

## The ethical dilemma: what is a human life worth?

Shima Gyoh asks what level of technology should we be seeking in a world where all defence expenditure being switched to health is about as likely as snowdrifts in Lagos or Lusaka



Advances in scientific knowledge are bringing revolutionary changes in the practice of medicine. In surgery, for example, there is a move from the open incisions, on which we were trained, to natural orifice endoscopic operations that leave no visible scar. Spare-part surgery makes it possible to replace damaged parts of the body including vital organs, such as the kidney, liver, lungs, and even the heart. The length and quality of life can be prolonged to the delight of patients and their relatives.

Miraculous investigative and curative machines developed in the last 50 years have been great tools in extending the dimensions of medical practice. They are evolving so fast that the models become obsolete sometimes within a year or two, and they work best in environments with a well-developed and stable basic infrastructure of power and water supplies, and require the availability of reasonably sound, if minimal, technological capacity for their maintenance.

But high-tech medicine is so expensive that its uncontrolled use would rapidly drain the resources of any country. For example, the 2010 approximate costs for major organ transplants in the USA were: heart \$650 000; liver US\$500 000; and kidney US\$250 000. These expenses refer only to hospital and medical personnel fees. Other costs which are by no means negligible include tests performed prior to the transplant and follow-up treatments related to the procedure. In addition, the transplant patient can expect to have the cost of prescription medications necessary to support their organ transplant for the rest of their lifetimes.

The financially prohibitive cost raises a serious ethical dilemma: what is a human life worth? If the answer is priceless, we have the duty of treating all patients with the best technology available. High-tech medicine would become the basic right of all human beings. While this is desirable, it could probably become practicable only if most countries diverted all their defence budgets to health. This is unlikely to ever happen. In practical terms, the cost of prolonging the life of one patient for a few years is sufficient to improve the health of thousands in the general population.

In the developing world the dilemma is even more pronounced. The standard of living of over 90% of the population is dominated by malnutrition, starvation, lack of access to clean water and sanitation. Unemployment

and poverty are widespread. The cost of one heart transplant that prolongs the life of one beneficiary, maybe for 5 years, is enough to develop the infrastructure and establish basic health services at the local government level that would radically improve the health of thousands of our citizens. But, is this type of reasoning ethically sound?

Could African countries make high-tech medicine cheaper by bringing it home? While developed countries have only to worry about the expense of the procedures and the machines, poorly developed countries would have the additional cost of providing reliable power and water supply for just the machines and the technology for their maintenance. These would further escalate the cost as many countries have already discovered. Exceptions can be found in places like South Africa where islands of advanced, first-world conditions exist in a sea of third-world underdevelopment.

Raising the standard of living and improving nutrition should be the priority of governments in Africa. All countries passed through a stage when their governments provided all their social needs. The British were distributing large quantities of pasteurised milk to their entire population up to the 1980s to save the population from malnutrition. It is not all that long ago that the National Health Service of Britain provided all treatments free, from major operations to all drug prescriptions. By the time prescription fees started creeping in, the income of the average Briton was sufficient to enable him to afford the fees, and the welfare services provided viable income for the unemployed.

No human being wants to settle for something other than the best available. There is a demand for high-tech medical services across all the social groups in our society, but only a small selected few can ever get them. The doctors too want to practise at the cutting edge of their specialties, and would be glad to do the organ transplants and produce test-tube babies just like their contemporaries are doing elsewhere. The trouble is, without careful control, allowing these needs to freely compete will result in neglect of primary healthcare as public funds are 'diverted' to high-tech medicine since its clients are predominantly among the health policy-makers of the nation.

What then, is the correct dose of high-tech medicine for our countries? This is one of the most difficult ethical problems of healthcare administration. If you think you have an answer, please send *Africa Health* an essay of about 500 words.

---

Prof Shima Gyoh has held many posts ranging from village doctor to DG of Nigeria's Federal Ministry of Health and Chair of the Medical and Dental Council of Nigeria.