
History of Contemporary Medicine

The Establishment and the First Four Decades of the Activities of the Pasteur Institute of Iran

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Abstract

The Pasteur Institute of Iran was inaugurated on August 24, 1921 in Tehran. This new institution was established on the request of the Iranian government with the agreement and scientific support of the French authorities under the supervision of Professor Pierre Paul Emile Roux (1853 – 1933), the General Director of the Paris Pasteur Institute of the time. The Iranian institute was inaugurated 33 years after the original institute was established in Paris on November 14, 1888.

In this article, we will review briefly the founding of the Pasteur Institute of Iran, its early French directors and the main services it rendered in the first four decades of its activity.

Keywords: Pasteur Institute of Iran • Pasteur Institute of Paris

Introduction

The development of modern medical practice and education in Iran was started with the establishment of the Dar al-Fonun School in Tehran due to the efforts of Mirza Taghi Khan Amir Kabir (1803 – 1851), the reformist Prime Minister of Nasser ad-Din Shah Qajar and was officially inaugurated in 1851¹ by the Shah and his new Prime Minister Mirza Agha Khan Nouri. In 1918, the medical branch of Dar al-Fonun became independent as the School of Medicine (Madreseh-ye Tebb) which was later incorporated into the Tehran University as its medical college in 1934.²

In addition to the establishment of Dar al-Fonun, the founding of the Pasteur Institute of Iran on August 1921 in Tehran was also instrumental in the spread of modern medicine during the latter

parts of the Qajar dynasty.³ In subsequent years, it served as an influential research and educational center.

The Pasteur Institute of Paris

According to Wikipedia “the Pasteur Institute of Paris is a French nonprofit private foundation dedicated to the study of biology, microorganisms, diseases, and vaccines. It is named after Louis Pasteur, its founder, and first director. It was founded on June 4, 1887 and inaugurated on November 14, 1888.”⁴

This institute is one of the world’s leading research centers of which eight scientists have been awarded the Noble Prize since 1908. At present, the Pasteur Institute of Paris is associated with other research centers worldwide and is very influential in combating infectious diseases especially in developing countries including Iran.

The foundation of the Pasteur Institute of Iran

The establishment of the Pasteur Institute of Iran (Figure 1) was originally proposed by Nosrat ad-Dowleh, the Iranian Minister of Foreign Affairs in 1918.³ Firouz Mirza Firouz bearing the title of Nosrat ad-Dowleh (1888 – 1938), obtained his Doctorate in International Law from the French University of Sorbonne and became the Iranian Minister of Foreign Affairs, during the reign of Ahmad Shah Qajar.⁵ In 1919, an Iranian Delegate including Nosrat ad-Dowleh, Mohammad Ali Foroughi, Dr. Loghman Adham, Hakim ad-Dowleh, and Dr. Mahmoud Khan Moetamed attended the Peace Conference in Paris and at that time they visited the Pasteur Institute of Paris and proposed to the Iranian government that a similar institute should be established in Tehran.⁶ This proposal was discussed at a ministerial meeting in Tehran and was unanimously accepted and the necessary steps were taken for its establishment. Following official agreement between Nosrat ad-

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Figure 1. A view of Pasteur Institute of Iran. In the middle part, the statuette of Louis Pasteur (1822 – 1895), the founder and first director of the Pasteur Institute of Paris is seen.

Dowleh and Dr. Rene Legroux on January 20, 1920, Professor Pierre Paul Emile Roux (1853 – 1933), who was the General Director of the Paris Pasteur Institute, introduced Dr. Joseph Mesnard to head the Iranian institute.³ He was employed by the Iranian government on April 8, 1920.⁷

Nosrat ad-Dowleh had persuaded his father Abdol Hossein Mirza Farmanfarma (1856 – 1940), the influential Iranian aristocrat, to bequeath ten thousand square meters of his own property in Tehran as well as an endowment of ten thousand Tomans in addition to fifteen thousand Tomans allocated by the Iranian government, for the necessary buildings and running costs of the establishment of the Pasteur Institute of Iran.⁸ In the bequeathal document dated 1923 (1302 Hejri Shamsi), Farmanfarma states his intentions for such a bequest as such: “As outbreaks of various contagious and chronic diseases are common in Iran and specifically in Tehran and whose prevention or treatment require injections which needed to be imported from abroad...thus the establishment of the Pasture Institute will allow the necessary serums and vaccines against such diseases as smallpox, plague, cholera, diphtheria, rabies and others to be manufactured at this place.”⁹

The French Directors of the Pasteur Institute of Iran

Dr. Joseph Mesnard

The first director of the institute was Dr. Joseph Mesnard who was recommended by Professor

Roux and he came to Iran on August 1, 1920 and held the post for 5 years before returning to France in 1925.^{6,7,10,11}

Dr. J. Kerandel

Following Dr. Mesnard, the institute was run by the Iranian physician, Dr. Abolghasem Bahrami until the appointment of Dr. J. Kerandel by the Paris Institute. Dr. Kerandel arrived in Tehran on September 1926 and stayed in Tehran until his death from pneumonia on June 20, 1934. He was buried in the catholic cemetery of Tehran in Akbar Abad district. Under his directorship, the institute was expanded to include vaccination department with emphasis on smallpox as well as laboratories and a library.^{6,8,11}

After the death of Dr. Kerandel, Dr. Hossein Mashouf was appointed as the temporary director of the institute.^{10,11}

Dr. Marcel Baltazard

The connection between the Paris and the Iranian institute was severed due to the outbreak of the Second World War until January 1946 when Dr. Marcel Baltazard (1908 – 1971) (Figure 2) was appointed and dispatched to Tehran by the Paris Institute. He remained in Tehran as the head of the institute for more than 15 years (up to 1961) and was instrumental in the further development and expansion of the Tehran Institute. He was a great researcher especially in the field of fatal epidemic diseases. Dr. Baltazard died in Paris on the first of September, 1971 from lung cancer and a memorial

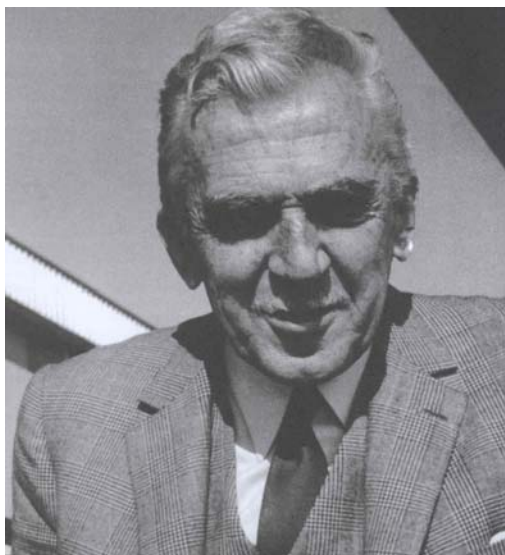


Figure 2. Dr. Marcel Baltazard¹⁰

ceremony was held in Tehran in recognition of his great services to the Pasteur Institute of Iran.^{7,10}

After Dr. Baltazard, the first Iranian director of the Institute was Dr. Mehdi Ghodssi (1900 – 1991) who was appointed in 1961.^{6,8,10,11}

Change of articles of association of the institute

After the end of the Second World War, on the request of the Iranian Minister of Health, a delegation was sent to Iran by the Paris Pasteur Institute in 1946, for renovation of the Tehran Institute. This delegation headed by Professor Pasteur Vallery Radot (the grandson of Louis Pasteur) and accompanied by Professor R. Legroux (honorary director of the Iran Pasteur Institute),



Figure 3. Professor Legroux (sitting), Dr. Baltazard (on the right side), Dr. Shamsa, Dr. Bahmanyar and Dr. Seyyedian are also seen.¹⁰

arrived in Tehran on August 12, 1946 and after discussions with the Iranian officials, drew up the new articles of association of the institute which was ratified by the Iranian Cabinet (Figure 3).^{6,8,11}

The inauguration of the new building of the Tehran Institute

On April 14, 1958, the new building complex of the Tehran Pasteur Institute was officially inaugurated by the Iranian and French authorities. The French delegation included Professor Vallery Radot and Roger Seydoux from the French Embassy in Tehran.¹¹

The French President, Charles De Gaulle visited the Pasteur Institute of Iran on the request of Dr. Baltazard, in 1963. (Figure 4)

Table 1 shows a summery of main events related to the Pasteur Institute of Iran between 1919 and 1961.¹¹

Some of the significant early achievements of the Tehran Institute

Smallpox vaccine production

The history of smallpox vaccination in Iran dates back to the reign of Fathali Shah Qajar (1797 – 1834). According to Dr. F. Adamyiat, the English physician Dr. John Cormick who was the personal physician to Abbas Mirza, the Crown Prince, had written a treatise on smallpox which was subsequently published but it was by the order of Mirza Taghi Khan Amir Kabir (see above) that public vaccination against smallpox became law. Dr. Jacob Eduard Polak (1818 – 1891), the



Figure 4. The French President, Charles De Gaulle visited the Pasteur Institute of Iran on the request of Dr. Baltazard, in 1963, Dr. Baltazard is seen on the right side.¹⁰

Table1. A summary of main events related to the Pasteur Institute of Iran between 1919 and 1961.*

Date	Event
October 23, 1919	Meeting of Professor Roux, the Director of Pasteur Institute of Paris and Iranian delegation
January 20, 1920**	An agreement was made between Dr. Legroux and Nosrat ad-Dowleh, the Minister of Foreign Affairs for the establishment of the Pasteur Institute of Iran
August 1, 1920	Arrival of Dr. Mesnard to Tehran, the first Director of the Pasteur Institute of Iran
1924	The establishment of the Pasteur Institute's laboratories
1925	Dr. Mesnard returned to France and Dr. A. Bahrami was appointed as the temporary director of the institute
September 1926	Dr. J. Kerandel came to Tehran as the second French Director of Pasteur Institute of Iran
June 20, 1934	Dr. J. Kerandel died in Tehran and Dr. H. Mashouf was appointed as temporary director of the Pasteur Institute of Iran
1940	Construction of new buildings
January 1, 1946	Appointment of Dr. Baltazard, the third French Director of the Pasteur Institute of Iran
August 12, 1946	The French mission headed by Professor Vallery Radot came to Tehran and a new agreement was made between the Iranian officials and the French mission
August 25, 1946	The new agenda of the Pasteur Institute of Iran was approved by the government
1947	New buildings were opened
November 1947	Dr. Baltazard and his colleagues started their research on plague as an endemic disease in Kurdistan Province in the west of Iran
1947	BCG vaccine production was started under the supervision of Dr. Ghodssi
1950 onwards	New activities against fatal diseases such as rabies, cholera, tuberculosis and plague were initiated by the Pasteur Institute of Iran
April 14, 1958	New buildings were opened
1960	Financial and administrative independence of the Pasteur Institute of Iran was approved by the Parliament
March, 1961	Dr. Mehdi Ghodssi was appointed as the director of the Pasteur Institute of Iran

*The contents of this table are derived from the Dr. Baltazard's manuscript published by the French Embassy in Tehran on November 2004 and Dr. M. Ghodssi's booklet published by the Pasteur Institute of Iran in 1971; **It is mentioned as January 30, 1920 in Dr. Ghodssi's booklet.

Austrian medical teacher of the Dar al-Fonun School also writes that "as Amir Kabir was concerned with the health of citizens, he made efforts to prevent smallpox by vaccination and dispatching care givers throughout the provinces with adequate means and ordered the translation of the treatise on smallpox into Persian." Dr. Polak adds that "at that time, most children in Tehran were vaccinated against smallpox but unfortunately after the death of Amir Kabir most of his health programs became suspended or ineffective."¹²

In 1924, about three years after the inauguration of the Pasteur Institute of Iran, a delegation from the Public Health Committee of the League of Nations (which preceded the United Nations and was established in 1919 after the First World War) arrived in Tehran in order to assess the public health and medical facilities in Iran. This delegation wrote a report in part of which it delineated some of the activities of the Pasteur Institute of Iran including its role in vaccination program and its vaccine manufacture. According to this report, before the establishment of the Pasteur

Institute of Iran, smallpox vaccine was imported from Paris which due to the lengthy journey and the excessive heat during its travel, the vaccines were not in prime condition by the time that they had reached Iran. After the start of vaccine production by the Pasteur Institute of Iran, in the first 19 months, 193,119 smallpox vaccines were manufactured. The report adds that the main limiting factor for further vaccine production was the availability of glass vials at that time in Iran.⁵

Other vaccines

According to the League of Nations' report, at that time, anthrax was rife among the livestock in Iran causing variable death rate between 25 and 80%. The report adds that in the first 19 months of activity of the Pasteur Institute of Iran, 1,638 vaccinations against livestock anthrax were performed and these vaccines were imported from Paris. It is also mentioned that cattle plague (rinderpest) and glanders have also been investigated.⁵

Later, various vaccines were produced at the Pasteur Institute of Iran. BCG vaccine was manufactured in 1947, under the supervision of Dr. Ghodssi.^{10,11}

The establishment of the organization for prevention of animal diseases

In 1924, following an outbreak of cattle plague (rinderpest), the Public Health Department of the League of Nations requested the Iranian government to establish an organization for prevention of animal diseases under the auspices of the Pasteur Institute of Iran for manufacture of serums and vaccines need in animal husbandry.⁵ The organization became independent from the Pasteur Institute in 1927 and in 1948 became the Razi Institute.¹³

Diagnostic medical laboratories

From its conception, the Pasteur Institute established within its premises, diagnostic medical laboratories. Samples were sent to the institute from public health, military, police and municipality establishments for diagnosis which were carried out free of charge and samples sent from private institutions carried a nominal fee.^{5,10}

Investigation of indigenous diseases

The Pasteur Institute pioneered research of indigenous diseases in Iran such as relapsing fever, smallpox, rabies, plague, tuberculosis, cholera,

typhoid fever, and typhus. Dr. Baltazard was instrumentals in this program.^{10,11}

Medical Teaching

From the beginning of its activity, the Pasteur Institute in Iran became involved in medical teaching and Dr. J. Mesnard, its first director taught bacteriology and hygiene to the medical students at the Tehran Medical School. Dr. J. Kerandel, who followed Dr. Mesnard as the head of the institute, also taught bacteriology at the same school of medicine for six years, from 1928 to 1934.^{2,11,14}

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