



# FACULTIES OF THE UNIVERSITY OF TEHRAN V. FACULTY OF MEDICINE

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## FACULTIES OF THE UNIVERSITY OF TEHRAN

### v. Faculty of Medicine

The Faculty of Medicine (Dāneškada-ye pezeškī), the pioneering academic institution of modern medicine in Persia, formed one of the six main faculties of the new University of Tehran in 1313 Š./1934 (Figure 1). The Faculty of Medicine was the successor to the Dār al-fonūn (q.v.) Department of Medicine, established in 1851, which had become the School of Medicine (Madrasa-ye ṭebb) in 1919.

### THE DĀR AL-FONŪN DEPARTMENT OF MEDICINE

According to official statements by the University (see, e.g., *Rāhnemā-ye Dānešgāh-e Tehrān*, Tehran, 1318 Š./1939, pt. 2, p. 2), the origins of the Faculty of Medicine can be traced back to the inauguration on 5 Rabī' I 1268/28 December 1851 of the Department of Medicine at the Dār al-fonūn. Before this date, the teaching of modern (Western) medicine was limited to free-lance medical tuition by European physicians in Tehran, in particular, by Louis-André-Ernest Cloquet 1818-55), the French chief physician to Moḥammad Shah



and later (from 1848) to his successor Nāṣer-al-Dīn Shah, who ordered Cloquet to tutor “a few” private students in surgery shortly before the opening of Dār al-fonūn in 1268/1851 (*Rūz-nāma-ye waqāye‘-e ettefāqīyya* [hereafter *Waqāye‘*] 52, 7 Rabī‘ II 1268/January 1852, p. 1). Cloquet can therefore be considered the pioneer of modern medical instruction in Persia.

Among the European teachers whom Mīrzā Jān-Dāwūd (=Jean David) Khan (an Armenian member of the Persian Ministry of Foreign Affairs; then translator/interpreter at the Persian Legation in St. Petersburg) recruited in 1267/1851 in Vienna for Dār al-fonūn by order of the grand vizier Amīr(-e) Kabīr (q.v.) were Jacob Eduard Polak (1820-91), an Austrian Jew born in Bohemia (*Encyclopedia Judaica* 13, col. 708), as teacher of medicine and surgery, and the Italian chemist Focchetti for teaching “physics and pharmacy” (*Waqāye‘* 42, 26 Moḥarram 1268/20 November 1851, p. 2; 43,3 Ṣafar 1268/26 November 1851, p. 1; Ādamīyat, I, pp. 356-60). Polak himself, however, refers to his employment by the Persian government only for pharmacy, and does not mention Focchetti at all (I, p. 298; tr., p. 206). In 1856 the shah appointed Polak as court physician and, at the same time, supervisor of Dār al-fonūn’s department of medicine and pharmacy—a double responsibility that was later assumed by other European physicians of the Qajar court.

Polak’s students, fourteen at first, increased to twenty when Cloquet’s private students joined Dar al-fonūn. He used to teach in French through an interpreter, Moḥammad-Ḥosayn Khan Qajar, but noticing after some time that the interpreter’s ineptitude had distorted his teachings, he endeavored to learn Persian himself. His rapid progress, combined with the acquaintance of some of his students with Persian medicine (see below), enabled him not only to make himself understood in Persian, but also to produce a number of treatises in Persian, using Persian or Arabic equivalents of French medical terms accurately. These works, the preparation of which became part of Polak’s main concerns, were Dār al-fonūn’s first medical textbooks. For his advanced students’ practical training, Polak took three measures: first he established a kind of outpatient’s clinic at Dār al-fonūn, where the students examined the patients under his supervision, and wrote out prescriptions, which then were dispensed by Focchetti; secondly, he arranged for the graduates to go for clinical practice to a military hospital which the government, on his proposal and through his tenacious effort, had founded outside the city walls; thirdly, he arranged for some of his most promising students to accompany him as his assistants when performing unusual



operations, and sometimes even entrusted the task to them (*Waqāye'* 67, 23 Rajab 1268/13 May 1852, p. 1; 98, 5 Rabī' I 1269/16 December 1852, p. 3; 99, 12 Rabī' I 1269/23 December 1852, p. 2; 102, 3 Rabī' II 1269/13 January 1853, p. 2; 140, 2 Moḥarram 1270/5 October 1853, p. 2; 271, 4 Ša'bān 1272/ 10 April 1856, p. 4; *Rūz-nāma-ye dawlat-e 'alīya-ye Īrān* [hereafter *RDI*] 502, 19 Rabī' II 1278/24 October 1861, p. 3. Polak, I, pp. 300-310; tr., pp. 209-13; for list of Polak's treatise, see Najmābādī, p. 206).

The age-old, traditional, Persian medicine was not utterly disregarded at Dār al-fonūn; almost concurrently with the employment of Polak, a Persian instructor was also assigned to teach it. Notable among the earlier teachers of traditional medicine were the *ḥakīms* Mīrzā Aḥmad Kāšānī and Mīrzā Abu'l-Qāsem Nā'inī entitled "Solṭān-al-Ḥokamā'" (E'temād-al-Salṭana, II, p. 1085). On the other hand, a number of students in Dār al-fonūn's earlier medical classes, particularly Cloquet's students, were already acquainted with traditional medicine; one of them even taught there the *Šarḥ-e Nafīsī* (i.e., the commentary of Borhān-al-Dīn Nafīs b. 'Eważ Kermānī on Ebn al-Nafīs's *Mūjaz al-Qānūn*) and the *Qānūnča* of Moḥammad Čaġmīnī (q.v.; *Waqāye'* 102, 5 Rabī' II 1269/14 January 1853, p. 2).

Being obliged to accompany the shah on his numerous tours of the country as his private physician, Polak proposed the appointment of the Dutch doctor Johann Louis Schlimmer as his *nā'eb* (locum tenens) at Dār al-fonūn (1 Rajab 1272/ 8 March 1856). Schlimmer (d. 1297/1880) had been in Persia from 1266/1850 and had been employed by the Persian government in Gīlān a year later (*Waqāye'* 21,26 Ša'bān 1267/26 June 1851, p. 3; Najmābādī, pp. 212-15). After Du'l-qa'da 1272/July 1856, Schlimmer's position became permanent and he is mentioned henceforth as a lecturer in medicine at Dār al-fonūn (*Waqāye'* 287, 26 Du'l-qa'da 1272/29 July 1856, p. 3; 395, 16 Moḥarram 1275/25 August 1858, p. 6).

Polak also managed to convince the authorities to send the best medical graduates of Dār al-fonūn to France for further study and training. In Rajab 1272/March 1856, four of his outstanding students succeeded in completing the courses of study. On Polak's proposal three of them, Mīrzā Moḥammad-Ḥosayn Afšār, Mīrzā 'Alī-Naqī Hamadānī, and Mīrzā Rezā, were sent to Paris. After nearly five years of study there, they obtained their doctoral degrees in 1277-78/1860-61. Mīrzā Moḥammad, after his return in 1861, replaced Schlimmer at Dār al-fonūn and the latter started to practice medicine in Tehran as an independent physician. In 1283/1866 Mīrzā Rezā (now Mīrzā



Rezā Doktor) became the replacement for Mīrzā Ḥosayn at Dār al-fonūn (*RDI* 482, 12 Rajab 1277/23 January 1861, pp. 5-6; 502, 19 Rabī' II 1278/24 October 1861, p. 4; 535, 17 Rajab 1279/8 January 1863, p. 8; 600, 7 Du'l-qa'da 1283/14 March 1867, p. 3).

Schlimmer also wrote some important textbooks for Dār al-fonūn's medical students. His works were translated into Persian and lithographed at the Dār al-fonūn press. Of a far-reaching, lasting value is his pioneering *Terminologie médico-pharmaceutique et anthropologique française-persane* (Tehran, 1874; for a list of Schlimmer's works, see Najmābādī, pp. 215-19). Given the disastrous state of the educational system as well as the lack of any attention to sanitary conditions in Persia at that time, Schlimmer believed that medical instruction should be aimed at training practical medical men.

After Polak, Joseph-Désiré Tholozan (1820-97), a retired French army medical officer who had been an associate professor at Val-de-Grâce military hospital in Paris, was recruited in 1864 as chief physician to Nāṣer-al-Dīn Shah (Elgood, p. 511). Because of other engagements including his almost constant attendance on the shah (see below), he could not devote himself entirely to teaching at Dār al-fonūn, although he did visit the school's medical department on the shah's orders and supervised the examinations (*Dāyerat al-ma'āref-e fārsī* II/1, p. 1636). The teaching of Western medicine was carried out mainly by Dār al-fonūn graduates who had then studied in France. However many of the well-known Persian physicians of the period were trained mainly under Tholozan. They include Mīrzā 'Alī-Akbar Khan Nafīsī Nāẓem-al-Aṭebbā', Mīrzā Zayn-al-Ābedīn Kāšānī Mo'tamen-al-Aṭebbā', Mīrzā Kalīl Khan Ṭaqafī A'lam-al-Dawla (see ṬAQAFĪ, KALĪL KHAN), Mīrzā Zayn-al-Ābedīn Khan Adham Loqmān-al-Mamālek.

The first years of Tholozan's tenure in Persia coincided with severe outbreaks of cholera in the country (see CHOLERA i) aggravated by a series of famines. Persian public health authorities were slow to respond to the seriousness of the epidemic. Tholozan, as the doyen of the medical corps, was moved to lead the reform of the public health service (Elgood, pp. 514 ff.). An inefficient Mašwarat-kāna-ye ṭebbī (Sanitary Council), composed of Dār al-fonūn physicians, and intended to deliberate on the country's sanitary problems, already existed in Jomāda II 1277/ December 1860 (*RDI* 481, 21 Jomādā II 1277/4 January 1861, p. 6; 482, 12 Rajab 1277/23 January 1861, p. 6). Probably on Tholozan's own suggestion, the shah ordered him to constitute a Majma'e ḥeḏẓ al-ṣeḥḥa (Public Health Board) and to preside over it. The first meeting of



the Majma' was held on 9 Du'l-qa'da 1284/4 March 1868 with the membership of the first three European-educated Dār al-fonūn students (see above) nominated by Tholozan. European physicians attached to foreign legations were also to be invited to attend the Majma's meetings for consultation. The first decision of the Majma' was to order the translation into Persian of two urgent sets of regulations prepared by Tholozan for the prevention and treatment of cholera (Tholozan's preliminary report on cholera in Persia is printed in *Rūz-nāma-ye mellat-e saniya-ye Īrān* 21, 9 Jomādā I 1285/28 August 1868, p. 2-5; his sanitary instructions, are in *ibid.*, 22, 13 Rajab 1285/29 October 1868, pp. 1-7, and 25, 7 Du'l-qa'da 1285/19 February 1869, pp. 1-3).

In 1279/1863, 'Alīqolī Mīrzā E'tezād-al-Salṭana (q.v.) minister of sciences and the then director of Dār al-fonūn, made the securing of a *taṣdīq* (certificate of proficiency) in European medicine from Tholozan and another one in traditional medicine from the *hakīm-bāšī* (chief physician) Mīrzā Aḥmad Kāšānī a prerequisite condition for the public practice of medicine in Persia by its students (*RDI* 541, 27 Šawwāl 1279/16 April 1863, p. 3). This decision was the first official measure to control the practice of medicine in the country. Further, because some army physicians and surgeons had proved unqualified, in 1285/1869, the shah commissioned E'tezād-al-Salṭana to inquire into the competence of all medical officers, to dismiss the quacks, and to arrange for the competent ones to attend the classes of Mīrzā Reżā Doktor and Mīrzā Sayyed Rażī, the army *hakīm-bāšī* at Dār al-fonūn (*RDI* 629, 4 Du'l-ḥejja 1285/18 March 1869, p. 3).

Other events affecting the development of Dār al-fonūn's medical department were as follows: The group of forty-two students, at least half of them from Dār al-fonūn, sent to France in 1275/1858 (Maḥbūbī, *Mo'assassāt* I, p. 321) included some medical students who, after their return, were assigned administrative and tuition offices that were previously held by Europeans. Further, after 1293/1876, the clinical training of the school's medical students was performed in a European-style hospital built on the order of the shah when he returned from his European tour in 1290/1873. The hospital, opened in 1286/1869, was named Marīz-kāna-ye dawlatī (government hospital; it formed the nucleus of the later, still existing, Bīmārestān-e Ebn-e Sīnā). Until 1298/1881, it was directed by a 1289/1872 Dār al-fonūn graduate, Mīrzā 'Alī-Akbar Khan Nafīsī Nāzem-al-Aṭebbā'.

The recruitment in Du'l-Ḥejja 1299/October 1882 by 'Alīqolī Khan Mokḥber-al-Dawla (d. 1315/ 1897-98) and his son Mortaẓāqolī Khan Ṣanī'-al-Dawla (d.



1329/1911) of a reputable practitioner from Berlin, Isidor Albu (Albo in Elgood), as lecturer in medicine, boosted the teaching of European medicine which was hitherto taught at Dār al-fonūn only by Mīrzā ‘Alī Ra’īs-al-Aṭebbā’. Albu was also put in charge of the older hospital, originally for troops, which now served civilians (Elgood, pp. 502, 512; Najmābādī, p. 219).

Despite his multifarious duties, the indefatigable Tholozan still found time to write some treatises on medical subjects (including one on the properties of quinine); and the Persian translations of them were used as standard textbooks at Dār al-fonūn (see the list of these translations in Najmābādī, p. 208). Some of Polak’s and Tholozan’s former students also wrote textbooks for their colleagues and Dār al-fonūn students. For instance, Mīrzā ‘Alī Ra’īs-al-Aṭebbā’ composed six treatises (Najmābādī, p. 223) and Dr. Mīrzā Moḥammad Kermānšāhī (nicknamed Kofrī, lit., “Blasphemer,” because of his severe criticisms of prevailing medical superstitions; 1245-1326/1830-1908), who, in addition to authoring several treatises (Najmābādī, pp. 227-28), introduced (ca. 1296/1879) the use of microscope to the Dār al-fonūn (he was an advocate of Louis Pasteur’s school of biology). In 1306/1889, the shah, on the recommendation of Tholozan, who had grown old and exhausted, replaced Tholozan with [Jean-Baptiste Feuvrier](#), who stayed for three years at the Persian court. Feuvrier, was in his turn, succeeded by another French physician, Jean-Etienne Justin Schneider, who was in Persia until 1907. Among other activities, Schneider formed the Sanitary Council of Persia (Majles-e ḥefẓ-al-ṣeḥḥa-ye Īrān), composed of Persian and foreign physicians, and presided over by himself; he also established a laboratory for the customs (*gomrok*) and the mint (*ẓarrāb-kāna*), and recruited a French veterinarian, named Dr. Carré, for the Persian government (Najmābādī, pp. 209-10; cf. Elgood, pp. 524, 527, 531). There is hardly any valuable information on the development of Dār al-fonūn’s medical department during the period after the assassination of Nāṣer-al-Dīn Shah (1313/1896), during the eventful eleven-year reign of his unstrung and infirm successor Moẓaffar-al-Dīn (d. 1324/1906.) This was partly due to the general disastrous social, sanitary, and economic conditions prevailing in the country, and more specifically because the above mentioned journals that regularly carried news about Dār al-fonūn had ceased publication.

The length of study at Dār al-fonūn’s medical department was first seven years, but later it was reduced to five years and at the end of Nāṣer-al-Dīn Shah’s period it was cut to four years. In 1324/1907, the curriculum was



divided into a three-year preparatory program for students who had earned the 3rd year high school certificate and successfully passed the entrance examination, and a four-year medical education proper (Maḥbūbī Ardakānī, p. 41).

#### THE SCHOOL OF MEDICINE

In 1337/1919 the medical department of Dar al-fonūn became an independent School of Medicine (Madrasa-ye ṭebb). Moḥammad Ḥosayn Adham (Loqmān-al-Dawla; 1258-1329 Š./1879-1950); a graduate of the Faculty of Medicine of the University of Paris, and private physician to Aḥmad Shah, became the director of Dār al-fonūn's medical section in 1335/1916-17, and was instrumental in making it a separate, independent medical school (*Rāhnemā-ye Dāneškada-ye pezeškī*, pp. 84-85). The new curriculum for the first year was called P.C.N. (i.e., physics, chemistry, and natural science). A medical museum, a museum of natural history, and a chemistry and microbiology laboratory were designed for the school. Clinical training was to be performed at the already mentioned Marīz-kāna-ye dawlatī and the newly founded private Wazīrī Hospital. Later, the otorhinolaryngology clinic established in 1309 Š./1930 at the American Hospital in Tehran cooperated as an adjunct for the students' clinical instruction in that field. The teaching staff included the following: Şeḥḥat-al-Dawla (traditional medicine); Yūnos Khan (obstetrics); Alī Partow (Ḥakīm-e a'zam), a Dār al-fonūn graduate with a M.D. from the University of Paris Faculty of Medicine who taught various medical subjects at Madrasa-ye ṭebb and, later, at the Faculty of Medicine; Yaḥyā Mīrzā Šams (Lesān-al-Ḥokamā'), a Dār al-fonūn medical student under Dr. Albu and later under Dr. Basil, who then specialized in ophthalmology in a two-year course (1312-14/1894-96), taught at Dār al-fonūn by a French specialist, and then at Paris Faculty of Medicine; later, when an ophthalmology class was first established in 1334/1916 at Dār al-fonūn, he taught this subject there, and assumed the direction of ophthalmology clinics at the Marīz-kāna-ye dawlatī and Wazīrī Hospital (ibid., pp. 86-87); Amīr (Khan) A'lam, Ḥosayn Mo'tamed and Abu'l-Qāsem Bahrāmī. The deans of the School of Medicine were, in chronological order: Loqmān-al-Dawla (until 1298 Š./1919), 'Abbās Adham (A'lam-al-Molk; until some time before 1307 Š./1928), Walī-Allāh Khan Naşr (until 1307 Š./1928-29), and A'lam-al-Molk Farahmandī (until 1312 Š./1933).

The School of Medicine was housed on the premises of Dār al-fonūn until 1303 Š./1924, when it was moved to one of the buildings of 'Emārat-e Mas'ūdiya (formerly the palace of Mas'ūd Mīrzā Żell-al-Solţān), which had been turned



over to the Ministry of Education, Pious Endowments, and Fine Arts (Wezārat-e ma'āref wa awqāf wa šanāye'-e mostazrafa), the present headquarters of the Ministry of Education on Ekbātān Street (Bāstān, pp. 65-93; Maḥbūbī Ardakānī, pp. 252-56, 261).

#### ESTABLISHMENT OF THE FACULTY OF MEDICINE

After the ratification of the legislation on the creation of the University of Tehran in Kordād 1313 Š./June 1934, the School of Medicine (Madrasa-ye ṭebb), with all its staff and paraphernalia, was turned into one of the *dāneškadas* (faculties) of the university, and was renamed the Faculty of Medicine, Pharmacy, and Dentistry (Dāneškada-ye ṭebb wa dārū-sāzī wa dandān-sāzī), with Loqmān-al-Dawla as its dean (*Rāhnemā-ye dānešgāh*, 1319 Š./1940, pt. 1, pp. 41-54; pt. 2 p. 2).

Because of an urgent need for an anatomy laboratory, this was the first section of the faculty to become operational on the large new campus designed for the university. Here, for the first time in Persia, cadavers were used for the practical training of medical students. Being considered an un-Islamic notion, dissecting Muslim corpses met with severe objection from the 'olamā' and had never been practiced before. Thus Abu'l-Qāsem Baḳtīār, professor of obstetrics, had to resort to unorthodox methods and smuggled in his own car a number of bodies from the public hospitals to the anatomy laboratory where Dr. Edward Blair of the American Mission Hospital in Tehran, as the instructor of anatomy, utilized them as cadavers for training in practical anatomy. The anatomy laboratory was prepared for operation in late January and inaugurated by Reżā Shah on 15 Bahman 1313 Š./4 February 1935; it was the first building constructed on the new university campus. On 13 Esfand 1316 Š./4 March 1938 the faculty formally moved into the new building specially constructed for it next to the anatomy laboratory (Ḥekmat, pp. 335-37).

#### ACADEMIC STRUCTURE OF THE FACULTY OF MEDICINE

After the inauguration of the faculty in Mordād 1313 Š./August 1934, writing a doctoral thesis was made a prerequisite for obtaining an MD degree. According to the faculty's statutes approved by the University Council in Esfand 1316 Š./March 1938, the Faculties' six-year curriculum was divided into three areas: theoretical, practical, and clinical (from the third year on). In the first two years, students received practical training in the fields of anatomy, histology and embryology, biology, physics, and chemistry. The curriculum in



the remaining four years was divided into two parts: clinical training in the hospitals in the mornings and theoretical and practical training in the faculty in the afternoons (Maḥbūbī Ardakānī, p. 265).

*Oberling's Reconstruction of the Faculty.* The new Faculty of Medicine suffered from domination by the old guard led by Loqmān-al-Dawla and the rivalry between his faction and that of Amīr A'lam's. This conflict impeded the development of the faculty and appointment of a new generation of physicians, who had been educated in the West, to the teaching positions. To resolve the problem, 'Alī-Akbar Sīāsī, then president of the university, appointed Professor Charles Oberling, a well-known French pathologist, as dean of the faculty in 1318 Š./1939, a post that he held till 1321 Š./1942, and again from 1323 Š./1944 to 1326 Š./1947. Oberling was instrumental in reorganizing the Faculty of Medicine and planning medical schools for some other cities. In recognition of his great services, the council of the faculty's professors elected him honorary dean of the faculty in 1337 Š./1958. Oberling's reforms included the appointment of qualified faculty members to the newly organized academic chairs, forty-one in all, and brought Tehran hospitals under the control of the faculty for its clinical needs (Āštīānī, pp. 22-27; Moṣaddeq, pp. 22-23; Maḥbūbī-Ardakānī, p. 257).

On 25 Dey 1318 Š./15 January 1940 the University Council approved Oberling's proposal for the appointment of 41 chairs—6 chairs for anatomy and embryology (Amīr A'lam, 'Alī Falātī, 'Abd-Allāh Bāher, Hāšem Hanjan, Moḥsen Ḥejāzī, and Naṣr-Allāh Nīknafs); 3 chairs for theoretical and practical bacteriology (Ḥosayn Sohrāb, Asad-Allāh Šaybānī, and Moḥammad Mo'tamen); 2 chairs for physiology (Ebrāhīm Ne'mat-Allāhī and Amīr Ḥosayn Partow A'zam); 2 chairs for theoretical and practical medical chemistry (Ārmā'īs Vārtānī and Hovākīmīān Gāgīk); 2 chairs for botany (Ḥosayn Gol-e Golāb and Mahdī Nāmdār); 2 chairs for internal medicine ('Abbās Adham and 'Abbās Mo'addeb Nafīsī); and 1 chair for each of the following fields: infectious diseases ([Manūčehr Eqbāl](#)); biology ('Abd-Allāh Šaybānī); histology (Qolī Bāvandī); obstetrics (Abu'l-Qāsem Baḳtīār); neurology (Ebrāhīm Čehrāzī); anatomy and histology and embryology (Moṣtafā Ḥabībī); dermatology (Moḥammad Sayyed Emāmī); otorhinolaryngology (Yaḥyā Šams); ophthalmology (Moḥammadqolī Šams); gynecology (Jahānšāh Šāleḥ); clinical gynecology (Golām-Ḥosayn Moṣaddeq); radiology (Aḥmad Farhād Mo'tamad); psychology (Qāsem Ġanī); pediatrics (Moḥammad Qarīb); clinical pediatrics (Farīdūn Kešāvarz); pharmacology (Nāšer Mālek); urology (Sa'īd Mālek);



chiropractics (*amrāz-e kārejī*; Ḥosayn Mo'tamad); minor surgery (Ḥosayn-'Alī Esfandiārī); clinical surgery (Yūsof Mīr); public health (Jawād Āštiānī); preventive medicine (Moḥammad-Ḥosayn Loqmān Adham); history of medicine (Moḥammad Šahrād), and forensic medicine (Moḥammad-Ḥosayn Adīb). In 1952 anesthesiology and hematology and in 1958 psychiatry were added to the curriculum (Maḥbūbī Ardakānī, pp. 266-67). Yaḥyā 'Adl, a prominent surgeon, who served as a departmental head at Sīnā Hospital, was later appointed to the chair of surgery.

In 1335 Š./1956 chairs of pharmacology and dentistry were transferred to the newly formed faculties for these disciplines.

*The Introduction of an American System.* In the late 1950s and early 1960s some aspects of the American system of medical education were adopted by Jahānšāh Šāleḥ and other faculty members who were graduates of American medical schools. These reforms included reorganizing the chairs into departments; dividing the academic year into two semesters and adopting the credit system for courses; dividing the seven-year curriculum into three parts of a three-year of premed program, a three-year of clinical training, and a year of internship for general medical practitioners. In the premed program the emphasis was on the practical core courses and, more specifically, on physiology, pathology, biochemistry, and preventive medicine. In 1966, the Department of Public Health and Preventive Medicine, the master's program in hospital administration, and the one year program in environment became the Faculty of Public Health (Dāneškada-ye behdāšt) on the initiative of Šams-al-Dīn Mofidī, the chair of the Department of Public Health, with the assistance of the World Health Organization.

The fields of specialization were not fixed in number. They usually varied between fourteen and seventeen fields. The shortest field (e.g. pediatrics, internal medicine, radiotherapy, radiology) required three years, and the longest (neurosurgery), five years. Specialists in three fields—pediatric, internal medicine, and general surgery—could pursue their studies in postgraduate courses from two to three years.

Academic departments of the faculty in the 1970s included clinical laboratories, pathology, histology, forensic medicine, psychiatry, surgery, gynecology and obstetrics, ophthalmology, internal and clinical medicine, radiology, medical chemistry, infectious diseases, physiology, pharmacology and biophysics, anesthesiology, anatomy, pediatrics, otorhinolaryngology,



bacteriology, and immunology (Maḥbūbī Ardakānī, pp. 291-92).

#### ENROLLMENT AND PUBLICATIONS

*Enrollment.* The Faculty of Medicine's enrollment increased from 436 students in 1935-36 to 717 in 1945-46, to 1,653 in 1955-56 and to 2,077 in 1965-66. The percentage of female students decreased from 3 percent in 1940-41 to 1 percent in 1945-46, increased slowly to 4 percent in 1950-51 and 6.5 percent in 1955-56, and leaped to 18.2 percent in 1965-66 (Table 1).

*Publications.* Noṣrat-Allāh Kāsemī, holder of a chair at the faculty and a man of letters, was in charge of the faculty's library and publications. In 1321 Š./1942 he founded the monthly *Nāma (Majalla)-ye Dāneškada-ye pezeškī* (the Journal of the Faculty of Medicine). Another periodical, the quarterly *Acta medica Iranica*, was founded in 1333 Š./1954 for reporting medical achievements in Persia in both English and French under an editorial board directed by Šams-al-Dīn Mofīdī; it is still being published. Also published by the faculty was the bi-monthly journal, *Majalla-ye ṭebb-e 'omūmī*; founded in 1341 Š./1962 for general practitioners, it was edited first by Aḥmad Farhād Mo'tamad and later by Hušang Dawlatābādī.

#### LABORATORIES, HOSPITALS, AFFILIATED INSTITUTIONS

*Laboratories.* From mid 1930s to mid 1960s, eleven laboratories were founded in the faculty. The Anatomy Laboratory (Āzmāyešgāh-e kālbod-æenāsī-e mawze'ī wa tawšifī; also known as Dastgāh-e Ebn-e Sīnā; see above) was divided into three sections: the anatomy hall, a section for preparing cadavers, and the unit of practical medicine. In 1966 a new anatomy hall with modern equipment was constructed. The Laboratory of Pathology was founded in 1315 Š./1936 by Moṣṭafā Ḥabībī Golpāyagānī. In 1948 Moḥammad Ḥosayn Adīb became its head and in 1955 Kamāl-al-Dīn Ārmīn was appointed to the chair of pathology and also became the director of the laboratory. Other laboratories included those for immunology, histology, embryology, medical chemistry, pathology, medical physics, physiology, and bacteriology (Maḥbūbī Ardakānī, pp. 256, 275-83).

*Affiliated Hospitals.* The core of Oberling's reform project of 1940 was to bring the hospitals of Tehran under the direct control of the Faculty of Medicine. With the assistance of Jawād Āštiānī, who served later as the dean of the Faculty of Medicine for two terms in the early 1940s, Oberling re-organised the



structure of the hospitals which now became affiliated to the faculty. These included the following: Sīnā, Wazīrī, Amīr Aʿlam, Bahrāmī, Pahlavī, Zanān (later Jahānšāh-e Šāleḥ), Rāzī, Rūzbeh, Fārābī, and ʿAlī-Rezā Pahlavī hospitals. Sīnā (Ebn-e Sīnā) Hospital, the oldest in Tehran, founded in 1290/1873 by Nāšer-al-Dīn Shah (see above), was renamed first Sīnā Hospital and later Ebn-e Sīnā Hospital when it became affiliated to the faculty. It served as the main hospital for accidents with a well-equipped emergency room. The Wazīrī Hospital was founded in 1318/1901 by Ḥājj Shaikh Hādī Najmābādī on behalf of Mīrzā ʿIsā Wazīr, who had bequeathed a third of his estate for establishing the hospital. When in 1940 the hospital was incorporated into the Faculty of Medicine it had 110 beds and wards specializing in otorhinolaryngology and ophthalmology. Amīr Aʿlam Hospital was originally an obstetrics hospital (Marīz-kāna-ye neswān), founded in 1335/1917 by Amīr Aʿlam. It was renamed Amīr Aʿlam Hospital when it became affiliated to the Faculty of Medicine in 1940. Pahlavī Hospital was originally designed for five hundred beds in 1939 and was completed in late 1940s-1960s as one of the largest and best equipped hospitals in Tehran with over one thousand beds and various medical services. Jahānšāh Šāleḥ Hospital was originally called the Hospital for Women (Bīmārestān-e zanān) and was directed by Šāleḥ from 1936, and in 1970 it was renamed after him. Bahrāmī Hospital was founded in 1337 Š./1958 by Yūsof Bahrāmī as a pediatrics hospital and was donated to the Faculty of Medicine. Rāzī Hospital was founded in 1313 Š./1934 by ʿAbbās Adham (Aʿlam-al-Molk) and in late 1960s it was transformed to a dermatology hospital with fifty-eight beds and a well equipped polyclinic with the capacity for treating five hundred out-patients per day. The original name of the Rūzbeh Hospital was Tehran Municipality's Hospital No. 1; it was renamed Rūzbeh Hospital in 1940 when it became affiliated with the Faculty of Medicine. In the mid-1950s it was turned into a psychiatric hospital with sixty beds, a clinic and a laboratory. Fārābī Hospital was originally one of the Tehran Municipality hospitals; it developed into a fairly large institution after it was incorporated into the Faculty of Medicine in 1940 and renamed Fārābī Hospital. This hospital specialized in ophthalmology and otorhinolaryngology (Āštīānī, pp. 22-27; Maḥbūbī Ardakānī, pp. 322-45).

*Affiliated Institutes.* Three medical institutes were affiliated with the faculty, including the Cancer Institute (Anstītū saraṭān) which was founded in 1956 by the Persian Red Lion and Sun Society (Jamʿiyat-e šīr o ḳoršīd-e sorḳ-e Īrān), the then equivalent to the Red Cross Societies in the West. In 1965 a post doctoral program of cytopathology was inaugurated with the cooperation of Johns



Hopkins University to serve the East Mediterranean countries. The Institute of Psychiatry (Anstītū a'šāb wa ravān), was founded in 1966 to serve the specialization program in the field. The Institute of Medical Research (Mo'assasa-ye taḥqīqāt-e 'olūm-e pezeškī) was founded in 1961 to provide theoretical and practical education in various fields of pharmacology for medical students (Maḥbūbī Ardakānī, pp. 283-91).

*Affiliated Schools:* To train the necessary nursing staff for medical services, the Faculty of Medicine incorporated two schools of midwifery and nursing and formed three new schools of physiotherapy, school for paramedical services, and psychiatric nursing. The Higher School of Midwifery (Āmūzešgāh-e 'ālī-e māmā'ī), was originally founded by Našīr-al-Dawla (Aḥmad Bader) as a three-year high school program with 10 students at the Women- Teachers' School (Dār al-mo'allemāt) in 1338/1920. In 1930 admission to the school required the five-year high school certificate; in 1940 it was affiliated with the Faculty of Medicine. From 1949 it only accepted the graduates of the Ašraf Pahlavī Nursing School and later those of other nursing schools who after taking the one-year program of the School were granted the bachelor degree in midwifery. The Ašraf Pahlavī Nursing School (Āmūzešgāh-e 'ālī-e parastārī-e Ašraf-e Pahlavī) was founded in 1327 Š./1948 to replace the Tehran School of Nursing (Āmūzešgāh-e paras'tārī-e Tehran) which had been established in 1315 Š./1936. The Tehran School of Nursing admitted applicants with the three-year high school certificate and after a two-year program of study granted them the fifth year high school diploma in nursing. In 1948 the admission requirement was raised to the fifth year high school diploma (later to the sixth year diploma) and the length of study was increased to three years; in 1950 the school's diploma was evaluated as a bachelor degree in nursing (*līsāns-e parastārī*). In 1340 Š./1961 the School of Psychiatric Nursing (Āmūzešgāh-e parastārī-e ravānī) was formed. The school admitted graduates of nursing schools and trained them in a one-year program, granting them a bachelor degree in psychiatric nursing. In the 1970s schools of midwifery and nursing merged and formed the Higher School of Nursing and Midwifery (Āmūzešgāh-e 'ālī-e parastārī o māmā'ī), which is now functioning as an independent institution. The School of Physiotherapy (Āmūzešgāh-e fīzioterāpī) was founded in 1343 Š./1964. The school's three year bachelor's degree program admitted applicants with a high school diploma who passed the entrance exams. The School of Paramedical Service (Āmūzešgāh-e behyārī) was founded in 1341 Š./1962 for training assistants to the nursing staff. Applicants with a three-year high school certificate who passed entrance exams were



admitted to the school's two-year program (Komīsīūn-e mellī, II, pp. 1441-43). In addition, the Higher School of Medicine (Āmūzešgāh-e 'ālī-e behdārī), instituted first in Mašhad (1419 Š./1940; on Oberling's suggestion), and then in Isfahan and Shiraz (both in 1325 Š./1946), functioned under the supervision of the Faculty of Medicine until independent universities were founded in the aforementioned cities. From then on the *āmūzešgāhs* became faculties (*daneškadas*) of medicine within their own universities.

#### THE POST-REVOLUTION PERIOD

After the Revolution of 1978-79 in Persia, when the former Ministry of Public Health (Wezārat-e behdāšt) was expanded in 1364 Š./1985 into the Ministry of Health, Medical Care, and Medical Education (Wezārat-e behdāšt o darmān o āmūzeš-e pezeškī), the Faculty of Medicine was administratively disassociated from the University of Tehran and was attached to the new Ministry. In the academic year 1371-72 Š./1992-93 the faculty was incorporated into a larger medical complex named The University of Medical Sciences and Health Services of Tehran (Dānešgāh 'olūm-e pezeškī o ḳadamāt-e behdāštī-darmānī-e Tehrān). In the same year an independent Paramedical School (Daneškada-ye pīrāpezeškī) was instituted.

At present the Faculty of Medicine is in charge of teaching general medicine as well as all medical and paramedical fields of specialization; it also provides, to a certain extent, technical and tutorial assistance for the Faculties of Dentistry, Pharmacy, and Health within the above mentioned Tehran University of Medical Sciences. In some cases the Faculty of Medicine benefits from the cooperation of the teaching staff of the Faculty of Science (Daneskada-ye 'olūm).

See also DĀR-AL-FONŪN.

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