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# THE ROLE OF THE DOCTOR AND THE COMPETENCIES EXPECTED FROM THE DOCTOR OF THE FUTURE

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The role of the doctor is changing in response to advances in medicine, developments in healthcare delivery and changes in patients' expectations.

### **Medical education must prepare students for the needs of the world of tomorrow**

Medical education is a lifelong process. It begins when the student enters medical school and ends on the last day of professional life. Medical students of today, both undergraduate and postgraduate, will see unimaginable changes in medical practice and the delivery of healthcare during their future career. These changes will follow developments in science and clinical practice; but they will also relate to new health priorities and threats to public health, to rising expectations from patients and the public and changing attitudes in society.

Traditional roles of the doctor will change, and new roles will emerge. Healthcare is changing from the unique doctor-patient relationship to the interaction of the patient with the entire healthcare team. Within this team, the doctor must have the competence and responsibility for definitive decisions in uncertain and complex situations, based on his or her scientific and clinical knowledge and experience.

The various stages of this lifelong learning have different responsibilities and offer different windows of opportunity (Table 2.1). Undergraduate medical education leading to a licence to practise should be planned and executed with the expected needs of the future in mind rather than based on history or the organisation of medicine in yesterday's society. Undergraduate education must prepare students for the next steps in their professional education, and demonstrate and document the competence they have achieved, ready for employment as professional and trustworthy physicians.

Medical schools, and their partners in postgraduate medical education, share the responsibility of all universities to foster members of society who will contribute to democratic and global development, both social and economic. Students must understand the needs of healthcare in different societies and the need for growth, development and improvement of regional healthcare systems.

*Table 2.1* The various stages of lifelong learning for a doctor

<i>Stage of education</i>	<i>Undergraduate</i>	<i>Specialist education</i>	<i>Continuing professional development</i>
What is the doctor doing?	Studying with supervised clinical responsibilities	Training as a specialist by today's specification: clinical practice with increasing personal responsibility and decreasing supervision	<p>Established independent professional practice</p> <p>Early independent professional practice, and educating and training the next generation</p> <p>Continuing to educate and train the next generation</p> <p>Leading in clinical practice and in teaching</p> <p>A future that we cannot predict . . .</p> <p>Understanding and absorbing new knowledge and practices</p> <p>Learning how to teach, how to lead and how to disseminate knowledge and good practice for the general benefit of society</p>
What is the doctor learning?	<p>Professional attitudes</p> <p>Scientific attitudes</p> <p>Scientific principles, and principles of disease and of clinical practice</p> <p>Psychological and social attitudes and principles</p> <p>'Learning how to learn'</p>	<p>Enhanced professional attitudes</p> <p>Additional scientific and clinical principles and knowledge</p> <p>Continuing to 'learn how to learn' as a specialist and a practitioner</p>	

This relates to the education of a doctor as a medical professional, the needs of society worldwide and lifelong learning – all relevant to the future global role of the doctor.

### **What do we mean by professionalism in medicine?**

A profession is, by definition, a vocation (not just a trade) in which the practitioner acknowledges that he or she has knowledge and skill that must be applied for *good*, not just for *gain*. A good analogy is the priesthood: a priest must use wisdom, knowledge and skill for the good of all; similarly, a doctor has a moral obligation to use his or her understanding and expertise for the good of society and (in particular) of the individual patient.

Professionalism is the basis of the contract of medicine with society. It demands placement of the interests of patients above those of the physician, the setting and maintenance of standards of competence and integrity, and provision of expert advice both to society and to the individual patient on matters of health. The principles and responsibilities of medical professionalism must be clearly understood by both the profession and society. Essential to this contract is public trust in physicians, which depends on the integrity of both individual physicians and the entire profession. In the face of changes in society and of globalisation, reaffirmation of the fundamental and universal principles and values of professionalism becomes all the more important for all doctors.

Development of professional attitudes in tomorrow's doctors is an important responsibility of the medical school. In addition to professionalism, fostering understanding of the need for continuing professional development; a critical and scientific approach; the ability to function in multiprofessional teams and systems as a leader and as a member; and a culture of creativity, innovation, continuous improvement and global social accountability are central to the educational responsibilities of universities. Because there is an increased focus on team-based delivery of healthcare, the definition of the professional role of the doctor cannot be done in isolation from other professions. To achieve all this, medical schools must work in close partnership with other important stakeholders in health and related areas, to improve the performance of the healthcare system. The competencies that doctors must acquire include those relating to ethics, teamwork, cultural competence, leadership and communication. The case study from India reviews the experience of introducing an orientation programme for new graduates about to embark on their internships, which included many of these vital competencies.

#### **Case study 2.1 Easing the transition to clinical work: The role of an internship orientation programme in India**

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The All India Institute of Medical Sciences is a premier tertiary-care institute in India offering undergraduate, postgraduate and postdoctoral courses in medicine and its various branches. The undergraduate curriculum is largely traditional and discipline-based with integrated organ- and system-based modules offered from the third semester onwards. The course content is heavy on biomedical sciences, with only limited teaching on professionalism, ethics, communication and psycho-social issues. Four-and-one-half years of training are followed by a year of compulsory internship rotation during which students rotate through various departments to learn practical skills and the art of doctoring. In this phase of training new graduates are expected to acquire and extend their skills under supervision, to become capable of functioning independently without direct supervision.

Quite often, new graduates go through this period without a clear aim as they are also preparing for the postgraduate entrance examinations, which are largely knowledge-based.

An orientation programme was conducted before these new graduates started their 1-year internship to familiarise them with their clinical tasks and their roles in society and the community. Interns were invited to participate in a 2-day programme conducted by a team of faculty members and administrators. The key objectives of the programme were to enable the interns to:

- focus on the need for developing effective communication skills essential for healthy doctor–patient interactions;
- assess the psycho-social needs of patients while providing care;
- identify the ethical and medicolegal issues involved in patient care;
- enhance their written communication skills;
- review the principles of rational drug therapy;
- familiarise themselves with universal precautions and biomedical waste management;
- develop and refine the skills and understanding necessary for the appropriate use of laboratory services;
- identify their role in multidisciplinary healthcare teams;
- develop a sense of belonging, responsibility and accountability.

The programme included interactive lectures, structured panel discussions, small-group discussions and role plays. Multiple case studies involving ethical principles applied to dilemmas and professional conduct and various scenarios for practising communication skills, including breaking bad news and communication across different cultures, were used for role play by the interns and facilitated by faculty. All the interns were highly engaged using an interactive process in a friendly, non-threatening environment. Most of the faculty participated in the sessions allocated to them while the author, as the programme coordinator, was available to students throughout the full programme. Participation in this programme was voluntary. Forty-one out of 44 eligible interns joined the programme on day one and 28 interns participated on day two. A formal evaluation of the programme was done at the end of day two, to which 19 interns contributed. Evaluation was done using a feedback questionnaire, and an interactive session, during which most faculty were present. The pre- and post-test comprised of 20 multiple-choice questions that tested theoretical knowledge and clinical problem-solving skills. The final analysis was done on the pre- and post-test responses of 19 interns.

The responses from the interactive session and the feedback questionnaire suggested that the workshop was successful in achieving its objectives and was useful for the interns' professional activities. Almost all the participants suggested such a programme should be mandatory for all.

It is important for new medical graduates to get opportunities for hands-on training and experiential learning in a safe environment where they can practise and internalise skills required to become an effective doctor. This programme is now being carried out regularly and many medical schools are conducting such orientation programmes for interns and new postgraduates. The Medical Council of India (2011) in its new curriculum reform initiative (*Vision 2015*), has introduced a mandatory foundation course spread throughout undergraduate training and the internship, incorporating most of the above elements of training.

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*Note:* This case study was first published in *The National Medical Journal of India* (NMJI) 2010; 23: 160–2.

## **The needs of society from the doctor of the future**

Medical knowledge continues to increase dramatically, but inequities in health persist both within and between countries. New challenges mean that healthcare systems worldwide have to struggle to keep up, as they become more complex and costly. Medical education has not kept pace with these challenges, and the mismatch between competencies achieved and the needs of patients and population grows (Global Consensus for Social Accountability of Medical Schools 2010). There remains too much focus on episodic encounters and acute events compared to continuous care and the management of chronic conditions. Education remains oriented to the hospital at the expense of primary care. The Lancet Commission (Frenk et al. 2010) put forward the vision that all health professionals in all countries should be educated to mobilise knowledge and to engage in critical reasoning and ethical conduct, so that they are competent to participate in patient- and population-centred health systems as members of locally responsive and globally connected teams. Although the evidence base of the Lancet Commission report is incomplete (Gordon and Karle 2012), the aim to assure universal coverage by those high-quality comprehensive services that are essential to advance opportunities for health equity within and between countries cannot be disputed.

Much of the challenge for the future is based around the gap between the richest and poorest in society. Since long-term trends are for spending on health to increase faster than the growth in national income, doctors will be asked to play a central role in 'doing more with less' and addressing preventive issues.

## **Promotion of health**

The future role of the doctor will include an enhanced focus on health promotion and on the prevention of illness. The future doctor must understand and contribute to the improvement of those conditions in society that affect the health of individuals and of different population groups, from both a national and global perspective. The doctor must be responsive to society in meeting the needs of people and populations in the area in which he or she works, and at the same time must expand this social accountability to a global perspective. It is not enough for medical schools, today, to educate the doctors of tomorrow solely to meet the needs in their own society. Doctors of the future must be prepared to take on a more global role, and be ready to practise in other, and particularly poorer, parts of the world.

## **The global view**

In less developed parts of the world, medical care is often deficient, and in richer countries the costs and complexities of healthcare are rising unsustainably. Both rich and poor societies need to understand what can only be done by doctors, and what should be done by other members of the healthcare team, in order to plan their health workforce efficiently. In this rapidly changing environment, an implicit understanding of what doctors do without a proper analysis of their function is no longer acceptable. In defining this role of the doctor, it is essential to avoid being culture- or region-specific and not to define the role of the doctor in isolation from other professions.

This definition must not solely comprise cognitive and technical competences, but also must include more complex attitudes and skills, for example the competence to change, to learn, to improve and develop personally. Once this complex role is defined, the content and process of medical education and of lifelong learning, to produce a person equipped to fulfil that role,

can be decided. Above all, medical education at all levels must respond to health challenges in the society of today and of the future, and this definition of the role of the doctor must not be bound to one particular culture or region.

Subjects of particular importance for the global roles and values of future doctors are summarised in Table 2.2. The role of the doctor as a communicator to patients, to other doctors and to healthcare professionals is obvious, but this role in relation to society is generally not often considered. The duty to teach is self-evident in the daily life of doctors, but often considered more of an added-on skill in special situations than part of their everyday role, and this duty to teach is not just to students and other health professionals: it is widely in society. Several commissions and publications have in recent years addressed the role and competence of future doctors and the implications for medical education. They come to generally shared conclusions, summarised in Table 2.3.

Freedom to move is an indisputable human right, but migration makes it necessary to address the global imbalance of healthcare resources. Migration of health professionals from less-developed regions to wealthy parts of the world has contributed to a global health workforce crisis. This illustrates the essential need to expand the global medical health workforce, and the need to build healthcare teams appropriate for the circumstances of the particular country or region, for

Table 2.2 Subjects of particular importance for the roles and values of future doctors

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- Professionalism: its meaning and significance today, and its relevance for personal development
  - The doctor as communicator, educator and researcher
  - Demographic changes, migration and the future of medicine
  - The doctor as a manager of healthcare within society, and as a community health leader
  - The social accountability of medicine and the doctor
  - Leadership and membership within the healthcare team
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Originally published in Lindgren and Gordon (2011).

Table 2.3 Generally agreed priorities for the future doctor and medical education

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- Matching of competencies to patient and population needs
  - Teamwork
  - First-line healthcare
  - Leadership
  - Leadership to improve health-system performance
  - Partnership approach with patients for long-term health gain
  - Social accountability
  - Difficult decisions in situations of complexity and uncertainty
  - Communication
  - Professionalism
  - Physician-scientist
  - Generalist
  - Capacity to change
  - Profound ethical understanding
  - Lifelong learner
  - Habits of inquiry and improvement
  - Striving for excellence
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Originally published in Lindgren and Gordon (2011), where references to other sources are shown.

the delivery of health and medical services. Doctors also need continual educational, professional, administrative and personal support so as not to feel isolated or disillusioned. This is also a problem in richer countries, where many graduates, motivated by social factors, are lost to other occupations.

### **Lifelong learning**

Medical students of today will see huge and continuing changes in medical practice and the delivery of medical care during their careers. Furthermore, the healthcare needs of different populations and societies will change. Thus, each student must be educated for a lifelong career and not simply trained for a job. This includes the need to strive for excellence continuously, both on a personal level and in the systems and teams in which the doctor will work throughout his or her professional life. Only when doctors are competent in the skills that underpin lifelong learning will they be well placed to adapt to changes in knowledge, update their practice in line with the changing evidence base and continue to contribute effectively as societal needs change.

Perhaps the most important challenge for medical education is to address this understanding of what it means to be a medical doctor, and at the same time adopt the socially responsible position of meeting society's long-term needs in relation to healthcare.

### **Medical education for the future global role of the doctor**

Medical schools must anticipate these future needs of society, educating competent doctors with professional attitudes, able to act as agents for change in society, understanding health promotion, with a global view, and prepared for lifelong learning. They will be able to work in teams, with the skills always to be a member, and only sometimes to be the leader, of the team. The interaction of the patient with the healthcare team will often be such that the patient is also a member of that team: the doctor must understand and welcome this. It is a challenge to preserve the doctor–patient relationship in this setting, with respect for the patient's integrity, needs, knowledge and experience.

Education for leadership is not just for leadership of the healthcare team. Flexible leadership and management by the doctor offer ways to develop healthcare systems in different parts of the world in context, based on available resources and competencies, and medical schools should not produce doctors with only local, special or restricted characteristics.

The duty of doctors to examine their responsiveness and accountability to society as a whole is important, because without such self-analysis the profession may blindly continue to do what it believes has always been done. This analysis particularly includes the cost of medical actions and interventions, in relation to overall indirect societal costs for loss of health and to the total resources available for healthcare.

The structure of undergraduate medical education will include longer continuous periods of integrated clinical training than are the norm today. This will give priority to education in, and assessment of, professional competencies as well as developing the ability of students to work together with other professional groups in health and medical services. The clinical settings for student education may affect the choice of their future vocational direction and specialised service. More sustained periods of learning in first-line healthcare with high-quality role models from those services is one way of stimulating the students to choose that – a prerequisite for the worldwide need to develop high-quality first-line healthcare.

Medical education with an appropriate content of first-line healthcare is one way to ensure that there is not an excess of doctors with only narrow specialism. The future doctor, whether

generalist or specialist, must take more responsibility for the overall management of resources and be an advocate of the health needs of the particular population he or she serves. By sometimes leading in a management role, doctors may fulfil an important function in population needs-based healthcare, promoting effective achievement of health outcomes, efficiency and equity, with emphasis on prevention and on patient and public satisfaction. The doctor has multiple roles in society, particularly in community health leadership and the management of healthcare.

In many parts of the world there is an obvious mismatch between medical school graduates, the distribution of specialists and the needs of the healthcare system. Medical education has not kept pace with this need and has a regrettable history of producing doctors fit for the past, and perhaps for the present, but not for the future. This need to change, to meet the needs of patients, society, learners and teachers, must involve postgraduate medical education and continuing professional development as well as medical schools. Educational development and reform, related to healthcare systems and their improvement, to enhance the global roles and values of the doctor, are needed.

Undergraduate medical education must always be devoted to the needs of the future and not to the pressures of today. Education of the doctor for an ever-changing and developing career, which may extend for 40 or more years, is required, and simple training for the here and now of medical practice today is not enough. In considering how medicine will develop we need to know what is meant by medical professionalism; to understand the needs of society and how medicine should respond to them, particularly the needs for disease prevention and health promotion; to think of all the future roles of the doctor; and to think globally rather than parochially.

This gives us the vision of lifelong learning and development. Not only will this help medical care continuously to improve, but also, it can inspire the medical students and young doctors of today that their professional lives will not be fixed and stagnant, but always be going forward, to the benefit of society, and of the individual patient.

### Take-home messages

- The traditional role of the doctor is changing. We must prepare our students to be lifelong learners, adaptable to the changing health needs and practices of the future.
- Ensuring that professionalism remains the key contract of medicine with society is vital; that doctors retain a moral obligation to use their skills for the good of society and not just for personal gain.
- The globalisation of society and the medical workforce requires the role of the doctor to be global, not regional or culture-specific. In addition, greater attention needs to be given to opportunities for health equity within and between countries.
- Population growth and the increasing cost of healthcare require a refocusing of attention to health promotion and disease prevention; of working within teams and across professions for the benefit of all.

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