare professionals relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	6	04.61	121	93.07	127	.548
Italy	3	02.97	93	92.07	96	
Total	9	03.89	214	92.64	223	

i. Laws and ethical practice

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	1	00.01	126	96.92	127	.021
Italy	6	05.94	90	89.10	96	
Total	7	03.03	216	93.50	223	

j. Ethics of healthcare

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	2	01.53	125	96.15	127	.231
Italy	4	03.96	91	90.09	95	
Total	6	02.59	216	93.50	222	

k. Ethics of human research

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	3	02.30	124	95.38	127	.436
Italy	4	03.96	91	90.09	95	
Total	7	03.03	215	93.07	222	

l. Public health ethics

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	4	03.07	120	92.30	124	.278
Italy	6	05.94	89	88.11	95	
Total	10	04.32	209	90.47	219	

Appendix XII

Comparison between the Age Group from 25 to 40 from India and Italy

1. Sex

		Sex		Total
		Male	Female	
Country	India	131	148	279
	Italy	63	45	108
Total		194	193	387

2. Age:

		Age						Total
		Below 25	25-30	31-40	41-50	51-60	Above 60	
Country	India		193	89				282
	Italy		92	16				108
Total			285	105				390

3. Religious Affiliation:

		Religious Affiliation								Total
		Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
Country	India	145	54	2	73	0	8	0	0	282
	Italy	0	0	0	101	0	0	0	7	108
Total		145	54	2	174	0	8	0	7	390

4. The state of my origin in India/ Italy:

5. The state in India/ Italy, where I studied Medicine/Nursing:

States/Regions	Of Origin Country		Of Study Country	
	India	Italy	India	Italy
Andhra Pradesh	1		8	
Arunachal Pradesh				
Assam				
Bihar			1	
Chhattisgarh	4		1	
Goa	13		4	
Gujarat	12		10	
Haryana	6		4	
Himachal Pradesh	7		7	
Jammu & Kashmir	2			
Jharkhand	3		1	

Karnataka	53		91	
Kerala	104		61	
Madhya Pradesh	8		5	
Maharashtra	36		48	
Manipur				
Meghalaya				
Mizoram				
Nagaland	2			
Odisha (Orissa)	5		4	
Punjab	2		3	
Rajasthan	3		5	
Sikkim				
Tamil Nadu	7		14	
Telangana	3		1	
Tripura				
Uttar Pradesh	1		2	
Uttarakhand	2		1	
West Bengal	2		2	
New Delhi	4		4	
Pondicherry	2		4	
Valle D'Aosta				
Piemonte				
Liguria		2		2
Lombardia				
Trentino-Alto Adige		2		
Veneto		1		1
Friuli- Venezia Giulia				
Emilia Romagna		2		
Toscana		4		3
Marche		3		1
Umbria		4		2
Lazio		26		79
Abruzzo		1		2
Molise		1		
Campania		20		6
Basilicata		2		
Puglia		18		4
Calabria		3		
Sicilia		16		7
Sardegna		1		
Total	**282**	**106**	**281**	**107**

6. At present I stay/ work:

		Work Countries		
		In the country	Outside the country	Total
Country	India	273	9	282
	Italy	108	0	108
Total		381	9	390

7. Designation/Profession

Designation	India	Italy	Total
Doctor	205	108	313
Medical Student	14		
Nurse	63		
Nursing Student			
Bioethicist			
Theologian			
Philosopher			
Religious Person			
Professor/ Teacher of Bioethics	4		
Member of a Medical Association for Social Action	6	3	9

8. Sector of Study

		Sector of study		
		Public Institute	Private Institute	Total
Country	India	131	151	282
	Italy	43	65	108
Total		174	216	390

9. Sector of Work

		Sector of working		
		Public Sector	Private Sector	Total
Country	India	67	209	276
	Italy	8	98	106
Total		75	307	382

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

		Bioethics studies			
		Yes	No	Not Sure	Total
Country	India	171	64	47	282
	Italy	89	11	8	108
Total		260	75	55	390

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

		lessons during Bachelor's			Total
		< 15	15-30	>30	
Country	India	161	14	2	177
	Italy	20	56	13	89
Total		181	70	15	266

b. approximately how many classes were devoted to ethics in Master's degree programme?

		lessons during Masters			Total
		< 15	15-30	>30	
Country	India	133	4	0	137
	Italy	11	10	1	22
Total		144	14	1	159

Indicate Very True, True, Not True, Not at all True, Don't Know for the questions below:

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	9	18	130	121	0	278
Italy	10	9	50	37	1	107
Total	19	27	180	158	1	385

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	9	12	132	122	5	280
Italy	2	2	29	72	3	108
Total	11	14	161	194	8	388

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	26	46	134	46	25	277
Italy	15	4	57	29	3	108
Total	41	50	191	75	28	385

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	11	61	74	112	14	272
Italy	1	19	39	42	6	107
Total	12	80	113	154	20	379

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	20	48	66	121	21	276
Italy	4	9	19	61	15	108
Total	24	57	85	182	36	384

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	12	21	77	137	32	279
Italy	13	7	24	56	7	107
Total	25	28	101	193	39	386

18. In the context of India/ Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	22	4	87	139	27	279
Italy	9	3	18	62	16	108
Total	31	7	105	201	43	387

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	15	4	36	136	86	277
Italy	13	3	22	56	14	108
Total	28	7	58	192	100	385

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	0	7	21	89	162	279
Italy	2	0	7	52	45	106
Total	2	7	28	141	207	385

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	2	6	28	126	117	279
Italy	10	0	12	65	17	104
Total	12	6	40	191	134	383

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	7	1	27	161	80	276
Italy	7	2	3	69	26	107
Total	14	3	30	230	106	383

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	110	4	47	74	34	269
Italy	46	2	21	32	3	104
Total	156	6	68	106	37	373

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	10	4	5	158	100	277
Italy	6	3	11	67	20	107
Total	16	7	16	225	120	384

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	2	0	13	180	83	278
Italy	9	3	12	66	15	105
Total	11	3	25	246	98	383

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	11	1	20	144	101	277
Italy	5	5	12	69	16	107
Total	16	6	32	213	117	384

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	7	5	42	165	62	281
Italy	5	6	22	62	12	107
Total	12	11	64	227	74	388

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	108	4	52	81	25	270
Italy	53	3	20	20	7	103
Total	161	7	72	101	32	373

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Response "YES"	Country		Total	P value
	India	Italy		
Any medical Practitioner	108	47	155	.346
A medical doctor who has specialized in Bioethics	198	79	277	.567
A non-medical doctor who has specialized in Bioethics	59	25	108	.632
One who has a PhD in Medical Ethics	127	43	170	.352
Someone who has specialized in the fields of philosophy, religion and science (medicine)	65	58	123	.000

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	2	33	69	111	61	276
Italy	1	6	17	57	26	107
Total	3	39	86	168	87	383

b. Government

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	6	0	10	118	142	276
Italy	1	8	39	44	14	106
Total	7	8	49	162	156	382

c. Philosophical and Social ideologies

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	3	3	36	147	85	274
Italy	2	1	13	65	26	107
Total	5	4	49	212	111	381

d. Associations and Social Workers

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	10	5	44	170	47	276
Italy	2	4	28	64	8	106
Total	12	9	72	234	55	382

e. Personal Convictions

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	3	19	33	72	129	256
Italy	2	16	18	41	29	106
Total	5	35	51	113	158	362

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	0	5	12	129	132	278
Italy	2	2	2	50	51	107
Total	2	7	14	179	183	385

b. Government policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	2	9	39	114	108	272
Italy	1	2	8	40	56	107
Total	3	11	47	154	164	379

c. Personal problems (tiredness, family issues etc.)

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	2	20	113	108	32	275
Italy	1	1	20	50	35	107
Total	3	21	133	158	67	382

d. Economic reasons

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	4	10	44	115	100	273
Italy	2	0	13	49	43	107
Total	6	10	57	164	143	380

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Country	< 15	15-30	>30	Total	P value
India	112	135	25	272	.000
Italy	12	70	17	99	
Total	124	205	42	371	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Country	< 15	15-30	>30	Total	P value
India	106	117	46	269	.001
Italy	19	58	22	99	
Total	125	175	68	368	

c. approximately how many classes need to be devoted to this in NURSING course?

Country	< 15	15-30	>30	Total	P value
India	105	90	30	225	.000
Italy	10	71	14	95	
Total	115	161	44	320	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Don't know	Not important	Important	Very important	Total
India	0	1	86	188	275
Italy	3	0	28	72	103
Total	3	1	114	260	378

b. Value of Human Life

Country	Don't know	Not important	Important	Very important	Total
India	0	3	79	195	277
Italy	3	1	17	82	103
Total	3	4	96	277	380

c. Dignity of the Human Person

Country	Don't know	Not important	Important	Very important	Total
India	0	5	124	147	276
Italy	2	0	12	89	103
Total	2	5	136	236	379

d. Ethics in financial matters

Country	Don't know	Not important	Important	Very important	Total
India	6	32	130	100	268
Italy	4	5	69	25	103
Total	10	37	199	125	371

e. Ethics of medical treatment

Country	Don't know	Not important	Important	Very important	Total
India	0	9	81	183	273
Italy	1	1	33	67	102
Total	1	10	114	250	375

f. Doctor patient relationship

Country	Don't know	Not important	Important	Very important	Total
India	0	11	85	181	277
Italy	0	0	21	82	103
Total	0	11	106	263	380

g. Doctor-doctor relationship

Country	Don't know	Not important	Important	Very important	Total
India	1	14	100	160	275
Italy	0	4	38	61	103
Total	1	18	138	221	378

h. Doctors-other healthcare professionals relationship

Country	Don't know	Not important	Important	Very important	Total
India	2	15	104	156	277
Italy	0	3	49	51	103
Total	2	18	153	207	380

i. Laws and ethical practice

Country	Don't know	Not important	Important	Very important	Total
India	0	3	97	175	275
Italy	2	5	49	47	103
Total	2	8	146	222	378

j. Ethics of healthcare

Country	Don't know	Not important	Important	Very important	Total
India	2	5	112	158	277
Italy	2	2	43	55	102
Total	4	7	155	213	379

k. Ethics of human research

Country	Don't know	Not important	Important	Very important	Total
India	4	14	176	82	276
Italy	2	2	49	49	102
Total	6	16	225	131	378

l. Public health ethics

Country	Don't know	Not important	Important	Very important	Total
India	2	6	144	117	269
Italy	2	4	53	43	102
Total	4	10	197	160	371

Part II
Grouped Answers[389]

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	121	42.90	157	55.67	278	.153
Italy	38	35.18	69	63.88	107	
Total	159	40.76	226	57.94	385	

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	127	45.03	153	54.25	280	.000
Italy all	75	69.44	33	30.55	108	
Total	202	51.79	186	47.69	388	

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	71	25.17	206	73.04	277	.426
Italy	32	29.62	76	70.37	108	
Total	103	26.41	282	72.30	385	

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	126	44.68	146	51.77	272	.797
Italy	48	44.44	59	54.62	107	
Total	174	44.61	205	52.56	379	

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	142	50.35	134	47.51	276	.001
Italy	76	70.37	32	29.62	108	
Total	218	55.89	166	42.56	384	

[389] Grouped values are made by adding the values (very true+true) titled "true" and (not true+not at all true+don't know) titled "not true". If there exists a notable percentage in the "don't know" answer, it is explained with special note in the text. Qty. = Quantity; % = percentage.

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	169	59.92	110	39.00	279	.761
Italy	63	58.33	44	40.74	107	
Total	232	59.48	154	39.48	386	

18. In the context of India/Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	166	58.86	113	40.07	279	.020
Italy	78	72.22	30	27.77	108	
Total	244	62.56	143	36.66	387	

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	222	78.72	55	19.50	277	.002
Italy	70	64.81	38	35.18	108	
Total	292	74.87	93	23.84	385	

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	251	89.00	28	09.92	279	.646
Italy	97	89.81	9	08.33	106	
Total	348	89.23	37	09.48	385	

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	243	86.17	36	12.76	279	.045
Italy	82	75.92	22	20.37	104	
Total	325	83.33	58	14.87	383	

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	241	85.46	35	12.41	276	.695
Italy	95	87.96	12	11.11	107	
Total	336	86.15	47	12.05	383	

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	108	38.29	161	57.09	269	.247
Italy	35	32.40	69	63.88	104	
Total	143	36.66	230	58.97	373	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	258	91.48	19	06.73	277	.001
Italy	87	80.55	20	18.51	107	
Total	345	88.46	39	10.00	384	

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	263	93.26	15	05.31	278	.000
Italy	81	75.00	24	22.22	105	
Total	344	88.20	39	10.00	383	

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	245	86.87	32	11.34	277	.023
Italy	85	78.70	22	20.37	107	
Total	330	84.61	54	13.84	384	

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	227	80.49	54	19.14	281	.014
Italy	74	68.51	33	30.55	107	
Total	301	77.17	87	22.30	388	

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	106	37.58	164	58.15	270	.019
Italy	27	25.00	76	70.37	103	
Total	133	34.10	240	61.53	373	

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	104	36.87	172	60.99	276	.005
Italy	24	22.22	83	76.85	107	
Total	128	32.82	255	65.38	383	

b. Government

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	16	05.67	260	92.19	276	.000
Italy	48	44.44	58	53.70	106	
Total	64	16.41	318	81.53	382	

c. Philosophical and Social ideologies

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	42	14.89	232	82.26	274	.927
Italy	16	14.81	91	84.25	107	
Total	58	14.87	323	82.82	381	

d. Associations and Social Workers

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	59	20.92	217	76.95	276	.029
Italy	34	31.48	72	66.66	106	
Total	93	23.84	289	74.10	382	

e. Personal Convictions

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	55	19.50	201	71.27	256	.013
Italy	36	33.33	70	64.81	106	
Total	91	23.33	271	69.48	362	

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	17	06.02	261	92.55	278	.851
Italy	6	05.55	101	93.51	107	
Total	23	05.89	362	92.82	385	

b. Government policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	50	17.73	222	78.72	272	.053
Italy	11	10.18	96	88.88	107	
Total	61	15.64	318	81.53	379	

c. Personal problems (tiredness, family issues etc.)

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	135	47.87	140	49.64	275	.000
Italy	22	20.37	85	78.70	107	
Total	157	40.25	225	57.69	382	

d. Economic reasons

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	58	20.56	215	76.24	273	.108
Italy	15	13.88	92	85.18	107	
Total	73	18.71	307	78.71	380	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	1	00.35	274	96.45	275	.031
Italy	3	02.77	100	92.59	103	
Total	4	01.02	374	95.89	378	

b. Value of Human Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	3	01.06	274	97.16	277	.071
Italy	4	3.70	99	91.66	103	
Total	7	01.79	373	95.64	380	

c. Dignity of the Human Person

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	5	01.77	271	96.09	276	.933
Italy	2	01.82	101	93.51	103	
Total	7	01.79	372	95.38	379	

d. Ethics in financial matters

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	38	13.47	230	81.56	268	.158
Italy	9	08.33	94	87.03	103	
Total	47	12.05	324	83.07	371	

e. Ethics of medical treatment

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	9	03.19	264	93.61	273	.495
Italy	2	01.82	100	92.59	102	
Total	11	02.82	364	93.33	375	

f. Doctor patient relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	11	04.25	266	94.62	277	.040
Italy	0	0	103	95.37	103	
Total	11	02.82	369	94.61	380	

g. Doctor-doctor relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	15	05.31	260	92.19	275	.534
Italy	4	03.70	99	91.66	103	
Total	19	04.87	359	92.05	378	

h. Doctors-other healthcare professionals relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	17	06.02	260	92.19	277	.211
Italy	3	02.77	100	92.59	103	
Total	20	05.12	360	92.30	380	

i. Laws and ethical practice

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	3	01.06	272	96.45	275	.002
Italy	7	06.48	96	88.88	103	
Total	10	02.56	368	94.35	378	

j. Ethics of healthcare

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	7	02.48	270	95.74	277	.473
Italy	4	03.70	98	90.74	102	
Total	11	03.07	368	94.35	379	

k. Ethics of human research

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	18	06.38	258	91.48	276	.338
Italy	4	03.70	98	90.74	102	
Total	22	05.64	356	91.28	378	

l. Public health ethics

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	8	02.83	261	92.55	269	.189
Italy	6	05.55	96	88.88	102	
Total	14	03.58	357	91.53	371	

Appendix XIII

Comparison between Non-Christians from India and Total Group of Italy

1. Sex

		Sex		Total
		Male	Female	
Country	India	176	187	363
	Italy	63	45	108
Total		239	232	471

2. Age:

		Age						Total
		Below 25	25-30	31-40	41-50	51-60	Above 60	
Country	India	97	134	75	25	23	12	366
	Italy	0	92	16	0	0	0	108
Total		97	226	91	25	23	12	474

3. Religious Affiliation:

		Religious Affiliation								Total
		Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
Country	India	250	85	16	0	1	13	1	0	366
	Italy	0	0	0	101	0	0	0	7	108
Total		250	85	16	101	1	13	1	7	474

4. The state of my origin in India/ Italy:

5. The state in India/ Italy, where I studied Medicine/Nursing:

States/Regions	Of Origin Country		Of Study Country	
	India	Italy	India	Italy
Andhra Pradesh	5		13	
Arunachal Pradesh	1			
Assam				
Bihar	7		2	
Chhattisgarh	3		1	
Goa	12		5	
Gujarat	14		13	
Haryana	6		5	
Himachal Pradesh	8		7	
Jammu & Kashmir	3		1	
Jharkhand	3		1	

Karnataka	72		111	
Kerala	94		68	
Madhya Pradesh	9		6	
Maharashtra	47		60	
Manipur				
Meghalaya				
Mizoram				
Nagaland	1			
Odisha (Orissa)	7		5	
Punjab	17		14	
Rajasthan	7		5	
Sikkim				
Tamil Nadu	14		15	
Telangana	6		4	
Tripura				
Uttar Pradesh	8		7	
Uttarakhand	5		1	
West Bengal	5		5	
New Delhi	9		11	
Pondicherry	2		6	
Valle D'Aosta				
Piemonte				
Liguria		2		2
Lombardia				
Trentino-Alto Adige		2		
Veneto		1		1
Friuli- Venezia Giulia				
Emilia Romagna		2		
Toscana		4		3
Marche		3		1
Umbria		4		2
Lazio		26		79
Abruzzo		1		2
Molise		1		
Campania		20		6
Basilicata		2		
Puglia		18		4
Calabria		3		
Sicilia		16		7
Sardegna		1		
Total	**365**	**106**	**366**	**107**

6. At present I stay/ work:

		Work Countries		
		In the country	Outside the country	Total
Country	India	362	4	366
	Italy	108	0	108
Total		470	4	474

7. Designation/Profession

Designation	India	Italy	Total
Doctor	247	108	355
Medical Student	84		84
Nurse	35		35
Nursing Student			
Bioethicist	2		2
Theologian			
Philosopher	1		1
Religious Person	2		2
Professor/ Teacher of Bioethics	7		7
Member of a Medical Association for Social Action	13	3	16

8. Sector of Study

		Sector of study		
		Public Institute	Private Institute	Total
Country	India	206	158	364
	Italy	43	65	108
Total		249	223	472

9. Sector of Work

		Sector of working		
		Public Sector	Private Sector	Total
Country	India	70	239	309
	Italy	8	98	106
Total		78	337	415

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

		Bioethics studies			
		Yes	No	Not Sure	Total
Country	India	194	102	68	364
	Italy	89	11	8	108
Total		283	113	76	472

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

		lessons during Bachelor's			Total
		< 15	15-30	>30	
Country	India	187	15	0	202
	Italy	20	56	13	89
Total		207	71	13	291

b. approximately how many classes were devoted to ethics in Master's degree programme?

		lessons during Masters			Total
		< 15	15-30	>30	
Country	India	156	4	0	160
	Italy	11	10	1	22
Total		167	14	1	182

Indicate Very True, True, Not True, Not at all True, Don't Know for the questions below:

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	14	37	179	127	6	363
Italy	10	9	50	37	1	107
Total	24	46	229	164	7	470

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	15	29	182	127	11	364
Italy	2	2	29	72	3	108
Total	17	31	211	199	14	472

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	39	79	155	68	19	360
Italy	15	4	57	29	3	108
Total	54	83	212	97	22	468

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	16	78	90	141	24	349
Italy	1	19	39	42	6	107
Total	17	97	129	183	30	456

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	33	54	89	151	32	359
Italy	4	9	19	61	15	108
Total	37	63	108	212	47	467

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	14	22	98	159	69	362
Italy	13	7	24	56	7	107
Total	27	29	122	215	76	469

18. In the context of India/ Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	33	12	91	178	48	362
Italy	9	3	18	62	16	108
Total	42	15	109	240	64	470

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	20	3	31	168	139	361
Italy	13	3	22	56	14	108
Total	33	6	53	224	153	469

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	2	6	25	121	209	363
Italy	2	0	7	52	45	106
Total	4	6	32	173	254	469

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	9	9	31	164	150	363
Italy	10	0	12	65	17	104
Total	19	9	43	229	167	467

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	12	5	41	192	111	361
Italy	7	2	3	69	26	107
Total	19	7	44	261	137	468

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	166	8	43	84	53	354
Italy	46	2	21	32	3	104
Total	212	10	64	116	56	458

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	25	7	6	180	141	359
Italy	6	3	11	67	20	107
Total	31	10	17	247	161	466

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	12	4	14	209	125	364
Italy	9	3	12	66	15	105
Total	21	7	26	275	140	469

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	18	5	28	173	137	361
Italy	5	5	12	69	16	107
Total	23	10	40	242	153	468

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	13	7	60	199	85	364
Italy	5	6	22	62	12	107
Total	18	13	82	261	97	471

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	Don't Know	Not at all True	Not so True	True	Very True	Total
India	153	3	66	106	28	356
Italy	53	3	20	20	7	103
Total	206	6	86	126	35	459

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Response "YES"	Country		Total	P value
	India	Italy		
Any medical Practitioner	143	47	190	.407
A medical doctor who has specialized in Bioethics	259	79	338	.593
A non-medical doctor who has specialized in Bioethics	88	25	113	.848
One who has a PhD in Medical Ethics	176	43	219	.143
Someone who has specialized in the fields of philosophy, religion and science (medicine)	93	58	151	.000

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	2	31	106	139	70	348
Italy	1	6	17	57	26	107
Total	3	37	123	196	96	455

b. Government

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	8	3	27	161	157	356
Italy	1	8	39	44	14	106
Total	9	11	66	205	171	462

c. Philosophical and Social ideologies

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	6	4	49	191	104	354
Italy	2	1	13	65	26	107
Total	8	5	62	256	130	461

d. Associations and Social Workers

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	18	13	45	202	77	355
Italy	2	4	28	64	8	106
Total	20	17	73	266	85	461

e. Personal Convictions

Country	Don't know	Not at all Important	Not so important	Important	Very important	Total
India	5	14	37	114	163	333
Italy	2	16	18	41	29	106
Total	7	30	55	155	192	439

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	3	8	25	173	152	361
Italy	2	2	2	50	51	107
Total	5	10	27	223	203	468

b. Government policies

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	6	14	41	164	129	354
Italy	1	2	8	40	56	107
Total	7	16	49	204	185	461

c. Personal problems (tiredness, family issues etc.)

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	6	29	124	137	62	358
Italy	1	1	20	50	35	107
Total	7	30	144	187	97	465

d. Economic reasons

Country	Don't know	Not at all serious	Not so serious	serious	Very serious	Total
India	7	16	58	140	134	355
Italy	2	0	13	49	43	107
Total	9	16	71	189	177	462

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Country	< 15	15-30	>30	Total	P value
India	155	168	28	351	.000
Italy	12	70	17	99	
Total	167	238	45	450	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Country	< 15	15-30	>30	Total	P value
India	131	160	43	334	.001
Italy	19	58	22	99	
Total	150	218	65	433	

c. approximately how many classes need to be devoted to this in NURSING course?

Country	< 15	15-30	>30	Total	P value
India	133	110	46	289	.000
Italy	10	71	14	95	
Total	143	181	60	384	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Don't know	Not important	Important	Very important	Total
India	0	3	100	248	351
Italy	3	0	28	72	103
Total	3	3	128	320	454

b. Value of Human Life

Country	Don't know	Not important	Important	Very important	Total
India	0	5	81	272	358
Italy	3	1	17	82	103
Total	3	6	98	354	461

c. Dignity of the Human Person

Country	Don't know	Not important	Important	Very important	Total
India	0	8	139	211	358
Italy	2	0	12	89	103
Total	2	8	151	300	461

d. Ethics in financial matters

Country	Don't know	Not important	Important	Very important	Total
India	5	40	158	148	351
Italy	4	5	69	25	103
Total	9	45	227	173	454

e. Ethics of medical treatment

Country	Don't know	Not important	Important	Very important	Total
India	1	9	113	232	355
Italy	1	1	33	67	102
Total	2	10	146	299	457

f. Doctor patient relationship

Country	Don't know	Not important	Important	Very important	Total
India	0	11	113	235	359
Italy	0	0	21	82	103
Total	0	11	134	317	462

g. Doctor-doctor relationship

Country	Don't know	Not important	Important	Very important	Total
India	1	15	140	201	357
Italy	0	4	38	61	103
Total	1	19	178	262	460

h. Doctors-other healthcare professionals relationship

Country	Don't know	Not important	Important	Very important	Total
India	3	19	134	202	358
Italy	0	3	49	51	103
Total	3	22	183	253	461

i. Laws and ethical practice

Country	Don't know	Not important	Important	Very important	Total
India	4	7	142	204	357
Italy	2	5	49	47	103
Total	6	12	191	251	460

j. Ethics of healthcare

Country	Don't know	Not important	Important	Very important	Total
India	2	6	151	200	359
Italy	2	2	43	55	102
Total	4	8	194	255	461

k. Ethics of human research

Country	Don't know	Not important	Important	Very important	Total
India	7	26	209	116	358
Italy	2	2	49	49	102
Total	9	28	258	165	460

l. Public health ethics

Country	Don't know	Not important	Important	Very important	Total
India	9	7	184	151	351
Italy	2	4	53	43	102
Total	11	11	237	194	453

Part II
Grouped Answers[390]

12. The medical ethics policy of the government of India/ Italy is strong and effective.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	133	36.33	230	62.84	363	.832
Italy	38	35.18	69	63.88	107	
Total	171	36.07	299	63.08	470	

13. In India/ Italy majority of the doctors and nurses are ethical in their practice.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	138	37.70	226	61.74	364	.000
Italy	75	69.44	33	30.55	108	
Total	213	44.93	259	54.64	472	

14. The ethics curriculum in the medical colleges in India/ Italy is properly designed to encounter the challenges that a medical professional faces in the field.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	87	23.77	273	74.59	360	.253
Italy	32	29.62	76	70.37	108	
Total	119	25.10	349	73.62	468	

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	165	45.08	184	50.27	349	.661
Italy	48	44.44	59	54.62	107	
Total	213	44.93	243	51.26	456	

16. In India/ Italy ethics in medical profession is strongly influenced by one's personal religious beliefs.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	183	50.00	176	48.08	359	.000
Italy	76	70.37	32	29.62	108	
Total	259	54.64	208	43.88	467	

[390] Grouped values are made by adding the values (very true+true) titled "true" and (not true+not at all true+don't know) titled "not true". If there exists a notable percentage in the "don't know" answer, it is explained with special note in the text. Qty.= Quantity; % = percentage.

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India/ Italy today.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	228	62.29	134	36.61	362	.442
Italy	63	58.33	44	40.74	107	
Total	291	61.39	178	37.55	469	

18. In the context of India/Italy, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	226	61.74	136	37.15	362	.062
Italy	78	72.22	30	27.77	108	
Total	304	64.13	166	35.02	470	

19. In the Indian/ Italian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	307	83.87	54	14.75	361	.000
Italy	70	64.81	38	35.18	108	
Total	377	79.53	92	19.40	469	

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	330	90.16	33	09.82	363	.849
Italy	97	89.81	9	08.33	106	
Total	427	90.08	42	08.86	469	

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	314	85.79	49	13.38	363	.055
Italy	82	75.92	22	20.37	104	
Total	396	83.54	71	14.97	467	

22. In India/ Italy a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	303	82.78	58	15.84	361	.217
Italy	95	87.96	12	11.11	107	
Total	398	83.96	70	14.76	468	

23. I think that in the context of India/ Italy certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	137	37.43	217	59.28	354	.350
Italy	35	32.40	69	63.88	104	
Total	172	36.28	286	60.33	458	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	321	87.70	38	10.38	359	.026
Italy	87	80.55	20	18.51	107	
Total	408	86.07	58	12.23	466	

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India/ Italy.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	334	91.25	30	08.19	364	.000
Italy	81	75.00	24	22.22	105	
Total	415	87.55	54	11.39	469	

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	310	77.59	51	13.93	361	.107
Italy	85	78.70	22	20.37	107	
Total	395	83.33	73	15.40	468	

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	284	77.59	80	21.85	364	.059
Italy	74	68.51	33	30.55	107	
Total	358	75.52	113	23.83	471	

28. There are books, medical journals and other publications that are relevant to the Indian/ Italian context regarding ethical matters in healthcare.

Country	True		Not True		Total	P value
	Qty.	%	Qty.	%		
India	134	36.61	222	60.65	356	.032
Italy	27	25.00	76	70.37	103	
Total	161	33.96	298	62.86	459	

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	139	37.97	209	57.10	348	.001
Italy	24	22.22	83	76.85	107	
Total	163	34.38	292	61.60	455	

b. Government

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	38	10.38	318	86.88	356	.000
Italy	48	44.44	58	53.70	106	
Total	86	18.14	376	79.32	462	

c. Philosophical and Social ideologies

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	59	16.12	295	80.60	354	.674
Italy	16	14.81	91	84.25	107	
Total	75	15.82	386	81.43	461	

d. Associations and Social Workers

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	76	20.76	279	76.22	355	.024
Italy	34	31.48	72	66.66	106	
Total	110	23.20	351	74.05	461	

e. Personal Convictions

Country	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
India	56	15.30	277	75.68	333	.000
Italy	36	33.33	70	64.81	106	
Total	92	19.40	347	73.20	439	

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	36	09.83	325	88.79	361	.165
Italy	6	05.55	101	93.51	107	
Total	42	08.86	426	89.87	468	

b. Government policies

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	61	16.66	293	80.05	354	.083
Italy	11	10.18	96	88.88	107	
Total	72	15.18	389	82.06	461	

c. Personal problems (tiredness, family issues etc.)

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	159	43.44	199	54.37	358	.000
Italy	22	20.37	85	78.70	107	
Total	181	38.18	284	59.91	465	

d. Economic reasons

Country	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
India	81	22.13	274	74.86	355	.049
Italy	15	13.88	92	85.18	107	
Total	96	20.25	366	77.21	462	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	3	00.81	348	95.08	351	.108
Italy	3	02.77	100	92.59	103	
Total	6	01.26	448	94.51	454	

b. Value of Human Life

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	5	01.36	353	96.44	358	.108
Italy	4	3.70	99	91.66	103	
Total	9	01.89	452	95.35	461	

c. Dignity of the Human Person

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	8	02.18	350	95.62	358	.857
Italy	2	01.82	101	93.51	103	
Total	10	02.10	451	95.14	461	

d. Ethics in financial matters

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	45	12.29	306	83.60	351	.260
Italy	9	08.33	94	87.03	103	
Total	54	11.39	400	84.38	454	

e. Ethics of medical treatment

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	10	02.73	345	94.26	355	.634
Italy	2	01.85	100	92.59	102	
Total	12	02.53	445	93.88	457	

f. Doctor patient relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	11	03.01	348	95.08	359	.072
Italy	0	0	103	95.37	103	
Total	11	02.32	451	95.14	462	

g. Doctor-doctor relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	16	04.37	341	93.16	357	.793
Italy	4	03.70	99	91.66	103	
Total	20	04.21	440	92.87	460	

h. Doctors-other healthcare professionals relationship

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	22	06.01	336	70.88	358	.202
Italy	3	02.77	100	92.59	103	
Total	25	05.27	436	91.98	461	

i. Laws and ethical practice

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	11	03.01	346	94.53	357	.087
Italy	7	06.48	96	88.88	103	
Total	18	03.79	442	93.24	460	

j. Ethics of healthcare

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	8	02.18	351	95.90	359	.343
Italy	4	03.70	98	90.74	102	
Total	12	02.53	449	94.72	461	

k. Ethics of human research

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	33	09.82	325	88.79	358	.083
Italy	4	03.70	98	90.74	102	
Total	37	07.80	423	89.24	460	

l. Public health ethics

Country	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
India	16	04.37	335	91.53	351	.584
Italy	6	05.55	96	88.88	102	
Total	22	04.64	431	90.92	453	

Appendix XIV

Comparison between Christians and Non-Christians in India

1. Sex

		Sex		Total
		Male	Female	
Religion	Non-Christian	176	187	363
	Christian	44	86	130
Total		220	274	494

2. Age:

		Age						Total
		Below 25	25-30	31-40	41-50	51-60	Above 60	
Religion	Non-Christian	97	134	75	25	23	12	366
	Christian	35	59	14	4	11	7	130
Total		132	193	89	29	34	19	496

3. Religious Affiliation:

		Religious Affiliation								Total
		Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
Religion	Non-Christian	250	85	16	0	1	13	1	0	366
	Christian	0	0	0	130	0	0	0	0	130
Total		250	85	16	130	1	13	1	0	

4. The state of my origin in India:

5. The state in India, where I studied Medicine/Nursing:

States/Regions	Of Origin Country		Of Study Country	
	Non-Christians	Christians	Non-Christians	Christians
Andhra Pradesh	5	3	13	7
Arunachal Pradesh	1			
Assam				
Bihar	7		2	
Chhattisgarh	3	2	1	
Goa	12	4	5	
Gujarat	14	1	13	
Haryana	6	2	5	2
Himachal Pradesh	8	1	7	
Jammu & Kashmir	3		1	

Jharkhand	3	2	1	1
Karnataka	72	9	111	63
Kerala	94	88	68	30
Madhya Pradesh	9	2	6	2
Maharashtra	47	1	60	3
Manipur		1		
Meghalaya				
Mizoram				
Nagaland	1	2		
Odisha (Orissa)	7	2	5	1
Punjab	17		14	4
Rajasthan	7		5	
Sikkim				
Tamil Nadu	14	8	15	12
Telangana	6	1	4	
Tripura				
Uttar Pradesh	8		7	
Uttarakhand	5		1	
West Bengal	5		5	
New Delhi	9	1	11	2
Pondicherry	2		6	2
Total	**365**	**130**	**366**	**129**

6. At present I stay/ work:

Religion	Work Countries		Total
	In India	Outside India	
Non-Christian	362	4	366
Christian	117	12	129
Total	479	16	495

7. Designation/Profession

Designation	Non-Christian	Christian	Total
Doctor	247	50	297
Medical Student	84	16	100
Nurse	35	64	99
Nursing Student			
Bioethicist	2	1	3
Theologian			
Philosopher	1	0	1
Religious Person	2	0	2
Professor/ Teacher of Bioethics	7	2	9
Member of a Medical Association for Social Action	13	3	16

8. Sector of Study

Religion	Sector of study		Total
	Public Institute	Private Institute	
Non-Christian	206	158	364
Christian	42	88	130
Total	248	246	494

9. Sector of Work

Religious Affiliation	Sector of work		Total
	Public Sector	Private Sector	
Non-Christian	70	239	309
Christian	17	107	124
Total	87	346	433

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

Religion	Bioethics studies			Total
	Yes	No	Not Sure	
Non-Christian	194	102	68	364
Christian	79	34	17	130
Total	273	136	85	494

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

Religion	lessons during Bachelor's			Total
	< 15	15-30	>30	
Non-Christian	187	15	0	202
Christian	62	14	5	81
Total	249	29	5	283

b. approximately how many classes were devoted to ethics in Master's degree programme?

Religion	lessons during Masters			Total
	< 15	15-30	>30	
Non-Christian	156	4	0	160
Christian	51	1	0	52
Total	207	5	0	212

Indicate Very True, True, Not True, Not at all True, Don't Know for the questions below:

12. The medical ethics policy of the government of India is strong and effective.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	14	37	179	127	6	363
Christian	5	14	43	65	0	127
Total	19	51	222	192	6	490

13. In India Italy majority of the doctors and nurses are ethical in their practice.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	15	29	182	127	11	364
Christian	3	2	45	77	2	129
Total	18	31	227	204	13	493

14. The ethics curriculum in the medical colleges in India is properly designed to encounter the challenges that a medical professional faces in the field.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	39	79	155	68	19	360
Christian	7	23	44	16	39	129
Total	46	102	199	84	58	489

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	16	78	90	141	24	349
Christian	6	68	18	36	1	129
Total	22	146	108	177	25	478

16. In India ethics in medical profession is strongly influenced by one's personal religious beliefs.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	33	54	89	151	32	359
Christian	12	17	23	60	13	125
Total	45	71	112	211	45	484

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India today.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	14	22	98	159	69	362
Christian	6	11	47	49	16	129
Total	20	33	145	208	85	491

18. In the context of India, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	33	12	91	178	48	362
Christian	7	2	34	74	11	128
Total	40	14	125	252	59	490

19. In the Indian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	20	3	31	168	139	361
Christian	0	2	9	88	30	129
Total	20	5	40	256	169	490

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	2	6	25	121	209	363
Christian	0	5	12	29	81	127
Total	2	11	37	150	290	490

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	9	9	31	164	150	363
Christian	0	6	8	46	69	129
Total	9	15	39	210	219	492

22. In India a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	12	5	41	192	111	361
Christian	2	3	9	75	35	124
Total	14	8	50	267	146	485

23. I think that in the context of India certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	166	8	43	84	53	354
Christian	37	4	28	46	8	123
Total	203	12	71	130	61	477

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	25	7	6	180	141	359
Christian	1	0	5	78	42	126
Total	26	7	11	258	183	485

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	12	4	14	209	125	364
Christian	0	0	6	83	38	127
Total	12	4	20	292	163	491

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	18	5	28	173	137	361
Christian	1	3	4	48	71	127
Total	19	8	32	221	208	488

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	13	7	60	199	85	364
Christian	0	5	13	40	71	129
Total	13	12	73	239	156	493

28. There are books, medical journals and other publications that are relevant to the Indian context regarding ethical matters in healthcare.

Religion	Don't Know	Not at all True	Not so True	True	Very True	Total
Non-Christian	153	3	66	106	28	356
Christian	30	5	22	53	15	125
Total	183	8	88	159	43	481

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Response "YES"	Religion		Total	P value
	Non-Christian	Christian		
Any medical Practitioner	143	35	178	.014
A medical doctor who has specialized in Bioethics	259	109	368	.003
A non-medical doctor who has specialized in Bioethics	88	31	119	.976
One who has a PhD in Medical Ethics	176	77	253	.027
Someone who has specialized in the fields of philosophy, religion and science (medicine)	93	34	127	.855

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Religion	Don't know	Not at all important	Not so important	Important	Very important	Total
Non-Christian	2	31	106	139	70	348
Christian	0	18	15	43	52	128
Total	2	49	121	182	122	476

b. Government

Religion	Don't know	Not at all important	Not so important	Important	Very important	Total
Non-Christian	8	3	27	161	157	356
Christian	0	2	2	48	74	126
Total	8	5	29	209	231	482

c. Philosophical and Social ideologies

Religion	Don't know	Not at all important	Not so important	Important	Very important	Total
Non-Christian	6	4	49	191	104	354
Christian	0	4	14	85	23	126
Total	6	8	63	276	127	480

d. Associations and Social Workers

Religion	Don't know	Not at all important	Not so important	Important	Very important	Total
Non-Christian	18	13	45	202	77	355
Christian	4	0	17	86	20	127
Total	22	13	62	288	97	482

e. Personal Convictions

Religion	Don't know	Not at all important	Not so important	Important	Very important	Total
Non-Christian	5	14	37	114	163	333
Christian	3	12	38	20	50	123
Total	8	26	75	134	213	456

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Religion	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Non-Christian	3	8	25	173	152	361
Christian	3	0	11	37	77	128
Total	6	8	36	210	229	489

b. Government policies

Religion	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Non-Christian	6	14	41	164	129	354
Christian	1	6	13	48	59	127
Total	7	20	54	212	188	481

c. Personal problems (tiredness, family issues etc.)

Religion	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Non-Christian	6	29	124	137	62	358
Christian	2	8	58	44	16	128
Total	8	37	182	181	78	486

d. Economic reasons

Religion	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Non-Christian	7	16	58	140	134	355
Christian	2	2	42	42	40	128
Total	9	18	100	182	174	483

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Religion	< 15	15-30	>30	Total	P value
Non-Christian	155	168	28	351	.001
Christian	31	76	16	123	
Total	186	244	44	474	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Religion	< 15	15-30	>30	Total	P value
Non-Christian	131	160	43	334	.010
Christian	48	41	27	116	
Total	179	201	70	450	

c. approximately how many classes need to be devoted to this in NURSING course?

Religion	< 15	15-30	>30	Total	P value
Non-Christian	133	110	46	289	.004
Christian	32	54	28	114	
Total	165	164	74	403	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	0	3	100	248	351
Christian	0	0	60	67	127
Total	0	3	160	315	478

b. Value of Human Life

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	0	5	81	272	358
Christian	0	0	59	68	127
Total	0	5	140	340	485

c. Dignity of the Human Person

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	0	8	139	211	358
Christian	0	2	63	62	127
Total	0	10	202	273	485

d. Ethics in financial matters

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	5	40	158	148	351
Christian	2	34	58	31	125
Total	7	74	216	179	476

e. Ethics of medical treatment

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	1	9	113	232	355
Christian	0	0	26	101	127
Total	1	9	139	333	482

f. Doctor patient relationship

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	0	11	113	235	359
Christian	0	0	24	103	127
Total	0	11	137	338	486

g. Doctor-doctor relationship

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	1	15	140	201	357
Christian	0	2	63	62	127
Total	1	17	203	263	484

h. Doctors-other healthcare professionals relationship

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	3	19	134	202	358
Christian	0	6	49	72	127
Total	3	25	183	274	485

i. Laws and ethical practice

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	4	7	142	204	357
Christian	0	1	31	95	127
Total	4	8	173	299	484

j. Ethics of healthcare

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	2	6	151	200	359
Christian	0	2	41	84	127
Total	2	8	192	284	486

k. Ethics of human research

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	7	26	209	116	358
Christian	1	2	77	47	127
Total	8	28	286	163	485

l. Public health ethics

Religion	Don't know	Not important	Important	Very important	Total
Non-Christian	9	7	184	151	351
Christian	0	4	44	76	124
Total	9	11	228	227	475

Part II
Grouped Answers[391]

12. The medical ethics policy of the government of India is strong and effective.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	133	36.33	230	62.84	363	.005
Christian	65	50.00	62	47.69	127	
Total	199	40.04	292	58.75	490	

13. In India majority of the doctors and nurses are ethical in their practice.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	138	37.70	226	61.74	364	.000
Christian	79	60.76	50	38.46	129	
Total	217	43.66	276	55.53	493	

14. The ethics curriculum in the medical colleges in India is properly designed to encounter the challenges that a medical professional faces in the field.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	87	23.77	273	74.59	360	.000
Christian	55	42.30	74	56.92	129	
Total	143	28.77	347	69.81	489	

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	165	45.08	184	50.27	349	.000
Christian	37	28.46	92	70.76	129	
Total	202	40.64	277	55.73	478	

16. In India ethics in medical profession is strongly influenced by one's personal religious beliefs.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	183	50.00	176	48.08	359	.160
Christian	73	56.15	52	40.00	125	
Total	256	51.50	228	45.87	484	

[391] Grouped values are made by adding the values (very true+true) titled "true" and (not true+not at all true+don't know) titled "not true". If there exists a notable percentage in the "don't know" answer, it is explained with special note in the text. Qty.= Quantity; % = percentage.

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India today.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	228	62.29	134	36.61	362	.014
Christian	65	50.00	64	49.23	129	
Total	293	58.95	198	39.83	491	

18. In the context of India, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	226	61.74	136	37.15	362	.434
Christian	85	65.38	43	33.07	128	
Total	311	62.57	179	36.01	490	

19. In the Indian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	307	83.87	54	14.75	361	.066
Christian	118	90.76	11	08.46	129	
Total	425	85.51	65	13.07	490	

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	330	90.16	33	09.82	363	.166
Christian	110	84.61	17	13.07	127	
Total	441	88.73	50	10.06	490	

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	314	85.79	49	13.38	363	.446
Christian	115	88.46	14	10.76	129	
Total	430	86.51	63	12.67	492	

22. In India a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	303	82.78	58	15.84	361	.201
Christian	110	84.61	14	10.76	124	
Total	414	83.29	72	14.48	485	

23. I think that in the context of India certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	137	37.43	217	59.28	354	.327
Christian	54	41.53	69	53.07	123	
Total	192	38.63	286	57.54	477	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	321	87.70	38	10.38	359	.051
Christian	120	92.30	6	04.61	126	
Total	442	88.93	44	08.85	485	

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	334	91.25	30	08.19	364	.193
Christian	121	93.07	6	04.61	127	
Total	456	91.75	36	07.24	491	

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	310	77.59	51	13.93	361	.020
Christian	119	91.53	8	06.15	127	
Total	430	86.51	59	11.87	488	

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	284	77.59	80	21.85	364	.051
Christian	111	85.38	18	13.84	129	
Total	396	79.67	98	19.71	493	

28. There are books, medical journals and other publications that are relevant to the Indian context regarding ethical matters in healthcare.

Religion	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	134	36.61	222	60.65	356	.001
Christian	68	52.30	57	43.84	125	
Total	203	40.84	279	56.13	481	

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Religion	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	139	37.97	209	57.10	348	.005
Christian	33	25.38	95	73.07	128	
Total	172	34.60	305	61.36	476	

b. Government

Religion	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	38	10.38	318	86.88	356	.011
Christian	4	03.07	122	93.84	126	
Total	42	08.45	441	88.73	482	

c. Philosophical and Social ideologies

Religion	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	59	16.12	295	80.60	354	.539
Christian	18	13.84	108	83.07	126	
Total	77	15.49	404	81.28	480	

d. Associations and Social Workers

Religion	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	76	20.76	279	76.22	355	.245
Christian	21	16.15	106	81.53	127	
Total	97	19.51	386	77.66	482	

e. Personal Convictions

Religion	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	56	15.30	277	75.68	333	.000
Christian	53	40.76	70	53.84	123	
Total	110	22.13	347	69.81	456	

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Religion	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	36	09.83	325	88.79	361	.750
Christian	14	10.76	114	87.69	128	
Total	50	10.06	440	88.53	489	

b. Government policies

Religion	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	61	16.66	293	80.05	354	.710
Christian	20	15.38	107	82.30	127	
Total	81	16.29	401	80.68	481	

c. Personal problems (tiredness, family issues etc.)

Religion	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	159	43.44	199	54.37	358	.096
Christian	68	52.30	60	46.15	128	
Total	228	45.87	259	52.11	486	

d. Economic reasons

Religion	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	81	22.13	274	74.86	355	.005
Christian	46	35.38	82	63.07	128	
Total	128	25.75	356	71.62	483	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	3	00.81	348	95.08	351	.297
Christian	0	0	127	97.69	127	
Total	3	00.60	476	95.77	478	

b. Value of Human Life

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	5	01.36	353	96.44	358	.181
Christian	0	0	127	97.69	127	
Total	5	1.01	481	96.78	485	

c. Dignity of the Human Person

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	8	02.18	350	95.62	358	.656
Christian	2	01.53	125	96.15	127	
Total	10	02.01	476	95.77	485	

d. Ethics in financial matters

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	45	12.29	306	83.60	351	.000
Christian	36	27.69	89	68.46	125	
Total	82	16.49	395	79.47	476	

e. Ethics of medical treatment

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	10	02.73	345	94.26	355	.056
Christian	0	0	127	97.69	127	
Total	10	02.01	473	95.17	482	

f. Doctor patient relationship

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	11	03.01	348	95.08	359	.046
Christian	0	0	127	97.69	127	
Total	11	02.21	476	95.77	486	

g. Doctor-doctor relationship

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	16	04.37	341	93.16	357	.138
Christian	2	01.53	125	96.15	127	
Total	18	03.26	467	93.96	484	

h. Doctors-other healthcare professionals relationship

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	22	06.01	336	70.88	358	.717
Christian	6	04.61	121	93.07	127	
Total	28	05.63	458	92.15	485	

i. Laws and ethical practice

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	11	03.01	346	94.53	357	.154
Christian	1	00.01	126	96.92	127	
Total	12	02.41	473	95.17	484	

j. Ethics of healthcare

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	8	02.18	351	95.90	359	.658
Christian	2	01.53	125	96.15	127	
Total	10	02.01	477	95.97	486	

k. Ethics of human research

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	33	09.82	325	88.79	358	.012
Christian	3	02.30	124	95.38	127	
Total	36	07.24	450	90.54	485	

l. Public health ethics

Religion	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Non-Christian	16	04.37	335	91.53	351	.529
Christian	4	03.07	120	92.30	124	
Total	20	04.02	456	91.75	475	

Appendix XV

Comparison between the Groups Sectors of Study in India Public and Private

1. Sex

Sector of study	Sex		Total
	Male	Female	
Public	135	111	246
Private	84	162	246
Total	219	273	492

2. Age:

Sector of study	Age						Total
	Below 25	25-30	31-40	41-50	51-60	Above 60	
Public	59	83	48	19	27	12	248
Private	73	110	41	10	7	6	247
Total	132	193	89	29	34	15	495

3. Religious Affiliation:

Sector of study	Religious Affiliation								Total
	Hindu	Muslim	Sikh	Christians	Buddhist	Jain	Parsi	others	
Public	156	33	8	42	1	7	1	248	248
Private	93	51	8	88	0	6	0	246	246
Total	249	84	16	130	1	13	1	494	494

4. The state of my origin in India and sector of study:

5. The state in India, where I studied Medicine/Nursing:

States	Sector of Study			
	State of Origin		State of Study	
	Public	Private	Public	Private
Andhra Pradesh	4	4	6	14
Arunachal Pradesh	1			
Assam				
Bihar	7		1	1
Chhattisgarh	4	1	1	
Goa	7	9	2	3
Gujarat	10	5	11	2
Haryana	8	0	5	2
Himachal Pradesh	8	1	7	

Jammu & Kashmir	3		1	
Jharkhand	3	2	2	
Karnataka	39	40	67	106
Kerala	74	109	58	40
Madhya Pradesh	6	5	5	3
Maharashtra	24	24	36	27
Manipur		1		
Meghalaya				
Mizoram				
Nagaland		3		
Odisha (Orissa)	6	3	4	2
Punjab	7	10	7	11
Rajasthan	6	1	4	1
Sikkim				
Tamil Nadu	7	15	7	20
Telangana		7		4
Tripura				
Uttar Pradesh	7	1	7	
Uttarakhand	4	1		1
West Bengal	4	1	4	1
New Delhi	6	4	9	4
Pondicherry	2		3	5
Total	**247**	**247**	**247**	**247**

6. At present I stay/ work:

		Work Countries		
		In India	Outside India	Total
Sector of study	Public	248	0	248
	Private	230	16	246
Total		478	16	494

7. Designation/Profession

Designation	Public	Private	Total
Doctor	177	119	296
Medical Student	61	38	99
Nurse	10	90	100
Nursing Student			
Bioethicist	1	1	2
Theologian			
Philosopher	1		1
Religious Person		2	2
Professor/ Teacher of Bioethics	6	3	9
Member of a Medical Association for Social Action	7	9	16

9. Sector of Work

Sector of Study	Sector of work		Total
	Public Sector	Private Sector	
Public	72	128	200
Private	15	218	233
Total	87	346	433

10. Was Ethics/ Bio-medical Ethics part of your curriculum in the institution you have studied?

Sector of Study	Bioethics studies			Total
	Yes	No	Not Sure	
Public	117	81	48	246
Private	156	54	37	247
Total	273	135	85	493

11. If YES,

a. approximately how many classes were devoted to ethics in the Bachelor's degree programme?

Sector of study	lessons during Bachelor's			Total
	< 15	15-30	>30	
Public	126	4	0	130
Private	122	26	5	153
Total	248	30	5	283

b. approximately how many classes were devoted to ethics in Master's degree programme?

Sector of study	lessons during Masters			Total
	< 15	15-30	>30	
Public	96	1	0	97
Private	112	4	0	116
Total	208	5	0	213

Indicate Very True, True, Not True, Not at all True, Don't Know for the questions below:

12. The medical ethics policy of the government of India is strong and effective.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	7	26	120	90	3	246
Private	12	25	100	103	3	243
Total	19	51	220	193	6	489

13. In India majority of the doctors and nurses are ethical in their practice.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	8	18	121	92	8	247
Private	9	13	105	113	5	245
Total	17	31	226	205	13	492

14. The ethics curriculum in the medical colleges in India is properly designed to encounter the challenges that a medical professional faces in the field.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	26	57	107	54	2	246
Private	20	44	92	29	57	242
Total	46	101	199	83	59	488

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	7	53	60	106	13	239
Private	15	93	48	70	12	238
Total	22	146	108	176	25	477

16. In India ethics in medical profession is strongly influenced by one's personal religious beliefs.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	24	36	55	94	32	241
Private	21	35	56	117	13	242
Total	45	71	111	211	45	483

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India today.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	8	21	70	98	49	246
Private	12	12	76	109	35	244
Total	20	33	146	207	84	490

18. In the context of India, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	27	7	68	105	38	245
Private	13	7	56	148	20	244
Total	40	14	124	253	58	489

19. In the Indian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	13	1	24	114	92	244
Private	7	4	16	142	76	245
Total	20	5	40	256	168	489

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	2	6	12	83	141	244
Private	0	5	25	67	148	245
Total	2	11	37	150	289	489

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	9	7	14	129	87	246
Private	0	8	25	81	131	245
Total	9	15	39	210	218	491

22. In India a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	9	7	25	117	83	241
Private	5	1	25	151	61	243
Total	14	8	50	268	144	484

23. I think that in the context of India certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	142	5	26	41	26	240
Private	61	7	45	88	35	236
Total	203	12	71	129	61	476

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	17	3	6	121	94	241
Private	9	4	5	137	88	243
Total	26	7	11	258	182	484

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	8	4	11	141	82	246
Private	4	0	9	150	81	244
Total	12	4	20	291	163	490

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	9	5	23	124	81	242
Private	10	3	9	96	127	245
Total	19	8	32	220	208	487

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	8	7	41	135	54	245
Private	5	5	32	104	101	247
Total	13	12	73	239	155	492

28. There are books, medical journals and other publications that are relevant to the Indian context regarding ethical matters in healthcare.

Sector of Study	Don't Know	Not at all True	Not so True	True	Very True	Total
Public	125	3	38	49	26	241
Private	57	5	49	111	17	239
Total	182	8	87	160	43	480

29. In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

Response "YES"	Sector of Study		Total	P value
	Public	Private		
Any medical Practitioner	91	86	177	.663
A medical doctor who has specialized in Bioethics	167	200	367	.001
A non-medical doctor who has specialized in Bioethics	53	64	117	.235
One who has a PhD in Medical Ethics	103	149	252	.000
Someone who has specialized in the fields of philosophy, religion and science (medicine)	50	77	127	.005

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Sector of Study	Don't know	Not at all important	Not so important	Important	Very important	Total
Public	2	25	75	81	53	236
Private	0	24	44	101	70	239
Total	2	49	119	182	123	475

b. Government

Sector of Study	Don't know	Not at all important	Not so important	Important	Very important	Total
Public	8	5	19	114	93	239
Private	0	0	10	94	138	242
Total	8	5	29	208	231	481

c. Philosophical and Social ideologies

Sector of Study	Don't know	Not at all important	Not so important	Important	Very important	Total
Public	5	8	26	125	73	237
Private	1	0	36	152	53	242
Total	6	8	62	277	126	479

d. Associations and Social Workers

Sector of Study	Don't know	Not at all important	Not so important	Important	Very important	Total
Public	17	7	34	127	54	239
Private	5	6	28	161	42	242
Total	22	13	62	288	96	481

e. Personal Convictions

Sector of Study	Don't know	Not at all important	Not so important	Important	Very important	Total
Public	5	12	18	75	114	224
Private	3	13	58	58	99	231
Total	8	25	76	133	213	455

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Sector of Study	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Public	5	8	25	104	100	242
Private	1	0	11	104	130	246
Total	6	8	36	208	230	488

b. Government policies

Sector of Study	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Public	7	15	25	121	68	236
Private	0	5	28	91	120	244
Total	7	20	53	212	188	480

c. Personal problems (tiredness, family issues etc.)

Sector of Study	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Public	2	22	80	92	43	239
Private	6	15	103	87	35	246
Total	8	37	183	179	78	485

d. Economic reasons

Sector of Study	Don't know	Not at all serious	Not so serious	Serious	Very serious	Total
Public	5	13	30	96	94	238
Private	4	5	71	85	79	244
Total	9	18	101	181	173	482

32. Please indicate the number of classes that needs to be devoted to the ethics learning for the following courses per year.

a. approximately how many classes need to be devoted to this in BACHELOR'S degree course?

Sector of Study	< 15	15-30	>30	Total	P value
Public	123	99	16	238	.000
Private	62	145	28	235	
Total	185	244	44	473	

b. approximately how many classes need to be devoted to this in MASTERS degree course?

Sector of Study	< 15	15-30	>30	Total	P value
Public	106	101	22	229	.001
Private	74	100	47	221	
Total	180	201	69	450	

c. approximately how many classes need to be devoted to this in NURSING course?

Sector of Study	< 15	15-30	>30	Total	P value
Public	78	91	26	195	.011
Private	87	73	49	209	
Total	165	164	75	404	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Sector of Study	Don't know	Not important	important	Very important	Total
Public	0	2	60	178	240
Private	0	1	101	135	237
Total	0	3	161	313	477

b. Value of Human Life

Sector of Study	Don't know	Not important	important	Very important	Total
Public	0	4	42	198	244
Private	0	1	99	140	240
Total	0	5	141	338	484

c. Dignity of the Human Person

Sector of Study	Don't know	Not important	important	Very important	Total
Public	0	5	80	159	244
Private	0	5	122	113	240
Total	0	10	202	272	484

d. Ethics in financial matters

Sector of Study	Don't know	Not important	important	Very important	Total
Public	5	14	118	102	239
Private	2	61	97	76	236
Total	7	75	215	178	475

e. Ethics of medical treatment

Sector of Study	Don't know	Not important	important	Very important	Total
Public	1	7	76	158	242
Private	0	2	63	174	239
Total	1	9	139	332	481

f. Doctor patient relationship

Sector of Study	Don't know	Not important	important	Very important	Total
Public	0	5	67	172	244
Private	0	6	69	166	241
Total	0	11	136	338	485

g. Doctor-doctor relationship

Sector of Study	Don't know	Not important	important	Very important	Total
Public	0	9	86	149	244
Private	1	8	116	114	239
Total	1	17	202	263	483

h. Doctors-other healthcare professionals relationship

Sector of Study	Don't know	Not important	important	Very important	Total
Public	3	12	104	124	243
Private	0	13	77	151	241
Total	3	25	181	275	484

i. Laws and ethical practice

Sector of Study	Don't know	Not important	important	Very important	Total
Public	2	6	107	129	244
Private	2	2	65	170	239
Total	4	8	172	299	483

j. Ethics of healthcare

Sector of Study	Don't know	Not important	important	Very important	Total
Public	0	5	112	127	244
Private	2	3	79	157	241
Total	2	8	191	284	485

k. Ethics of human research

Sector of Study	Don't know	Not important	important	Very important	Total
Public	6	18	136	83	243
Private	2	10	150	79	241
Total	8	28	286	162	484

l. Public health ethics

Sector of Study	Don't know	Not important	important	Very important	Total
Public	7	5	129	96	237
Private	2	6	99	131	238
Total	9	11	228	227	475

Part II
Grouped Answers[392]

12. The medical ethics policy of the government of India is strong and effective.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	93	37.34	153	61.44	246	.191
Private	106	42.74	137	55.24	243	
Total	199	40.04	290	58.35	489	

13. In India majority of the doctors and nurses are ethical in their practice.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	100	40.16	147	59.03	247	.087
Private	118	47.58	127	51.20	245	
Total	218	43.86	274	55.13	492	

14. The ethics curriculum in the medical colleges in India is properly designed to encounter the challenges that a medical professional faces in the field.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	56	22.48	190	76.30	246	.002
Private	86	34.67	156	62.90	242	
Total	142	28.57	346	69.61	488	

15. The unethical practices of other doctors have affected my ethical decisions and practices.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	119	47.79	120	48.19	239	.001
Private	82	33.06	156	62.90	238	
Total	201	40.44	276	55.53	477	

16. In India ethics in medical profession is strongly influenced by one's personal religious beliefs.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	126	50.60	115	46.18	241	.752
Private	130	52.41	112	45.16	242	
Total	256	51.50	227	45.67	483	

[392] Grouped values are made by adding the values (very true+true) titled "true" and (not true+not at all true+don't know) titled "not true". If there exists a notable percentage in the "don't know" answer, it is explained with special note in the text. Qty.= Quantity; % = percentage.

17. Lack of adequate formation in medical ethics is one of the main reasons for the malpractices in medical profession in India today.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	147	59.03	99	39.75	246	.868
Private	144	58.06	100	40.32	244	
Total	291	58.55	199	40.04	490	

18. In the context of India, the integration of the traditional religious and cultural values can provide a strong foundation for the ethical formation of the healthcare practitioners.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	143	57.42	102	40.96	245	.016
Private	168	67.74	76	30.64	244	
Total	311	62.57	178	35.81	489	

19. In the Indian context, it is better to have a bioethics curriculum for all the medical practices (for eg. Ayurveda, Siddha, Unani etc.).

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	206	82.73	38	15.26	244	.138
Private	218	87.90	27	10.88	245	
Total	424	85.31	65	13.07	489	

20. Medical ethics should not be formulated on the basis of religious beliefs. It should be based on universally accepted principles, like human rights declaration, Government norms and so on.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	224	89.95	20	08.03	244	.140
Private	215	86.69	30	12.09	245	
Total	439	88.32	50	10.06	489	

21. There is a need for an ethics moderating panel/committee (from the Govt.) to monitor the curriculum and practice of ethics in the medical education.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	216	86.74	30	12.04	246	.673
Private	212	85.48	33	13.30	245	
Total	428	86.11	63	12.67	491	

22. In India a better medical ethics education can create an effective ethical medical practice among the healthcare practitioners.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	200	80.32	41	16.46	241	.188
Private	212	85.48	31	12.50	243	
Total	412	82.89	72	14.48	484	

23. I think that in the context of India certain themes in the present curriculum of medical ethics should be removed and something else should be included.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	67	26.90	173	69.47	240	.000
Private	123	49.59	113	45.56	236	
Total	190	38.22	286	57.54	476	

24. I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	215	86.34	26	10.44	241	.196
Private	225	90.72	18	07.25	243	
Total	440	88.53	44	08.85	484	

25. Even after the completion of studies, there is a need for an ongoing ethical formation for the medical practitioners in India.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	223	89.55	23	09.23	246	.088
Private	231	93.14	13	05.24	244	
Total	454	91.34	36	07.24	490	

26. I have an opinion that we need to update time to time the curriculum of medical ethics in the universities.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	205	82.32	37	14.85	242	.033
Private	223	89.91	22	08.87	245	
Total	428	86.11	59	11.87	487	

27. It is very useful to have a philosophy of science/bioethics/ medical ethics faculty in every Medical College for better learning in ethical issues.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	189	75.90	56	22.48	245	.104
Private	205	82.66	42	16.93	247	
Total	394	79.27	98	19.71	492	

28. There are books, medical journals and other publications that are relevant to the Indian context regarding ethical matters in healthcare.

Sector of Study	True		Not True		Total	P value
	Qty.	%	Qty.	%		
Public	75	30.12	166	66.66	241	.000
Private	128	51.61	111	44.75	239	
Total	203	40.84	277	55.73	480	

30. Below listed are certain possible sources of ethics in the medical field. Please indicate how important a source each of these is.

a. Religion

Sector of Study	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	102	40.96	134	53.81	236	.001
Private	68	27.41	171	68.95	239	
Total	170	34.20	305	61.36	475	

b. Government

Sector of Study	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	32	12.85	207	83.13	239	.000
Private	10	04.03	232	93.54	242	
Total	42	08.45	439	88.32	481	

c. Philosophical and Social ideologies

Sector of Study	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	39	15.66	198	79.51	237	.727
Private	37	14.91	205	82.66	242	
Total	76	15.29	403	81.08	479	

d. Associations and Social Workers

Sector of Study	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	58	23.29	181	72.69	239	.026
Private	39	15.72	203	81.85	242	
Total	97	19.51	384	77.26	481	

e. Personal Convictions

Sector of Study	Not important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	35	14.05	189	75.90	224	.000
Private	74	29.83	157	63.30	231	
Total	109	21.93	346	69.61	455	

31. Given below are some possible reasons for unethical practices in medical profession. Please indicate how serious a problem each of the following is in your opinion.

a. Hospital policies

Sector of Study	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Public	38	15.26	204	81.92	242	.000
Private	12	04.83	234	94.35	246	
Total	50	10.06	438	88.12	488	

b. Government policies

Sector of Study	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Public	47	18.87	189	75.90	236	.060
Private	33	13.30	211	85.08	244	
Total	80	16.09	400	80.48	480	

c. Personal problems (tiredness, family issues etc.)

Sector of Study	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Public	104	41.76	135	54.21	239	.128
Private	124	50.00	122	49.19	246	
Total	228	45.87	257	51.71	485	

d. Economic reasons

Sector of Study	Not Serious		Serious		Total	P value
	Qty.	%	Qty.	%		
Public	48	19.27	190	76.30	238	.002
Private	80	32.25	164	66.12	244	
Total	128	25.75	354	71.22	482	

33. Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate how important each of these is.

a. Value of Life

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	2	00.80	238	95.58	240	.570
Private	1	00.40	236	95.16	237	
Total	3	00.60	474	95.37	477	

b. Value of Human Life

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	4	01.60	240	96.38	244	.183
Private	1	00.40	239	96.37	240	
Total	5	01.00	479	96.37	484	

c. Dignity of the Human Person

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	5	02.00	239	95.98	244	.979
Private	5	02.01	235	94.75	240	
Total	10	02.01	474	95.37	484	

d. Ethics in financial matters

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	19	07.63	220	88.35	239	.000
Private	63	25.40	173	69.75	236	
Total	82	16.49	393	79.07	475	

e. Ethics of medical treatment

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	8	03.21	234	93.97	242	.058
Private	2	00.80	237	95.56	239	
Total	10	02.01	471	94.76	481	

f. Doctor patient relationship

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	5	02.00	239	95.98	244	.745
Private	6	02.41	235	94.75	241	
Total	11	02.21	474	95.37	485	

g. Doctor-doctor relationship

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	9	03.61	235	94.37	244	.964
Private	9	03.62	230	92.74	239	
Total	18	03.62	465	93.56	483	

h. Doctors-other healthcare professionals relationship

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	15	06.02	228	91.56	243	.714
Private	13	05.24	228	91.93	241	
Total	28	05.63	456	91.75	484	

i. Laws and ethical practice

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	8	03.21	236	94.77	244	.257
Private	4	01.61	235	94.75	239	
Total	12	02.41	471	94.76	483	

j. Ethics of healthcare

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	5	02.00	239	95.98	244	.984
Private	5	02.01	236	95.16	241	
Total	10	02.01	475	95.57	485	

k. Ethics of human research

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	24	09.63	219	87.95	243	.040
Private	12	04.83	229	92.33	241	
Total	36	07.24	448	90.14	484	

l. Public health ethics

Sector of Study	Not Important		Important		Total	P value
	Qty.	%	Qty.	%		
Public	12	04.81	225	90.36	237	.356
Private	8	03.22	230	92.74	238	
Total	20	04.02	455	91.54	475	

Appendix XVI

Comments and Suggestions Received from the Questionnaire from India[393]

Question Number: 23

I think that in the context of India certain themes in the present curriculum of medical ethics should be removed and something else should be included. For eg. (please specify):

-Ethics when taught should be convincing. The curriculum should be with real and concrete cases that are thought provoking and forming the doctors and healthcare professionals.

-Talking about curriculum and modifications in it, it is not possible to say generally, because there isn't any curriculum for biomedical ethics in India. (2)[394] Only St. John's Medical College Bangalore and Christian Medical Centre Vellore are the only two institutions those instruct the students with certain ethics courses.

-Art of living workshops on stress reduction help at individual level

- There is nothing as a medical ethics curriculum in India

- My experience has been in St John's. They teach Catholic medical ethics. This may not find acceptance in other colleges.

- Process of consent before any investigation or procedure, proper documentation, access to healthcare records to patients etc.

- Basic medical ethics must be introduced in the curriculum to start with

- Medical ethics must be introduced in curriculum.

- Public Health Ethics, Ethics related to use of animals in medical sciences

[393] The comments are given in the order of the question numbers in the questionnaire. I have tried as much possible to keep the exact words used in the responses.
[394] The number in brackets after a comment indicates the number of respondents who expressed the same/ similar view. I kept the numbering so in order to avoid repetition.

Question Number: 24

I would prefer better techniques to teach bioethics in the medical colleges like video presentation, discussions, practical situation analysis, experience sharing, workshops, role plays, seminars, attending International colloquium etc. Also suggestions (please specify):

-Art of living, yoga practices, meditation.

- Bioethics should be in the internship programs before conferring the degree or permission to practice medicine. Complete one year program.

- All this should help, when followed with commitment by teacher and student

- Instead of attending International colloquium, inviting bioethicists from abroad to explain how issues can be handled under our situation, also recognizing EC members by giving them some incentives for spending their time and efforts – it can be subsidized medical or something similar.

Question Number: 28

There are books, medical journals and other publications that are relevant to the Indian context regarding ethical matters in healthcare. If so, please specify the name of the publication:

-Indian Journal of Medical Ethics (NBC) (14)

- Guidelines for Ethical research involving human subjects by ICMR

- I have read sometimes the journal on medical ethics in the section of Forensic Medicine and Medical Jurisprudence.

- I only know of Indian Journal of Medical Ethics and this journal too is struggling for survival

- SOCHARA has a whole collection at Bangalore, which one could browse through

- Perspectives of Clinical trials

- http://www.issuesinmedicalethics.org/index.php/ijme

After the Section, Questions from 12 to 28

Any other comment to share:

-Linking ethics and education is crucial. Stress reduction at personal level; spiritual education help to a large extend.

-There isn't any literature regarding medical ethics that reaches to most of the doctors in our country.

-There is a need to update information in the field of bioethics time to time.

- Good topic for research. Hope it awakens the curriculum designing authority in India. Anybody there to teach ethical practices to the Medical Council of India? (*it was a comment written by a doctor as it is*)

- CDMU promoting ethical issues on medicines and other health related issue. Public education on ethical issues can be promoted by CDMU on likeminded organizations.

- Character building should begin early in life. Many issues in the Indian context happen because of flaws in character development. I think that in question no: 13 Doctors and Nurses should be separated – because I feel that many more Doctors are unethical, when compared to Nurses.

- There should be checks to find out if the research projects are reviewed by ethics committees. There should be monitoring and audit of ethics committees. Those who review well should be rewarded. EC members do not get anything. Their time and effort should be rewarded.

-The Govt. policy is strong but not effectively implemented.

Question Number: 29 f

In my opinion the ones who are eligible to teach medical ethics are: (Mark all that apply)

a-Any medical practitioner

b-A medical doctor who has specialized in bioethics

c-A non- medical doctor who has specialized in bioethics

d-Someone who has a PhD in medical ethics

e-someone who has specialized in the fields of philosophy, religion and science (medicine)

f-Or suggestions (please specify):

-Anybody who is interested can teach Ethics.

-The professors for ethics should be the one's own professors in the medical college, not anyone who comes from outside. The students may better follow one's own teacher.

-There is a greater scarcity of the bioethicists/those who are specialized in bioethics in our country; we need more trained and equipped persons. (5)

-The policies of Government are to be modified to give more attention to the implementation of medical ethics courses in the Medical Colleges all over India.

-Ethics should not be taught as a course to gain marks in the exam it is to be imparted as an integration of the personality, as a value of life.

- Start from the existing regulatory bodies. Directors, Deans, Heads of the department, then students. Design the curriculum for teaching Medical Ethics to every level of medical fraternity. After that each Medical Institute private or govt. should have a committee handling the ethical issues in that institute. They should be vigilant especially to the Research protocols submitted for permission.

- Public education needs to be promoted

- I think that the most important factor is that the 'Teacher' should be an 'ethical' person – it is of no use and probably great harm if a teacher does not 'practice' what he/she 'preaches'. One needs role models - particularly in teaching institutions.

- Any medical practitioner who has been regarded by many as an ethical practitioner

- Someone who has experience working as EC member, who has published articles in bioethics and has interest and passion to read/understand and comment on newer issues in bio Ethics

- Better a spiritually strong person having a specialization in medical ethics

Question Number: 30 f

Below listed are certain possible sources of ethics in the medical field. Please indicate ***(X)*** *how important a source each of these is.*
a-Religion
b-Government
c- Philosophical and Social ideologies
d-Associations and Social Workers
e-Personal Convictions
f-Others (please specify):

-When you feel a connectedness with the patient, you don't indulge in malpractising.

- School – is a very important stage for 'teaching' integrity, which is at the core of Medical Ethics

- The question is not very clear.

Question Number: 31 e

Given below are some possible reasons for unethical practices in medical profession. Please indicate (X) how serious a problem each of the following is in your opinion.
a-Hospital policies
b-Government policies
c-Personal problems (tiredness, family issues etc.)
d-Economic reasons
e-Any other comment to share:

- Unethical promotion of medicines, Lab. Technologies, Research should have structured guide line and public should have knowledge of that.

- Until unless there is a protective mechanism on medical practitioners for ethical practice, no improvement can be foreseen.

-Dwindling personal integrity is a key factor in deterioration in medical ethics

-The influence and strategies of Pharmaceutical companies

- It is related to peer-learning. Students will emulate the kind of standards set by their mentors.

Question Number: 33

*Given below are some possible themes that could be included in a biomedical ethics curriculum. Please indicate **(X)** how important each of these is. Other Themes:*

-Medical teachers should teach medical students more ethically, imbibe good human values. He should be a role model. He is the one who has maximum potential to change the students' behaviour. He should be targeted first to change the current scenario.

- There is no scope of public education on bio ethics. Public should have knowledge on the issues.

a) - Personal Integrity
b) Universality of different religions – the Universal Golden Rule in all religions – "Do unto others what you would have them do to you"

- General principles of ethics, Ethics and Religion, Ethics and Law; Ethics of animal research, Ethics of reproductive healthcare; Ethics and the healthcare "industry" – influence of pharma companies and corporate hospitals.

- Value of human life from the instant of fertilization is very important

Opinion about the Questionnaire:

-Good/very good (2)

-Good attempt (2)

-Ethical practices in India actually needs to be improved

-It is important to have ethics in any field. Good approach that a survey is being conducted. Hope some changes will come in the curriculum.

-Good way of raising an important issue among the community. Biomedical ethics is a necessity in medical life, which needs to be developed strongly for the betterment of our health system.

-Hope this will help to improve the ethical aspects of medical treatment and medical research. All the best!

-I feel the questionnaire points out the deficiencies in our system when it comes to the implementation of Bio-ethics as part of Medical Curriculum. Very good and well prepared.

-Well framed

- Reasonable and easily understood.

-Specific and Relevant

-Meticulously planned and executed.

-thought provoking

Additional Observations and Suggestions on Biomedical Ethics Education in India:

-There are few efficient teachers in the field of bioethics in India. We need more qualifies professors. (4)

-There is a great need for medical ethics in practice.

-Unfortunately the high fees paid for the education also causes the doctors to be money oriented.

-The education can be effective only id the professors practice ethically and give a good example to the medical students. There is a scandal of medical teachers practicing unethically.

-Ethics is needed in all medical fields.

-Privatization of medicine in India, pharmaceutical companies, insurances, lawyers etc. influence doctor's ethical practice negatively. (2)

-There is lot of work to be done by insurance sector. Health insurance companies should act as an additional check over the hospital health providers. Health service s should be strong nationalized purely govt. bodies. Everyone should get medical insurance.

- Must be an ongoing process, beginning in the first year of the course, and continuing into post -graduation.

- Health profession educators need to first demonstrate ethical practices

-Then they should move on to different teaching learning methods [no method to teach ethics will succeed until ethics in not seen to be practiced]

- Bioethics and Medical Ethics shall be part of the Curriculum of undergraduate and postgraduate programme

- Many doctors have clearly decided that there is no choice but to practice medicine as if one is running a business. They were involved in 'cut practice' right from the beginning. After the advent of large and corporate hospitals, these practices have increased further. Doctors routinely accept large gifts (*kickbacks* might be a more appropriate term) from drug and pharmaceutical companies to exotic foreign vacations, in return to prescribing their drugs. There is also direct commission (again, kickback being the more appropriate term) to the doctor for every diagnostic test prescribed, which can vary from a third to half of the price paid by the patient. Stent manufacturers give a cut to the surgeon for cardiac procedures that uses their products. The 'gift' amount to a surgeon for a knee replacement is Rs 25,000 per surgery, often resulting in

replacement of knees even for healthy young people. These types of financial incentives lead the medical professionals to *over-treat* the patients that results in iatrogenic damage to the patient.

- The Drug Controller-General of India and the Indian Council for Medical Research regulate the Institutional Ethics Committees (IEC) and major steps are being taken to ensure that all members of IECs in medical institutions across the country are certified after going through a course in GCP and Bioethics Guidelines. Many of the IEC doctor/basic scientist members, being older, have not gone through the formal Bioethics course as part of their curriculum, leave alone the theologian, lay person etc. The need to introduce a uniform course in research methodology/ basic medical ethics in the Medicine curriculum is being considered seriously in India, so that the younger generation grows up with a background in these areas, and is well prepared to step into practice or research when the time comes.

Ethics is something that one imbibes from early days. It is the value system taught in childhood at home and in the school. It is tradition, culture and perhaps religion that teaches you to respect all life equally, and not to wantonly crush that insect on your path, or pluck that wayside flower which nods at you with joy in the gentle breeze. In medical college you are face to face with pain, suffering, death and you grow up to develop the ethical sense in a deeper manner. Medical college lectures on ethics help to the extent of letting you know the rules of the game, be it patient care, research or drug trials, (especially as these areas get more and more complex). That is important too, and that is why the formal training in bioethics. With globalization of healthcare, we must speak the same language in Bioethics.

-Since character building is no longer emphasized in schools, an attempt to do this in medical colleges is necessary.

a) Formal ethics education should begin in the first year of MBBS and continue till post graduation.
b) Ethics should be integrated in day to day clinical discussions and practice and not compartmentalized
c) During MBBS classes ethical issues should be integrated – apart from stand alone ethics classes
d) Student involvement and opinions in ethical issues.

e) Medical conferences must have at least one session where ethical issues are discussed.

f) Medical Journals could also devote some space to the practice of ethical medicine.

g) Space and time for personal reflection should be provided and encouraged, at least in teaching institutions.

- At one level it is important for colleges to have ethics curriculum, but it is also important for colleges to ensure ethical practice is taking place in the hospital. Measures should be taken to reflect what is being discussed in classes. Doctors who have been found to be engaging in unethical practices should not be allowed to continue in medical colleges. Unfortunately, the situation where students have to pay high fees also leads them to be money oriented in their future practice.

- I have not received such an education during my MBBS. But I was informally taught that it was the duty of every doctor to protect any doctor who commits an unethical practice, and to argue & hide truth for him. I could not agree in mind; but in our country, if a student expresses doubtfulness about the ethical correctness of the teacher's advice, he will be subjected to multiple forms of torture.

- Very important topic and a very topical interest

- The ethics classes should be made compulsory.

- Unless the subject is assessed neither students nor teachers take it seriously, hence assessment should form a part of bioethics curriculum.

-Additionally professionalism should be included to bioethics, as both go hand in hand and many issues are overlapping.

Appendix XVII

Comments and Suggestions Received from the Questionnaire from Italy

Question No. 23: Credo che nel contesto italiano alcuni temi degli attuali programia di etica medica dovrebbero essere rimossi e altri dovrebbe essere inseriti. Per esempio: (per favore specificare):

-Obiezione di coscienza

-Rimuovere quei troppo religiosi

-Eutanasia

-Vautazione obiettiva della percezione del paziente

-Insert ethics on specific clinical practices

-Aborto, euthanasia

Question No. 24: Preferirei tecniche migliori di insegnamento della bioetica nelle facoltà mediche come presentazione di video, dibattiti, analisi di situazioni reali, condivisione di esperienze, laboratori, giochi di ruolo, seminari, partecipazione a convegni internazionali ecc. Altri suggerimenti (specificare):

-Casi clinici di etica nelle decisioni cliniche, simulazioni, case report

Question No. 28: Ci sono libri, riviste e altre pubblicazioni rilevanti per il contesto italiano in merito alle questioni etiche e di assistenza sanitaria. In caso affermativo, si prega di specificare i nomi dalle pubblicazioni:

-Medicina e Morale, Articoli "Vita e Pensiero", Testi Prodotti Dall'Associazione "Medicina e Persona".

-Pagina Web Medicina e persona

-Qulity of life

Dopo questione numero 28

altri commenti:

- Non sono I corsi di etica medica a guidare le scelte del medico. Ma la sua personalità cultura morale personale.

- medical ethics is not a material which can be taught as a formal didactics and its comprehension depends on the social build up of the student and then is taken in the clinical practice acquired from the moral examples of those who teach and practice medicine in the university.

-Ethics must not be intended absolutely as a consequence of a formation in the school. It is to be seen as the individual formation.

-The life is respected not just as a collection of static details, there should be a continued education from birth to death, in respect to life.

Per q.19. omeopatia non è medicina!!

Per 23. inserire modificazioni DNA con CRISPR.

29. f. A mio parere dovrebbero insegnare l'etica medica : (*Segna tutte le risposte pertinenti*). Altri suggerimenti:

-Psicologi clinici, giuristi esperti di questioni sanitarie

-(marcato a, b, c, d e commentato) "nella giusta misura"

30. f. Qui di seguito sono elencate alcune possibili fonti di etica in campo medico. Si prega di indicare (X) quanto è importante ognuna di queste fonti. Le altre fonti specifiche:

-Clinical practice in comparison with Italy and other countries

-Issues arise from public debates

-Education from the family

31 e. Di seguito sono riportate alcune possibili cause di pratiche non etiche nella professione medica. Si prega di indicare (X) quanto è grave l'influenza di ognuna. Qualche altro commento:

1. IN ITALIA SI STA AFFERMANDO IL PENSIERO CHE L'OBIEZIONE SIA UN NEGARE I DIRITTI DEL PAZIENTE. QUESTO PENSIERO NEGA LA BASE STESSA DELL'AGIRE ETICO DEL MEDICO.
PURTROPPO QUESTA POLEMICA NON COINVOLGE SOLO GRUPPI "ESTRANEI" ALL'AMBITO MEDICO O GRUPPI IDEOLOGICI DI PARTE, MA (SOPRATTUTTO NELLE NUOVE GENERAZIONI DI MEDICI) SI VA DIFFONDENDO COME MENTALITA' PREMINENTE: IL MEDICO E' VISTO AL PARI DI UN MECCANICO, PER IL MEDICO "CONTRARIO" A CERTE OPERAZIONI OD INTERVENTI (COME SE FOSSE FRUTTO DI LABILI OPINIONI E NON DI DECISIONI ETICHE COINVOLGENTI LA COSCIENZA DEL MEDICO) NON DOVREBBE FARE TALE O TAL ALTRA SPECIALITA'.
IL FATTO CHE EMERGA DALL'INTERNO DELL'AMBITO MEDICO DENUNCIA LA NECESSITA' DI UN APPROFONDIMENTO CURRICULARE DELL'ETICA NELLE FACOLTA' DI MEDICINA.

33. Altri temi importanti:

-Etica e technologie mediche
- ATTIVITA' PRATICA RIGUARDANTE I TEMI DI CUI SOPRA (CASI CLINICI, SIMULAZIONI, RACCOLTA DI CASE REPORT PERTINENTI)
- IL VALORE DELLA LIBERTA' DI COSCIENZA
-Etica di fine vita (Testamento Biologico, Eutanasia etc.)
-Aborto, interruzione di gravidanza, obiezione di coscienza
-Fecondazione e procreazione medicalmente assistita

Appendix XVIII

Manipal University Bioethics Programme[395]

Centre for Bioethics

Manipal University, Manipal

Bioethics Certificate Course

SCHEDULE FOR FIRST CONTACT SESSION

September 8th to 10th 2016

DAY 1: 8th September 2016

TIMINGS	TOPIC	SPEAKER
08:30 AM – 09:00 AM	REGISTRATION	
09:00 AM – 9:30 AM	Inauguration & Inaugural Address	Chief Guest Dr. Narayana Sabhahit Registrar, Manipal University
9:30 AM –9:45 AM	Pre-Assessment	Dr. Revathi Shenoy/Dr. Jyothi
09:45 AM – 10:30 AM	History of Bioethics	Dr. Nandini K. Kumar
10:30 AM – 10.45 AM TEA BREAK		
10:45 AM – 11:30 AM	Prayer, Oath, Covenants, Declarations, Guidelines	Dr. Joseph Thomas
11:30 AM – 12:15 PM	Responsible conduct of research	Dr. Nimesh Verma (Skype)
12:15 PM – 01:00 PM	Animal Ethics	Dr. Vasantha Muthuswamy
01:00 PM – 01:45 PM Lunch		
01:45 PM – 02:30 PM	Research Methodology	Dr. Asha Kamath
02:30 PM – 03:15 PM	Ethical Issues In Clinical Research	Dr. Nandini Kumar
03:15 PM – 04:00 PM	Regulation and Ethical Issues In Stem Cell Research	Dr. Vasantha Muthuswamy
04:00 PM – 04:15PM Tea Break		
04:15 PM – 05:00 PM	Traditional Systems of Medicine	Dr. Nandini Kumar
5:00PM – 5:10 PM	Day 1 feedback	Dr. Revathi Shenoy

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[395] Given by Dr. Prof. Nandini K. Kumar

DAY 2: 9th September 2016

TIMINGS	TOPIC	SPEAKER
8:30 Am – 9: 15 AM	Research on vulnerable group	Dr. Nandini K Kumar
9:15 AM – 10:00 AM	Introduction to legal aspects	Dr. Mary Mathew
10:00 AM – 10:45 AM	Doctor-patient relationship	Dr. Ravindran (skype)
10:45 AM – 11:00 AM TEA BREAK		
11:00 AM – 11:45 AM	Beginning of Life issues	Dr. Leslie Lewis
11:45 AM – 12:30 PM	End of Life issues	Dr. Naveen Salins (skype)
12:30 noon – 01:15 PM	Drugs and Cosmetic Act	Dr. Vishaal Bhat
1:15 PM – 2:00 PM LUNCH		
2.00 PM – 02:45 PM	Risk benefit analysis, compensation	Dr. Nandini Kumar
02:45 PM – 03:30 PM	Informed consent	Dr. Animesh Jain
03:30 PM – 03:45 PM TEA BREAK		
03:45 PM – 05:00 PM	Informed consent exercises 4 groups / 4 cases Dr. Joseph Thomas (coordinator)	GROUP GUIDES : Dr. Krishna Sharan Dr. Ganesh Shenoy Dr. Baby Nayak Dr. Rajeshkrishna Bhandari
05:00 PM – 05:10 PM	Day 2 feedback	Dr. Jyoti

DAY 3: 10th September 2016

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TIMINGS	TOPIC	SPEAKER
08:30 AM– 09:15 AM	Good pre-clinical and clinical practices	Dr. Dinesh Kumar (skype)
09:15 AM– 10:00 AM	Ethics in Western Philosophy	Dr. Sreekumar N (Skype)
10:00 AM – 10:15 AM TEA BREAK		
10:15 AM – 11:00 AM	Conflict of Interest	Dr. Vasudha Devi
11:00 AM – 11:45 AM	Mental Health Act	Dr. Shripathy Bhat
11:45 AM – 12:30 PM	Organizational Ethics	Dr. Somu G
12:30 PM – 01:15 PM	Stored tissue	Dr. Krishnananda Prabhu R V
01:15 PM – 02:00 PM Lunch		
02:00 PM – 02:45 PM	Regulations and ethical issues of transplantation act	Dr. Joseph Thomas

02:45 PM – 04:15 PM	**Panel Discussion** Professional Council Acts Dr. Joseph Thomas (Coordinator)	Dr. Kasturi Adiga (Nursing) Dr. Shashidhar (Dental) Dr. Virendra S. Ligade (Pharmacy) Dr. Shankar (Medical)
04:15 PM – 04:30 PM Tea Break		
04:30 PM – 05:00 PM	Day 3 Feedback and post assessment	Dr. Revathi Shenoy and Dr. Jyoti

SCHEDULE FOR SECOND CONTACT SESSION

October 6th to 8th 2016

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Day 1: 6th October 2016

TIMINGS	Topic	Speaker
8:30 AM – 9:15 AM	Pre Assessment	Dr.Vasudha Devi Dr.Jyothi R
9:15 AM – 10:00 AM	CTRI	Dr. Arvind Pandey (skype)
10:00 AM – 10:15 AM Tea Break		
10:15 AM – 11:00 AM	RTI ACT	Mr. Melroy Fernandes
11:AM- 11:45 AM	Standards of care	Dr. Girish Menon
11:45 AM – 12:45 PM	Ethical Issues In International Collaboration	Dr. Nandini Kumar
12:45 PM – 1:15 PM	Participant interaction "Miss Evers Boys" movie	Critique participants at random
1:15 PM – 2:00 PM Lunch		
2:00 PM – 2:45 PM	Regulations And Ethical Issues of MTP & PNDT Act	Dr. Muralidhar V. Pai
2:45 PM – 03:30 PM	Ethical issues in public health research	Dr. Prakash N.V.
3.30 PM – 3.45PM TEA BREAK		
3.45- 4.30 PM	Ethics in Eastern Philosophy	Dr. Mrinal Kaul
4.30 PM – 5.00 PM	Q & A Day 1 Feedback	Dr. Revathi Shenoy

Second Contact sessions

Day 2: 7th October 2016

TIMINGS	TOPIC	SPEAKER
8:30 Am – 9:15 Am	Environmental Protection Act	Mr. Derrick Ian Joshua
9:15 Am – 10:00 Am	Ethics related to social science research	Dr. Sudha Ganapathy (skype)

10:00 AM – 10.15 AM Tea Break		
10.15AM-11.00 AM	Intellectual property rights	Dr. Bindu Sharma (skype)
11:00 Am – 12:00 noon	Research visibility framework	Dr. Sanjay Singh
12:00 noon- 01.15 PM	Handling Of Medico Legal Cases- Clinicians Perspective	Dr. Kiran Acharya
	~~Approaches to medical negligence and discussion~~	~~Dr. Joseph Thomas~~
1:15 PM – 2:00 PM Lunch		
2:00 PM- 2.45 PM	IEC Review Procedures	Dr. Stanely Mathew
2:45 PM – 3:45 PM	Mock IRB Review Exercises Dr. Nandini K Kumar (Coordinator)	4 Groups / 4 Cases Group Guides : Dr. Vasudev Ballal Dr. Pallavi Dr. Revathi Shenoy Dr. Chytra V Raj
3.45Pm – 4.00 Pm Tea Break		
4.00 PM – 4.45 PM	Regulations And Ethical Issues of Genetics Research	Dr. Girisha K M
4:45 PM – 5:00 PM	Q & A session and Day 2 Feedback	Dr. Revathi Shenoy/Dr. Jyoti R

Second Contact sessions

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Day 3: 8th October 2016

TIMINGS	TOPIC	SPEAKER
8:30 AM- 9:15 AM	Data protection	Dr. Nabeel MK (skype)
9:15 AM – 10:00 AM	IPE/IPP	Dr. Ciraj AM
10.00 am – 10:15 am tea break		
10:15 AM– 11.00 AM	Traditional Systems of Medicine	Dr. Nandini Kumar
11:00AM - 11.45 AM	INFORMED CONSENT VIDEO Followed By Discussion	FERCI
11:45 PM– 12.30 PM	Approaches to medical negligence	Dr. Joseph Thomas
12:30 PM – 1:15 PM	Publication Ethics	Dr.Peush Sahni (skype)
1:15 pm – 2:00 pm lunch		
2:00 PM – 2:45 PM	Ethics of internet & social media research	Dr. Nandini Laxmikantha
2:45 PM – 3:30 PM	Regulations and ethical issues related to reproduction and ART	Dr. Praveena Pai

3:30 pm – 3.45 pm tea break		
3.45- 4.30 pm	Ethical Issues In War/Conflict Situations	Col. Dayananda
4.30-5.00 pm	Q& A sessions, Feedback and Post assessment	Dr. Revathi Shenoy/Dr. Jyoti R

Third Contact Sessions

DAY 1: 10th November 2016

TIMINGS	TOPIC	SPEAKER
8:30 am – 10.00 am	Written theory exam	Centre for Bioethics Manipal university
10:00 am – 10.15 am tea break		
10:15 AM – 11.00 AM	MCQ EXAMS	Center for Bioethics, Manipal University
11.15 pm – 12 NOON	Oral presentations …4	Participants
12.15-1.00 Pm	Oral presentations 4	Participants
1:00 pm – 2:00 pm lunch		
2:00 pm – 3:00 pm	Oral presentations 4	Participants
3:00 pm – 4:15 pm	Discussion	
4:15 pm – 4:30 pm tea break		
4:30 pm – 5:00 pm	Feedback	Participants

DAY 2: 11th November 2016

Timings	Topic	SPEAKER
8:30 am – 10:30am	Oral presentations 10	Participant
10:30 am – 10:45 am tea break		
10:45 am – 11:45 AM	Oral presentations 5	Participants
11:45 AM – 12:30 PM	Discussion	
12: 30 pm – 1.30 pm lunch		
1.30 pm – 3:45 pm	Lorenzo's oil	Movie
3.45-4.00 pm	Discussions from movie	Dr. Joseph Thomas
4:00pm – 4:15 pm tea break		
4.15 pm – 5.00 pm		

DAY 3: 12th November 2016

TIMINGS	TOPIC	SPEAKER
8:30 am – 9.30am	Bioethics	Dr. Valliathan
	Teaching skills/communication skills	
~~9.30 am – 10.15 am~~	Clinical care - a patient's perspective Ethics review - non medical person perspective	Mrs. Natarajan (breast cancer) Ms. Lakshmi Bai

	Ethics review - legal person perspective	Adv. S. Prasad
10:15am – 10.30 am Tea break		
~~10:30 am – 12.15 pm~~	book review/role play about consultation/history of medicine	
12.15 PM- 1:15 PM	Understanding Literature Searching	Dr. Judith A. Noronha
1:00 PM – 2:00 PM LUNCH		
2:00 PM – 3:00 PM		……..
3:30 PM- 3:00 PM	TEA BREAK	
3:30 PM – 4: 00 PM	Feedback on 3rd contact session	
4:00 PM to 5 PM	Valedictory function	

Appendix XIX

Yenepoya University Mangalore Bioethics Programme - I[396]

Centre for Ethics, Yenepoya University, Mangalore
Four Day Intensive Summer Workshop in Ethics and Research (I-SWEAR)
May 29 to June 1, 2017

Day One: May 29, 2017

Time	Resource persons	Title	Topics to be covered/Learning objectives
0900-0930 : Registration and Pre-test			
0930-1000	Dr. Ravi Vaswani Dr. Amar Jesani	Round of introduction	a. Introduction of participants and resource persons b. Overall program structure and objectives
1000-1030	Dr. Ravi Vaswani	What is research? (Case study discussion)	a. To define research b. Distinguish research from innovations in practice c. How different are ethics standards for research and practice
1030-1100 Inaugural program and refreshments			
1100-1200	Dr. Amar Jesani	Ethics of clinical practice and clinical research (Presentation and discussion)	a. Doctor patient-relationship in practice vis-à-vis doctor-participant relationship in research b. Uncertainty in practice and research c. Concepts of clinical equipoise and therapeutic misconception d. Brief history of research ethics
1200-1315	Dr.Uma Kulkarni	Methodology for ethical analysis: principles and theories (Presentation and discussion)	a. Principles and theories of ethics and basic tools for moral reasoning b. Identifying ethical issues in research
1315-1345: Lunch break			
1400-1530	Film	Miss Evers' Boys	

[396] Given by Dr. Prof. Amar Jesani.

1530-1545	Dr. Amar Jesani Dr.Uma Kulkarni	Discussion on the film	a. Tuskegee trial and its impact on development of ethical standards b. Identify various ethical issues in the film c. Application of theories, principles and guidelines d. Making scientific design to confirm ethical standards
1545-1630	Dr.Uma Kulkarni Dr.Vina Vaswani	Vulnerability of participants	a. Clarifying concept of vulnerability, and method of identifying different kinds of vulnerabilities of participants b. Individual and group vulnerabilities c. Appropriate ethical standards for protection of the vulnerable and ensuring benefits of research to them

Day Two: May 30, 2017

Time	**Resource persons**	**Title**	**Topics to be covered/Learning objectives**
0830-0900	Dr.Ravi Vaswani Dr. Amar Jesani	Recap, questions and discussion on the topics of previous day	Summary and key take-home messages from the previous day
0900-0945	Dr. Vina Vaswani Dr. Uma Kulkarni	Voluntary informed consent (IC) (Case studies/film, presentation, discussion)	a. Operationalizing the principle of participant's autonomy b. Elaboration of each component of IC: voluntariness, disclosure, comprehension and documentation c. Importance of consent process - who, where, how
0945-1030	Dr. Amar Jesani Dr. Ravi Vaswani	Privacy and confidentiality in clinical research (Case study, presentation and discussion)	a. Clarifying concepts: autonomy in relation to privacy/confidentiality

			b. Methods to operationalize protection of privacy and confidentiality c. Levels of confidentiality protection d. Limits of confidentiality protection
1030-1200	Dr. Roli Mathur	Helsinki Declaration and ICMR guidelines	e. Development and highlights of the guidelines
1200-1300	Dr. Amar Jesani Dr. Ravi Vaswani	Assessment of risks and benefits in clinical research (Case study, presentation, discussion)	a. Clarifying concepts – various types of risks, potential harms and benefits b. Methods to assess risks and benefits: components analysis, net-risk test, decision studies methods c. Who should do the risk assessment?
1300-1330 Lunch			
1330-1430	Dr. Arun Bhatt Dr. Vina Vaswani	Laws and regulations related to clinical trials (Presentation and discussion)	a. Outline of scope & provisions of drugs & cosmetic act - Schedule Y b. Good Clinical Practice Guidelines: Major provisions on competence & responsibilities of investigators, institutions, CROs and Sponsors c. Provisions for highest scientific standards of clinical trials d. Place and legal powers of the ICMR guidelines or ethical standards in legal framework of clinical trials in India
1430-1545	Dr. Amar Jesani Dr. Vina Vaswani	Ethics committees: Institutional and Independent (Presentation and discussion)	a. Structure and composition of ethics committees b. Functioning and responsibilities: Review, continuous review, monitoring, site visits

			c. Essential provisions in the Standard Operating Procedure (SOP)
1545-1630	Dr. Amar Jesani Dr. Ravi Vaswani	Formation of ethics committees of participants and protocols for mock ethics review	a. Getting to know each other in groups b. Identifying the various roles for the members of the group c. Brief overview of mock protocol

Day Three: May 31, 2017

Time	Resource persons	Title	Topics to be covered/Learning objectives
0830-0900	Dr. Vina Vaswani Dr. Amar Jesani	Recap, questions and discussion on the topics of previous day	a. Summary and key take-home messages from the previous day
0900-1000	Dr. Arun Bhatt	Regulations for SAE and compensation (Presentation and discussion)	a. Serious Adverse Events (SAE) reporting; injuries and deaths b. Provision of full and free medical management of SAEs c. Criteria for provision of compensation and the quantum d. Role and responsibilities of ethics committees and national expert committee/panel on compensation e. Registration & responsibilities of Ethics committees f. Trial inspections by CDSCO
1000-1100	Dr. Arun Bhatt Dr. Mala Ramanathan	Practical aspects of scientific and economic organization of clinical trials (Presentation and discussion)	a. Clinical trial agreements: Sponsor-CRO, CRO-Institution-Investigator b. Application for clinical trial to CDSCO: who, how c. Various types of CROs, their functions and responsibilities, strengths, weakness

			d. Clinical Trial insurance: What it covers, procedure for claims
1100-1200	Dr. Abhay Nirgude Dr. Mala Ramanathan	Community engagement in research (Case studies/Film, presentation and discussion)	a. Need for engagement – issues in relevance of research to community, community benefits and its protection b. Community permission and consent – understanding power relations within the community c. Culture sensitivity and developing cultural competence of researchers
1200-1330	Dr. Anant Bhan Dr. Amar Jesani	Scientific misconduct (Discussion on cases on the topic and presentation)	a. Data falsification and fabrication b. Plagiarism, self-plagiarism, salami publication c. Ghost writing d. Authorship credit e. Vancouver protocol
1330-1400	Lunch		
1400-1500	Dr. Anant Bhan Dr. Vina Vaswani	Standards of care and post-trial benefits	a. Standards of care in clinical practice and research b. History and international debate on standards of care c. Ancillary care and its importance for uninsured patients in India d. Post-trial obligations of research - need for institutional and national mechanism
1500-1630	Dr. Ravi Vaswani	Groups discussion on mock proposal	a. Members will discuss ethical issues in their groups based on previous day's activities

Day Four: June 1, 2017

Time	Resource persons	Title	Topics to be covered/Learning objectives
0830-0900	Dr. Amar Jesani Dr. Mala R	Recap, questions and discussion on the topics of previous day	a. Summary and key take-home messages from the previous day
0900-1000	Dr. Mala Ramanathan Dr. Anant Bhan	Transparency and social accountability in clinical research (Presentation and discussion)	a. Clinical trials as social function for development of new treatment, prevention methods and products b. Recent debates on making clinical trial data available to doctors and researchers c. Limits of trade/business secrets, and primacy of welfare of people d. Chain of responsibilities – who is accountable to whom
1000-1100	Dr. Ravi Vaswani Dr. Amar Jesani	Conflict of Interests (Discussion on case and presentation)	a. Clarifying concept, its importance for credibility, quality and ethics of research b. How it is managed c. Disclosure of conflict of interest to participants, ethics committee, in publication etc d. Measures to be taken when significant or irreconcilable conflict of interests
1100-1200	Dr. Anant Bhan	Ethical use of animals in Research	a. History of debate on the way animals were used in research; for the better treatment of animals b. Alternatives to animal use available c. Ethical guidelines for animal use, ethics committee for review and monitoring of the animal use.

1200-1300	Final meeting of Ethics committee	
1300-1330 Lunch		
1330-1430	Mock Ethics Presentation	Dr. Anant Bhan, Dr. Mala Ramanathan and Dr. Vina Vaswani
1430-1530	Post test and workshop feedback and Valedictory program	

Appendix XX

Yenepoya University Mangalore Bioethics Programme – II

CURRICULUM DETAILS

POSTGRADUATE DIPLOMA IN BIOETHICS & MEDICAL ETHICS

CENTRE FOR ETHICS

YENEPOYA UNIVERSITY, MANGALORE, INDIA

Name of the course: Postgraduate Diploma in Bioethics & Medical Ethics

Abbreviated name:	PGDBEME
Year of commencement:	2011
Duration of course:	One calendar year
Admissions:	Annual (every January)
Approved annual intake:	25
Eligibility for admission:	Bachelor's degree from a UGC recognized institute or equivalent, in the fields of health, law, philosophy, ethics and humanities
Course structure:	Modular; blended learning curriculum (contact programs + online learning) and mentoring
Course objectives:	To provide an overview of the various branches of bioethics To impart skills to develop ethical reflections based on theories of ethics To be able to identify and apply locally relevant ethical solutions to issues related to healthcare and research
Faculty:	Internal: Dr. Vina Vaswani; Dr. Uma Kulkarni; Dr. Ravi Vaswani

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	External: Dr. Amar Jesani; Dr. Anant Bhan; Dr. Mala Ramanathan; Dr. Arun Bhatt; Dr. Roli Mathur; Dr. Lavina Noronha
Details of contact program:	Three contact programs; six modules; 13 days of classroom teaching; Yengage – custom-made online learning portal; two field visits)
Course requirements:	80% attendance of classroom teaching On-time submission of online assignments Active participation in classroom activities and online forum Submission of a research project
Assessment:	Continuous internal assessment: Based on active engagement in classroom, quality of assignments and project report (20 marks) Summative assessment: Theory paper (50 marks; 3 hours); presentation of research project work & viva voce (30 marks)
Pass criterion:	50% aggregate
Results:	In grades
Course fees (current):	Rs. 30,000/- (Additional application fees Rs. 1,000/-, Exam fees Rs. 2,400/- and convocation fees Rs. 3,000/-)

Course Content

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Contact program 1 (4 days in January): Modules 1 and 2

1. Pre-course assessment of student knowledge
2. Faculty and participants' introductions
3. Introduction to ethics, medical ethics and bioethics
4. Historical aspects of the development of ethics, medical ethics and bioethics

5. Hands-on training in YENGAGE (Yenepoya University's online learning portal)
6. Human dignity and respect for person
7. Hermeneutics
8. Morality and moral reasoning
9. Bodily integrity
10. Equality and equity
11. Ethical theories (Deontology, Utilitarianism, Virtue ethics, Care ethics)
12. Principles of bioethics (Autonomy; beneficence; non-maleficence; justice)
13. Medical negligence and common medico-legal issues)
14. Basics of research methodology

Contact program 2 (5 days in May): Modules 3 and 4

1. Basic concepts of research and standards for research
2. Doctor-patient relationship (healthcare versus research)
3. Clinical equipoise
4. Application of ethical theories and principles in research
5. Identifying ethical issues in research
6. Making scientific design conform to ethical standards
7. Vulnerability\
8. Informed consent
9. Privacy and confidentiality
10. National and international guidelines for research (Declaration of Helsinki; Good clinical practice; ICMR guidelines)
11. Risk-benefit analysis
12. Laws and regulations related to clinical trials
13. Practical aspects of scientific and economic organization of clinical trials
14. Structure and functioning of research ethics committees
15. Serious adverse events, compensation issues, post-trial access
16. Community engagement in research
17. Scientific misconduct
18. Conflict of interest
19. Use of animals in research

Contact program 3 (4 days in September): Modules 5 and 6

1. Social responsibility and health
2. Stigma and discrimination
3. Palliative care and ethics
4. Field visit to palliative centre
5. Ethical issues of HIV medicine
6. Field visit to HIV Care and Support Centre
7. Ethical issues in end-of-life care
8. Ethical issues in genetics
9. Ethical issues in assisted reproductive technologies
10. Public health ethics
11. Basics of clinical ethics consultation
12. Update on research project progress

Glossary

Agnikula Theory of Rajputs

There are four theories of origin related to the existence of Rajput Clan in North India. They are 1. Foreign Origin Theory, 2. Mixed Origin Theory, 3. Kshatriya Theory of Origin and 4. Agnikula Theory. The fourth one comes from the work *Prithvirajraso* written by Chandarbardai. According to this theory, Rajputs were the result of a *Yagya* (ritual) performed by Rshi (seer) Vasishta at Guru Shikar in Mount Abu. The four Rajput Clans from *Agnikunda* (ritual fire) are Chauhans, Chalukyas, Paramaras and Pratiharas.[397]

In Indian culture, the *Agnivanshi* are people who claim descent from *Agni*, the Vedic god of fire. The *Agnivanshi* lineage (*Agnivansha* or *Agnikula*) is one of the three lineages into which the Rajput clans attribute their identities. The others are the *Suryavanshi* (descended from Surya, the sun god) and the *Chandravanshi* (descended from *Chandra*, the moon god). According to medieval legends, there are four *Agnivanshi* clans which are the above mentioned Chauhans (Chahamanas), Parihars (Prathiharas), Parmars (Paramaras) and Solankis (Chaulukyas).[398]

Ahimsa

Ahimsa is a Sanskrit word which denotes not causing injury/violence. It is a prominent ethical principle in the Indian religions Jainism, Hinduism, and Buddhism which counsels not to cause harm to other living things. In the early 20th century Mohandas K. Gandhi (The Father of the Nation, India) extended and propagated ahimsa into the political sphere as *satyagraha*, or nonviolent resistance to a specific evil.

In Jainism, ahimsa is the criterion by which all human actions are judged. For a householder *anuvrata* or observing the small vows, the practice of ahimsa requires that one not kill any animal life. However, for an ascetic who observes *mahavrata* which is the observation of the great vows, ahimsa entails the greatest care to prevent the ascetic from knowingly or unknowingly being the cause of injury to any living soul (*jiva* or *athman*). Hence, the principle of ahimsa applies not only to human beings and to large

[397] For more details please refer: https://www.jatland.com/home/Agnivansh#Agnikula_theory retrieved on 06.06.2017.
[398] Jaswant Lal Mehta, *Advanced Study in the History of Medieval India*, Sterling, 1980, p. 34; Jaideep Singh, "Theories of the Origin of Rajputs", retrieved on 11.06.2017 from http://www.rajras.in/index.php/theories-origin-rajputs/.

animals but also to insects, plants, and microbes. The soul when liberated is called *mukta*. The disruption of another *jiva*'s spiritual progress effects in incurring *karma*—the accumulated effects of past actions, envisaged by Jains as a fine particulate substance that accretes upon oneself —keeping one stalled in *samsara*, the cycle of rebirth into mundane earthly existence. Not only physical violence but also aggressive or other negative thoughts result in the attraction of karma to oneself. Many frequent Jainist customs, such as not eating or drinking after dark or the wearing of cloth mouth covers (*mukhavastrika*) by monks, are based on the principle of ahimsa.

Though the Hindus and Buddhists observe ahimsa, they never had so strict an execution of the principle as the Jains. It is seen that vegetarianism and tolerance toward all forms of life is widespread in India. It was Ashoka, the Buddhist emperor who stressed in his inscriptions of the 3rd century BCE the sanctity of animal life. Ahimsa is practiced to be one of the first disciplines learned by the student of Yoga and is a requisite to be mastered in the preliminary stage (*yama*), the first of the eight stages (*ashtanga marga*) that lead to perfect concentration.[399]

AYUSH

The Ministry of AYUSH was formed on November 9, 2014. It seeks to ensure the optimal development and propagation of AYUSH systems of healthcare. This governing body was earlier known as the Department of Indian System of Medicine and Homeopathy (ISM&H) which was created in March 1995 and again renamed as Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) in November 2003, with focused attention for development of Education and Research in Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy.[400]

Dharma

Dharma is a shared concept in Indian religious traditions like Hinduism, Buddhism, Jainism and Sikhism though they have different interpretations of the concept. In Sanskrit, a widely accepted meaning of the term is "the way of righteousness". Dharma

[399] For more details please refer: Brian Duignan (ed.), *The History of Western Ethics*, New York: Britannica Educational Publishing, 2011, p. 26; Jayaram V., "Ahimsa, Nonviolence or Non-injury", *Hinduwebsite.com*, accessed on 02.06.2018 from http://www.hinduwebsite.com/hinduism/concepts/ahimsa.asp.

[400] Accessed on 02.06.2017 from http://ayush.gov.in/about-us/about-the-ministry.

is the system of rules that maintains the cosmic order as well as the individual and social order. Dharma sustains human life in harmony with nature and all beings. When one follows dharma, he/she is in conformity with the law that sustains the whole universe. Generally, dharma is the universal moral order and code of conduct of living that includes the fundamental principles of law, religion, virtues and one's obligations/duty. It is dharma that helps one to liberate his soul from reincarnation and attain the Divine Fulfillment. Traditional Hindu view dharma is dependent upon his or her age, occupation and caste and asserts one's personal obligations in prescribed religious rituals, caste obligations and way of life. Jains use the term dharma to denote the Jain religion. In this tradition the term dharma means also "the real nature of an object". The essential nature of the soul is to seek self-realization and spiritual elevation, therefore, the dharma way of life. Buddhists uphold the teachings of Gautama Buddha as Dharma. Sikh Dharma is a spiritual path for those who are looking to launch an enduring connection to their Divine truth within.[401]

Guru Shishya Parampara and Gurukula Education

The *guru shishya parampara* is found in the Indian religious traditions of Hinduism, Buddhism, Sikhism and Jainism. Guru shishya parampara is the teacher-disciple tradition in Indian religion and culture. In Sanskrit, guru means "master/an enlightened teacher" *shishya* means "student of a guru" and *parampara* means "an uninterrupted succession." It is the lineage of transmitting knowledge from a succession of gurus to students through oral tradition. For thousands of years, many disciplines like Ayurveda, yoga, religious ceremonies etc. were passed along through the guru shishya parampara.

In a *gurukula* tradition, the shishya typically lives with the guru. In this residential schooling system knowledge is passed from guru to shishya through different practices and the spiritual, intellectual and emotional bond between them, hence, it envisages an all round human development of the student. The guru directs his shishyas on their path

[401] References accessed on 02.06.2017 from https://berkleycenter.georgetown.edu/essays/dharma-hinduism; http://veda.wikidot.com/dharma; https://www.buddhanet.net/e-learning/dharmadata/fdd41.htm; http://jainworld.com/jainbooks/guideline/2.htm; https://www.sikhdharma.org/ideology-beliefs/; also refer: Olle Qvarnström, "Dharma in Jainism – A Preliminary Survey", *Springer: Journal of Indian Philosophy*, Vol. 32 (5-6), December 2004, pp. 599-610.

to knowledge and enlightenment. The relationship requires the students to be obedient and devoted to the guru.[402]

Karma

Karma is the principle of causality in Hinduism, Buddhism and Jainism though they are interpreted differently in different religions. In Hinduism *karma* means the view of causality in which good words, actions and thoughts lead to a positive and beneficial effect to the *atman* (individual soul) and likewise bad expressions, thoughts, words and deeds bring harmful effects to the soul. This results in the rebirth to a higher level if one leads a good life or to a lower life if one leads a bad life i.e., ones *karmic life* influences the reincarnation of the soul. Moreover, the good or bad that one experiences in the present life could be the effect of karma in the previous life, means to say that one's future life depends upon the way he or she lives in the present.[403]

Manusmriti

Manusmriti or *Manusmruti* which is also known as *Manav Dharma Shastra* (the science of human righteousness) is an authoritative law text in Hindu tradition. The book Manusmriti (in English it is also translated as 'The Laws of Manu' or 'The Institutions of Manu') entails about a wide range of themes which includes the creation of the world, customs and rituals like 'upanayana' (vestition of the sacred thread) and marriage, duties of men and women placed in different classes of society and stages of life, penitential rites for violation of codes of conduct and so on.

According to Hindu legends it is also said that Manusmriti is written after the words of Brahma. The book consists of 12 chapters which have 2690 verses. About the authorship of the primary text there is no clear idea, the author has used the name

[402] Accessed on 04.06.2017 from https://www.yogapedia.com/definition/7953/guru-shishya-parampara; also refer: Kurian Kachapilly CMI, "Gurukula: A Family with Difference – An Exposition of the Ancient Indian System of Education", 3rd International 'Soul in Education' Conference, Byron Bay, NSW, Australia, Sep27 – Oct 2, 2003, retrieved on 04.06.2017 from https://www.academia.edu/4378166/Gurukula_A_Family_with_Difference_-_An_Exposition_of_the_Ancient_Indian_System_of_Education.

[403] Wendy Doniger O'Flaherty, *Karma and Rebirth in Classical Indian Traditions*, California: University of California Press, 1980, accessed on 02.06.2017 from https://archive.org/stream/bub_gb_4WZTj3M71y0C#page/n27/mode/2up; Paul Reasoner, "Reincarnation and Karma", in C. Taliaferro, P. Draper and P. L. Quinn (eds.), *A Companion to Philosophy of Religion*, II ed., Blackwell Publishing Ltd., 2010, pp. 639-647 accessed on 02.06.2017 from http://www.lamarre-mediaken.com/Site/EAST_493_files/Reasoner%20Reincarnation%20and%20Karma.pdf.

Manu, which has led the text to be ascribed to Manu, who was the first human being (also known as the 'son of Brahma) and the first king in the Indian tradition.[404]

Maya

Maya literally means "illusion" or "magic". Therefore, it denotes the illusory status of reality. But in the Hindu philosophical traditions especially in the *Advaita* (non dualistic) school of Vedanta it emerges to be a fundamental concept which explains how god can make human beings believe in what turns out to be an illusion. It is also known as the powerful force that creates the cosmic illusion that the phenomenal world is real. Vedanta envisages that the real nature is divine, pure, perfect and eternally free. We do not need to become god (Brahman) because we are already Brahman, in the sense that our true self (Athman) is one with Brahman. We are unaware of it because of *maya* or ignorance. It is the veil that covers our real nature and we perceive an apparent nature of the world around us. At the fulfillment of the perfect knowledge of our own divine nature, *maya* ceases to exist.[405]

Moksha

Moksha (also called *Mukti*) in Indian philosophy generally denotes the attainment of the highest goal in one's life. Not only we have two different theories one based on faith of surrender ('grace' of God is necessary to be liberated) and other based on self effort (one's own personal effort for salvation) but what is moksha is also very differently defined by some of the schools of philosophy. To some moksha means cessation of births & rebirths & the soul obtains *Jnan* (pure knowledge/enlightenment) & the darkness dispels. According to the Ramanuja school of Hindu philosophy, *Vishishtadvaita*, moksha means fellowship with God. In Jainism by meditation and spiritual practices the spirit/soul becomes light and attains complete solitude *kaivalya*. In Buddhism moksha is denoted with the term *Nirvana/Nibbana* which means going out of existence as the lamp blows out. In *yoga darshana* moksha is defined as *Samadhi*

[404] "Manusmriti with English Translation", accessed on 04.06.2017 from https://archive.org/details/ManuSmriti_201601; http://www.hindibookspdf.com/manusmrit-hindi-book-pdf-download/; Jayaram V., "Manusmriti: The Laws of Manu – Introduction", accessed on 05.06.2017 from http://www.hinduwebsite.com/sacredscripts/hinduism/dharma/manusmriti.asp.
[405] "The Concept of Maya", accessed on 05.04.2017 from https://vedanta.org/what-is-vedanta/the-concept-of-maya/; Matt Stefon, Wendi Doniger, "Maya", in *Encyclopaedia Britannica*, accessed on 05.04.2017 from https://www.britannica.com/topic/maya-Indian-philosophy.

(the final stage when the soul is united with the divine). According to Shankara's theory of *Kevaladvaita* "moksha" is man falling back to the universal soul, merging, the loss of identity & ego/self. *Sankhya darshana* also like Jain believe in the theory of *Kaivalya* with minor differences. Hence, the nature of moksha differs widely, as conceived in the various systems of Indian religious and philosophical traditions. It may generally be represented as achieving self-perfection.[406]

Samsara

Samsara is the continuous cycle of life, death, and the recurrent reincarnation of the humans envisioned in Hinduism, Buddhism and other Indian religions. Buddhism does not assume the existence of a permanent soul, but accepts a semi-permanent personality core that goes through the process of samsara. In Hindu and Buddhist practice, samsara is the endless cycle of life, suffering and death from which human beings seek liberation. In Hinduism, the prominent belief is that samsara is a feature of a life based on illusion (maya). Illusion surrenders a person to think he/she is an independent being instead of realizing the connection between one's self and the rest of reality. Believing in the illusion of separateness that persists throughout samsara leads one to act in ways that generate karma which is the cause that perpetuates the cycle death and rebirth. By fully grasping the unity or oneness of all things, the believer has the potential to break the illusion upon which samsara is based and achieve moksha—liberation from samsara.[407]

Sramana Tradition

Sramana was an ancient Indian religious movement that predates its origins in the later forms of Vedic religion. Sramanas were those who practiced an ascetic, or strict self-denying lifestyle in pursuit of spiritual perfection. It was also known as the reformation of Vedic religions. The strict followers were also commonly known as monks/sages. It

[406] Ref: "Chapter IV: The Concept of Moksha in Different Schools of Indian Philosophy", accessed on 02.04.2017 from http://shodhganga.inflibnet.ac.in/bitstream/10603/111609/5/chapter-4.pdf; Patric Olivelle, "Moksha", in *Encyclopaedia Britannica,* accessed on 02.04.2017 from https://www.britannica.com/topic/moksha-Indian-religion.

[407] "Samsara (Hinduism)", accessed on 05.04.2017 from https://berkleycenter.georgetown.edu/essays/samsara-hinduism; Matt Stefon, Wendy Doniger, "Samsara",in *Encyclopaedia Britannica*, accessed on 05.04.2017 from https://www.britannica.com/topic/samsara.

is also argued that the Sramana movement was one of the causes which gave rise to religions like Jainism and Buddhism.

Sramana, which means "seeker", was a tradition that began around 800-600 BCE when innovative philosophical groups, who believed in more austere ways to spiritual freedom, discarded the authority of the Brahmins (the priests of Vedic Hinduism). Modern sects in Hinduism can be regarded as a combination of Vedic and Sramana traditions; they are substantially influenced by both.[408]

Veda and Agama

Veda means knowledge and Vedas are the earliest revealed texts in Hinduism. The Vedas are the foundation scripts of Hinduism and explains how Hinduism came into practice during Indo-Aryan civilization. There are four Vedas- Rig Veda, Sama Veda, Yajur Veda and Atharva Veda. Each Veda consists of 4 main parts- The Samhitas (hymns), the Brahmanas (rituals), the Aranyakas (the theologies), the Upanishads (Philosophy). Vedas are considered to be the divine wisdom which is revealed to *Rshis* (Seers/sages) in the higher states of their consciousness.

In short words, Agamas can be defined as scriptures or sacred traditional doctrines which are of non-vedic origin. They are theological treatises and practical manuals of divine worship. They have been dated either as post-vedic texts or as pre-vedic compositions. The Agamas are a compendium of Sanskrit scriptures in which certain rules and regulations are mentioned that are to be followed while establishing a temple; the methods of construction, installation of the prime deity and other associated deities in the temple, sculptures, performance of daily devotions, worships on special and periodical occasions, observation of festivals, consecration of the deities etc. There are three classes of Agamas – *Shaiva* (in the tradition of the worshippers of Lord Shiva/Siva), *Vaishnava* (in the tradition of the devotee of Lord Vishnu) and *Shakta* (in the tradition of the worshippers of *Devi*/goddess/ female deity/ eternal principle of energy).[409]

[408] Krishna Reddy, *Indian History*, 3rd ed., New Delhi: Tata McGraw-Hill Publishing Company Limited, 2008, pp. A 122-123; "The Sramana Movement", accessed on 01.07.2017 from https://courses.lumenlearning.com/suny-hccc-worldcivilization/chapter/the-sramana-movement/.

[409] Sri Swami Sivananda, *All About Hinduism*, U.P., India: The Divine Life Society, 1999(web.), accessed on 02.05.2017 from http://dlshq.org/download/hinduismbk.htm#_VPID_16.

Bibliography

Advocate Healthcare, *Religious Beliefs and Healthcare Decisions*, available at http://www.advocatehealth.com/beliefs/.

Aggarval, Arun K. "Strengthening Healthcare System in India: Is Privatization the Only Answer?", *Indian Journal of Community Medicine*, 33(2), Apr. 2008, pp. 69-70.

Angelos P., Da Rosa D. A., Derossis A. M., Kim B., "Medical Ethics Curriculum for Surgical Residents: Results of a Pilot Project", *Surgery*, Oct. 126(4), pp. 701-705; discussion pp. 705-707.

Animal Protection in India, http://api.worldanimalprotection.org/country/india#_ftn2.

Animal Welfare Board of India, http://awbi.org/?q=node/1 accessed on 02.02.2017.

Anusandhan Trust and CSER, http://www.anusandhantrust.org/centres/CSER.

Anusandhan Trust, http://www.anusandhantrust.org/ accessed on 02.12.2016

Arnold, David. *The New Cambridge History of India III (5): Science, Technology and Medicine in Colonial India*, Cambridge: Cambridge University Press, 2000.

Asai A., Kishino M., Fukui T., Masano T., "Postgraduate Education in Medical Ethics in Japan", *Medical Education*, Jan. 32(1), 1997, pp. 100-104.

Autorità Garante della Concorrenza e del Mercato. "Provvedimento n. 25078. I738. Restrizioni deontologiche FNOMCeO (Intese e abuso di posizione dominante)", *Bollettino settimanale - Autorità Garante della Concorrenza e del Mercato* 24(37): 24 settembre 2009, pp. 5-31.

Azariah J., Azariah H., Macer Darryl R. J. (eds.), *Bioethics in India: Proceedings of the International Bioethics Workshop in Madras: Bio management of Bio-geo-resources, 16-19 Jan. 1997, University of Madras*, Eubios Ethics Institute, 1997. Also found in http://www.eubios.info/india/BIIP.HTM.

Bahuguna, Sunderlal. "Technology V. Ecology", *The Hindustan Times*, Feb. 9, 1986.

Banerji, Debabar "Place of the Indigenous and the Western Systems of Medicine in the Health Services of India", *International Journal of Health Services*, 9(3), 1979, pp. 511-519.

Basu, Durga Das. *Introduction to the Constitution of India*, (21ed.), India: LexisNexis, 2013.

Bethsabé, *Pancha Kosha Yoga*, retrieved on 17.06.2017 from http://www.panchakoshayoga.com/index.php?path=home/5koshas&PHPSESSID=8d3234a5bae91b97d7cfbd147ec496f7.

Bhattacharji S. "Working the Contradictions: Three Decades". In, Zachariah, A., Srivatsan, R., Tharu, S. (Ed.) *Towards a Critical Medical Practice: Reflections on the Dilemmas of Medical Culture Today*. Hyderabad: Orient Blackswan, 2010.

Bhushan, Patwardhan and Anant, Mashelkar Raghunath. "Traditional Medicine-Inspired Approaches to Drug Discovery: Can Ayurveda Show the Way Forward?", *Elsevier: Drug Discovery Today*, June 2009, pp.1-8.

Bombay High Court Rule on Pre-diagnostic Techniques, accessed on 01.12.2016 from http://bombayhighcourt.nic.in/libweb/rules/MahRegulationofuseofPre-natalDiagnosticTechniquesRules1988.pdf,

Borins, Mel. "Traditional Medicine of India", *Canadian Family Physician*, Vol. 33, April 1987, pp.1061-1065.

"Buddhism", *IAS UPSC Notes for Indian History – Indian Art and Culture*, October 27, 2015, retrieved on 12.02.2017 form http://www.nextgenias.com/2015/10/buddhism-ias-upsc-notes-for-indian-history-indian-art-and-culture.html.

C. M. Francis, *Medical Ethics*, New Delhi: Jaypee Brothers, 1993, 2007 (II ed.), from https://docs.google.com/file/d/0BxvjJ4mG_bfYUDF1VG1vdlB5Rlk/edit retrieved on 02 February 2017.

Cahill, Lisa Sowle. "Within Shouting Distance: Paul Ramsey and Richard McCormick on Method", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, pp.70-82.

Case Conference: "How do we teach Medical Ethics?" *Journal of Medical Ethics*, 7, 1981, pp. 92-94.

CBSE Circular: Compassionate Citizen, accessible at http://www.compassionatecitizen.org/pdf/endorsement-CBSE-circular-compassionate-citizen.pdf; http://www.compassionatecitizen.org/pdf/endorsement-AWBI-dr-shashi-tharoor.pdf.

Census of India 2011 accessed on 12.07.2017 from http://www.dataforall.org/dashboard/censusinfoindia_pca/.

Census of India 2011. "Gender Composition of Population and Sex Ratio (States and Union Territories)", retrieved from http://censusindia.gov.in/2011-prov-results/data_files/india/Final_PPT_2011_chapter5.pdf, on 04.04.2017.

Census of India 2011. "Population by Religious Community – 2011", Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India, retrieved from http://www.censusindia.gov.in/Census_Data_2001/India_at_Glance/religion.aspx, on 04.04.2017.

Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, *National Health Profile 2015*, 10th Issue, New Delhi, 2015.

Chakravarti, Sitansu. *Hinduism a Way of Life*, Delhi: Motilal Banarsidas Publishers, 1991.

Chakravorthy, R. "The Duties and Training of Physicians in Ancient India as Described in the Sushruta Samhita", *Surgery, Gynecology and Obstetrics*, May 120, 1965, pp. 1067-1070.

Chapple, Christopher Key. *Bioethics in Jainism*, 1995, retrieved on 16.05.2017 http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/jainism-bioethics.

"Chapter IV: The Concept of Moksha in Different Schools of Indian Philosophy", accessed on 02.04.2017 from http://shodhganga.inflibnet.ac.in/bitstream/10603/111609/5/chapter-4.pdf.

Chaudhuri, Sarit Kumar. "The Institutionalization of Tribal Religion: Recasting the Donyi-Polo Movement in Arunachal Pradesh", in *Asian Ethnology*, 732(2), Nanzan Institute for Religion and Culture, 2013, pp. 259-277.

CHEHAT Mumbai, http://www.cehat.org/go/TrainingandEducation/Home accessed on 02.12.2016.

Cherdsak, Iramaneerat. "Moral Education in Medical Schools", Journal of the Medical Association of *Thailand*, 89(11), 2006, p. 1987. pp. 1987-1993.

Chopra, Ananda S. "Ayurveda", in Helaine, Selin (ed.) *Medicine Across Cultures: History and Practice of Medicine in Non-Western Cultures*, Kluwer Academic, 2003, pp. 75-83.

Chopra, Deepal. *What is Ayurveda?*, retrieved on 12.06.2017 from http://www.chopra.com/articles/what-is-ayurveda#sm.000yhus9833dfje11uw1gscvhio85.

Christian Medical College Vellore, *An Integrated Bioethics Curriculum for Health Personnel in India*, 2014 available at http://www.cmch-vellore.edu/WeeklyNews/othernews/LT2014/awards/pdf/bioethics.pdf. Accessed on 18.06.2017.

Clark, Jocalyn. "Indian Medical Education System is Broken, Reuters Investigation Finds", *British Medical Journal*, 350(h3324), 18 June 2015 retrieved on 16.06.2017 from http://www.bmj.com/content/350/bmj.h3324,

Clements, Mari. "Ayurveda: Mother of Traditional Medicine", in Elizabeth R. Mackenzie, Birgit Rakel, (eds.), *Complementary and Alternative Medicine for Older Adults: A Guide to Holistic Approaches to Healthy Aging*, New York: Springer Publishing Company, pp. 215-232.

Community Health Cell accessible at http://www.communityhealth.in/~commun26/wiki/index.php?title=Community_Health_Cell and http://www.sochara.org/Evolution, retrieved on 31.01.2017.

Continuing Bioethics Formation at Harvard University, accessible at http://bioethics.hms.harvard.edu/. Accessed on 18.08.2017.

Continuing Bioethics Formation at Pennsylvania University, accessible at http://medicalethicshealthpolicy.med.upenn.edu/online-learning, accessed on 18.06.2017.

Continuing Bioethics Formation at Pittsburg University, available at http://bioethics.pitt.edu/continuing-education. Accessed on 18.06.2017.

Corte di Cassazione (Sezioni unite civili). *Sentenza n. 26810/07 del 20 dicembre 2007*.

Corte di Cassazione (Terza Sezione penale). *Sentenza n. 16145/08 del 5 marzo 2008*.

Coward, Harold and Ratnakul, P. (eds.), "Introduction", in *A Cross Cultural Dialogue on Healthcare Ethics*, Waterloo (ON): Wilfrid Laurier University Press, 1999.

Coward, Harold and Sidhu, Tejinder. "Bioethics for Clinicians: 19. Hinduism and Sikhism", *Canadian Medial Association Journal*, 163(9), pp. 1167-1170 retrieved on 12.04.2016 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC80253/.

Curran W. J. "American Personal-injury Lawyers at Bhopal. Ethics and Public Policy in Mass Disaster", *The New England Journal of Medicine*, 313 (17), 1985, pp. 1068-1070.

De Sarkar, O. Bishakha and Kumar, Sanjai. *World Health Organization, Continuing Medical Education in India*, retrieved on 18.06.2017 from http://www.who.int/bulletin/volumes/82/2/feature0204/en/index1.html.

Dikshith, T. S. S. *Safe Use of Chemicals: A Practical Guide*, London etc.: CRC Press, 2009.

Documents on Catholic Bioethics from https://www.ncbcenter.org/resources/church-documents-bioethics/, accessed on 15.06.2017.

Doniger, Wendy O'Flaherty. *Karma and Rebirth in Classical Indian Traditions*, California: University of California Press, 1980, accessed on 02.06.2017 from https://archive.org/stream/bub_gb_4WZTj3M71y0C#page/n27/mode/2up.

Doniger, Wendy. (ed.), *Merriam-Webster's Encyclopedia of World Religions*, Springfield, Mass.: Merriam-Webster, 1999.

Dudgeon, R. E. *Lectures on the Theory and Practice of Homeopathy*, London: Henry Turner, 1853.

Duignan, Brian. (ed.) *The History of Western Ethics*, New York: Britannica Educational Publishing, 2011.

Ecology, accessible at: http://www.ecology.edu/index.html retrieved on 03.12.2016.

Emmerich, Nathan. *Medical Ethics Education: An Interdisciplinary and Social Theoretical Perspective*, Cham, Heidelberg etc.: Springer, 2013.

European Conference of Medical Orders (CEOM). *European Charter of Medical Ethics*. 10 June 2011. Available from: http://www.ceom-ecmo.eu/sites/default/files/documents/en-european_medical_ethics_charter-adopted_in_kos.pdf. Accessed on 16.06.2017.

European Conference of Medical Orders (CEOM). *Principles of European Medical Ethics adopted on 6 January 1987* (with Appendix of the Principles adopted on 6 February 1995). Available from: www.ceom-ecmo.eu/sites/default/files/documents/european_medical_ethics_principles-1987-1995_ceom_cio_0.pdf. Accessed on 16.06.2017.

Fahlsbusch, Erwin. "Syrian Orothodox Church in India", in *The Encyclopedia of Christianity*, Vol.5, Grand Rapids, MI: Wm.B. Eerdmans, 2008.

Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri (FNOMCeO). *Codice di deontologia medica*. 18 maggio 2014, modificato il 19 maggio 2016. Available from: https://portale.fnomceo.it/fnomceo/downloadFile.dwn?id=148778&version=7. Accessed on 16.06.2017.

Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri (FNOMCeO), *European Conference of Medical Orders (CEOM). The Sanremo 2010 consensus document*, 15 February 2010.

FERCI: Forum for Ethics Review Committees in India, retrieved on 01.02.2017 from http://ferci.org/.

Garg. Tarun, Singh, Omkar and Arora, Saahil. "Opportunities and Growth of Conduct Clinical Trials in India", *International Journal of Pharmaceutical Sciences Review and Research*, 8(1), May-June 2011, pp. 152-160.

Gethin, Rupert. *Foundations of Buddhism*, London: Oxford University Press, 1998.

Ghoshal, Rakhi and Meherally, Sanna. "Conference Report", *Indian Journal of Medical Ethics*, 10(1), January-March 2013, pp. 16-19.

Glick, S. M. "The Teaching of Medical Ethics to Medical Students", *Journal of Medical Ethics*, 20, 1994, pp. 239-243.

Goel, Ayush. et al., *Preconception and Prenatal Diagnostic Techniques Act*, retrieved on 01.12.2016 from https://radiopaedia.org/articles/preconception-and-prenatal-diagnostic-techniques-act.

Goldstein, Steve. "Trainee to Teacher: Leveraging Bioethics Learning in India", *Global Health Matters Newsletter*, Fogarty, NIH, Nov.-Dec. 2011, retrieved on 01.12.2016 from https://www.fic.nih.gov/News/GlobalHealthMatters/nov-dec-2011/Pages/bioethics-india.aspx.

Gordon, John-Stewart. "Bioethics" in *Internet Encyclopedia of Philosophy: A Peer Reviewed Academic Resource*, ref: http://www.iep.utm.edu/bioethic/ as registered on 26.05.2016.

Greco, Donato and Petrini, Carlo. "Alcuni aspetti di etica in sanità pubblica", *Annali dell'Istituto Superiore di Sanità*, 40 (3), 2004, pp. 363-371, retrieved on 17.06.2017 from http://www.iss.it/publ/anna/2004/3/403363.pdf.

Grierson, George Abraham. *Linguistic Survey of India*, Culcutta: Office of the Superintendent of Government Printing, India, 1903-1928, available at http://dsal.uchicago.edu/books/lsi/ accessed on 31.03.2017.

Gross M. L., "Ethics Education and Physician Morality", *Social Science and Medicine*, 49, 1999, pp. 329-342.

Gross M. L., "Medical Ethics Education: to What Ends?", *Journal of Evaluation in Clinical Practice*, 7, 2001, pp. 387-397.

Gurumukhi to English Translation and Phonetic Transliteration of Sri Guru Grandh Sahib: Sentence by Sentence, retrieved on 15.02.2017 from http://fateh.sikhnet.com/SGGS/translation/1136.html.

Harden R. M., Sowden Susette and Dunn W. R., "Educational Strategies in Curriculum Development: the SPICES Model", *Medical Education*, 18(4), 1984, pp. 284-297.

Harvey, Peter. *An Introduction to Buddhism: Teachings, History and Practices*, London: Cambridge University Press, 2013.

Hirakawa, Akira and Groner, Paul. *A History of Indian Buddhism: from Samkyamuni to Early Mahayana*, New Delhi: Motilal Banarsidass Publications, 1993.

http://ayush.gov.in/about-us/about-the-ministry accessed on 02.06.2017.

http://jainworld.com/jainbooks/guideline/2.htm accessed on 02.06.2017.

http://jipmer.edu.in/about-us accessed on 02.12.2016.

http://veda.wikidot.com/dharma accessed on 02.06.2017.

http://www.astroninstitute.in/certificate-course-on-medical-law-and-bioethics.

http://www.astroninstitute.in/wp-content/uploads/2017/06/medical-law-brochure.pdf.

https://berkleycenter.georgetown.edu/essays/dharma-hinduism accessed on 02.06.2017.

https://www.buddhanet.net/e-learning/dharmadata/fdd41.htm accessed on 02.06.2017.

https://www.jatland.com/home/Agnivansh#Agnikula_theory retrieved on 06.06.2017.

https://www.sikhdharma.org/ideology-beliefs/ accessed on 02.06.2017.

https://www.yogapedia.com/definition/7953/guru-shishya-parampara accessed on 04.06.2017.

Hui, Edwin C. "Bioethics in Christianity", in, Anne L.C. Runehov, Luis Oviedo (eds.), *Encyclopedia of Sciences and Religions*, Dordrecht: Springer, 2013.

Human, Delon Secretary General, World Medical Association, "Forward", *Medical Ethics Manual*, 3rd Ed., 2015.

I. J. Singh, "Bioethical Issues: A Sikh Perspective", in *The Sikh Way: A Pilgrim's Progress*, Ontario: The Centennial Foundation, 2001, pp. 19-26.

IGNOU Programme of Bioethics, available at http://www.ignouonline.ac.in/icmrproject/ProgrammeGuide.aspx. Accessed on 16.06.2017.

India Brand Equity Foundation, *Healthcare*, January 2017, accessed on 02.06.2017 from https://www.ibef.org/download/Healthcare-January-2017.pdf.

Indian Council of Medical Research. *Ethical Guidelines for Biomedical Research on Human Subjects*, New Delhi: ICMR, 2000.

Indian Council of Medical Research. *Ethical Guidelines for Biomedical Research on Human Participants*, New Delhi: ICMR, 2006.

Indian Council of Medical Research. *Policy Statement on Ethical Considerations Involved in Research on Human Subjects*, New Delhi: ICMR, 1980.

Indian Journal of Medical Ethics. *Report on National Bioethics Conference*, accessed on 26.03.2017 from http://ijme.in/articles/national-bioethics-conference-3/?galley=pdf.

Indian Medical Association, *Pledge*, retrieved on 16.06.2017 from http://www.ima-india.org/ima/free-way-page.php?pid=18.

Indian Medical Council (Medical Council of India), *Professional Conduct, Etiquette and Ethics Regulations, 2002*, (Published in Part III, Section 4 of the Gazette of India, dated 6th April, 2002), retrieved on 20.06.2017 from https://www.maharashtramedicalcouncil.in/Files/Code-of-Medical-Ethics-Regulations.pdf.

Indian Medicine Central Council Act, 1970, retrieved on 12.06.2017 from http://www.pousada-tauma.com/documents/Indian-Medical-Central-Council-Act-1970.pdf.

Irwin, W. G., R. J. McClelland, R.W. Stout, and M. Stchedroff. "Multidisciplinary Teaching in a Formal Medical Ethics Course for Clinical Students", *Journal of Medical Ethics,* 14(3): 1988, pp. 125–128.

Jainism in India, retrieved on 14.05.2017 from https://www.revolvy.com/topic/Jainism%20in%20India&item_type=topic.

Jayaram V., "Treatment of Animals in Hinduism", retrieved on 01.02.2017 from http://www.hinduwebsite.com/hinduism/essays/animals.asp.

Jayaram, V. "Ahimsa, Nonviolence or Non-injury", accessed on 02.06.2018 from http://www.hinduwebsite.com/hinduism/concepts/ahimsa.asp.

Jayaram, V., "Manusmriti: The Laws of Manu – Introduction", accessed on 05.06.2017 from http://www.hinduwebsite.com/sacredscripts/hinduism/dharma/manusmriti.asp.

Jewell, M. D. "Teaching Medical Ethics", *British Medical Journal*, 289(6441), pp. 364-365.

John XXIII, Pope. *Encyclical on Establishing Universal Peace in Truth, Justice Charity and Liberty Pacem in Terris*, April 11, 1963.

Jonsen, A. R. *The Birth of Bioethics*, New York: Oxford University Press, 1998.

Kachapilly, Kurian CMI. "Gurukula: A Family with Difference – An Exposition of the Ancient Indian System of Education", *3rd International 'Soul in Education' Conference*, Byron Bay, NSW, Australia, Sep27 – Oct 2, 2003, retrieved on 04.06.2017 from https://www.academia.edu/4378166/Gurukula_A_Family_with_Difference_-_An_Exposition_of_the_Ancient_Indian_System_of_Education.

Kauai's Hindu Monastery, *Basics of Hinduism: The Four Denominations of Hinduism*, retrieved on 05.04.2017 from https://www.himalayanacademy.com/readlearn/basics/four-sects.

Kosambi, D. D., *The Culture and Civilization of Ancient India in Historical Outline*, 1997 (first ed. 1964), retrieved from http://vidyaonline.org/dl/cultddk.pdf on 30.03.2017.

Kumar Nandini, Ravindran G. D., Bhan A., Srivastava J. S., Nair V. M. "The India Experience", *Journal of Academic Ethics*-Springer 6, 2008, pp. 295-303.

Kumar, Nandini K. "Bioethics Activities in India", *Eastern Mediterranean Health Journal*, 12(1) 2006, pp. S56-S65.

Lallanilla. Marc, "Ayurveda: Facts About Ayurvedic Medicine", *Livescience* accessed on 06.06.2017 from https://www.livescience.com/42153-ayurveda.html.

Lalmalsawma, David. *India Speaks 780 Languages, 220 Lost in Last 50 Years – Survey*, September 7, 2013, accessed on 31.03.2017 from http://blogs.reuters.com/india/2013/09/07/india-speaks-780-languages-220-lost-in-last-50-years-survey/.

Larson, Gerald James. *India's Agony over Religion*, Albany: State University of New York Press, 1995.

Lempp, Heidi and Seale, Clive. "The Hidden Curriculum in Undergraduate Medical Education: Qualitative Study of Medical Students' Perceptions of Teaching", *British Medical Journal*, 329, 2004, pp. 770-773.

Levada, Card. William. The *Role of Magisterium in Bioethics*, retrieved on 15.05.2017 from http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20070208_levada-dallas_en.html.

Lipkin, Mack Jr., Frankel Richard M., Beckman Howard B., Charon Rita and Fein Oliver. "Performing the Interview", in Lipkin M. Jr., Putnam S.M., Lazare A., Carroll J.G., Frankel R.M., Keller A., Klein T., Williams P.K., (Eds.), *The Medical Interview: Clinical Care, Education, and Research*. New York, NY: Springer-Verlag; 1995, pp. 65-82.

"List of Animal Welfare Groups", accessed on 02.09.2016 from https://en.wikipedia.org/wiki/List_of_animal_welfare_groups.

Lobo, George. *Current Problems in Medical Ethics*, Allahabad: St. Paul's Publications, 1980.

Loh, Lawrence C, Cesar Ugarte-Gil and Kwame Darko. "Private Sector Contributions and Their Effect on Physician Emigration in the Developing World", *Bulletin of the World Health Organisation*, accessed on 20.06.2017 from http://www.who.int/bulletin/volumes/91/3/12-110791/en/.

Macer Darryl R. J., *Bioethics is Love of Life: An Alternative Textbook*, Christchurch, NZ: Eubios Ethics Institute, 1998.

Main Sects of Hinduism: Saivism and Vaishnavisam retrieved from https://www.britannica.com/topic/Hinduism/Vaishnavism-and-Shaivism on 12.06.2017.

Maithreyi M. R. *Towards a History of Bioethics in India (1980-2010): Mapping the Field, A Preliminary Report*, Mumbai: Centre for studies in Ethics and Rights, 2012.

Mandal Jhama, Acharya Srinivas and Parija Subhash Chandra. "Ethics in Human Research", *Tropical Parasitology*, 1 (1), January-June 2011, pp. 2-3.

Mano K., Fujiki N., Hirayama M., Nakazaki S., Verma I. C., Ratanakul P. "International Opinion Survey for Bioethics and Medical Genetics", *Collegium Anthropologicum*, Dec. 17(2), 1993, pp. 191-198.

"Manusmriti with English Translation", accessed on 04.06.2017 from https://archive.org/details/ManuSmriti_201601; http://www.hindibookspdf.com/manusmrit-hindi-book-pdf-download/.

McCall, Timothy. "75 Health Conditions Benefited by Yoga, as Demonstrated in Scientific Studies", *Yoga as Medicine: The Science and Practice of Therapeutic Yoga*, retrieved on 19.06.2017 from http://www.drmccall.com/uploads/2/2/6/5/22658464/yam--75conditions.pdf.

McCall, Timothy. "Stress, Your Health, and Yoga", *Yoga as Medicine: The Science and Practice of Therapeutic Yoga*, retrieved on 19.06.2017 from http://www.drmccall.com/uploads/2/2/6/5/22658464/stresshealthyoga.pdf.

McCall, Timothy. "The Language of Healing", *Yoga and Joyful Living*, Summer 2010, pp. 36, 38, retrieved on 17.06.2017 from http://www.drmccall.com/uploads/2/2/6/5/22658464/mccallyogaholism.pdf.

McCullough, L. B. "Philosophical Challenges in Teaching Bioethics: the Importance of Professional Medical Ethics and Its History for Bioethics", *The Journal of Medicine and Philosophy*, 27, 2002, pp. 395-402.

McGonigal, Kelly. "Interview: A Conversation with Timothy McCall, MD", *International Journal of Yoga Therapy*, 19, 2009, pp. 143-147.

Mckenzie, John. *Hindu Ethics*, New Delhi: Oriental Book Reprint Corporation, 1971.

Med India. *Ayurveda Colleges in India*, retrieved on 15.06.2017 from http://www.medindia.net/education/ayurveda_colleges.asp.

Medical Ethics: Quarterly Newsletter for the Forum for Medical Ethics, Aug.-Oct., 1(1) 1993, pp. 7-9.

Medicina: università pubblica o privata?, retrieved on 24.06.2017 from http://www.obiettivo-test-ammissione.it/medicina-universita-pubblica-privata/.

Mehta, Jaswant Lal. *Advanced Study in the History of Medieval India*, New Delhi: Sterling Publishers, 1980.

Mibang, Tamo and Chaudhuri Sarith Kumar. *Understanding Tribal Religion*, Mittal Publications, 2004.

Mishra L., Singh B. B., Dagenais S., "Healthcare and Disease Management in Ayurveda", *Alternative Therapies in Health and Medicine*, 7 (2), 2001, pp. 44-50.

Miyasaka M., Akabayashi A., Kai I., Ohi G., "An International Survey of Medical Ethics Curricula in Asia", *Journal of Medical Ethics*, 25(6), Dec. 1999, pp. 514-521.

Moor-Jankowski, J., Goldsmith, E. I., Wittrup, L. "Humane Methodology and Conservation of Species in Maintaining a Primate Animal Laboratory for Biomedical Experimentation: Twenty Years Experience", *Developments in Biological Standardization*, 45, 1980, pp. 197-202.

Mukherjee, J. B. "Ethical and Medico-legal Aspect of General Practice", *Indian Medical Journal*, Jan. 61(1), 1967, pp. 1-2.

Murthy, K. R. Srikanta. "Professional Ethics in Ancient Indian Medicine", in Robert M. Veatch, *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston, MA: Jones and Barlett Publishers, pp. 126-132.

N. M., Mathew. *St. Thomas Christians of Malabar through Ages*, Thiruvalla: CSS, 2003.

Nagarathna R., Nagendra H. R. and Telles S. *Yoga in Health and Disease*, retrieved on 18.06.2017 from http://passthrough.fw-notify.net/download/027763/http://www.laxminarayanmandir.libraryofyoga.com/bitstream/123456789/903/1/MEDICAL%20APPLICATIONS%20OF%20YOGA.pdf.

Nagral, J. and Roy, N. "The Medical Council of India Guidelines on Industry-Physician Relationship: Breaking the Conspiracy of Silence", *National Medical Journal of India*, 23(2), Mar.-Apr. 2010, pp. 69-71.

Narayan R., Lewin S., Srinivasa D. K., Francis C. M., (eds.) *Teaching of medical ethics in undergraduate medical education: proceedings of 77 the workshop 31st March-1st April*, Bangalore: Rajiv Gandhi University of Health Sciences, 1999.

Narayanaswamy, V. "Origin and Development of Ayurveda: A Brief History", in Ancient *Science of Life*, 1 (1), 1981, pp. 1-7.

National Crime Records Bureau (NCRB), Ministry of Home Affairs. *Accidental Deaths and Suicides in India 2015* (latest comprehensive report available), at www.ncrb.gov.in accessed on 04.04.2017.

National Rural Health Mission- *The Progress So Far* - [updated on 2008 Apr 19], retrieved on 17.06.2017 from http://mohfw.nic.in/NRHM/NRHM%20-%20THE%20PROGRESS%20SO%20FAR.htm.

Nelson, Dean. "India's Swindling Parsi Population to be Boosted with Fertility Clinics", *The Telegraph*, retrieved on 121.04.2017 from http://www.telegraph.co.uk/news/worldnews/asia/india/9612009/Indias-dwindling-Parsi-population-to-be-boosted-with-fertility-clinics.html.

Norman K. R., *The Four Noble Truths*, 2003, retrieved on 14.05.2017 from http://www.ahandfulofleaves.org/documents/Articles/The%20Four%20Noble%20Truths_Norman_PTS_2003.pdf.

Novak, Dennis H. "Therapeutic Aspects of the Clinical Encounter", in Lipkin M. Jr., Putnam S.M., Lazare A., Carroll J.G., Frankel R.M., Keller A., Klein T., Williams P.K., Eds. *The Medical Interview: Clinical Care, Education, and Research*. New York, NY: Springer-Verlag; 1995, pp.32-49.

Oath of Initiation (Charaka Samhita), retrieved on 12.06.2017 from http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/oath-initiation-caraka-samhita.

"Oath of Initiation: from the Charaka Samhita", in Robert M. Veatch, *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston, MA: Jones and Barlett Publishers, pp. 130-132.

Oberi, Harjot. *The Construction of Religious Boundaries: Culture, Identity, and Diversity in the Sikh Tradition*, Delhi: Oxford University Press, 1994.

Office of the Associate Director for Science (OADS), "Centers for Disease Control and Prevention", *Public Health Ethics*, retrieved on 16.06.2017 from https://www.cdc.gov/od/science/integrity/phethics/index.htm.

Olivelle, Patric. "Moksha", in *Encyclopaedia Britannica*, accessed on 02.04.2017 from https://www.britannica.com/topic/moksha-Indian-religion.

Pandya, Sunil K. "History of Medical Ethics in India", *Eubios Journal of Asian and International Bioethics*, 10, 2000, pp. 40-44.

Pandya, Sunil K., "History of Medical Ethics in India", retrieved on 12.05.2016 from http://www.eubios.info/EJ102/EJ102E.htm.

Pandya, Sunil K. "The Indian Medical Council's New Code of Ethics Favours Industry", *The BMJ Opinion*, March 15.2016, retrieved on 15.06.2017 from http://blogs.bmj.com/bmj/2016/03/15/sunil-k-pandya-the-indian-medical-councils-new-code-of-ethics-favours-industry/.

Pandya, Sunil K., "Seminar on Ethical and Legal Issues in healthcare Organised by FIAMC Bio-Medical Ethics Centre, Association of Medical Consultants, 12 November 1995 at Seth G. S. Medical College, Bombay", *Issues in Medical Ethics*, Apr-Jun 4 (2), 1996, pp. 59-60.

Pati, S., Sharma, A. and Zodpey, S. "Teaching Public Health Ethics in India: A Mapping Exercise", *Indian Journal of Medical Ethics*, 11(3), July-September 2014, pp. 185-190.

Patruzzo, S. *Storia del Codice di deontologia medica: Dalle origini ai nostri giorni*. Torino: Edizioni Minerva Medica; 2014.

Pattanaik, Devdutt. "Beyond Hinduism: Is Caste a Religious or a Regional Problem?", *Scroll.in*, Jan. 31, 2016, retrieved on 02.03.2017 from http://scroll.in/article/802759/beyond-hinduism-is-caste-a-religious-or-a-regional-problem.

Pattanaik, Devdutt. *The Man who was a Woman and Other Queer Tales of Hindu Lore*, New York: Harrington Press, 2002.

Pellegrino, E. D. "Teaching Medical Ethics: Some Persistent Questions and Some Responses", *Academic Medicine*, 64(12), 1989, pp.701-703.

Penrose, Walter D. Jr., *Hinduism*, 2015, retrieved on 04.04.2017 from http://www.glbtqarchive.com/ssh/hinduism_S.pdf.

People for Animals in India, *About Us*, http://www.peopleforanimalsindia.org/aboutus.php. As retrieved on 02.02.2017.

Petrini, Carlo and Ricciardi, Walter. "The Relationship between Medical Ethics and the Legal System in Italy: Food for Thought", *Annali dell'Istituto Superiore di Sanità*, Vol. 52(4), pp. 582-586.

Phadke Anant, *MFC: Looking Back and Looking Ahead; Some Reflections*, ref. http://www.mfcindia.org/mfcpdfs/ history1.pdf.

Plato. "The Republic" (342e), in Crane, Gregory R. *Perseus Digital Library*, Tufts University, retrieved on 16.06.2017 from http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0168%3Abook%3D1.

Pontifical Academy for Life, from http://www.academiavita.org/, retrieved on 03.03.2017.

Pontifical Academy for Life, http://www.vatican.va/roman_curia/pontifical_academies/acdlife/documents/rc_pa_acdlife_pro_20051996_en.html, accessed on 20.03.2017.

Pope Francis, *New Statutes for the Pontifical Academy for Life*, accessed on 30.03.2017 from http://www.academiavita.org/_articles/435499747-nuovo_statuto.php; Retrieved on 30.03.2017 from http://www.academiavita.org/_uploads/article_file/660903242-NEW_STATUTE.pdf.

Pope Francis, *Statutes of the Pontifical Academy for Life*, Art. 1, para.2, 18.10.2016, retrieved from http://w2.vatican.va/content/francesco/en/motu_proprio/documents/papa-francesco_20161018_statuto-accademia-vita.html, on 27.03.2017.

Pope John Paul II, *Motu Proprio Vitae Mysterum*, 11.02.1994, retrieved from http://w2.vatican.va/content/john-paul-ii/it/motu_proprio/documents/hf_jp-ii_motu-proprio_19940211_vitae-mysterium.html, on 27.03.2017.

Pradyumna, Adithya. "Countervailing Power in the Environment Movement in India", in SOCHARA Team Bangalore (ed.), *Social Justice in Health: Multiple Pathways towards Health for All*, Bangalore: SOCHARA, 2014, p. 174, pp. 173-175.

Presidential Commission for the Study of Bioethical Issues available at https://bioethicsarchive.georgetown.edu/pcsbi/. Accessed on 18.06.2017.

Prof. Dr. Mario Vas (*About*), accessed on 02.04.2016 from http://sjri.res.in/health/keypersonnel/Dr.%20Mario%20Vaz.

Profile: Dr. Ignacimuthu accessible at http://loyolacollege.edu/profile/PBT/Rev.Dr.S.Ignacimuthu,S.J..pdf, retrieved on 02.12.2016.

Punjab Data: *Sikh Population in India* retrieved on 12.03.2017 from http://www.punjabdata.com/Sikh-Population-In-India.aspx.

Purohit, B. C. "Private Initiatives and Policy Options: Recent Health System Experience in India", *Health Policy and Planning*, 16(1), Mar. 2001, pp. 87-97.

Qasmi, Burhanuddin M. "Origin of Muslims in India", *Asian Tribune*, 22 April 2008 retrieved on 04.04.2017 from http://www.asiantribune.com/node/10670.

Qvarnström, Olle. "Dharma in Jainism – A Preliminary Survey", *Springer: Journal of Indian Philosophy*, Vol. 32 (5-6), December 2004, pp. 599-610.

Radhakrishanan, S. *Eastern Religions and Western Thought*, Oxford: Clarendon Press, 1940.

Radhakrishnan, S. *The Principal Upanisads*, London: Allen and Unwin, 1968.

Radwan, I. *India – Private Health Services for the Poor*, Washington: World Bank, 2005;

Rahman Abdul, C. Amine and Elkadi Ahmed. "Islamic Code of Medical Professional Ethics", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, pp. 120-126.

Ramesh, K. "Start Sensitising Medical Students", *Indian Journal of Medical Ethics*, 4(2), Apr.-Jun. 2007, p. 64.

Rameshkumar, Karuna. "Ethics in Medical Curriculum; Ethics by the Teachers for Students and Society", *Indian Journal of Urology*, 25(3) 2009, pp. 337-339.

Ramsey, Paul. "Patient as a Person", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, pp.65-70.

Ravindran G. D., Kalam T., Lewin S., Pais P., "Teaching Medical Ethics in a Medical College in India", *National Medical Journal of India*, Nov-Dec. 10(6) 1997, pp.288-289.

Reasoner, Paul. "Reincarnation and Karma", in Taliaferro, C., Draper, P. and Quinn, P. L. (eds.), *A Companion to Philosophy of Religion*, II ed., Blackwell Publishing Ltd., 2010, pp. 639-647 accessed on 02.06.2017 from http://www.lamarre-mediaken.com/Site/EAST_493_files/Reasoner%20Reincarnation%20and%20Karma.pdf.

Reddy, Krishna. *Indian History*, 3rd ed., New Delhi: Tata McGraw-Hill Publishing Company Limited, 2008.

Regan, Tom. *The Case for Animal Rights*, U.S.: University of California Press, 1983.

Research Department at the St. John's National Academy of Health Sciences, https://www.sjri.res.in/Projects?page=4. Accessed on 26.03.2017.

Research Foundation of Hospitals and Healthcare Administration, *Medical Laws and Ethics in India*, retrieved on 16.06.2017 from http://www.rfhha.org/index.php?Itemid=51&id=1&option=com_content&view=article.

Rikam, Nabam Tadar. *Emerging Religious Identities of Arunachal Pradesh: A Study of Nyishi Tribe*, Mittal Publication, 2005.

Rogers, Peter C. *Ultimate Truth, Book I*, IN, Bloomington: Authorhouse, 2009.

Rose, Anuradha and K. S. Jacob. "Editorial", *The National Medical Journal of India*, 28(2), 2015, Pp. 61-63.

Rose, Anuradha. George Kurian, Arul Dhas T., Pulimood Anna B. and Kang Gagandeep. "Survey of Ethical Issues Reported by Indian Medial Students: Basis for Design of a New Curriculum", *Indian Journal of Medical Ethics*, 11(1), Jan-Mar 2014, pp. 25-28. Available at https://www.researchgate.net/publication/260130417_Survey_of_ethical_issues_reported_by_Indian_medical_students_basis_for_design_of_a_new_curriculum.

Rowlingson, H. G. *Ancient and Medieval History of India*, Delhi: Bharatihya Kala Prakashan, 200.

SACEM, SIPCOT Area Community Environmental Monitors, retrieved on 15.06.2017 from http://www.sipcotcuddalore.com/about_us.html.

SACEM, SIPCOT Area Community Environmental Monitors: Gas Trouble-Air Quality in SIPCOT, Cuddalore, retrieved on 15.06.2017 from http://www.sipcotcuddalore.com/downloads/cuddalore_air_quality_report.pdf.

Sahai, Suman "Bogus Debate on Bioethics", *Economic and Political Weekly*, Dec. 14; 31 (50), 1996, pp. 3231-3232; republished in *Biotechnology and Development Monitor*, 30, March 1997, p. 24.

Saligram, Prasanna, Kurpad, Sunita Simon, Narayan, Thelma. "IJME Fifth National Bioethics Conference: A Summary Report", *Indian Journal of Medical Ethics*, 12(2), April – June 2015, pp. 104-109.

"Samsara (Hinduism)", accessed on 05.04.2017 from https://berkleycenter.georgetown.edu/essays/samsara-hinduism.

Saripanidis, Stavros. "Corruption in Medical Education and Licensing in India", *British Medical Journal*, 352(i291), January 2016 retrieved on 16.06.2017 from http://www.bmj.com/content/352/bmj.i291/rr-3.

SATHI (Support for Advocacy and Training to Health Initiatives), accessed on 18.06.2017 from www.sathicehat.org.

Sathyavati, G. V. "Ethical Considerations in Medical Research", *Indian Paediatrics*, 19 (3), 1982, pp. 201-208.

"Section 20 A. 1", *The Indian Medical Council Act, 1956*, retrieved on 12.02.2017 from http://www.mciindia.org/ActsandAmendments/TheMedicalCouncilAct1956.aspx.

Sethi, Atul. "Trade Not Invasion Brought Islam to India", *Times of India*, January 24, 2007, retrieved on 04.04.2017 from http://timesofindia.indiatimes.com/india/Trade-not-invasion-brought-Islam-to-India/articleshow/2144414.cms?referral=PM.

Shivapuri, H. N. "Medical Ethics", *Journal of Indian Medical Association*, Sep. 16, 49(6), 1967, pp. 298-301.

Sikhism and Bioethics, http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/sikhism-bioethics. Accessed on 16.05.2017.

Sikhism and its Religious and Ethical Views from http://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/sikhism-bioethics, accessed on 16.05.2017.

Singer, Peter A. "Recent Advances in Medical Ethics", *British Medical Journal*, vol. 321, 29 July 2000, pp. 282-285, retrieved on 12.06.2017 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1118276/pdf/282.pdf.

Singh, Aman. *Bioethical Issues: A Sikh Perspective*, retrieved on 12.05.2017 from https://www.sikhphilosophy.net/threads/bioethical-issues-a-sikh-perspective.24293/.

Singh, Jaideep. "Theories of the Origin of Rajputs", retrieved on 11.06.2017 from http://www.rajras.in/index.php/theories-origin-rajputs/.

Smart, Ninian. "Politheism", *Encyclopaedia Britannica* online, 1.22.2016, retrieved from https://www.britannica.com/topic/polytheism, on 04.04.2017.

Smith, Vincent A. *The Early History of India from 600 B.C. to the Muhammadan Conquest Including the Invasion of Alexander the Great*, 3rd ed., London: Oxford University Press, 1914.

SOCHARA http://www.sochara.org/Who-We-Are, retrieved on 31.01.2017.

SOCHARA, *The Paradigm Shift*, http://sochara.org/Paradigm-Shift, accessed on 27.03.2017.

Sri Aurobindo on Himself, Part One, Section Four, Sadhana for the Earth-Consciousness, retrieved on 18.06.2017 from https://www.aurobindo.ru/workings/sa/26/0009_e.htm.

Sri Swami Sivananda, *All About Hinduism*, U.P., India: The Divine Life Society, 1999(web.), accessed on 02.05.2017 from http://dlshq.org/download/hinduismbk.htm#_VPID_16.

Stefon, Matt. and Doniger, Wendy. "Maya", in *Encyclopaedia Britannica*, accessed on 05.04.2017 from https://www.britannica.com/topic/maya-Indian-philosophy.

Stefon, Matt. and Doniger, Wendy. "Samsara", in *Encyclopaedia Britannica*, accessed on 05.04.2017 from https://www.britannica.com/topic/samsara.

Subba Reddy, D. V., "Medical Ethics in Ancient India", *Journal of Indian Medical Association*, Sep. 16 (37), 1961, pp. 287-288.

Subramuniyaswami, Satguru Sivaya. *Dancing with Siva: Hinduism's Contemporary Catechism*, Himalayan Academy Publications, 2003.

Szczepanski, Kallie *History of India's Caste System*, ThoughtCo., August 9, 2016, retrieved from https://www.thoughtco.com/history-of-indias-caste-system-195496, on 04.04.2017.

Tachibana, S. *The Ethics of Buddhism*, London: Curzon Press, 1926.

Thawani, Vijay The "Doctor-Doctor Relationship: Professional Criticism", *Issues in Medical Ethics*, VIII (3) July-September 2000, pp.82-83.

The 5 K's, retrieved on 12.05.2017 from http://www.amritsar.com/The%20Five%20K.shtml.

The Bahà'ì Faith: The Website of the Worldwide Bahà'ì Community, retrieved on 12.06.2017 from http://www.bahai.org/.

The Bifurcation of new states after the constitutional observation, the list is modified from http://www.mapsofindia.com/culture/indian-languages.html, accessed on 03.04.2017.

The Central Council of Indian Medicine, *Ayurveda Colleges in India*, retrieved on 15.06.2017 from https://ccimindia.org/colleges-ayurveda.php.

"The Concept of Maya", accessed on 05.04.2017 from https://vedanta.org/what-is-vedanta/the-concept-of-maya/.

The Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994, retrieved on 01.12.2016 from http://chdslsa.gov.in/right_menu/act/pdf/PNDT.pdf

"The Sramana Movement", accessed on 01.07.2017 from https://courses.lumenlearning.com/suny-hccc-worldcivilization/chapter/the-sramana-movement/.

Tilburt, John G. and Kaptchuk Ted J. "Herbal Medicine Research and Global Health: An Ethical Analysis", *Bulletin of the World Health Organization*, 86, 2008, pp. 577-656.

Timms, Olinda. *Biomedical Ethics*, New Delhi: Reed Elsevier, 2016.

Tiwari, Devendra Nath and Mishra, Ananda. *Environmental Ethics: Indian Perspectives*, Banaras Hindu University, 2012.

Tiwari, Kedar Nath. *Classical Indian Ethical Thought: A Philosophical Study of Hindu, Jaina and Budha Morals*, Delhi: Motilal Banarsidass Publishers, 1998.

UNESCO Chair Bioethics, http://www.unesco-chair-bioethics.org/?page_id=8, accessed on 04 February 2017.

United Nations Educational, Scientific and Cultural Organization (UNESCO), *Bioethics Core Curriculum: Section 1 – Syllabus Ethics Education Programme*, Paris: UNESCO Division of Ethics of Science and Technology, 2008.

United Nations, *Population of India*, accessed on 12.06.2017 from http://data.un.org/CountryProfile.aspx?crName=INDIA.

United Nations, *Population of India*, retrieved on 15.02.2017 from http://data.un.org/CountryProfile.aspx?crName=INDIA.

United States Catholic Conference, "Ethical and Religious Directives", in Robert M. Veatch (ed.), *Cross Cultural Perspectives in Medical Ethics: Readings*, Boston: Jones and Bartlett Publishers, 1989, pp.58-64.

Università Private in Italia: costi università private e quale sciegliere, retrieved on 24.06.2017 from https://www.controcampus.it/2014/04/universita-private-in-italia-costi-universita-private-quale-scegliere/.

University of Mumbai, FYBA Foundation Course I: *Social Awareness and Personality Development*, retrieved on 14.03.2017 from http://archive.mu.ac.in/myweb_test/FYBA%20FOUNDTION%20COURSE.pdf.

Vaswani V., Vaswani R. "Bioethics Education in India", in Henk A. M. J. ten Have (ed.), *Bioethics Education in Global Perspective: Challenges in Global Bioethics, Advancing Global Bioethics*, Vol. 4, Dordrecht: Springer, 2015.

Vatican Council II, *The Pastoral Constitution on the Church in the Modern World Gaudium et Spes*, December 7, 1965.

Vazhayil, Abraham Thomas. *Christians in Secular India*, Vancouver: Fairleigh Dickinson University Press, 1974.

Vyapam, "India's Deadly Medical School Exam Scandal", *BBC News*, 8 July 2015 retrieved on 16.06.2017 from http://www.bbc.com/news/world-asia-india-33421572.

What Bahà'ìs do: Devotional Life, retrieved on 12.06.2017 from http://www.bahai.org/action/devotional-life/.

WMA Declaration of Geneva, accessed on 20.06.2017, available at https://www.wma.net/policies-post/wma-declaration-of-geneva/.

WMA Declaration of Helsinki-Ethical Principles for Medical Research Involving Human Subjects, accessed on 20.06.2017 from https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/.

WMA International Code of Medical Ethics, accessed on 20.06.2017 from https://www.wma.net/policies-post/wma-international-code-of-medical-ethics/.

World Bank 2015 estimate retrieved on 15.02.2017 from http://data.worldbank.org/country/india.

World Federation for Medical Education, "Continuing Professional Development (CPD) of Medical Doctors", *WFME Global Standards for Quality Improvement*, 2003, available at http://wfme.org/standards/cpd/16-continuing-professional-development-cpd-of-medical-doctors-english/file.

World Medical Association, *Medical Ethics Manual*, WMA Ethics Unit, 2005, 2015 retrieved on 12.06.2017 from https://www.wma.net/what-we-do/education/medical-ethics-manual/ethics_manual_3rd_nov2015_en_1x1/.

Wright, Richard A. Human Values in Healthcare: The Practice of Ethics. New York, USA: McGraw-Hill, 1987.

Wujastyk, Dagmar. *Well-Mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda*, New York: Oxford University Press, 2012.

Zoroastrian Religion, retrieved on 12.06.2017 from http://www.culturalindia.net/indian-religions/zoroastrian.html.

Zoroastrianism, retrieved on 14.06.2017 from http://www.indovacations.net/english/Zoroastrianism.htm.

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