

Medical education needs to change in Pakistan

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Abstract

The economic crisis in the last few years has reduced the role of government in social development and transferred it to the private sector. These changes have affected medical education too. Lack of resources has created a situation where outdated equipment and educational methods produce medical graduates with outdated knowledge, skills and attitudes. Students' are understandably frustrated when they discover that their long journey through medical school has yielded knowledge that does not match the requirements of their profession. Failure to structure criterion for proper selection of students and societal needs has resulted in indiscriminate admittance of thousands of students, causing many dropouts in the first two years and, eventually, ill-prepared medical doctors. Clearly, medical teachers are feeling the pressure to adapt to changes in the health care system while maintaining excellence in education. The question in their minds is; how can we change our medical education programme to meet the society's need? This paper suggests certain changes which could be considered as the first step at the beginning of a long journey.

Keywords: Education, Medical college, Curriculum, Teachers, Universities.

Introduction

These days Pakistan is engaged in a debate about the appropriateness of the medical curriculum inherited from Britain at the time of partition of the subcontinent, which is still largely in place in most medical colleges of the country. Thus in this modern age of information technology there is considerable uncertainty about the future of graduates of our medical institutions. Our medical colleges are also accused of producing elitist doctors best suited to practice in big cities rather than in the less privileged rural communities. In response, medical colleges /universities are re-examining their programmes in terms of what is taught, where it is taught and how it is taught. A methodological paradigm shift in teaching is occurring in the form of integrated, non-departmental preclinical teaching, student centered learning, and clinical exposure at ambulatory sites.¹ Thus this is a time for strong academic visionary

leadership and collaboration in medical universities of the country.

According to Harden² following steps can certainly help the medical teachers in handling this need of today's society.

- ◆ Define characteristics of doctors who can meet society's needs.
- ◆ Change the medical curricula.
- ◆ Develop quality assessment for medical education.
- ◆ Improve ongoing/future research activities.
- ◆ Restructure the educational environment.

Characteristics of the kind of doctor society needs:

Medical education has to train future doctors in a way that they are capable of managing the health problems of those who seek their services in a competent and humane manner. Today's medical graduates not only need adequate knowledge but also the skill to use it. But this era of rapid advancement of IT, may declare today's knowledge be obsolete tomorrow. Therefore students must also be equipped with skills for self directed lifelong learning. Doctors need the competence to analyse and interpret clinical findings and translate them into a rational diagnostic and management plan. Additionally, education should be aligned with the needs of society. Doctors need to adapt their medical practice to new epidemiological or demographic patterns. In summary, medical students must acquire an integrated, community-oriented body of knowledge, and the ability to update, extend and improve that knowledge and use it effectively in the care of their patients.

The need has arisen for doctors to be able to:³

- ◆ assess and improve the quality of care by responding to patients' comprehensive health needs and provide integrated preventive, curative and rehabilitative services;
- ◆ make optimal use of new technology, bearing in mind ethical and financial considerations;
- ◆ promote healthy lifestyles by means of communication

skills and empowerment of individuals for their own health protection;

- ◆ reconcile individual and community health requirements, striking a balance between patients' expectations and society's needs;
- ◆ work efficiently in teams within the health sector and socio-economic sectors affecting health.

Once these competencies have been incorporated into our medical education, we should be able to train our medical graduates possessing the characteristics of a general practitioner who is able to:

- ◆ diagnose, treat and prevent the most prevalent diseases in the community;
- ◆ resolve emergencies in primary care;
- ◆ develop teams in patient care, teaching and investigation;
- ◆ recognise the importance of basic science, clinical and epidemiological research;
- ◆ incorporate patients' perspectives relating to physical and psychological aspects, family, work and the economic environment;
- ◆ develop health promotion programmes at individual and community level;
- ◆ analyse society's health problems and identify high-risk groups;
- ◆ Develop, evaluate and implement health care programmes at primary care level.

Need of Curricular change:

In developing the most appropriate new curriculum we need to take help from the Knowles' theory of andragogy.⁴ This theory states that adults are self-directed and expect to take responsibility for decisions. Adult learning programmes must accommodate this fundamental aspect. Andragogy makes the following assumptions about the design of learning:

- ◆ Adults need to know why they need to learn something
- ◆ Adults need to learn experientially,
- ◆ Adults approach learning as problem-solving,
- ◆ Adults learn best when the topic is of immediate value.

The current MBBS curriculum being followed in most of the schools of country is divided into a phase devoted to basic science (years 1-2), a preclinical phase (years 3-4) and a clinical phase (years 4-5) in which teaching is organised by discipline without vertical or horizontal integration and no electives (except one or two institutions of

private sector).⁵ There is a strong dissociation between theory and practice and between education, patient care and research. Almost 99% of the teachers have had no educational training.

In a new curriculum, based on findings from cognitive psychology, learners should be stimulated to construct their own knowledge within contexts of problem-solving situations. Students should be taught metacognitive⁶ skills and how and when to use them. Knowledge should be taught from different but integrated perspectives and applied in many different situations. Learning should be community oriented, that is, education should focus on the health needs of the community and the groups and individuals within it. In order to accomplish this task, researchers, educators, and clinicians will have to work closely together. Thus, the true measure of success for all of these constituencies should be to continue to provide curricular models that demonstrate how all faculties can combine their efforts to address, one of the most important current issues in medical education.

Assessment of quality in medical education:

The role of quality assurance in medical education is to ensure that future physicians attain adequate standards of education and professional training. This requires evaluation based on a clear understanding of the goals of university-based professional education and the context of its application. Quality assurance must strike a balance between ideals and institutional reality.⁷

Patrick explains different approaches for evaluation of our teaching programmes with the help of internal and external evaluators. Institutional/Internal quality evaluation starts by setting goals and aims and periodical self-evaluation monitor the attainment of goals, followed, if necessary, by modifications.⁸ External evaluation is managed by a governmental office (universities) and has three components: accreditation/affiliation, control and improvement.

Each medical school possesses unique characteristics and has differing resources that can be focused on the broad area of curriculum reform and incorporation of new science into the educational programme. However, to support a national agenda related to maintaining the status of the medical profession, every medical college should play a part in establishing an infrastructure that attaches value to new science, research, evidence-based practice, and the application of new knowledge and technologies to patient care.

Need of improving ongoing/future research activities:

Improving research standards is another challenge in medical education. High quality relevant research needs more interdisciplinary collaboration.⁹

Restructuring of the educational environment:

To meet the new curriculum objectives and to encourage students to mature as a self-learner and the teacher to become a facilitator, it is crucial to prepare the educational environment for these goals. Students and teachers, rather 'learners and facilitators', should have a 'comfortable' access to various MI products.¹⁰ Classrooms may be replaced by learning centers, and collaborative programmes with other institutions may become the norm. Learning would not be restricted to a particular site or institution. Distance-learning and collaborative inter institutionalized curriculum delivery may be adopted as the most cost-effective means of curriculum delivery.¹¹ As a result, the 'learners', the 'facilitators' and their institute would be exposed to the World at large not only in curricular delivery but also in assessment. This exposure would lead to worldwide raising of educational standards the product (doctors) more similar and better qualified.

Suggested Remedies:

Few of the steps which would help to address these issues are:

Competence Based Curricula:

The present curriculum reflects an over-emphasis on rote memorization of unnecessary descriptive details. It has limited relevance to real life problems¹² and hardly promotes critical thinking and innovation, which are essential for advancement in areas of health service deliveries.

The current health profession educational system is producing health professionals with poor skills or with skills that are not directly relevant to the needs of our society. Acquisition of skills and competence enables the workforce to deal with complex situations. Studies have shown that such competence and skills are more readily acquired if students get an opportunity to try out and develop their abilities by becoming more involved in practical work than getting just theoretical knowledge in lectures.

It would not be too wrong to say that we are

lagging far behind in health profession education and the present situation should not be allowed to persist. The curricula need a thorough review and revision to improve education from primary to tertiary health care and from basic to clinical health sciences.

Regular supervision and monitoring:

Lack of proper monitoring has led to major breakdowns in quality of doctors which our medical colleges (both in private and public sectors) are producing. Regular unbiased inspection of regulatory authorities as well as transparency, accountability and tracking mechanisms can certainly have positive impact on quality of health care system.

Department of Medical Education and Teacher Training:

The quality of education is also constrained by inadequate number of trained medical teachers. The majority of teachers employed are untrained and very few of medical colleges in private sectors have proper medical education departments which offer teacher's training. Even those institutes which claim to have established medical education departments are providing rudimentary teachers training which fails to help teachers in transfer of proper relevant information in an integrated manner.

The majority of medical teachers are unable to communicate effectively. Most of the teachers are inflexible in adapting to changing learning needs. There is little motivation for most teachers because the system does not provide incentives for quality performance in terms of advancement opportunities and improvement in working conditions, and suitable increase in salaries.

Also the quality of teachers can be improved by arrangements for refresher courses/workshops in new teaching methodologies.

All these issues need proper and immediate actions by making Medical Education Department "A MUST" in each medical institute.

Proper funding/Investment in health research:

Health Profession Education system in Pakistan has been hampered by a number of problems, including inadequate physical infrastructure and facilities for research,¹³ shortage of trained and motivated teachers because of under-investment in health sector, resulting in poor supply of services and adversely impacting teacher

quality. Thus proper funding and more share in budget is the need of the day.

Partnership between planners and service providers:

Improving the quality of health services is inextricably linked with partnerships. The current system lacks participation of the core stakeholders. As a result, investment in private sector, particularly in health education has no focus on the needs of the community. Unless a mechanism is developed in which communities are mobilized for assessing their needs, establish priorities, invest and monitor these medical institutes, relevant health profession education will remain an elusive goal. The core players in education: federal, provincial and local governments, doctors, students, and investors need to be properly integrated to review and design the current health care system according to the needs of the society.

Conclusion

The improvement of medical education should be a priority task for all of us. Medical education is ultimately aimed at improving clinical practice and the competent management of health problems. To be competent is to use clinical tools and economic resources rationally. The speed of social changes demands skills at adapting our tools and resources to new situations and societal needs. Thus medical education is a practical and dynamic discipline that

needs constant review and research to become and remain a useful tool to society.

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