Abstract Increasing the numbers of health workers and improving their skills requires that countries confront a number of ethical dilemmas. The ethical considerations in answering five important questions on enabling health workers to deal appropriately with the circumstances in which they must work are described. These include the problems of the standards of training and practice required in countries with differing levels of socioeconomic development and different priority diseases; how a society can be assured that health practitioners are properly trained; how a health system can support its workers; diversion of health workers and training institutions; and the teaching of ethical principles to student health workers. The ethics of setting standards for the skills and care provided by traditional health-care practitioners are also discussed.

Keywords Health personnel/education/standards; Health manpower/standards; Education/standards; Ethics; Quality of health care/ethics; Health services accessibility/ethics; Certification (source: MeSH, NLM).

Mots clés Personnel sanitaire/enseignement/normes; Personnel santé/normes; Enseignement et éducation/normes; Éthique; Qualité soins/éthique; Accessibilité service santé/éthique; Octroi diplôme (source: MeSH, INSERM).

Palabras clave Personal de salud/educación/normas; Recursos humanos en salud/normas; Educación/normas; Ética; Calidad de la atención de salud/ética; Accesibilidad a los servicios de salud/ética; Certificación (fuente: DeCS, BIREME).

Introduction In their future efforts to increase the number of skill levels of their health workers, developing countries will have to confront a number of ethical dilemmas. These will be influenced by the fact that resources are limited in most developing countries, inequitably distributed between countries and, to varying degrees, within countries. If as Beaglehole & Dal Poz stated (1), “Public health is ‘the collaborative actions to improve population-wide health and reduce health inequalities,’” then the issue of equity will influence the ethics dialogue.

Declarations of human rights and other inspirational documents often speak of a universal right to the best possible health care. In the wealthiest countries, this is sometimes achievable (though not always for everyone) with regard to availability of drugs, equipment and facilities. These same abundant resources make it possible to train doctors and other health-care workers to the full extent of their capabilities. In the developing world, this level of training is uncommon, as are the drugs that have been shown to be most effective (irrespective of cost). If they do exist, they are accessible to only a fraction of the population. Everyone else must compromise.

But where does compromise with the reality of scarce resources turn into substandard care? Even in the poorest countries, health ministries are urged to license and certify physicians and other health workers and to ensure that each person permitted to practice health care has had proper training. This requirement, where adhered to, may make access to care more difficult or even impossible for some people, whereas others may gain access to care only by providing a market for health workers with substandard training. What is the ideal under these circumstances? When should standards be upheld, and when should the rules be relaxed to permit easier access to care? What values are at stake, and what are the long-term consequences of suspending the usual requirements for training of the health-care workforce? This paper will address the following questions, exploring them primarily from an ethical perspective.

• What should be the standard of care to which health workers are trained?
• How can a society be assured that those responsible for health care are properly trained to deliver it?
• How well does the health system support its health workers?
• Should health workers and training institutions be diverted to those areas of a country that are unable to provide adequate care?
• What ethical principles regarding standards of care should be taught to health workers?

Standards of care to which health workers are trained

There are many paths to health and there is no point in insisting that all countries follow one model (2, 3). At each level of economic development some countries are vastly more successful...
than others both in achieving good health for their populations and in delivering health care. Although people in developing countries must accept that they lack the resources needed for health care at the standards prevailing in the wealthiest cities, surely the citizens of a given developing country should receive health services comparable to those available in other countries that are at the same level of economic development. Comparisons can be made by looking at WHO’s ranking of national health systems (4) which, for all its flaws, is a systematic attempt to assess the overall efficiency of national health systems with respect to the morally relevant criteria (5). The relevant comparisons would come from the answers to the following questions.

• How much health does a country produce in its population relative to the resources that are available?
• How equitably are these health benefits distributed?
• What is the extent and distribution of desirable attributes of the health system apart from maintaining and restoring health (e.g., clean beds and linen, respect for privacy and receiving prompt attention)?
• Is the financing fair to the entire population?

WHO’s rankings have been questioned, and appropriately so, in view of the paucity of data on which WHO sought to base some of its conclusions; moreover, its interpretation of certain data has been disputed (6, 7). Nonetheless, the framework itself is a major step forward at the conceptual level in putting ethics to work in global public health. Countries are implicitly held accountable for the efficiency and fairness of the use of their resources. Theoretically, a poor country could do better than a rich one in this regard, and some have done so. Fairness is not an unquantifiable attribute; WHO has provided an example of how it can be measured. This type of analysis has not yet been extended to health workforce issues, but the work could be a useful starting point.

The distribution and type of care provided by society will determine the health worker mix and the training that is needed. The implications of this discussion are that there is no one global standard of care and it must reflect the level of resources available. At the same time, however, the standard is normative and not merely descriptive. Health systems that fail to deliver the level of care that is feasible in an efficient and fair system, even given severe resource constraints, should be judged substandard. The applicable standard of comparison is the record of achievement of countries with a similar geography, population density, economic picture and history. Countries may have similar colonial experience from a political and developmental perspective, yet have very different health profiles. For certain types of analysis, countries with large, diverse populations should be examined with regard to the status of the different states, especially if health has been identified as a state-(provincial-) level function. This is the case in India, for example, where responsibility for health services is largely assigned to the state government, and the health status and the performance of the health systems of various states is very different. Kerala (population 33 million), for example, has an infant mortality of 15 per 1000 live births whereas that of Bihar (population 95 million) is over 70 (8, 9). Both the numbers and functions of the health workforce vary.

In research ethics there is still a contentious debate as to whether the participants in a study should have access to the best treatment in the world or to the best available and sustainable treatment in the country in which the research is conducted. Given the severe resource constraints of the poorest countries, where the per capita expenditure on health may be US$ 5 or less, it is unrealistic to believe that the best and most expensive therapy in the world should be made available to all citizens (or available only to the elite). Those who insist, in the name of avoiding “double standards”, that the applicable moral standard is that of the world’s best hospitals, are failing to address the actual needs of most of the people who live in the poorest countries. No apology need be made for making efforts to improve the care offered to these vulnerable people, even if the improvement falls short of the theoretical ideal. What is needed is a standard of care that reflects the best that the host country can deliver, given its resources, plus the commitment to incremental improvements over time (10). This point carries over directly from research ethics to the ethics of health worker development. Although each medical professional might wish to have the skills of the world’s foremost practitioner, and the resources needed to provide the best possible level of care, a humane (and morally defensible) policy for health workers must accept the compromises that are dictated by the overwhelming unmet needs of those who live in poverty in much of the world. It would be unethical — because it would have to be inequitable — to impose first-world standards in training health personnel, if the result were to limit access to care to a fortunate few.

Ensuring appropriate training of health workers

Ethical considerations apply to three of the most important issues: training of the health workforce, licensure and continuing education. Curriculum content has been alluded to in the previous section; many of the same considerations apply to postgraduate education. If the quality of training is below some international optimal standard, does this condemn the people — both practitioners and patients — to second-class medicine? Can one be a first-class practitioner of a type of medical practice that accepts compromises due to resource constraints? A developing country that trains its health professionals to the world’s highest standards might justifiably be proud, but surely not if this comes at the cost of providing training on the health problems that are most pressing in that country. Childhood diarrhoea and malaria are not significant causes of mortality in the more developed countries. Neither are simplified low-cost treatments for these and other conditions, the therapies of choice in more-developed countries. The chief concerns in the development of the health workforce in developing countries, therefore, must differ from those of their counterparts in Europe and North America. This may seem obvious, but if it is an evident truth it is still one that is evaded in practice. One reason must be acknowledged explicitly: knowledge of the modes of health care suitable to the poorest and sickest populations will not help a medical graduate pass the Educational Commission for Foreign Medical Graduates (ECFMG) examination (an examination taken by physicians who want to be licensed in the USA, but have been trained in a country whose medical schools do not have reciprocity with USA institutions).

Training to care for the poorest and sickest will not make graduates exportable. The notion of a developing country lavishing scarce resources on training a health professional so that he or she can practise in a richer country may seem indefensible, given what it may cost to train a physician. In India for example, it costs 70 times the per capita gross national product (GNP)
to train a physician and in South Africa the cost is 23 times the per capita GNP (11). But practising in comfortable surroundings with plentiful resources is an understandable preference of health professionals. Is the solution to this pattern of misallocation draconian restrictions on the freedom of practitioners or rather the kind of training that the society provides? It should also be born in mind that many countries and states train far more health workers than can be locally employed. Countries that have an unwritten policy to overproduce human resources for health for export include Cuba, Egypt, India and the Philippines (11). Kerala State in India for example, has 3% of the national population and 30% of the nursing schools. The excess nurses who are trained in Kerala then work in other Indian states and overseas and send money back to their families.

How does society know that a recent graduate from a medical, nursing or pharmacy school has been properly trained? Few countries in the developing world have a national test for each type of graduate. Rather, they depend on each institution to certify their own. But some training institutions take in as many students as possible to raise tuition revenue; failing paying students would decrease that revenue and few are therefore prevented from completing the course of study. Does society not have an ethical responsibility to assure the public that when a person has a medical degree, that they have been trained and tested in certain areas of knowledge and skills? How will skills be evaluated? There is a system of written and oral examinations (assessed by internal and external evaluators), and practical demonstrations for some specialties that are used in many countries. But most rely solely on the written examination. Is this form of evaluation sufficient — and if not, have these governments fulfilled their responsibilities to their citizens (12, 13)?

A vexed question in developing countries is how to certify those who practise some form of alternative medicine (14, 15). For some of these systems there are a number of recognized schools and training institutions, which certify their own graduates. But some traditional healers only learn through an apprenticeship system. If they are recognized by the state as a legitimate type of healer, does the state not have an obligation to ensure that they are not harming patients but rather helping them? Is it enough just to say “let the buyer beware”? The state is supporting institutions and health care through revenue that could be put to other uses, and few are therefore prevented from completing the course of study. Does society not have an ethical responsibility to ensure that this money is properly spent. Certification of training institutions and their graduates is one way to achieve this. These issues should be addressed by any donor who is supporting health workforce training institutions.

The same argument should be used in determining whether society should insist that medical practitioners — whatever their skill level — be re-certified at regular intervals to determine how much relevant knowledge has been retained and new knowledge assimilated. New diseases are appearing (e.g. human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)), and treatments and techniques are constantly changing. The public should be assured that they are receiving the most-up-to-date care that is affordable and sustainable. Canada and the USA, in particular, have an active programme of continuing education and re-certification. Developing countries should consider what needs to be done to provide continuing education for their health professionals and how this might tie in with the licensing procedures.

These issues will become particularly problematic if traditional forms of medicine are validated and paid for by the government. Is it proper and ethical to treat traditional practitioners differently from those trained in the allopathic system? If traditional healers insist that they learned everything they needed to know when they were trained, how valid can these systems be? If a system is based only on tradition and does not take account of new knowledge, should it be supported and certified by government?

Support from the health system for its workers
Is it ethically defensible for society to train people and then not support them at even the basic level? Or to support a system of medical training that focuses on resource-intensive procedures that will never be available to most of the country’s people? Health authorities have an ethical obligation to determine the appropriate target standard for health care in their country, which requires making comparisons with similar countries at the same level of development, and to provide the best possible training for health workers who will work in that health care environment.

This consideration complements the first question addressed above, which is whether a society is behaving ethically if it knowingly trains health-care providers in treatments that are not available (not just in short supply). The question does not presuppose that the society will make these supplies available without regard to resource constraints, but just the opposite: the government of a given country is under an ethical obligation to assess what can feasibly be achieved in health care given its level of economic development (e.g. by learning from the most successful countries at similar levels of economic development). The necessary steps can then be taken to ensure that the systems of supply for that mode of health care are efficient, honest and reliable. Permitting the degradation and breakdown of systems of supply for low-cost drugs and equipment is, given the circumstances, likely to be more damaging than shortages of more expensive supplies would be in richer countries.

Diversion of resources to areas that are failing to provide adequate care
In many countries with poor health care almost all aspects of the society function poorly. In this situation, to what degree should states be held accountable for the performance of their health workers? If countries cannot monitor their workers or provide them with the barest essentials for carrying out their work, is it ethical to train additional workers? Does this not give the population a false sense of security?

Teaching students about the ethics of health care
Health professionals take pride in their expertise; and most would think badly of a colleague who offered care that he or she could not deliver at the appropriate standard. But it is inappropriate simply to adopt the professional standards of the developed world, because this would require resources that are unavailable to most people in a developing country. There has not been adequate debate on what principles and standards should be taught and upheld in health systems in the poorest countries that would simultaneously uphold the health worker’s sense of professional integrity and at the same time address the very difficult question of what constitutes optimal care under severe resource constraints.
It is surprising how little medical and public health ethics is taught in professional schools. Other than taking an oath at graduation (e.g. the Oath of Hippocrates or Mamonedes) most medical and nursing students receive no training in ethics. Yet it forms the backbone of professional guidelines and behaviour. Until recently, St John’s Medical College in Bangalore was the only one of hundreds of Indian health schools that required students to take a course in medical ethics. It is an accident that physicians see no “conflict of interest” issues in sending their patients for medicines and tests at their own pharmacies and diagnostic laboratories? Should we be surprised when government doctors refer the day patients that they see in government hospitals to their private clinics after hours? Though one cannot ensure high ethical standards by requiring an ethics course, a good course in ethics can achieve the goal of engaging the student’s attention as to the nature of the problems and the need to make a responsible choice between feasible alternatives. It can also remind the student that the health professions carry high expectations for integrity and responsibility. These expectations also remind the student that the health professions carry high expectations for integrity and responsibility. These expectations do not provide formal sanctions, as do laws and regulations, but they do create a climate of opinion in which the health professional will be judged by peers and by patients, and according to which the health professional feels entitled to self-respect.

**Summary**
The responsible development of a health workforce is a challenge for all countries, rich and poor. The public trusts that the skills and values of health-care workers will be at the highest standard that is appropriate. To achieve this, countries must certify that training programmes are appropriate to the resources of their society and that health-care workers maintain their skills and conduct themselves responsibly. Each society must ensure that whoever is trained, in either the public or private sector, develops skills that can be supported by the public through taxes or fees. To do otherwise would be a waste of resources, exacerbate inequitable distribution of these resources and put the public at risk. This would be an unfair and unethical policy. When it comes to the emigration of health workers from poorer to wealthier societies, each country will develop its own policy. The export of health workers or excess workers can be advantageous to a state or country, as Kerala and the Philippines have demonstrated. These workers could not be gainfully employed locally, but provide much needed financial support for their societies. Workers leave but they are often underemployed or unemployed in their own country because of resource constraints. It is when there is a real shortage of health workers that cannot be trained or imported that we have an ethical dilemma. In the future as societies seek to address their health workforce needs, they will have to address the ethical issues that have been raised.

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