## Glimpses of the Contemporary Pharmacy in Iran: "Dar al-Fonun School; the Cradle of Modern Pharmacy in Iran"

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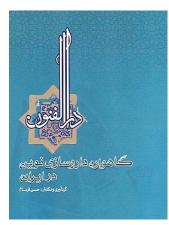


Figure 1. Front cover of the book "Dar al-Fonun School; the Cradle of Modern Pharmacy in Iran".



Figure 2. Professor Hassan Farsam.

N ewly, a well-written Persian book with sufficient documentation entitled: "Dar al-Fonun School, the Cradle of Modern Pharmacy in Iran" is published by Tehran Uni-

versity of Medical Sciences in 264 pages. This book contains a concise history of the advent and development of modern pharmacy in Iran. The book reveals that from the mid-19th century onwards and after the establishment of Dar al-Fonun School (Polytechnique School) in 1851 as the first modern educational center in Iran, the profession of pharmacy has progressed in parallel with the advancement of modern medicine.

The author, Professor Hassan Farsam (born in1932, Tehran), is a pharmacist and medicinal chemist. Professor Farsam is also a pioneering Professor of the Faculty of Pharmacy at Tehran University of Medical Sciences and the permanent member of the Iranian Academy of Medical Sciences. He is a prolific writer who has been one of the advisors of the "WHO Monographs on Selected Medicinal Plants" between 1999 and 2007 and published 122 articles in local and reputable international journals.<sup>1</sup> He is the Head of the Iranian National Museum of Medical Sciences History. His current work chronologically narrates a history of pharmacy and therapeutics in Iran and mainly deals with the development of modern pharmacy during the recent decades. The author highlights that the profession of pharmacy in Iran developed over the centuries, however modern pharmacy started in the mid-19<sup>th</sup> century.

The book consists of nine parts. The first part covers several topics including the history of pharmacy in Iran, medicine and pharmacy profession before the establishment of the Dar al-Fonun School, traditional physicians and their therapeutic methods, introduction of the European medicine and pharmacy in Iran during the Qajar era (1785 – 1925), as well as the arrival of foreign physicians in Iran. According to the author, Dr. Focckette from Italy was the first professor of pharmacy in Dar al-Fonun.<sup>2</sup>

According to author, the history of pharmacy in Iran goes back to antiquity. Professor Farsam pointed out that Edward Browne, the English physician and orientalist, addressed in his studies, the role of ancient Iranians in the development of pharmacy. From ancient times, Iranians were familiar with various medicinal plants. In the Avesta, the Zoroastrian sacred text, several medicinal herbs are mentioned.<sup>3</sup> The Gondishapur School that was also a prominent medical center, was founded in third century CE during the Sassanid era (224 - 651 CE). In Gondishapur medical center, physicians had a wide knowledge of medicinal plants. Persian medieval physicians and pharmacists also contributed to a better understanding of herbal medicine. According to the author, the first book of the compound drugs (Qarabadeen) was written in the 9th century CE by an Iranian Christian pharmacist, Shapur Sahl (died in 869 CE). In the 10th century CE, "Abu Mansur Muvaffaq Hervai", another Iranian physician, wrote the oldest Persian Materia Medica and named it the Book of the Remedies (Kitab al-abnyia an Hagaig al-adwiva) and described 600 plant species including herbal remedies. His work was regarded as a reference text throughout the next few centuries.<sup>2</sup> Zakariya Razi (854 CE - 925 CE), known as Rhazes in the West, was a distinguished experimental physician who described near 800 medications in his famous work, al-Havi (Continens Liber), volume 21.4

Various plants including medicinal herbs are abundant in Iran. According to Professor Farsam, from the beginning of the 17<sup>th</sup> century; over 30 botanists, pharmacists and pharmacologists came to Iran and investigated medicinal herbs. The most important collection was the *"Flora Iranica"* series edited by Austrian Botanist, Professor Karl Heinz Rechinger (1906 – 1998), who traveled to Iran twice (in 1937 and 1949).<sup>5,6</sup> As W. Frey mentioned *"Flora Iranica"* is a great work in which ten thousand plant species from

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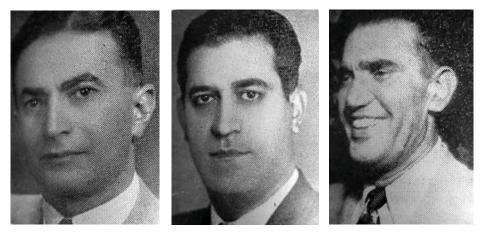


Figure 3. From left to right: Dr. Fatholla Aalam, Dr. Hooshang Nezami and Dr. Mehdi Namdar.

Papilionaceae V., Astragalus III.



FLORA DES IRANISCHEN HOCHLANDES UND DER UMRAHMENDEN GEBIRGE PERSIEN, AFGHANISTAN, TEILE VON WEST-PAKISTAN NORD-IRAQ, AZERAIDIAN, TURKMENISTAN

Univ.-Prof. Dr. KARL HEINZ RECHINGER † Ester Direktør des Naturhistorischen Museums in Wien (ems Lig: 177 besaugegeben von WILHELMINA RECHINGER



Figure 4. Flora Iranica, Volume: 177, Karl Heinz Rechinger (editor), Sh. Zarre, A. A. Maassoumi and D. Podlech (authors). May 2008.



Figure 5. A recent view of the Dar al-Fonun School, founded in 1851. (Photo by: Mr. Jamshid Rabeei).<sup>6</sup>

Iran are described (Figure 4).7

The second part of this book is devoted to the poor status of public health and unscientific medical practice during the Qajar period. In this part, prevalent fatal diseases of that time such as malaria, cholera, tuberculosis, typhus and other infectious diseases are mentioned and pointed out that there was no record of mortality data in Iran until 1922.<sup>2</sup> In the third part, the author discusses the practice of traditional healers in Iran, before the introduction and propagation of the modern medicine which was mainly based on the Galenic tradition.<sup>2</sup> The foundation of the Dar al- Fonun School (Figure 5) by Amir Kabir, Prime Minster of Nasser ad-din Shah Qajar with a major social and scientific impact in Iran are discussed in the fourth, fifth and sixth parts.<sup>2</sup>

The medical department of the Dar al-Fonun that was the forerunner of the School of Medicine (Madreseh-ye Teb), became independent in 1918. In part seven, a brief history of the foundation of the School of Medicine and the establishment of School of Pharmacy are described. It is mentioned that the School of Pharmacy in Tehran was established in 1922, when the modern pharmaceutical teaching was officially established. Part seven contains the agenda of the medical, pharmacy and dentistry schools in Tehran, as well as the short biographies of pioneering pharmacists including Dr. Fatholla Aalam; a French-trained pharmacist who returned to Iran in 1929 and joined the School of Pharmacy in Tehran. Other pioneer teachers of the Tehran School of Pharmacy were Dr. Mehdi Sadegh-Moghadam and Dr. Hooshang Nezami and Dr. Mehdi Namdar.<sup>2</sup>

In the 8<sup>th</sup> and 9<sup>th</sup> parts, the history of the establishment of the European style public pharmacies, which gradually began to appear in Tehran and other major cities, is described. According to these parts, in 1929 there were 148 drugstores in Tehran.<sup>2</sup> One of which was known as *Nezami Pharmacy* founded between 1854 and 1860 (Figure 5).<sup>8</sup>

A valuable collection of pictures (Figure 7) and documents are included in this book. The book uses several Persian and English resources, as its reference.<sup>2</sup>



**Figure 6.** Nezami pharmacy in Tehran was the oldest modern pharmacy in Iran founded initially between 1854 and 1860 and 30 years later Dr. Abdolhossein Khan Nezami and then his son, Dr. Hooshang Nezami, the Professor of Pharmacology of Tehran University supervised it.<sup>7</sup>

In summary, up to my knowledge, "*Dar al-Fonun School, the Cradle of Modern Pharmacy in Iran*" is the first Persian book written by an expert on the history of contemporary pharmacy in Iran. This book can be recommended to readers, particularly to the Iranian pharmacists and pharmacy students. If the book is translated into English, it may also attract the attention of foreign medical historians who are interested in the history of modern medicine and pharmacy in Iran.

## Acknowledgment

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Figure 7. A pharmacy certificate issued by the Ministry of Education (Vezarat-e-Maaref) in 1926.<sup>2</sup>



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