



New Doctor of Pharmacy Curriculum of the I. R. Iran: Needs and Gaps

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Every educational program should be reviewed and revised periodically with an eye towards improvement. The former doctor of pharmacy curriculum of Iran, designed and approved in the early 1980s, has been in force for more than 25 years. From about 15 years ago, the idea that this curriculum is not in complete accordance with the needs of pharmacy graduates and expectations of the health system has come up. Since more than 90% of the pharmacy graduates (based on the official and non-official reports in Iran) are employed in community or hospital pharmacies, then pharmacy students need to be trained properly based on the basic and applied knowledge and skills required for their main role.

A community-oriented pharmacy program must not only educate pharmacists capable of presenting pharmaceutical care (i.e. being involved in treatment interventions and patient or health care team consultations), but also must train competent pharmacists to design problem-oriented pharmaceutical researches and manage pharmaceutical care systems. In this regard, the new pharmacy curriculum was designed by several expert action-groups covering all aspects of the pharmaceutical sciences.

From September 2006, the new curriculum with major changes in the final year of the program has been in place. In this program, students have to attend teaching community pharmacies and hospital wards or pharmaceutical companies for at least their final two semesters in order to achieve a higher level of applied professional skills. Though, introducing the new curriculum was one step forward and the changes made were necessary, however they certainly are not enough.

Designing an appropriate educational curriculum is only part of a successful pharmacy program. The rest are closely related to the way this curriculum is implemented. Problem-oriented, student-centered and community-based methods of teaching; access to appropriate teaching hospitals, community pharmacies and industrial fields simulating the real world rather than a classroom or laboratory setting; along with the efforts which should be made to change opinions and feeling of the students towards their role in the patient care and rationale drug use are major educational strategies that should be targeted by executive bodies and pharmacy schools. Gaps in students' communication skills, analytical thinking and critical review of published articles (evidence based medicine) should be acknowledged. Appropriate actions should be taken to overcome these pitfalls.

It should also be taken into account that additional influencing factors like political, regulatory, cultural and economical parameters need to be tackled and developed autonomously. A leading role for pharmacists with high quality training and experience in rational drug use should be acknowledged. They should be considered as a "co-therapist" or "drug consultant", collaborating with other members of the patient care team. Health authorities and policy makers should support these roles by providing appropriate authoritative, administrative and technical resources. This certainly includes considerable additional investment, in terms of funds and human resources and the establishment of new employment positions in the primary and secondary care settings.

The current pharmacy curriculum should also be re-evaluated and revised in the next few years. Iranian pharmacy schools, which are the main parties putting the new curriculum into practice, should be encouraged to perform internal evaluation of the curriculum and to report the possible failures to the Ministry of Health and Medical Education of Iran. It is hoped that the next revision of the Iranian

doctor of pharmacy curriculum will be more applicable and feasible.

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