IMPRESSIONS OF MEDICAL EDUCATION IN IR IRAN

- WFME CONTRIBUTIONS TO THE REFORM PROCESS -

Report of the WFME Visit November – December 2003

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Upon invitation of 17 May, 2003 from the Chancellor, Dr Habibollah Peyrovi, Shaheed Beheshti University of Medical Sciences and Health Services and WHO Collaborating Centre for Educational Development, to the World Federation for Medical Education (WFME) to visit IR Iran and to participate in the First International Conference on Reform and Change Management in Medical Education in Tehran, the WFME visit took place from 28 November to 6 December 2003. Participants in the visit were Dr Hans Karle, WFME President, Dr Jørgen Nystrup and Mr Leif Christensen, senior advisors, the WFME Office in Copenhagen, Denmark.

We take this opportunity to express our thanks for the invitation, for an extremely well planned programme for our visit and for the warm reception by all. Due to the high level of activity in improving medical education in IR Iran, and the strong support to WFME and its Programme on Global Standards for Quality Improvement of Medical Education, the visit to IR Iran was very successful at least from the point of view of WFME as it provided us with a close look behind the scene and several valuable suggestions for future work.

The following is a brief report including a description of the background for the visit, of activities during the visit, our impressions of medical education and the ongoing reform process and suggestions for further cooperation between WFME and institutions and authorities in IR Iran.

1. Background

Contact and cooperation with IR Iran was established in connection with the WFME Standard Programme. One medical school (Shiraz University of Medical Sciences and Health Services) participated in Pilot Study I, testing the use of the WFME Global Standards for Basic Medical Education. More than 30 colleagues from IR Iran participated in the World Conference on Global Standards in Medical Education for Better Health Care in Copenhagen 15 – 19 March 2003. Many had submitted papers and posters.
During the World Conference a meeting was held between the President of WFME and the following representatives from Iran:

Dr Abdollah Karimi, Deputy Minister for Education & University Affairs, MOHME
Dr Seyed Jalil Hosseini, Consultant of Deputy Minister for Education & University Affairs
Dr Bahram Einollahi, Secretary of Supervision, Evaluation and Expansion of Medical Universities Council, MOHME
Dr Ali Akbar Zeinaloo, Director of Educational Development Center/EDC, Tehran University
Dr Sedighi Gillani, Educational Deputy of Tehran Medical University
Dr Masood Naseri Pour, Secretary of Council for Graduate Medical Education
Dr Ahmad Saboori, EDC/Member of Science Staff, Tehran Medical University and
Dr Fakhrosadat Hosseini, Expert of Office of Supervision and Evaluation, Shaheed Beheshti Medical University

Further cooperation including the possibilities of a visit to IR Iran was discussed at the meeting. Shortly after the conference 3 more medical schools (Tehran Medical University, Shaheed Beheshti Medical University and Ahwaz Medical University) expressed interest in participating in the Pilot Study II on the WFME Standards for Basic Medical Education and were included in the pilot study. Later on Shiraz University of Medical Sciences and Health Services was also included in the Pilot Study II. Furthermore, Iranian interest was declared in participation in the upcoming Pilot Studies of the WFME Standards for Postgraduate Medical Education and for CME/CPD. This expansion of collaboration was facilitated by Dr Bahram Einollahi, Secretary of Supervision, Evaluation and Expansion of Medical Universities Council, Ministry of Health Education.

2. The visit

Following a short introduction by Dr Sharam Yazdani, Director of the Educational Development Centre (EDC), Dr Ramin Homayouni-Zand and Dr Fakhrosadat Hosseini, experts of the EDC, Shaheed Beheshti University of Medical Schools and Health
Services, the professional programme started off by WFME contributions to the Pre-Conference Workshops on 29 November. Each visitor organised a full day workshop:

- Planning an Accreditation System Compatible with a Mainly State-run Medical Education System by Dr Hans Karle
- Medical Education Policy Analysis by Dr Jørgen Nystrup
- Change Management in Medical Education by Mr Leif Christensen

Participation in the conference continued the following day, 30 November by attending the morning session, the official opening of the conference and the main lectures. The main lectures at the morning session on 1 December included our lectures:

- WFME Global Standards in Medical Education – Principles and Perspectives by Dr Hans Karle
- Use of Standards in Institutional Self-evaluation by Mr Leif Christensen
- Global Standards in Postgraduate Medical Education by Dr Jørgen Nystrup

Besides participation in the conference the visit included several meetings and visits to universities. A visit to Shaheed Beheshti University of Medical Sciences and Health Services in the afternoon on 30 November included a meeting with the Chancellor Dr Habibollah Peyrovi, Dr Abdolla Karimi, Deputy Minister for Education and University Affairs (MOHME), the Dean Dr Masoud Mardani and several faculty members followed by a campus tour with visits to departments and teaching and research facilities.

Furthermore, a meeting with the Chancellor Dr Habibollah Peyrovi, Dr Sharam Yazdani, Director of the EDC and a few other staff members took place on 3 December providing detailed information on the reform activities and special projects at the university.
A tour to Shiraz was included in the programme. Iranian participants were Dr Fatemeh Javidan (MOHME) and Dr Ramin Homayouni-Zand. A visit to the Shiraz University of Medical Sciences and Health Services took place in the morning on 2 December with a meeting with a large group consisting primarily of staff being involved in the pilot studies including Dr Mohammad-Rahim Kadivar, Dean of the Faculty of Medicine, and Dr Abdollah Bazargani, Deputy of the EDC.

Finally, the visitors met on 4 December with a group of representatives from Tehran Medical University including Vice-Chancellor for Education Dr M.A. Sedighi Gillani, Dr H.A. Soleimani, Dean of the Faculty of Medicine, and Dr Ali Akbar Zeinaloo, Director of the EDC.

Also the programme included several meetings with representatives from the Ministry of Health and Medical Education (MOHME) and from different sections of the ministry. On 3 December, a focus group discussion with high-ranking administrators from MOHME and managers also from the Management and Planning Organisation took place, covering the administrative, legislative and financial aspects of the reform plan for medical education.

On 4 December, a meeting was held in the Ministry of Health under the auspices of the Deputy Minister for Education and University Affairs Dr Abdollah Karimi and with a total of approx. 50 participants. After discussion of general aspects of the WFME Standards, the meeting continued with a session concerning postgraduate medical education, introduced by Dr Masood Naseri Pour, Secretary of Council for Graduate Medical Education, a session about CME/CPD, introduced by Dr Farhad Samii, Director of CME/CPD Office in MOHME, as well as a session on basic medical education and the WFME Pilot Studies, introduced by Dr Seyed Jalil Hosseini, Consultant, Deputy Minister for Education and University Affairs. The meeting included participation of staff of the Secretariat of Iranian Council for Graduate Medical Education, Office of CME and the Secretariat for Postgraduate Medicine, and the Secretariat for Supervision and Evaluation Council respectively.
Participation in the conference, visits and meetings offered unique possibilities for informal discussions and meetings, including discussions with the two WHO temporary advisors Professor Hossam Hamdy, Bahrain and Professor Ahmed Hassan Fahal, Sudan. Also we met with Professor Bashir Noormal, Human Resources Development and National Training Officer, WHO Afghanistan. The importance of continued international activities and exchange in the Region was discussed.

A separate meeting was organised on 30 November with Dr Seyed Jalil Hosseini and other board members of the Iranian Association of Medical Education and chaired by Dr Ali Haeri, Director of Research, Pasteur Institute of Iran. Among other issues, we were informed about the integration of the Ministry of Health and medical education affairs in the Ministry of Health and Medical Education (MOHME). This integration is now undergoing evaluation with the assistance of WHO/EMRO after consultation with WFME.

It should be mentioned that the programme provided opportunities for a visit to Persepolis, to the National Museum, the Islamic Museum and the Tapestry Museum as well as to some exhibitions of contemporary Iranian art. We are very grateful for these glimpses also of the magnificent history and culture of Iran. Our special thanks are due to Dr Ramin Homayouni-Zand, who organised and escorted us on these excursions.

3. Impressions of medical education in IR Iran
The visitors are aware of the limitations due to the comparatively brief visit to IR Iran. Especially, we want to underline that we did not visit smaller medical schools in the provinces and did not meet with faculty staff from these schools. Consequently, we are not in a position to assess possible differences in conditions and educational quality between medical education institutions in different regions, between the large and small towns, etc.

3.1 General Observations
If one is not familiar with medical education in IR Iran several features deserves to be mentioned. There are presently 44 medical schools in IR Iran of which only a few and
small schools are private. The existing medical programme has a duration of six years, followed by one year of internship. Upon graduation, the medical doctor is obliged to two years of service for the Government.

Medical education at all stages is state controlled, centralised and highly regulated. Compared to other centrally controlled systems, the rules and regulations seem to be very detailed with little leeway for optional courses, local inventions and experiments, etc.

Medical education in IR Iran is not under a ministry of education or research, but is since 1984 joined with the administration of the health system under the Ministry of Health and Medical Education (MOHME). It is a consequence of this integration that the regional health organisation since 1995 has been integrated in universities of medicine. Consequently, the chancellor of a medical university is also responsible for the health system in a region, internationally a unique model.

Medical education operates under the national 5-year cultural, social and economic development plans. The present plan for 2000-2005 emphasises quality improvement in health professions education and the application of accreditation as a tool to achieve this goal. A process of reform of medical education has been initiated and - as far as it can be judged under a short visit – with a very high degree of involvement at all levels. Another factor, which could be decisive for the success of the reform process, is the establishment in 1995 of an Educational Development Centre (EDC) at all medical schools, the advantage being that resources are designated to educational development and that educational expertise is available for the staff of faculties and departments.

An international orientation and knowledge about advancements in medical education is present at all levels both among staff in the Ministry of Health and among staff and students at the medical schools. This is also demonstrated by many visits to foreign universities and extensive participation in international meetings and conferences.
The teaching facilities, including libraries and IT, and the research laboratories that we visited were well equipped and of international standard.

3.2 The Conference

The First International Conference on Reform and Change Management in Medical Education, which was also the 6th National Conference on Medical Education, took place at Shaheed Beheshti University of Medical Sciences and Health Services, Tehran under the auspices of Ministry of Health and Medical Education, Iranian Association of Medical Education and the university. The conference had a large and impressive attendance from the country, of faculty staff and students, the authorities, administrators and experts of medical education and other stakeholders. Also representatives from countries in the region were present. Especially, it should be noted that the conference was attended by a group of medical doctors and other health professionals from Afghanistan, participating during the occasion of the conference in a special course at the university.

The main lectures, short contributions and poster presentations covered a wide range of internationally current topics in medical education such as:

- the relations between the health sector and medical education curriculum
- planning integrated medical education (integration between basic and clinical medicine)
- teaching communication and clinical skills
- use of information technology
- training in research methods
- teaching methods, self-directed learning and learning styles of students
- assessment methods
- optional programmes for specially qualified students
- strategic management and planning, administration and staff development
- programme evaluation and accreditation
The visitors were impressed by the thorough-going character of the discussions and preparations of the reforms. A high level of knowledge and a widespread involvement in the process was documented by the active participation in the pre-conference workshops as well as at meetings and during visits to the medical schools.

A Declaration of the First International Conference on Reform and Change Management in Medical Education was issued at the end of the conference. The Declaration is a succinct summary of the main conclusions of the conference. One conclusion in the Declaration is the necessity of defining national standards, and that the set of Standards proposed by WFME is an appropriate framework to establish national standards. The Declaration is fully in line with our perception of the results and we could endorse the Declaration.

3.3 The Reform Process

As mentioned, it is our impression of the reform process that it takes place with a high degree of involvement at all levels and is conducted in a very careful and competent way, encompassing evidence from current research in medical education. However, the strong commitment to change and improvement bordering to enthusiasm and optimism was maybe our most astonishing observation.

The quality of the work was also illustrated by the Curricular Reform in Undergraduate Medical Education at Shaheed Beheshti University of Medical Sciences and Health Services, initiated in 2002. Preparations have included comparative case-studies of the medical curriculum at approx. 300 medical schools world-wide, interviews with faculty, students, physicians in practise, managers etc. and matching results with the WFME Standards. This reform process has resulted in a proposal for a transitional curriculum, approved by the University Council.

A prominent example of the thoroughness of the work is the comprehensive investigation and analysis of the health problems confronting the general practitioner (GP), including the knowledge and skills necessary to handle the problems and corresponding educational requirements specified for individual disciplines and courses.
The study: Role Definition, Task Analysis and Clinical Educational Need Assessment of General Practicians in IR Iran, jointly sponsored by the University, MOHME and the Planning and Budgetary Organisation of IR Iran make use of a sophisticated methodology in the translation of health problems into curricular elements which could be an inspiration for other medical schools in other countries.

The proposed curriculum is characterized among other things by being student-centred, problem-based, integrated (within organ-systems) and community-based (with early patient contact). The proposal is in accordance with important international trends in improvement of medical education including most of the WFME Standards. It was indicated that the proposed curriculum most likely will be implemented at Shaheed Beheshti University of Medical Sciences and Health Services as a pilot project. It is our firm belief that implementation of the proposed curriculum and similar programmes at other medical schools will have profound impact on the quality of the outcome of medical education and will lead to improvement of health care delivery in IR Iran.

The reform plans are ambitious being conducted under circumstances with a number of barriers and the implementation will put heavy demands on the authorities responsible for medical education and on the medical schools both in terms of human resources and economic resources. It is our hope that the necessary resources will be made available. Furthermore, embarking on a reform process of such dimensions signals that it is not going to be a one-off reform to be repeated every 5 or 10 years but an ongoing, gradual and continuous development. If this is to be realistic, we regard that it is necessary to make new rules and regulations less specified and restrictive in order not to hamper constant updating and improvements of the curriculum, local innovations and experiments within a broader framework of common rules for the medical programmes.

Finally, the reform process for medical education and the integration of medical education and health services will undoubtedly result in a greater need for qualified leadership and management. In this light, we look forward to the results of the GTP-project. In GTP, the Gifted and Talented Program, approx. 100 selected students in addition to their normal work-load in medical education are studying and taught
subjects such as Health Policy and Planning, Health Economics and Finance, Medical Education, Research, Management and Sustainable Development. The programme also includes periods of managerial clerkship and managerial internship. The students are provided with the extensive readings on a CD-Rom, the Managerial Knowledge-base. If the programme is successful, it will demonstrate a fast and effective way to increase the supply of qualified managers for the medical schools and the health sector.

3.4 WFME-related Activities
The Iranian involvement in and support to the WFME Standard Programme is very strong. The WFME Global Standards for Basic Medical Education has been translated into Farsi, published and disseminated to the medical schools in Iran and other interested parties. Translations of the two other sets of WFME Standards for Postgraduate Medical Education and for Continuing Professional Development (CPD) of Medical Doctors are about to be finalised.

As mentioned above 4 medical schools are already participating in Pilot Studies of the Standards for Basic Medical Education. During the visit, it was decided upon to include one more medical school, Kashan University of Medical Sciences and Health Services.

At meetings the medical schools already participating in WFME Pilot Studies described in detail their activities in connection with carrying out the self-evaluations. All the medical schools have established a small steering group being in charge of the self-evaluation, appointing the members of other groups and committees and coordinating the activities. The leadership of the schools has taken responsibility for the project and are themselves chairmen and members of the steering groups, including the director of EDC. Normally, 8 working-groups have been formed to do the job within an area of the Standards. These groups can be fairly large as all relevant disciplines, etc. are represented. In most schools this structure has been supplemented by an advisory or technical committee including members of EDC and administrators. The organisational set-up and the achievements so far at the schools were very impressive.
Also, strong Iranian participation in the coming Pilot Studies of the WFME Standards for Postgraduate Medical Education and for CME/CPD has now been decided.

Especially, the Iranian efforts to implement the WFME Global Standards are emphasised by the work being done to adapt the WFME Standards to national conditions and needs. The work involving specifying and supplementing the WFME Standards is well under way. Half the national standards for basic medical education has been finalised.

The reform process is supposed to lead to an accreditation of Iranian medical education. After the visit it is our impression that there is a shared opinion that not WFME but a national regulatory body should be in charge of accreditation, whereas WFME upon request can assist in setting up an accreditation body and/or by providing guidelines for conducting accreditation.

We were informed about the provisional programme for a planned First Regional and Second National Evaluation and Accreditation Conference to take place at Tehran University of Medical Sciences and Health Services in April 2005.

4. Concluding remarks

4.1 On the Reform of Medical Education in IR Iran
The visitors from WFME noticed a strong involvement in the reform process at all levels, a powerful commitment to change and quality improvement of medical education, a pronounced leadership of the process and clearly the competence to bring about the necessary changes, including a high level of information about international trends in the reform of medical education. The strength or potential for a break-through in improvement of medical education in IR Iran was in our opinion clearly demonstrated.
At the actual stage of development it seems that the reform process in IR Iran could confront two major challenges, requiring special attention:

- To maintain the momentum and cohesion of the process of change is crucial for a favourable outcome. However, it is notoriously difficult to preserve the motivation for the work involved when the planning move from discussion and decision about mission and broad objectives, structure, main content etc. to the minute details of instructional objectives, course content, assessment methods etc. Besides securing the resources needed for the additional work involved in the planning of change, it will most likely be necessary to support the continuation of the process by intensifying the information and consultation activities and especially constantly to publish the achievements and progress of the reform process.

- It is probably safe to say, that all known cases of a major change in medical education at a time encountered significant resistance to the planned change, posing a serious barrier for the continuation and success of the process. Active or passive resistance has generally been displayed by the authorities, by medical schools, by departments, by administrative and academic staff, and by students. Very often resistance is based on fear of laws of control and insecurity about future position, role, workload and other requirements. We did not during our visit detect any sign of such resistance to the reform process. However, the process could be at the verge on some resistance, and in any case, precautions should be taken to avoid resistance to impede the reform process. Strong leadership of the process is important, especially to maintain responsibility and participation of the chancellors and deans in the process. Nevertheless, an equally important measure is a continuation and expansion of the apparently already intensive communication at all levels and between the levels in the system, from the Ministry of Health to staff and students at the universities, to secure a high level of information and involvement by all with the target of sharing ownership of the reform. In the last resort, the individual teacher and the individual student will determine the degree of success of the reform.
Consequently, efforts to involve teachers and student in the onward process should be strengthened.

- The diffusion of ideas, proposals and results from the universities taking the lead in the reform process to all medical schools in the country could prove to be a major concern. Admittedly, we are not in a position to assess precisely to what extent the reform process currently is truly nation-wide with an equal involvement of all medical schools. However, one will never expect all medical schools in a country to participate to the same degree in the first phases of an innovative process. Hence, it will probably be necessary for the success of the process to make special efforts to diminish the gap between the development at the most advanced universities and the less resourceful medical schools.

As far as we could ascertain, the reform process in IR Iran is presently approaching the transition from planning to implementation. Many medical schools across the world have after a long period of talking and writing stumbled crossing the threshold of action. Hopefully, this will not be the case in IR Iran due to the apparent determination to change and improvement of medical education.

Besides, once more stressing the need for sufficient human and economic resources and for less restrictive formal rules and regulations, the visitors from WFME would like to draw attention to the following two aspects of the implementation of a new curriculum:

- We are generally in favour of pilot-projects to test a proposed educational intervention on a smaller scale and to pave the way for a more embracing change. However, if implementation of the reform process is to start with a pilot-project we will emphasise the necessity of a parallel and practicable monitoring of the course of events especially of problems encountered and solutions selected.

- Furthermore, we will advice against a protracted period for the pilot-project, for monitoring, evaluation and adjustment of the plan. To test the full curriculum
before implementation at other medical schools would imply that the benefits of an improved medical programme for many years will affect only a minor part of the student-population and accordingly will have only a small and late impact on health care delivery in the country. As the overall plan for the new curriculum is known, one can envisage implementation at all medical schools just two years after implementation of the pilot-project. In two years the curriculum for one year of the programme can be tested and in the following year the results can be evaluated and the curriculum for the year in question can be adjusted before it is adopted and implemented by the other medical schools.

Finally, we support the endeavours to draw up national standards on the basis of the WFME Global Standards for Basic Medical Education and to establish a national system for accreditation of medical education.

4.2 On Future Cooperation between IR Iran and WFME

Several specific questions regarding the standards and their use in self-evaluations were raised at meetings during the visit. Such questions will be dealt with in direct correspondence with the individual medical school. WFME will welcome a closer cooperation in this area leading to an elaboration of the annotations to the WFME Standards.

In other areas WFME has noted an Iranian interest and competence which could be avenues for further cooperation. WFME would like the Iranian authorities and institutions to consider continued cooperation in such areas as

- Guidelines and support in connection with self-evaluations based on the WFME Standards for all stages of medical education.
- National adaptation of the Standards. The Iranian adaptation in the form of specifications and supplements based on national conditions and needs could serve as a demonstration project.
- Other aspects of use or implementation of the Standards. Examples of good practise would be organisational models for self-evaluation and implementation.
Setting up of a national accreditation system.

Besides the possible advantages for Iranian medical education it is obvious in the light of our experiences during the visit, that a further cooperation along these lines could provide useful results also for other countries or the region. The Iranian case could be a role model for other countries in improvement of medical education. WFME will support and enhance such a development.

Hans Karle          Jørgen Nystrup          Leif Christensen