

DISCUSSION

Socio-ethical issues in the deployment of life-extending technologies

SUHITA CHOPRA CHATTERJEE AND SWETA MOHANTY

Department of Humanities and Social Sciences, Indian Institute of Technology (Kharagpur), Kharagpur 721302 INDIA e-mail suhitacc@yahoo.co.in

As medical practice becomes increasingly technology oriented, health-care expenditure has also increased significantly (1). At the same time, there have long been calls that medical technologies like other social goods should be distributed by rational criteria, especially when resources are scarce.

Variations in the provision and use of medical technology have been reported according to country, region, race socio-economic status, and sex (1). Of these technologies, life-extending technologies, which increase the maximum age or span to which people live, perhaps demand the most serious attention. The use of these highly capital-intensive technologies accentuates existing imbalances in health care.

Images of death

In the western tradition, life has an absolute value and there is anxiety in accepting death in our lives. Physicians equate beneficence with saving life at any cost, even when patients' material resources have been exhausted. This commitment can lead to the patient being kept alive with little regard to the quality of living as well as dying. Those promoting the concept of death with dignity have questioned this 'medicalised dying', and have defined a 'good death' as one, which is quick, painless, and without suffering to the patient.

Quality considerations

Patients and physicians may have different definitions of what constitutes a quality life and even quality dying. They can have significantly different perceptions of what constitutes quality care at the end of life. Physicians may emphasise the physical self, whereas patients and their families may view the end of life within broader psycho-social and spiritual needs (2,3). These differences in perspective must be resolved and decisions jointly made with patients and their families. For this, physicians need to learn the art of initiating end-of-life discussion. Moreover, good end-of-life care involves knowing the patient's treatment values and preferences. This is an important step towards promoting patient autonomy and self-determination. A US study referring to more than 9,000 seriously ill patients found that 46 per cent of "do-not-resuscitate" orders were written only two days before the patient's death, and only 47 per cent of physicians knew their patients' preferences on the subject (4). The same study also revealed that 50 per cent of patients studied in five major tertiary-care hospitals were reported to have suffered moderate to severe pain at least 50 per cent of the time during the last two or three days before they died.

There is also a growing concern that biomedicine pays little attention to patients' subjective feelings and hence fails to acknowledge not only pain but also suffering, a more expansive concept. Prevention of suffering – as opposed to prevention of death – constitutes an important aspect of end-of-life care. However, for a long time physicians addressed themselves to preventing death, without regard for the suffering that might result for the patient. It is only in recent years that medicine has adopted concepts such as brain death and futility treatment to avoid unnecessary prolongation of life and useless deployment of life-extending technologies. Advance directives are actively promoted as strategies to protect patients' rights. Recently, value histories, which identify core values and beliefs in the context of terminal care, have been used to understand patients' wishes (7). These avoid the problem associated with precise wording of treatment in advance directives.

Life-extending technologies and health rationing

Access to health care is considered a fundamental human right. However, health care policy must be made in the face of inequalities – some people die young, some suffer from debilitating diseases and others may live a relatively pain-free existence. Therefore, a basic secular right to health care is difficult to provide (8).

Most advanced health care systems impose some sort of rationing of specialised health care. In the US, rationing has been justified within Medicaid, the federal state health insurance programme for the poor. In 1987, the Oregon state legislature cancelled Medicaid funding for 30 organ transplants recipients arguing that this cut would enable the state to expand other services to poor women and children and still balance the Medicare budget. In 1991, Oregon ranked medical treatments in terms of priority taking into consideration such factors as costs, benefits to the patient, the extent to which treatment would improve the patient's quality of life and the community values (9).

Rationing of resources in managed care plans is also exercised through new methods of defining death. In fact, the modern debate on euthanasia and Physician-Assisted Suicide (PAS) may also be considered a debate on rationing. One might argue that it is no coincidence that Oregon, which has been rationing health resources for some years, has also legalised PAS. So far, the debate on mercy killing has focused on ethical, legal and medical issues with little reference to the economic aspects. But there is a growing realisation that medical ethics and medical

economics are two sides of the same coin (9).

The Indian context

India has a multi-tiered system of health care. Its public hospitals are meant to provide health care for all, while those with resources to purchase additional or better services may do so at private hospitals. In practice, however, the public sector provides only limited health services and even these are available at a cost. There are also acute structural constraints as a result of inadequate financing mechanisms. A study of two public sector hospitals studied in Orissa to investigate end-of-life care, found only 1,208 beds for 3,89,264 indoor patients in one hospital during 2000-2001; there were only 146 beds for 3,029 indoor patients in the other hospital. There were just 10 ICU beds available in the two hospitals. The doctor-patient ratio for the two hospitals was 1:55 and 1:33 respectively, while the nurse-patient ratio was 1:15 (10).

Such figures are probably reflective of conditions elsewhere in India. Public hospitals are expected to provide a basic level of care and support to all people, with high-cost technological interventions for the chronically ill, those suffering from debilitating diseases, and those at the end of life. A bed occupied by a terminally-ill patient often deprives others of even minimum facilities. Given the poor financing of our health care system, life-extending technologies must be used with clear-cut regulations. The following suggestions may be examined:

Adequate distribution of medical technology

Good social management requires not only effective distribution and deployment of technologies but also trained personnel to operate them as well.

Need for managed care

Internal rationing of life-extending technologies may be imposed only after devising guidelines on hospital admission, length of stay and type of care that could be availed. There is also a need to devise guidelines for the use of life-extending technologies as well as their withholding and withdrawal. The study referred to earlier (10) showed that although physicians often took decisions to withhold and withdraw care, they did not use any guidelines for such decisions. Eighty-six per cent of 50 physicians (all males with a mean age of 48 years and an average of 17 years of post-qualification experience) did not use any guidelines for withholding care. None used any guidelines for withdrawal of treatment. Nine of them claimed to be using brain death criteria for diagnosing death. However, even these

were actually using outdated cardio-vascular death criteria. Ninety per cent had never participated in PAS, and 45 per cent were not aware of the distinction between PAS and euthanasia. Sixty-nine per cent did not consider any treatment as futile. All treatment strategies were considered relevant irrespective of their curative potential(10).

Constitutional reforms in favour of legalisation of PAS and euthanasia

A cursory view of the situation in India suggests that a disproportionate amount of money is spent on terminally-ill patients who receive no therapeutic benefit from high-cost, life-extending care, and many families were being put under financial strain. The Orissa study showed that though subsidised, treatment in the public sector put considerable strain on poor families (10).

If countless people suffer while resources are spent on patients who can never really live an interactive life, a serious economic and utilitarian case could be made for PAS and euthanasia. So far, Article 21 of the Constitution of India confers the right to live with human dignity. It provides protection of life, a right to live with dignity up to natural death, including a dignified procedure of death, but does not include right to terminate natural life. A constitutional reform needs to be made in this direction to accommodate PAS and euthanasia.

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