History of Contemporary Medicine in Iran

Impact of Quality Mentorship on Achievements of Shiraz Medical School in the 1970s and the Role of Professor Faramarz Ismail-Beigi

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Abstract
Almost four decades ago, an eminent physician, outstanding mentor and scholar, Professor Faramarz Ismail-Beigi (b. 1941) was appointed Chair of the Department of Internal Medicine at Shiraz Medical School. Soon, this proved to be the beginning of a golden era in medical education at that center. Professor Ismail-Beigi invited outstanding teachers and physicians to collaborate with him. Their efforts during the next decade laid a strong and unique foundation for medical education based on quality mentorship and role-modeling.

In this paper, we briefly highlight the importance of mentorship in medicine and medical education, followed by a glance at the academic life and career of Professor Ismail-Beigi and his role as a prominent mentor at the Shiraz School of Medicine.

Keywords: Iran, mentorship, school of medicine


Introduction
Over the past four decades, we have witnessed substantial changes in medicine and medical education. This has occurred because of technological and scientific advancements, availability of abundant information in different disciplines of medicine, mechanisms of learning, and the way these changes are viewed. Despite these, the central role of quality mentors and teachers has remained the same in training highly qualified graduates.

In Greek mythology, Mentor was the name of a friend of Odysseus. When Odysseus was leaving for the Trojan War, he assigned Mentor and his foster-brother Eumaeus to be in charge of his son, Telemachus. Mentor served Telemachus as a loyal, trustworthy, counselor or guide to a younger person, i.e., the ‘mentee’.¹ The term ‘mentor’ has been used to delineate who is willing and capable of encouraging and providing practical plans for personal dilemmas of the mentee.

Training qualified, skilled, humane physicians who are life-long self-learners is the ultimate goal of any medical school. To do this, quality mentorship is a pivotal requirement. However, it seems that as much as it is needed, it is a shortcoming of many medical schools worldwide, including Iran. This is due to the fact that a mentor is not just a skilled physician, but a multi-faceted person who is willing and capable of encouraging and providing practical plans for personal dilemmas of the mentee.

In this paper, we briefly highlight the importance of mentorship in medicine and medical education, followed by a glance at the academic life and career of Professor Ismail-Beigi and his role as a prominent mentor at the Shiraz School of Medicine.

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Quality mentors of medicine are role models in their daily practice. They not only teach mentees up-to-date scientific concepts and fundamental professional skills, but also the art of medicine and medical ethics codes. Therefore, there are considerable differences between a medical teacher who merely is capable of transferring scientific data to students and a mentor who teaches mentees medical knowledge, professional skills, and medical ethics.
The mentor is viewed by mentees as “an influential senior sponsor or supporter”.3

The importance of quality mentorship in medicine has recently gained more attention. For instance, according to Nakantako and colleagues the fundamental component of medical education is high quality mentoring which plays a major role in career accomplishment of mentees.4 In addition, mentorship has a profound impact on professional development of mentees as well as their future career selection.5 A positive correlation has been found between mentoring, research skills, and efficiency of mentees.6 Quality mentorship in medicine affects various aspects of medical students’ training. According to Tobin: “The physician-researcher as mentor has at least seven roles to fulfill: teacher, sponsor, advisor, agent, role model, coach, and confidante.”7 Superior teachers always consider teaching and learning as a two-way communication process and know the circumstances which affect learning.8 The mentorship process is successful when it is dynamic, in which the so-called ‘supermentor’, a team of mentors or multiple mentors continuously support mentees.9

**Shiraz Medical School and the role of Professor Ismail-Beigi as a role model and mentor**

The establishment of Shiraz School of Medicine

The roots of Shiraz School of Medicine in southern Iran date to 1946 when the Medical Auxiliary Training School (Amouzeshgah-e Alee Behdari-e Shiraz) was founded. A graduate of the American University of Beirut, Dr. Zabih Ghorban (1903–2006) was appointed Associate Professor of Medicine and Dean of the newly found school. At that time, Saadi Hospital (later Shaheed Faghihi Hospital) in Shiraz was the only clinical training center for medical students. It had five clinical wards, which included an Internal Medicine Department with 32 beds, headed by Dr. Abol-Hassan Dehghan, who also was a graduate of the American University of Beirut and specialized in tropical diseases in London, UK. Dr. Dehghan served as Associate Professor of Medicine at Shiraz Medical Auxiliary Training School in 1946.10

The Shiraz School of Medicine was officially founded 6 years later in 1952.11 It was a medical school with special features. According to Professor Khsrow Naser, the former Dean of Shiraz School of Medicine, there were six major pillars that shaped the School of Medicine in Shiraz. They included: selection of English as its institutional language, establishment of a modern and well-equipped hospital (Nemazee Hospital), bylaws, full-time faculty members, the attractiveness of Shiraz and bright students willing to accept change.12

The school flourished in the 1970s when Professor Faramarz Ismail-Beigi and his colleagues joined the Department of Internal Medicine.

Faramarz Ismail-Beigi was born in Tehran on December 28, 1941 in a highly-educated family. His father, Dr. Zia-o-din Ismail-Beigi Shirazi was a Professor of Physics. Faramarz graduated from Hadaf High School in Tehran, Iran and continued his education at Berea College in Kentucky, USA where he received his Bachelor of Art degree in 1962. He enrolled at Johns Hopkins School of Medicine and graduated in 1966. Dr. Ismail-Beigi continued his residency in internal medicine and did a post-doctoral fellowship in biophysics and internal medicine at the University of California at Berkeley where he received his PhD and board of Internal Medicine in 1972. He returned to Iran in the same and was appointed as the Chief of Medicine at the former Pahlavi University in Shiraz. Under his leadership, substantial propagation of modern academic medicine occurred in Shiraz. Besides being the Chief of Medicine, he served at other positions which greatly enhanced the development of medical education in Shiraz. His other academic appointments included:

- Director of the Bio-Medical Research Unit and Institute of Nuclear Medicine, 1972 – 1981.
- Member of the former Pahlavi University Research Council, 1972 – 1976.
- Member of the Central Committee of Iranian Board of Internal Medicine, 1973 – 1978.
- Member of the Central Committee for Medical Education at the Iranian Ministry of Science and Higher Education, 1973 – 1975.
- Member of the Central Research Committee at the Iranian Ministry of Science and Higher Education, 1975 – 1978.

![A view of Shiraz School of Medicine in the 1970s.](https://www.SID.ir)

**Professor Ismail-Beigi as a mentor**

Dr. Ismail-Beigi was not only a successful physician and it was not only his positions which helped medical education in Shiraz to develop, but his unique personal characteristics as a role-model and his endless enthusiasm in teaching and developing others made him an outstanding figure. His colleagues viewed him as a dedicated physician, a generous mentor, consummate clinician, and a trusted friend of mentees. Professor Asghar Rastegar, a friend and colleague of Professor Ismail-Beigi who himself served as Professor of Internal Medicine at Shiraz Medical School during the same period states: “Two individuals, Khsrow Naser and Faramarz Ismail-Beigi, however, stand out among all for their unique role in making the Department of Medicine in Shiraz into the finest clinical department in Iran and probably the Middle East. Khsrow Naser stands out for his creativity, vision, sense of optimism, and his ability to bring disparate groups together to achieve goals critical to the institution. Faramarz Ismail-Beigi stands out for his commitment to excellence, his confidence in the ability of Shiraz students and residents, and his uncompromising stand for highest level of professionalism. He embodied the essence of an academic physician, an outstanding teacher, true scholar as well as a dedicated clinician. For a young faculty such as me he had created an organizational structure to maximize our contributions. This was
and is rare in Iran where the commitment to one’s own success often supersedes the commitment to the success of others as well as the institution one serves. During the past 40 years, I have had the privilege of working with many outstanding leaders in academic medicine in the US. I still consider Khosrow Nasr and Faramarz Ismail-Beigi as among the top individuals I have worked with in my professional life.”

Dr. Ismail-Beigi together with Dr. Rastegar created the best medical center in the country and one of the best in the region. Dr. Ismail-Beigi was passionate about his work as a teacher and as a physician he cared about his patients. He was also instrumental in helping me in my career. I remember after graduating from medical school, after the summer break, I was trying to decide on a further specialization. At that time, the Department of Internal Medicine was considered to be the most difficult to get into and Dr. Ismail Beigi was seen as a “hard task master”. I made an appointment and with much trepidation went to see him. I have always remembered that interview; he made me understand that I could become whatever I put my passion into.

He was tremendously supportive and always encouraged me even when I had difficulty coping after the death of my father. I still have the letter of appreciation he wrote to me acknowledging my efforts in teaching the undergraduates. It was always exciting and stimulating working in that department. They put so much effort, despite all the shortcomings, to train excellent doctors.”

Dr. A. M. Rostami, a former resident of internal medicine at Shiraz Medical School and current Professor and Chair of the Department of Neurology at Thomas Jefferson University quotes him as follows: “Dr. Ismail-Beigi’s teaching style was legendary. Even in areas outside the focus of his clinical or research training, he was able to give an in-depth view of the subject and invited the audience to read about it in the references that he provided. Sometimes we would ask him a question that we thought he would have difficulty answering! After about a 30-second pause, during which we were sure that we had got him, he would give the most sophisticated answer in a logical and coherent manner and would put us to shame! Based on their own experiences at Hopkins and Pennsylvania, Dr. Ismail-Beigi and Dr. Rastegar started a new medicine residency program at Shiraz. According to their plan, they asked the top Shiraz Medical School graduates who wanted to do a residency in medicine or related areas abroad to stay on as residents in the new program. After 2–3 years, they could receive further training in medicine and their subspecialty of choice in top medical schools in the United States and Europe. It was stipulated that the students would return to Shiraz and contribute to the depth and breadth of the department of medicine and its subspecialties. At this juncture, Dr. Ismail-Beigi must be proud of his great academic achievements, service to his patients and education of several generations of medical students, residents as well as clinical and research trainees, in Iran and abroad. We, his former trainees, salute him for his teaching, mentorship, leadership skills and his dedication that revolutionized the teaching and practice of medicine at Shiraz University School of Medicine and by extension to the entire Fatherland.”

Being described as such and alike by colleagues, administrators, and students means a lot. Not every professional can achieve this. During his years of activity at Shiraz Medical School, in addition to being a reliable mentor, dedicated teacher, and caring physician, he managed to hire outstanding interns at his department, all of whom shared a common character: dedication to excellence in whatever they did. This was the essence of the foundation that Dr. Ismail-Beigi and his colleagues built successfully which trained many outstanding and influential teacher-physicians in successive generations, at a time when none of the founders were there to supervise.

**Publications and scientific interests**

In addition to the instrumental educational activities, between 1970 and 2011, Professor Ismail-Beigi has been rather active in basic and clinical research. This has led to the publication of 62
clinical papers and 111 articles in basic science in peer-reviewed journals. His main interest is ‘diabetes mellitus’. (See his review article on “Pathogenesis and glycemic management of type 2 diabetes mellitus: a physiological approach” in this issue of the Journal, pp: 239 – 246). Professor Ismail-Beigi is currently a full-time professor of medicine at Case Western Reserve University in Cleveland, Ohio, USA where he serves as the Chief of the Department of Clinical and Molecular Endocrinology.

**Figure 3.** Nemazee Hospital, Shiraz, 1974. Professor Ismail-Beigi, Professor Borhanmanesh and former residents of internal medicine. Standing from left to right: Dr. Moslemi, Dr. Rajaee, Dr. Sodifi, Dr. Fakhraa, Dr. Moghtader, Professor Ismail-Beigi, Dr. Gabriel, Professor Borhanmanesh, Dr. Hoshmand, Dr. Keshmiri. Sitting: Dr. Mehraban, Dr. Rezvani, Dr. Rafat, Dr. Badri. (Courtesy of Dr. Rahim Keshmiri, Internist, Shiraz)

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**References**
