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## FROM THE ORGANISERS

# The moral and ethical imperatives of health care technologies: introductory note

**GEORGE THOMAS**

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When I was a medical student in the decade between 1976 and 1986, it was already obvious that advances in technology were making possible interventions on the human body that had till then been merely the stuff of science fiction. In the decades that followed, and now in the twenty first century, it is clear that we have already galloped past a technological threshold. Now human life, the creation or initiation of it, the living and the leaving of it, are all subject to manipulation by medical scientists at a scale unparalleled in human history. It is also clear that society worldwide is struggling to come to grips with unforeseen ethical issues that the rocketing progress of science in health brings in its wake. Some of the problems are universal: for example, what to do with the terminally ill for whom the act of living every day is an intolerable burden. Some of the problems are perhaps specific to countries like India that are unable to assure a basic, dignified standard of living and health care to all its people, for example life- saving dialysis for a patient with chronic renal failure.

Many authors have written, sometimes with dismay, about the ethical and social issues that arise with the use of technology in medical care. One of the most well-known of these critics is Ivan Illich. In his book *Medical nemesis*, he bemoaned the

“medicalisation” of life and death. This is an extreme view and serves to caution all of us, not merely clinicians, against making the cure of disease more grievous than the endurance thereof, to paraphrase Dr Robert Hutchison.

Ethics in a society is not static, and continually evolves to grapple with new problems that arise. However, in the field of medical care there appears to be a definite lag between the evolution of technology and societal response as evidenced by the provision of safeguards to ensure the ethical use of technology. The four pillars of medical ethics - beneficence, non-maleficence, autonomy and equity - may be enough for an individual medical practitioner faced with an ethical conundrum, but they are hardly sufficient to inform the choices of civil society. One of the best methods of achieving a consensus position as to what is good for people is a wide and open debate. This conference is an attempt in that direction. The abstracts in this volume give a flavour of the multiple and varied ethical questions that inevitably come along with technological advances. The fact that so many people from so many different disciplines are thinking about these problems and suggesting ethical solutions is a cause for optimism.

## FROM THE ORGANISERS

### Sustaining the National Bioethics Conference: secretariat's report

SUNEETA KRISHNAN

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The First National Bioethics Conference (NBC) held in Mumbai in November 2005 was a resounding success. Over 400 participants attended although only 150 were expected. Intense dialogue and debate took place, and have continued in the pages of the *Indian Journal of Medical Ethics*. Further, an independent, participatory, and national process was established to convene future such national conferences. Given the high standards that had been set, organising the Second National Conference was indeed a daunting task. We have faced several challenges but have also had many strengths to draw upon.

Recognising the need to galvanise new bioethics initiatives in the country and ensure opportunities for a broad range of groups and institutions to shape the national discourse, at the close of the first NBC, the national organising committee (NOC) recommended that *IJME* publish a call for proposals to host the second NBC. This call, in the January-March 2006 issue, yielded just one proposal - from the Bangalore Bioethics Forum, an informal network of clinicians, researchers, and activists in Karnataka, India - and illustrated the very first of several challenges. We hope that interest in, and institutional resources for, hosting the NBC will increase with each edition.

In recognition of the fact that close collaboration between the Mumbai group that organised the first NBC and the Bangalore group would be essential for the conference's success, it was decided that rather than having a single conference coordinator, the second NBC would be coordinated by a group of Bangalore- and Mumbai-based individuals.

We located the secretariat at the project offices of the Samata Health Study, which had the necessary infrastructure to support conference planning activities. The secretariat, funded in part by the Centre for Studies in Ethics and Rights and the Samata Health Study group, has been anchored by Abraham Thomas from its inception in May 2006. The secretariat has had administrative and accounting support from Jayanthi Bhat and Padma Ramaiah in Bangalore and from Mahendra Shinde and Smita More in Bombay.

During the second half of 2006, the conference coordinators, secretariat, *IJME* editors and a number of other members of

our national network contributed to the development of the conference themes. A proposal to fund the conference was sent to funding agencies and an invitation was sent to a range of academic, clinical, and practice organisations - governmental and non-governmental - to join the NOC. While we reached out to institutions around the country, we made an intensive effort to reach organisations in southern India in an attempt to capitalise on Bangalore's geographical location in south central India. The response was tremendous - 38 organisations formally joined the NOC while several others have actively contributed to conference planning through, for example, participation in the local organising committee LOC. These dynamic volunteers have been another critical strength.

Subsequent to the formation of the NOC, *IJME* published a call for abstracts and workshop proposals which generated an enthusiastic response. Although submissions trickled in during the first few months, we were barraged with online, email and postal submissions in the final few weeks before the July 2007 deadline (as was the case with the first NBC). We received nearly 150 submissions, but have been able to accommodate fewer than half of these in the programme. A rigorous process was followed for selection of abstracts: following blinded review by NOC members and *IJME* editorial board members, final selection - also blinded -- of shortlisted abstracts was done by the programme committee.

The most formidable challenge has been obtaining funds. Thanks to the assiduous efforts of the organisers, and the resounding success of the first NBC, we have managed to raise sufficient funds to conduct the conference.

Sustaining the momentum of the conference has not been easy. However, the strength of our process has been that it was not dependent on individuals. We have been able to juggle multiple responsibilities - though not always seamlessly - in such a way that today we have a final conference agenda and programme. We look forward to many stimulating and thought-provoking discussions in the days ahead.

## FROM THE ORGANISERS

### Conference objectives and programme structure

#### NATIONAL COORDINATION TEAM

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The *Indian Journal of Medical Ethics (IJME)* is the first specialised bioethics journal in India and has been in print for the last 15 years. Beginning as a voluntary effort of a small group of concerned professionals, it has evolved into a peer-reviewed, indexed journal that serves as a broad platform for scientific exchange and debates on bioethics. To further expand this platform, the *IJME* initiated the National Bioethics Conference (NBC) in 2005.

The Second NBC has been organised in a fashion similar to the first with an emphasis on an independent, participatory and national process. Thirty eight diverse organisations from across India came together to form the national organising committee (NOC), and were guided by four eminent national advisors. Two key changes were made in the organisational structure to address the challenge of holding the conference in different parts of the country each time. First, one national coordinator was replaced by a national coordination team of four individuals, two based at the conference location and two *IJME* appointees. Second, the conference venue (Bangalore) was determined on the basis of responses to a call for proposals published in the *IJME*. The diversity and commitment demonstrated by this group illustrate the need for and feasibility of such an initiative.

#### **Objectives**

The NBC has been conceived as a regular platform for showcasing institutional and individual engagements with bioethics and for enhancing interest in bioethics at a national level. Specifically, the NBC aims to enhance awareness of, sensitivity to, and enquiry on bioethics; to facilitate inter-disciplinary interaction, discussion and communication on bioethics; and to provide a platform for popularising the discipline and providing an impetus for its growth. The Second NBC 2007 will promote critical examination of and perspective-building on the ethical dimensions of health care technologies in clinical practice, research and public health and policies.

#### **Structure**

The conference programme reflects our attempt to ensure the representation of varied perspectives on the conference

theme, focusing specifically on insights emerging from within India and, more broadly, in the South Asian region. Five plenary sessions will be held during the three-day conference. While the inaugural and closing ceremonies will focus on the broad theme of the conference, the remaining three plenary sessions will focus on the three conference sub-themes: use and misuse of technologies in clinical practice, research on health care technologies, and public health and policy dimensions of technologies.

A total of three parallel paper and poster sessions, two media sessions and two workshop sessions will also be held. The latter will provide opportunities for small-group interaction and learning. The workshops will involve at least one of the following features: (a) demonstration of new methods and/or skills (e.g. setting up and running an ethics review board); (b) learning exercises (e.g. case study based learning about ethical issues in medical device development); (c) participatory sharing of experiences (e.g. through personal testimonies); and (e) simulation exercises (e.g. conducting ethical review of proposals). Finally, based on feedback from the first NBC, we have created space in the programme for a parallel session featuring four panels of international experts on bioethics. Topics of global and national relevance will be examined and discussed in these sessions.

Two pre-conference workshops are also being organised. The Public Health Foundation of India has invited national and international public health and ethics experts review their planned course on public health ethics. A short module on teaching methods in public health ethics will also be demonstrated. A second pre-conference workshop, coordinated by the *IJME* and partner organisations, focuses on enhancing medical students' knowledge and understanding of bioethics through various activities such as debates, essay writing competitions and film screenings.

We hope that you will find this programme stimulating and inspiring.

## FROM THE ORGANISERS

### Concept note

#### ORGANISING COMMITTEE

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Developments in technology have been crucial in shaping health care all over the world. Today, physicians utilise and depend on a wide range of tools to guide and support their healing practices, and new relationships between health care professionals, patients and industry have emerged. In the field of public health, the impact of technology has been dramatic. Measures such as immunisation, antenatal screening and purification of water have contributed significantly to lowering mortality and transforming the demographic profile of entire regions. Advances in health care technologies include the development of an array of diagnostics such as the ultrasound scan, magnetic resonance imaging, DNA-based laboratory tests, and treatments using genes and stem cells

Although many of these diagnostic and treatment modalities have improved standards of care, their abuse has simultaneously led to an adverse impact on clinical practice and outcomes. Market forces have influenced the development and use of technology and at times led to inappropriate treatment. Further, as a result of these forces, the cost of these technologies is often so prohibitive that the gap in access to health care technology between socio-economically privileged and disadvantaged individuals and communities has been widened. The costs of innovation and the pressure to stay technologically advanced have often prompted health care professionals and institutions to adopt strategies such as increases in the cost of care, advertising, and outsourcing of various services to maintain their profit margins.

Today in India, the State and State-run institutions are no longer the focal point of health care development and provision. In fact, corporations and private providers, who are primarily unregulated, increasingly control the development of health care technology and its use. The increasing application of health care technologies may also be related to expansions in foreign investment in health care and medical tourism. These developments give rise to ethical questions such as those related to the appropriateness and equitable distribution of technologies; the need for setting priorities in research; the role of government and/or independent agencies in regulating research and the use of health care technologies; and the control of intellectual property.

In view of the importance of health care technologies and the social, economic, legal and moral dimensions that shape their development, use and misuse, *IJME* has decided to focus its second National Bioethics Conference on health care

technologies. The conference aims to facilitate comprehensive debates and dialogues on health care technologies in the contexts of clinical practice, research, and public health and policy.

#### **Conference sub-theme 1: technologies in medical practice**

Medical technologies dominate present day clinical practice. However, advances in technological know-how have not necessarily been accompanied by systemic changes in public policy that are required to make these benefits accessible and affordable. Thus, health care providers who work in resource-poor settings confront a range of challenges related to the distribution of technological advances. They are compelled to ration or, often, do without the latest technological aids that can serve their patients better. Further, in a largely market-based health care system, there is a heavy burden on the poor to pay for services; this creates a dichotomy between those who have the means to pay and therefore have access to technology-based care and those who cannot afford to pay, and do not have access. This dichotomy is particularly apparent in the treatment of chronic diseases, including cases in which organ transplantation may be necessary. Another challenge that has emerged is linked to the fact that hi-tech treatment-oriented solutions are given more attention, leading to the neglect of simpler prevention-focused responses.

Particular ethical issues have arisen in the use of technological means to prolong life. The possibility of prolonging human life by artificial means has radically transformed our understanding of life, death, and the acceptable quality of life. Several cases, now historic, have brought to the fore the moral conflict between the health care system and civil society in the context of life prolongation. Families have gone to court demanding the right to withdraw life support and allow their loved ones to die a "natural" death. These documented cases represent just the tip of the iceberg. Providers and families are compelled to make these choices routinely in the course of their work, often despite the lack of institutional understanding or support.

Another area where the use of technology has become particularly controversial is in the field of artificial reproduction and reproductive health. The possibility of using technological means to predict or even influence the characteristics of the foetus has created a whole range of ethical debates. Most noteworthy in the Indian context is the widespread use of diagnostics to determine or select the sex of the foetus, a practice

that has distorted sex ratios in several states. This provides a classic example of the manner in which the deployment of a technological innovation in a market-driven health care system adapts to suit dominant interests. Debates on the ethics of assisted reproductive technologies have brought to the fore the intersections between gender, society, national policy and regulation, and ethical practice.

The above has, in some sense, overshadowed an equally long and important debate on eugenics. Increasingly sophisticated tools are now available due to technological advances in diagnosis of foetal abnormalities and “undesired” genetic traits. The impacts of these tools include eugenic abortions, reduced access to health care (through restrictions on health insurance, for example), and stigmatisation.

Other ethical issues related to the use of technology in health care are in the arena of professional education. Providers face the challenge of having to continually update their knowledge and skills. Moreover, there has been sustained pressure from various quarters to expand the cadre of health professionals who can deploy health care technologies. One example is the training of paraprofessional health workers to conduct medical abortions. A key challenge is the expansion of access to the benefits of health care technologies at the same time as ensuring their safe and scientific use. Although trained professionals are liable to make mistakes, there are virtually no institutional mechanisms to monitor the use of technology by the broad array of health workers (registered and unregistered) practising in countries like India.

### **Conference sub-theme 2: research on health care technologies**

Research on health care technologies has been a hotly debated subject in bioethics. This is particularly so in fields such as vaccine and drug development, genomics, artificial reproduction and stem cell research. Concerns related to justice have been at the crux of these debates. Although there has been a rapid increase in research in the developing world, the extent to which the people of these countries share in the benefits of this research has been questioned. Some have argued that it is the global market that determines the relevance and access to the products of research, particularly in the case of developing countries.

The explosion of research activity has led to completely new arrangements for conducting health research in different parts of the world. The growth of contract research organisations and the outsourcing of trials have raised several questions about research oversight and mechanisms for demanding accountability from dispersed and often unrelated stakeholders.

Research on emerging health care technologies such as genomics and stem cells raise fundamental questions about the meaning of life and personhood. The possibility of mapping the genetic makeup of entire populations has implications for the human rights of individuals and communities who are found to possess genetic traits that make them either susceptible or resistant to particular diseases. Further, the patenting of life forms (including cell functions and pathways) has raised important

questions regarding what may be patented and under what terms. The burgeoning number of lawsuits in the western world is evidence of the contentiousness of these issues.

Other issues that are relevant in discussions of the ethics of research on health care technologies include the participation (or exclusion) of vulnerable groups as well as the quality of informed consent. There is often a very fine line between treatment/care and research because both are undertaken in the same setting and by the same professional. Thus, the conditions of consent, including the motivations for participation in research, must be critically examined.

Setting priorities in research on health care technologies also poses several ethical dilemmas. Not only is there a need for attention to the ethical dimensions of medical research that is being undertaken, but the ethical implications of neglected areas of research also need to be considered. Communicable diseases, nutritional deficiencies and occupational hazards are major causes of morbidity and mortality in developing countries. Nonetheless, there is a very little investment in research on these issues. Technological advances in the prevention and control of these adverse health outcomes have been less than satisfactory. Developing affordable technologies and scaling up available affordable technologies have also not received adequate attention.

### **Conference sub-theme 3: health care technologies, public health and policies**

Any technology, when used on a wide scale, has important consequences for society. This is particularly evident in the case of food and agricultural technology. Large numbers of people all over the world still suffer from malnutrition. Developing nations have limited political clout when it comes to issues such as gene modification, intellectual property rights, biodiversity, conservation, and the erosion of traditional farming practices. Despite nearly a decade of discussions on labelling, marketing restrictions and banning genetically modified foods, many constituencies continue to view current regulations as extremely weak. Further, some argue that developing nations have become laboratories for research on food technologies, agriculture, and biotechnology. Others contend that these developments will make significant contributions to end world hunger, poverty, and malnutrition.

Another example of the profound impact of technology on human society is in the development and deployment of vaccines. Ensuring appropriate coverage, a necessary condition for the effective use of vaccines, brings into focus the State's roles and responsibilities in health care delivery. Firstly, the State has to enlist community support and participation, and, secondly, it has to make resources available to ensure coverage. Both these aspects raise several ethical dilemmas related to individual freedom, the use of State power as well as the welfare function of the State. Large conglomerations drive vaccine research; and involve both private and public (State) entities. Thus, private interests have the potential to exert considerable influence on governments and international organisations in the making

of vaccine-related policies. Questions remain about the future availability of these vaccines and their costs

While technology has vastly expanded the range of health care options, it has led to a massive increase in the cost of health care. Prohibitive costs have meant that health care is out of reach for a significant proportion of the population, and this has led to indebtedness and further exacerbation of poverty. Paradoxically, the growth of medical technology has levelled international barriers. Medical tourism has become a popular policy option for developing countries that have a large trained professional workforce and access to technology. While it is conjectured that the revenues from medical tourism will benefit the local population, there is little documented evidence to support this contention. On the contrary, the development of hi-tech infrastructure necessary to promote medical tourism has

led to human, financial and material resources being diverted away from institutions accessible and available to the local population. The superimposition of a highly modernised health care system on societies where primary care remains a pressing need is fraught with ethical dilemmas.

Ethical issues also emerge at the intersections of policies on trade and health. For example, intellectual property rights, compulsory licensing, and international trade agreements have had important implications for drug pricing and access in developing countries. The balancing of economic and health concerns merits close attention.

*This paper is based on material written by members of the NBC organising committee.*

## FROM THE ORGANISERS

# Guidelines and suggestions for participation

### ORGANISING COMMITTEE

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To facilitate discussions, participants are asked to consider the below guidelines for constructive contributions:

- Introductions: When posing questions in plenaries and parallel sessions, please briefly introduce yourself to the group (your name, occupation and institutional affiliation).
- Please keep questions/comments on-topic and brief (within 1 - 1.5 minutes).
- Please be respectful of your fellow participants.

**Remember:** This conference will only be as useful as its participants make it.

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### Your contribution is valuable

There are many ways to participate in the conference. Please consider the suggestions below:

- Share your experience, as an individual or on behalf of your organisation. Where possible, please provide examples.
- Ask questions and answer questions asked by others. If you use terminology that may be exclusive to your field, please include brief definitions for the group.
- Network, network, network: Explore ways to form local, regional and international partnerships with your fellow participants.
- Spread the word: Share what you learn at the conference with your colleagues, students and friends.

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### Effective communication

Recognising the diversity of our group, the conference coordinators would like to remind participants to consider the following general guidelines for communication. Bear in mind that conference participants are diverse: gender, cultural identity, profit/non-profit, academic/activist, language/dialects, religious/non-religious philosophies, and much, much more.

- Be sensitive when posing questions or sharing comments: Please bear in mind that English may not be the first language of some participants; that participants come from diverse fields and backgrounds - not all fields define similar terms in the same ways. Whenever possible, please avoid the use of jargon, idioms, and colloquialisms.

- Avoid comments that may be easily misinterpreted or considered offensive to a particular group.
- Best practice: Be sensitive, proceed carefully, and assume the best spirit and motive for each participant, until absolutely proven otherwise.

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### Conference code of conduct

One of the greatest strengths of the NBC is its diversity. Our participants come with widely varying views on health, politics, ethics, and how (and even if) these fields overlap and interact. We see this diversity as a strength and ask that all participants appreciate this dialogue and debate as a vital, constructive part of the dialogue.

The IJME and NBC are dedicated to the free and respectful exchange of information and ideas on contemporary ethical challenges in health promotion. We are committed to maintaining a safe, equal, and open platform for discussion, in which participants with differing views feel free to express themselves. We, therefore, encourage all participants to focus their contributions to the dialogue. Abusive language or personal attacks should be avoided at all times. This includes, but is not limited to:

- Harmful, threatening, abusive, harassing, defamatory, vulgar, obscene, libellous, hateful, or otherwise objectionable comments.
- Comments invading another person's privacy.
- Comments attacking another participant rather than the content of a participant's statement, argument or position. Constructive disagreement is encouraged; however, please comment only on the argument or position taken, rather than against the person.
- Comments containing racial, religious, sexual or ethnic slurs or insults related to mental, physical or intellectual qualities should be avoided at all times.

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Thank you for your participation and for helping the National Bioethics Conference maintain its open and fair dialogue.

***Adapted from EcoRes Forum's E-conference guidelines.***

KEYNOTE ADDRESS**Bioethics and Ayurveda****M S VALIATHAN**

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Bioethics is a broad term which subsumes much of medical ethics. Among the products of biological evolution, humans are unique because they not only take part in the evolutionary process like all other species but also command the future. But, as noted by Professor Markl, human concepts and inventiveness are no more than nature's way of acting upon itself and forming its own future. Humankind is therefore responsible for the future and is obliged to act in accordance with the dictates of reason and moral norms. If human conduct in disregard of bioethics leads to the devastation of earth and the extinction of life, discussions on medical ethics would be no longer necessary.

The conference programme covers a range of topics in medical ethics but leaves out the ethical aspects of traditional medicine which has been practised in India uninterruptedly since at least the time of the Buddha. As traditional medicine or Ayurveda provides the health care needs of millions of Indians and trains over 10,000 doctors every year, it is important to look at the ethical concepts which have sustained it over many centuries. Bioethics is no stranger to Ayurveda which regards the universe, including of course humans, as composed of five elements, and human beings as no more than cosmic resonators. The homology between the human microcosm and the universal macrocosm is a doctrine which pervades Ayurvedic dietetics, therapeutics and every other form of treatment.

Good health was similarly viewed as a manifestation of equilibrium among the constituents of the body, and between

the body and the physical world. Ill health was therefore a temporary lapse into disequilibrium which was primed to correct on its own. All that medicine sought to do was to facilitate the recovery of equilibrium. The care of patients included diagnosis by interrogation and examination; prognosis; and treatment which invariably involved changes in life style, diet, medicinal formulations, medical procedures such as panchakarma and surgery. The decision on treating complex and fatal diseases had to be taken after explaining the risk to the patients and relatives. For major surgery, royal permission was additionally necessary. When the patient was too poor to undergo a costly treatment, a "no-frills" protocol for treatment was advised. The physician had to so conduct himself that the patient would look upon him as his father and mother.

Great emphasis was placed on the training of physicians, which took place in gurukulas or in universities such as Takshasila. The qualifications of the teacher and student were explicitly laid down and, on acceptance into traineeship, the student had to take an elaborate oath in a sacred ceremony. The oath covered every aspect of a physician's code including his personal, academic, professional and social conduct. It is a classic in the history of medical ethics.

Ethics was not discussed as a separate subject in the manner of, say, protocol for medical debate in the ancient Ayurvedic texts. It was dissolved in the concepts and procedures invisibly much as sugar is dissolved in a syrupy formulation.

## KEYNOTE ADDRESS

# Socio-cultural assumptions and economic dimensions of health care technologies: some issues for discussion

**PADMINI SWAMINATHAN**

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The growth in health care technologies, the increase in total as well as per capita health expenditures in a context where not even primary health care is guaranteed to citizens, among other things, calls for an assessment of not just the technology (or technologies) but also the context in which these technologies function and the manner in which the operation of these technologies alters the context in which health care transactions occur. The theme of technologically mediated health care has several components: the issues of what constitute health care technologies; public policies to deal with aspects such as training, diffusion and regulation of use of these technologies; the financial implications for users of these technologies and subsidies, if any, for facilitating access to these technologies; remedies [legal and otherwise] for adverse outcomes of these technologies; databases to facilitate planning for health care technologies, etc.

This presentation will not engage with health care technologies per se but attempt a mapping of the socio-economic-cultural context over which certain health care technologies have been superimposed. Simultaneously, in several other contexts such technologies do not exist despite the pressing need for such technologies. The co-existence of such seemingly contradictory contexts notwithstanding, the theme of health care technologies has become a site of contestation among the several stakeholders (producers and users of technology, developed and developing countries, public and private sectors, the state and its citizens, etc). Since very often discussions as well as decisions are not contextualised spatially or temporally, and/or by differentiating population by class, age, sex, religion,

location, marital status, etc, more heat than light is the order of the day.

The presentation will focus on two themes to illustrate the Indian government's failure to evolve its policies towards health care and health care technologies taking into consideration the country's diverse socio-economic-cultural context. One, the Indian nation's obsession with the theme of population control, and the translation of this obsession into coercive population policies of which health care technologies are a part, is symptomatic of the manner in which grave injustices have been done to large segments of the population across the country and in particular to women whose bodies have been the sites of invasive technologies, with little or no thought to the person of the woman or to the health implications of such invasion.

The second theme will attempt to address the issue of the adverse health outcomes of occupations where little or no technology exists to mitigate hazards. Once again the criminal negligence to take cognisance of the context and conditions in which large segments of the population work has resulted in almost no investment in technologies to address even the most visible inhuman conditions of such work, even when the execution of such tasks have resulted in death to the workers concerned. Another work-related health outcome not openly admitted because of fear of social stigma, and, therefore not addressed by policies of health care technology, is the increase in cases of infertility among men working in industries such as dyeing and bleaching. In short, the presentation will attempt to highlight the significance of contexts that inform - or misinform - decisions to invest in health care technologies.

## KEYNOTE ADDRESS

# “Moral and ethical imperatives of health care technologies: scientific, legal and socio-economic perspectives on use and misuse”: a message from the British Medical Association

**ANN SOMMERVILLE**

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On behalf of the British Medical Association (BMA), I wish to congratulate the organisers and participants of this timely and important conference. The themes for debate and the questions addressed are becoming increasingly urgent. They indicate changing public and professional perceptions of the function of medicine and the core purpose of health care technologies. The spectrum of topics to be discussed in Bangalore shows very clearly that current ethical dilemmas override geographical boundaries and are experienced in various forms around the world. If the conference as a whole neatly reflects the wide range of dilemmas increasingly faced by health professionals, the focus in some sessions on the specifically local and cultural context of decision-making reminds us that ethics is not just about abstract principles but also about achieving an overall balance of benefit over harm. It is not about inflexible rules but about weighing up the issues within a particular context and with regard to the wishes, rights and values of the individuals involved.

Although significant international consensus exists on some basic ethical issues such as the duty to seek informed consent, to protect the confidentiality of identifiable health data and to respect the rights of participants in clinical trials, new technologies continuously challenge that consensus. They require us to rethink how widely accepted ethical principles can be applied to newly arising dilemmas. The UK, for example, is grappling with many of the dilemmas you are debating, such as how to make the best use of information technology for public health purposes while protecting patient privacy; whether it is possible to have informed consent in very complex clinical trials where the risks are unknown and volunteers are highly paid; how to have a fair system of allocating scarce resources without marginalising some groups and when to withdraw life-prolonging treatment at the end of life. Variations of such topics are also featured for debate in the influential *Indian Journal of Medical Ethics (IJME)* which examines controversies such as how medical technology can be subservient to commercial goals, for example, in the sale of kidneys for transplantation (1).

The central theme of the conference is the ethical aspects of how health care technologies are used or misused: a theme which organisations like the BMA and publications like *IJME* also explore. Both have, for example, highlighted the role of doctors and medical knowledge in judicial procedures such as

interrogation and capital punishment (2). We may well consider that a misuse of medical technology but around the world, scientists are increasingly scrutinising how therapies developed for one purpose - healing, palliating or preventing disease - can also be adapted for a variety of other purposes. Some of these functions may be innocuous insofar as they mainly just reflect the vanity of people who wish to use medical technology for relatively trivial cosmetic or lifestyle purposes. But some of the new functions hold real risks. The use of drugs as weapons is just one example, as the use of opioid chemicals and anaesthetic agents attracts attention as part of what has been termed the “militarisation of biology”. Various governments are interested in how compounds which inhibit the function of the central nervous system could be used as “non-lethal weapons”. Reports by bodies such as the BMA (3) describe the alarming gap between the rapid pace of scientific discoveries that could be misused and the relatively slow development of international agreements to control them.

Clearly, health care technologies hold both a promise and a threat. The promise is seen - not just in caring for the sick but also in the social and lifestyle choices offered to people who are not sick. We may have misgivings about how cosmetic surgery and other elective procedures are used to modify normal facets of life or how pharmaceutical products are used for recreational purposes. Such use of medical technology questions what we understand by terms such as “disease”, “health” and the “purpose of medicine”. It not only represents the medicalisation of life but encourages healthy people to undertake what may be seen as unnecessary or even risky medical procedures for relatively trivial gains.

Many techniques that involve attempts to medically modify aspects of ourselves or our children are seen as ethically problematic. Just as cosmetic surgery may be controversial, partly because our bodies are symbolic of our shared humanity, there are even more concerns arising from interference with the brain. The brain is intrinsically linked with our personality and individuality and the long-term effects of interfering with this very complex system are unknown. Nevertheless, drugs or medical techniques originally designed to deal with aspects of mental impairment are also being used to improve concentration in people with “normal” mental functioning. Studies show, for example, that American students increasingly

use drugs such as Ritalin to improve cognition prior to exams. Technologies such as trans-cranial magnetic stimulation, developed to treat depression and Parkinson's disease may also be able to improve mental functioning in healthy individuals. These are cosmetic interventions for the brain. Anti-depressants and mood enhancers, such as Prozac, are sought to improve confidence and self-image. Medical ethics is about balancing the harms and benefits of any intervention but perhaps we need to consider whether these uses represent a "misuse" or are simply what medicine has become in the twenty first century.

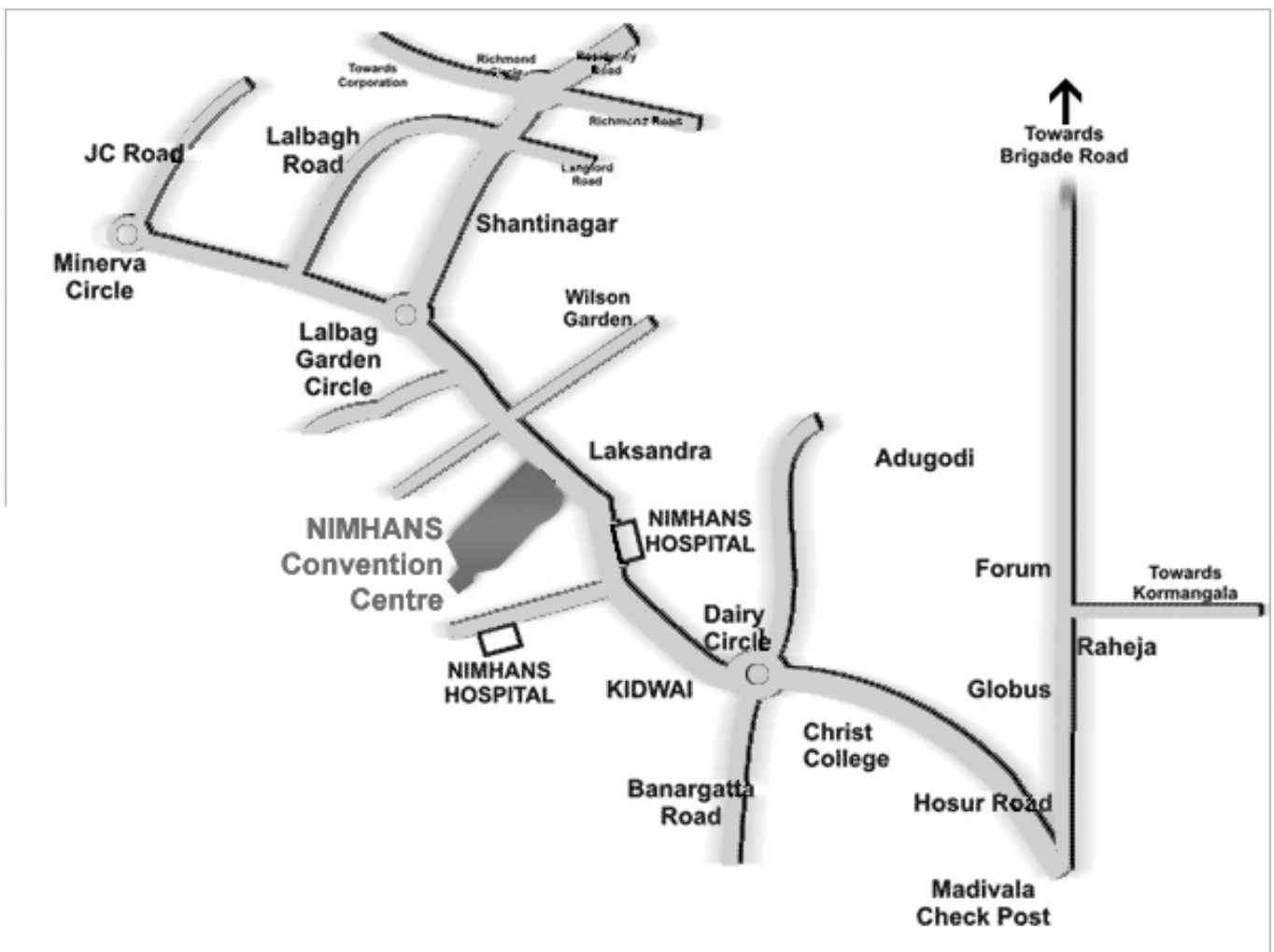
The rapid development of medical technologies not only allows more choices but inevitably also creates more dilemmas about when they should be used and whether their use should be

restricted to clinical scenarios or applied to social goals and individual lifestyle preferences.

The topics highlighted in this conference highlight a wide range of ways that health care technologies can be used or subverted. Hopefully, we can all learn from the conference conclusions and outcome.

**References**

1. *Indian J Med Ethics* 2007;4 (2): 52-3.
2. In 2001, the BMA published its book "The Medical Profession and Human Rights"; the *IJME* featured such issues in Oct-Dec 2004 and Oct-Dec 2006.
3. This is an issue on which the BMA has published three reports - *Biotechnology, weapons and humanity* I and II and, in 2007, its report *The use of drugs as weapons*.



## FELICITATIONS

### Anil Pilgaokar

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Anil Pilgaokar was born on May 12, 1937 in Bombay. He is the fourth and the youngest son of Sushila (*nee* Mukta Kamat) and Kamalnath Purushottam Pilgaokar. Anil's grandfather was a physician and so was his father, a graduate of JJ Medical College, Bombay.

Anil went to school at St Teresa's High School in Girgaum from 1945 to 1953. He received a Bachelor of Science in Chemistry in 1958 from Wilson College and a Masters in biochemistry from GS Medical College for which his thesis was on hormones in health and disease. He was awarded a Ford Foundation fellowship to pursue research at TN Medical College in 1964-65 and the All India Research Scholarship in Biochemistry to pursue a PhD at the Hindustan Antibiotics Ltd at Pimpri. I am not sure why he did not complete his doctoral thesis but one factor was surely the abominable food and sanitation in the student dorms provided by HAL!

He continued research in biochemistry and food technology at BARC from 1966 to 1972 and then shifted gears, leaving behind academia, to join UniChem. His job involved training sales representatives and he shifted to Aphali Pharmaceuticals as marketing manager from 1976 to 1978. He worked as a freelance consultant for the pharmaceutical industry until 1980 and at the same time he also continued his interest in Ayurvedic medicine, obtaining the degree "Ayurvedic Bhashak" from Karnataka in 1978.

Around this time he made the decision to quit gainful employment and immerse himself in voluntary activities. Since then he has been involved with many non-governmental organisations which were fledgling organisations then and are eminent and respected institutions now such as LOCOST, FRCH, CEHAT, MASUM, ACASH, Anusandhan Trust, GM Trust, to name just a few. He has been a loyal member of Medico Friend Circle, taking on the task of convener in the early 1990s.

He was a founding member of the Forum for Medical Ethics Society along with Drs Arun Bal, Amar Jesani and Sunil Pandya. FMES went on to publish. *Issues in Medical Ethics* out of Dr Pandya's neurosurgery office at KEM Hospital in 1993. This journal is now called the *Indian Journal of Medical Ethics*.

In recognition and deep appreciation of his contribution to public health activism and the field of bioethics in India, the national organising committee of the Second National Bioethics Conference deems it an honour to felicitate Anil Pilgaokar.

### C M Francis

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Dr C M Francis has a distinguished academic background. He graduated in medicine from Madras Medical College and received a doctoral degree from Cambridge University, UK. He was a visiting professor in the faculty of medicine at the University of Toronto. At a young age he became dean of the Government Medical College in Calicut, Kerala state. He subsequently headed two other government medical colleges in Kerala. He was the founder-director of Sree Chitra Tirunal Medical Centre for Advanced Studies in Specialties. He later was Dean of St John's Medical College, Bangalore, which was one of the earliest medical colleges to systematically introduce the teaching of medical ethics to undergraduate medical students.

He has been a member of the syndicate, senate and academic council of several universities. He has also been a member of the governing bodies of a number of hospitals and ethics committees. He was the director of St Martha's Hospital, Bangalore, and later coordinator, continuing medical education at Christian Medical College, Vellore. He was founder-president of the Indian Society of Health Administrators and of the Society for Community Health, Awareness, Research and Action. He was founder-convener of CBR Forum for persons with disabilities. As editor of *Health Action* for a few years, he continued the tradition of the magazine.

This rich experience was distilled into a book on medical ethics in 1993, filling in a gap in Indian literature on the topic. The second edition published in 2004 was when he was a senior consultant with the Community Cell (CHC), Bangalore. CHC was invited to help the Rajiv Gandhi University of Health Sciences in Karnataka to introduce medical ethics into the undergraduate medical curriculum. The book by Dr Francis was prescribed as reading material on the subject by the university. Dr Francis has been a supporter, promoter and practitioner of bioethics over several years, always available to discuss ethical dilemmas and problems and to advice institutions and individuals. He has also explored medical ethics from a cross cultural point of view especially medical ethics in the Indian tradition.

In recognition of a long standing commitment to medical ethics and to the realisation of health human rights, the national organising committee of the Second National Bioethics Conference deems it an honour to felicitate CM Francis.