

Medical education in Iran; past, now and future or New horizons in Medical education in Iran

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ABSTRACT

History has repeatedly acknowledged the contributions of Iranian scientist to man kind. In recent years the courageous integration of medical education with health unique in its characteristic and dimension had reshaped the face of Iran's Medical as any other change there has been short comings but the potentials created is promising. The article gives a brief history of science and specially medical in Iran. Present potential and possibilities of future is overviewed.

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History has repeatedly acknowledged the contributions of Iranian scientists to mankind. The advent of Islam and its teachings underscored the vitality of knowledge to progress and fostered advances in various fields of sciences. The progress was made possible by the incentive to learn and achieve, a rich culture, availability of libraries with references of Islamic medicine, the integration of various schools of thought, and development of medicine-related literature and Islamic beliefs motivating physicians and their thirst for knowledge. The study of Greek scientific tradition and available literature, identified mainly at the time with non-Muslims and non-Arabs, also played a significant role (1).

Unfortunately, the Moghul invasions of the Islamic countries ravaged and destroyed most of these rich resources and reserves, crippling the skilled manpower and dragging them back into a state of academic poverty. With the downfall of the Moghuls, despite a new beginning in academic activities, there was an unbridgeable gap between Iran and the West with the explosion in information taking place there.

In the early 19th century, Iran once again suffered the interference of Britain and Russia, both politically and domestically in its health and medical policies. However the establishment of the Dar-ul-Funoon, one of the greatest achievements of the time, greatly improved the situation

regarding scientific education. Students were also sent to Europe for higher education and with time

modern medicine began to replace traditional medicine (2).

In the first half of the 20th century, with the return of Iranian medical graduates and the establishment of medical colleges along modern lines, much progress was made in the development and availability of trained manpower and specialized faculties of medicine. Despite all this, there were shortcomings in meeting high international standards both qualitatively and quantitatively, mainly in the teaching of basic and para clinical sciences and the development of medical research. Since 1979, following the Islamic revolution, great advances have been made in medical education. Overall, considering the 8-year war imposed by Iraq and its socio-economic consequences, Iran made a tremendous effort in training the skilled manpower needed in the country, towards attaining self-sufficiency in various fields, mainly in meeting the demand for medical personnel (3).

The unprecedented advances of recent years, particularly in the fields of immunology, biochemistry, and genetics, the emphasis on prevention of disease, and the initiation of the “health for all” approach by the World Health Organization (WHO) and governments have highlighted the need for a fundamental change in approaches to medical education. The last three decades revealed that traditional methods of

teaching in medical sciences could no longer meet the demands of communities. This has led to most newer medical schools and many older ones to try and adapt to the needs of the people move towards more community oriented medical education (COME) or problem based learning (PBL) or both as the basis for further education.

From 1988 - 1993, the movement gained momentum at international congregations and assemblies and led to the endorsement of a declaration, in which the world federation of medical education (WFME), despite acknowledging the importance of newer advances in teaching methods, found the above to be inadequate, emphasizing the need for more realistic fundamental changes in medical education, in keeping with the ever-changing cultural, and political needs of communities (4,5).

In the 1980s, serious efforts were made to alleviate shortcomings in the lack of skilled manpower – efforts particularly noticeable in the medical faculties. (6) The 1990s saw a concentrated effort put into enhancing the quality of medical education, based on PBL and student oriented learning, newer concepts of student and lecturer evaluation, development of community oriented medicine, all issues focused upon by education policy makers for the designing and implementation of future strategies.

To overcome problems being faced by the two ministries of health and that of higher education, regarding in particular the issues of community health and training of health-care personnel, the establishment of the Ministry of Health & Medical Education was a turning point in the progress of medical education in Iran. This led to an increase in the number of universities of medical sciences, faculty members, student admissions and graduations, conferences and workshops, and a relative quantitative and qualitative growth in medical research and publications. Needless to say, for the achievement of all the above, education development centers were established with the development of related policies and strategies (7).

Apart from being certified, graduates must be adequately skilled in using the knowledge they have attained. Despite taking graduate and postgraduate courses, it is an accepted fact that regular updates are imperative for practitioners and specialists for them to maintain the required level of competency (8). Medical education, today, therefore consists of undergraduate, postgraduate, in service, and community oriented medical education, which keeps practitioners, both general and specialized, in constant touch with any and all advances made in their related fields (9).

Continuing Medical Education (CME), has, in the past two decades, been constantly endorsed and recommended as the appropriate approach for tackling the challenges faced in present day medical education (5). Following an act passed by parliament of the Islamic Republic of Iran making CME compulsory; a 5-year CME program from 1991 – 1995 was implemented throughout the country. In 1997, the CME act was revised, requiring all physicians to undergo courses in CME, to be able to continue practicing in Iran (10). Needless to say, CME has and continues to enhance academic status and progress of practitioners and medical education in general. The integration of medical education and the country's health care system has proved to be pivotal in the success of CME in Iran (11).

New Horizons in Medical Education:

Curriculums

The high council approved curriculums for medical education almost 20 years ago. The curriculums were reviewed by council members and renewed and updated according to the latest educational programs being used around the world, towards the latter years of the seventies and eighties (7). The Ministry of Health and Medical Education has been working towards reform in medical education for the past decade. Two years ago, the Education development center of the Shaheed Beheshti University of Medical Sciences initiated a comprehensive study aimed at developing a new curriculum for medical education (12).

Faculty members:

Academic faculty members are the cornerstone of medical education and unfortunately there is reason to believe that members- both basic sciences and clinical faculties have a lack of incentive to perform at optimum levels. Socio-economic circumstances make it necessary for the abovementioned to work outside universities, private practices limiting the beneficial teaching time afforded to students. It is of utmost importance therefore, that strategies and policies pertaining to these issues be reviewed, altered where necessary and implemented creating the necessary incentive for teaching scholars. Academic members need to be suitably reimbursed for their work to enhance their dedication; the proper implementation of the full time use of their working hours in “full time” contracts must be paid attention to.

Teaching environments:

Shortcomings in advanced educational and research facilities and instruments both in basic science and clinical teaching should be paid attention to. Teaching environments, in particular clinical ones must become "full-time", extending from early morning to late afternoon.

Educational settings:

Limitations in the use of modern updated technology needed in the teaching of basic sciences and in clinical practices are hindering progress to a large extent and widening the gap between the developed and developing countries (13).

Efforts must be made to enhance working environments and conditions for both the graduating physician and the faculty member. Students of medicine throughout their time in college view practice of medicine as their ultimate goal. Yet, despite the innovative methods of teaching being used, they find themselves stepping out into the older conventional framework of clinical practice, not quite in keeping with what they had been made to work so hard for. The reasons for this are most probably an inconsistency of collaboration in the educational and health care delivery systems of the country, urgent issues that need to be resolved immediately (14).

Continuing Medical Education:

Ultimately, re-certification should be a main component of CME. This is now mandatory for most applicants applying to certain organizations in developed countries.

Research in Medicine:

The past ten years have witnessed rapid increase in the number of articles published nationally and abroad (15). Despite the quantitative growth, the quality does need to be improved, considering the rapid progress of the developed countries.

I would like to avail of this opportunity to acknowledge the unceasing efforts of academic colleagues throughout the country in furthering the objectives and widening the horizons of medical education. I wish all of you the best of success. May Allah bless you and give you the fortitude and strength to advance and progress in your venerable vocations.

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