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## Teaching of public health ethics in India: a mapping exercise

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### Abstract

*Public health ethics has been receiving increasing attention in recent years. Frequently, public health practitioners have to confront complex decisions, with numerous and often conflicting ethical implications. The objective of this study was to obtain information on the teaching of public health ethics in India by making a detailed examination of the public health and community medicine curricula. The specific areas of interest included the content and structure of the courses and electives available to students. 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.*

### Introduction

The link between ethics and health has been a major concern for human society since antiquity. This preoccupation dates

back at least to the time of Hippocrates, who was the first to delineate the importance of ethical practice in healthcare (1). With the gradual advancement of health technology and increasing complexity of healthcare, bioethics and clinical ethics have become integral and important elements of contemporary medicine and research, respectively. The principal focus of medical ethics is on the physician's role vis-à-vis patients, while bioethics deals with decision-making and public policy in the domains of biology, medicine, and healthcare (2). In recent years, there have been efforts to broaden the scope of ethical analysis in healthcare so that it also embraces public health issues. This has given rise to the relatively young discipline of "public health ethics." In contrast to traditional ethics, public health ethics essentially pertains to the population level, focusing primarily on the designing and implementation of measures to monitor and promote the health of populations. Further, it transcends the conventional boundaries of healthcare to consider the structural conditions underlying the development of healthy societies (3).

The evolution of public health ethics over the past several decades has been triggered by a confluence of events. The first

were the series of instances of gross misconduct in the 20th century, such as the genocide and human experimentation during World War II and the Tuskegee experiment. The result was the Nuremberg Code on research ethics in 1947, the Declaration of Human Rights, 1948, the Helsinki Declaration of 1964, and the integration of health into all policies since the Alma Ata Declaration of 1978. The second development was a change within the disease spectrum: with the emergence of chronic conditions such as cardiovascular diseases and mental disorders, a transition was made from the curative to the preventive approach, as well as to the promotion of health. Subsequently, with the explosion of HIV/AIDS epidemics during the 1990s, there was a resurgence of interest in public health ethics (4, 5). When the Institute of Medicine published its report entitled "Who will keep the public healthy?" in November 2002, ethics was identified as a priority. This landmark document entailed a review of the teaching of public health in the USA and indicated eight areas which needed special reinforcement in the country's schools and programmes of public health. Of these eight areas, public health ethics was identified as a key issue (6). Concurrently, the World Health Organization (WHO) started its health and ethics initiative and included ethical practice in health policy as one of the six core functions (7). Since then, schools of public health worldwide have initiated efforts to revise public health education and practice so as to accommodate ethics.

Public health issues raise various ethical challenges, ranging from vaccination and herd protection, finding a non-paternalistic argument for the discouragement of tobacco use, to the analysis of cost-effectiveness for setting priorities (8). Often, public health personnel are intrigued by dilemmas, dealing with which necessitates reflective ethical practice. Therefore, it is essential to train public health practitioners in ethics. Before undertaking any curricular intervention, it is imperative to first obtain information on the current situation with respect to ethics education in public health, as the faculty developing the curriculum can use it to evaluate and design appropriate professional and continuing educational activities. However, limited information is available on ethics education in public health in the developing countries and the existing literature relates almost entirely to the USA and European countries (9–11). In India, we do not yet know about the content and objectives of the course, the teaching methods, and how to evaluate students doing these courses. Against this backdrop, and with a view to filling the gap in information, this study set out to determine the extent of teaching of ethics in public health and related academic programmes in India. First, it made an inventory of courses relating to public health ethics and then analysed the teaching in terms of content, duration and mode of delivery. The overarching objective was to provide critical inputs to administrators and educationists involved in drawing up public health curricula to strengthen education in ethics at the national and local levels.

## Methods

To gain the best possible insight into how ethics is taught, a systematic search strategy was adopted for collecting information. The methodology used was similar to that followed

in an earlier study (12). First, a thorough search of the Internet was carried out, using search engines such as Google Scholar, and PubMed. A set of keywords, consisting of individual and combined terms, was used for the purpose of the search. These included ethics, medical; education; courses; teaching; clinical; healthcare; bioethics; and public health. The websites of the Association of Indian Universities, the Indian Council of Medical Research, the Universities Grants Commission, the Medical Council of India, the Indian Nursing Council, the Ministry of Health and Family Welfare and the All India Institute of Medical Sciences were also searched to find out about the courses offered in public health ethics. A similar search was made of the websites of the Indira Gandhi National Open University, WHO and various public health institutes. The search was limited to courses offered in India and collaborations between Indian and foreign institutes, if any. It was not restricted by the duration of the course or the type of degree/certification awarded on the successful completion of the course. Detailed information on the courses was collected from the institutions concerned or from the designated websites of these institutions. In case the information on a website had not been brought up to date, telephonic contact was established with the institute or university concerned to obtain detailed information. Once the search was complete, the next step was to leave out short-term courses lasting from a few days to a few weeks. Seminars and workshops were also excluded. The third step was to undertake a systematic review of the curricula of these academic programmes to understand the context and content of ethics training at the undergraduate and postgraduate levels. The syllabi of community medicine in undergraduate courses of medicine, dentistry, nursing and allied health sciences were analysed to map content related to public ethics. Similarly, masters/diploma courses in public health and management programmes were examined to identify whether ethics was being taught at all. This study, however, did not review courses in ethics that are being delivered as a part of clinical research, business management and study programmes in other life sciences.

The courses/modules were analysed for information on any of the following questions: (i) whether ethics is a part of the teaching curriculum; (ii) what the mode of delivery is; (iii) what the broad content is; (iv) which instructional formats or methods are being employed to teach ethics; (v) whether there is any assessment of the teaching of ethics and (vi) how the students are selected. The specifications regarding where and how public health ethics is taught, as well as what is taught, were summarised and compiled into a matrix. The salient characteristics, namely the duration of the courses, institutions, modes of teaching, target groups and themes on which the courses focused, were tabulated.

## Results

The study consisted of a descriptive analysis of the academic programmes/courses relating to public health ethics in India. At present, public health ethics is being taught in the following forms:

- There are independent programmes (full-time/distance learning) focusing on bioethics/clinical ethics/public health ethics.
- Ethics is being taught as a module in Master of Public Health (MPH)/Diploma in Public Health (DPH) and public health management courses.
- Some elements of ethics are being taught as a part of undergraduate and postgraduate community medicine courses.
- Ethics is a component of undergraduate courses for nursing and allied health professionals (and allied health sciences).

Very few institutions are imparting education in ethics in the form of a distinct educational programme. As can be seen in Table 1, a total of eight programmes are dedicated to the teaching of ethics and five of these rely on classroom-based direct learning. However, not a single programme focuses exclusively on public health ethics. The primary thrust of seven programmes is on research ethics or bioethics, while the emphasis of another two is on clinical or healthcare ethics. One deals with the legal aspects. There is no definite pattern with respect to the teaching of ethics. Instruction in ethics has been integrated into the programmes to varying degrees, and the programmes also differ with respect to their focus, approach, contents and duration. The eligibility criteria for the selection of students are mostly uniform, the basic requisite being a background in the life sciences or health sciences.

Currently, 31 institutions in India offer an MPH programme. The curricula of 14 of these programmes have an ethics component. Public health ethics has been incorporated as a dedicated module in 11 of these programmes, either in an elective or a compulsory format. No programme has public health ethics as a specialisation. Unlike MPH programmes, the health and hospital management programmes being offered in India do not emphasise public health ethics at all. Some of them cover ethics-related issues very briefly, as a part of the teaching of research methods.

At present, India has 381 medical colleges, which enrol approximately 49,418 students every year. A total of 218 colleges offer MD in community medicine, while 39 institutes offer DPH and six have DCM programmes. Public health ethics is not included *per se* in the DPH/DCM curricula. Very little stress is laid on ethics-related training in the MBBS curriculum. Public health ethics is not covered as a clearly demarcated topic in the syllabi of even postgraduate programmes in community medicine. There are a few exceptions, such as the Christian Medical College, Vellore. The postgraduate department of community medicine here routinely familiarises the students with ethics-related case studies. However, such pedagogical innovations are limited to a select few institutions. The scenario in the nursing profession is marginally better, with the Indian Nursing Council having laid down the order of code of ethics and professional conduct as part of practice and curriculum. However, ethical issues in research and public health are hardly deliberated upon or addressed. These educational programmes do not offer core or elective courses on public health ethics.

## Discussion

Despite the important role of ethics in public health practice and research, there was hardly any commensurate emphasis on instruction in ethics until recently. Many academicians have commented on the lack of systematic courses in public health ethics (13). In response to this, public health schools in the UK, USA and Europe have successfully integrated ethics curricula into public health education (9–11). The dearth of evidence of similar activity in the developing world suggests that either not much education is being imparted in public health ethics or that it is but has not been reported. The primary purpose of this study was to take an overview of the current situation with respect to the teaching of public health ethics in India and help guide those who might be involved in making this topic a teaching priority in public health education. The availability both of standalone and integrated ethics courses within the ambit of health professional programmes was explored, and the type and duration of the educational activities currently in place were detailed. Our study found that there are very few independent ethics courses and the thrust on public health ethics in health professional curricula is minimal. Most of the courses offered are in the form of short courses/workshops, series of seminars or guest lectures on topics related to ethics. The contents are confined mainly to three topics: (i) research ethics, (ii) public health law and human rights, and (iii) bioethics. According to WHO, public health ethics should focus on health equity, response to the threat of infectious diseases, international cooperation in surveillance, exploitation of individuals in low-income countries, promotion of health, participation of disenfranchised and vulnerable members in a community, transparency and accountability (7). The courses offered in India have yet to address these key issues in depth and their overall focus is more on general themes, ie the traditional paradigm of ethics. The educational programmes differ from each other considerably in all aspects of their approach to ethics, as well as in their basic content. There is neither standardisation, nor curricular consensus.

It is sufficiently evident that public health ethics is distinct from the realm of traditional ethics and, therefore, merits separate attention. First, the initiative for public health interventions usually comes from a public health professional and not a patient who is seeking care. Second, public health interventions may not be beneficial for each individual, but aim to protect and promote health at the group or population level. Finally, public health activities are potentially pervasive and can interfere with all aspects of life and of society (14). For instance, while informed consent is the hallmark of bioethics in health services, it becomes difficult to use the same standard for public health activities due to the complexity of interventions at the group and population levels. Our study found that the teaching of ethics in India is mostly bioethics-centric, and public health ethics is yet to be recognised as a necessary component both of masters- and diploma-level public health programmes. As such, public health professionals are ill equipped to deal with the vast array of ethical challenges encountered in their field.

Many a time, they have to take complex decisions, which have numerous and often conflicting ethical implications. When topics related to ethics are interspersed with others in the public health curricula and not taught in a systematic way, there is a danger of students accepting certain positions without critical reflection. These pertain not only to socioeconomic aspects, such as how to allocate resources in an equitable manner and how to ensure equal access to healthcare, but also environmental issues, such as how to tackle natural disasters. The urgent need for a systematic discussion of ethical issues in public health warrants an improvement in ethics education in formative academic programmes and the introduction of more such programmes.

There is a considerable body of literature which shows that teaching ethics in a didactic mode does not always lead to ethical behaviour in public health or clinical practice (15). Ethics can be taught adequately only by actively involving the students. To address the knowledge-behaviour deficit, a model curriculum for public health ethics was designed by a team comprising Jennings, Kahn, Mastroianni and Parker in 2003 (16). The study had clearly articulated objectives and curricular attainment goals. In contrast to the USA, where the importance of public health ethics has been recognised and the area has been strengthened by the model curriculum, initiatives in this sphere are rudimentary and fragmented in India. Even though academic courses in ethics might not necessarily promote ethical scruples and build the moral character of the trainees, they would certainly induce them to apply ethical principles in their professional practice and activities. At a time when health challenges are being faced at the national and global levels, to have a health workforce that is not trained in ethics is neither advisable, nor acceptable.

Teaching ethics or planning for ethics courses in India raises many challenging questions. For example, we have yet to define which elements of ethics should be included in ethics courses for public health and uncertainty still exists about how to integrate the element of ethics in the curricula. How should we structure the curriculum to best address the diverse nature of public health in India while keeping the fundamental philosophy intact? Using an internationally standardised curriculum might serve as the first step. Another important challenge is how to ensure that instruction in ethics translates into practice among students, researchers and practitioners. Above all else, it should be borne in mind that the overarching goal of public health ethics education is not to provide ready-made solutions to public health practitioners stumbling over ethical issues; rather, it is to stimulate the trainees to reflect on these issues, and help them deepen their understanding and arrive at conclusions that should be deliberated upon and discussed with others. The goal should be to encourage them to perform public health actions that are based on moral values.

## **Conclusion/Recommendation**

Training in ethics should be an integral component of education in public health and the education of health professionals. Our study highlights the need to develop a robust system for the teaching of public health ethics across the health disciplines in India. Among the most important tasks is to formulate academic strategies for the incorporation of case studies related to public health ethics in the courses and to ensure that public health actions are steered by ethical reasoning. In view of the overarching and all-pervasive nature of public health ethics, a standalone module should be devoted to the subject in all academic programmes. In addition, it might be useful to deliver ethics courses through distance learning, webinars, and short, intensive programmes specifically designed for in-service public health/ clinical practitioners to enable them to learn while continuing with their employment. Further, this initiative should percolate to public health organisations and agencies functioning at the local, state and national levels. Awarding credits for continuing education in aspects of ethics at public health and medical conferences and forums is to be encouraged. Strengthening instruction in public health ethics in medical and paramedical community medicine education is another important task. The critical challenges are how to frame an appropriate curriculum and how the contents are to be imparted. This necessitates (i) a thorough analysis of the public health ethics curricula worldwide, (ii) a detailed analysis of the content of the extant Indian curricula, and (iii) the designing of strategic and contextualised curricula. Eventually, suitable accreditation/certification of these academic programmes should be considered. Concerted efforts by public health and medical professionals, as well as those trained in bioethics, together with international and national medical and public health institutes could be of major help in taking public health ethics forward.

## **Ethical considerations**

*The authors have given due attention to ethical issues, including plagiarism, fabrication and falsification of data, duplicate publication and/or submission and redundancy.*

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**Table 1**  
**Academic programmes on ethics in India**

Institute	City	Course	Type of course	Duration	Theme	Intake capacity
<b>On-campus courses</b>						
Yenepoya University	Mangalore	Postgraduate diploma in bioethics & medical ethics	Diploma	1 year	Bioethics	25
Yenepoya University with Centre for Studies in Ethics and Rights, Mumbai	Mangalore	Postgraduate diploma in clinical ethics	Diploma	1 year	Ethical issues in healthcare practices	25
National University of Advanced Legal Studies	Kerala	Postgraduate diploma in medical law & ethics	Diploma	1 year	Healthcare ethics and law	50
Federation Internationale des Associations Medical Catholique	Mumbai	Certificate course in healthcare ethics	Certificate	1 year	Ethical status of various actions – experimental, diagnostic or therapeutic – in the biomedical field within the ethic of culture, religion and the modern secular state	50
The Indian Council of Medical Research	Information not available	Information not available	Long-term course	8-week programme	Bioethics	Information not available
<b>Online courses</b>						
Indian Council of Medical Research –Indira Gandhi National Open University joint initiative	Chennai	One-year online PG diploma programme in bioethics	Online programme	1 year	Bioethics	50
James Lind Institute	Hyderabad	Advanced certificate in medical law and bioethics	Online programme	Self-paced 4–6 months (maximum duration 18 months)	Bioethics, ethics in pharmaceutical and drug management	Information not available
Family Health International		Research ethics training curriculum	Online programme	Information not available	Human research ethics	Information not available

**Table 2**  
**Institutes teaching ethics under the MPH curriculum**

S. No.	Name of institute	Ethics discipline	Part of MPH curriculum
1	National Centre of Disease Control	Ethics in public health	Yes [Semester II]
2	Datta Meghe Institute of Medical Sciences University	Ethics in public health	Yes
3	Dr Giri Lal Gupta Institute of Public Health, Lucknow University	Medico-social ethics	Yes
4	Interdisciplinary School of Health Sciences, University of Pune	Research ethics, bioethics	Yes
5	Tata Institute of Social Sciences	Ethics in public health	Yes [Semester II]
6	Postgraduate Institute of Medical Education and Research, Chandigarh	Public health laws and ethics	Elective
7	Christian Medical College, Vellore	Introduction to bioethics (clinical practice, public health and research)	Yes
8	Faculty of Health and Medical Sciences, Department of Public Health, Allahabad Agricultural Institute-Deemed University, Allahabad	Ethical issues in public health	Yes [Semester II]
9	Asian Institute of Public Health, Bhubaneswar	Ethics in global health, role of ethics in public health policy	Yes
10	Birla Institute of Technology and Science, Pilani	Ethics in public health	Elective
11	Jagadguru Sri Shivarathreeshwara (JSS) University, Mysore	Bioethics, environment ethics	Yes
12	SRM University, Chennai	Ethics in public health, ethics in clinical health	Yes [Semesters I & II]
13	Punjab University	Public health ethics	Yes [Semester IV]
14	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum	Ethics in public health	Yes

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