

From Our History of Vaccination and Contagious Diseases

DOI: 10.5578/ced.20239713 • J Pediatr Inf 2023:17(3):e215-e221

Portraits from Our Medical History: Dr. Reşat Rıza (Kor) (1877-1941)

Tıp Tarihimizden Portreler: Dr. Reşat Rıza (Kor) (1877-1941)

Yağız Fatih Nazlıer¹(İD), Pervin Özelçi²(İD), Rüya Kılıç³(İD), Ateş Kara⁴(İD)

- ¹ PhD Student, Department of History, Hacettepe University Faculty of Literature, Ankara, Türkiye
- ² Türkiye Vaccine Institute, Presidency of Turkish Health Institutes, Ankara, Türkiye
- ³ Department of History, Hacettepe University Faculty of Literature, Ankara, Türkiye
- ⁴ Division of Child Infectious Diseases, Department of Child Health and Diseases, Hacettepe University Faculty of Medicine, Ankara, Türkiye

Cite this article as: Nazlier YF, Özelçi P, Kılıç R, Kara A. Portraits from our medical history: Dr. Reşat Rıza (Kor) (1877-1941). J Pediatr Inf 2023;17(3):e215-e221.

*This article was prepared within the scope of the project "History of Vaccines and Infectious Diseases in the Ottoman Empire and the Republican Period and Creation of Source Documents" supported by TÜSEB/Turkish Vaccine Institute. Project No: 2022ARGE02-28235.

"He was a very high scholar, a decent and noble person. He was not appreciated as much as he should have been." 1

Dr. Reşat Rıza (Kor), one of the most important figures of the recent Turkish Medical History, was born in Yeşilköy/İstanbul in 1877 (Figure 1). Reşat Rıza grew up in a modern family environment and his father was Lieutenant Colonel Ali Rıza Bey, a painting instructor at the Mekteb-i Tıbbiye-i İdadi. Having successfully completed his primary and secondary education at Yusuf Pasha Mekteb-i Osmani, Cerrahpaşa Ibdai School and Medina-i Münevvere Rüştiye School, Reşat Rıza Bey continued this success at Kuleli Military Idadisi and Mekteb-i Tıbbiye-i Askeriye (2-4).

During his education at the Military Medical School, he became a class sergeant and managed to attract the attention of his teachers with his success.³ In 1899, Dr. Reşat Rıza Bey graduated from the Military Medical School with the rank of



Figure 1. Dr. Reşat Rıza (Kor) (1877-1941).2

Correspondence Address / Yazışma Adresi Yağız Fatih Nazlıer

Hacettepe Üniversitesi Edebiyat Fakültesi, Tarih Anabilim Dalı, Doktora Öğrencisi, Ankara-Türkiye

E-mail: yf.nazlier@gmail.com

Received: 02.08.2023 Accepted: 18.08.2023 Available Online Date: 08.09.2023

¹ From an article by Dr. Haydar İbrahim Aydar, one of Dr. Reşat Rıza Bey's closest friends, in the Polyclinic magazine (1).

² See (4) for a photo.

³ Those who excelled in their studies and earned the appreciation of their teachers were elected as class sergeants (class representatives). Class sergeants were also the first ones to be held responsible for any incident involving the class.

Lieutenant, and after completing his compulsory internship at the Gülhane Practice School and Seririyat Hospital, he started working as an assistant to Prof. Dr. F. B. Georg Decyke. During the six years he spent with Prof. Dr. Deycke, Dr. Reşat Rıza Bey trained himself in areas such as clinical bacteriology, diagnosis of morbidity (pathological anatomy), X-ray, physiology chemistry and skin diseases and gained the appreciation of his teachers (4,7,8).⁴

In 1907, Dr. Resat Rıza Bey went to the Robert Koch Institute in Berlin to increase his specialization and carried out studies on syphilis serology under the supervision of Dr. August von Wassermann (1866-1925) for a year, then returned to Istanbul and became the first person to apply the Wasserman test in our country (4).5 After returning to his homeland, Dr. Reşat Rıza Bey started to work as chief in the Bacteriology Department of the Customs Laboratory and soon rose to the title of serkimyager (chief chemist). In 1908, when the military and civilian medical schools merged in Haydarpaşa and became a Faculty of Medicine affiliated to Darülfünun, Dr. Reşat Rıza Bey started to work as an assistant lecturer in bacteriology. During this period, he founded the Bacteriology and Emraz-I Intaniye Institution and carried out studies on the diagnosis and treatment of various diseases, especially syphilis, tuberculosis, cholera, typhoid, typhus and dysentery (2,3,13).6

With the Balkan War in 1912, Dr. Reşat Rıza Bey was dispatched to Ioannina, which is today within the borders of Greece, as a reserve officer. During the Balkan War, Dr. Reşat Rıza Bey took part in the treatment of sick and wounded soldiers under Suleyman Numan Pasha, the sertabibi (chief physician) of Ioannina Castle, and his duty at the front ended with the loss of Ioannina (1913) (4,7,14). Upon his return to



Figure 2. Promotional article about Dr. Reşat Rıza Bey's practice in Akşam Newspaper dated May 28, 1922. (E.T. 02.07.2023).¹⁰

istanbul, Dr. Reşat Rıza Bey was appointed as the Director of the Sanitary Directorate's Department of Hygiene and during his tenure until 1915, he created the infrastructure for many regulations (bylaws) to combat epidemics.⁸ Dr. Reşat Rıza Bey was then appointed as the Chief of the Intani Diseases (Microbial Diseases) Branch at Bezm-i Âlem Gureba-yı Müslimin Hospital, a position he held until 1918, after which he resigned and started to work as a freelance physician (8).⁹ Dr. Reşat Rıza Bey, who continued to work on internal diseases and especially on the treatment of tuberculosis until the end of his life, can be found in the newspapers of the period with advertisements for his private practice (Figure 2).

It is also known that Dr. Reşat Rıza Bey, like other famous physicians of the period, frequently travelled to Europe to be informed about medical developments and to learn new techniques. When he returned from his travels, it is seen that he placed advertisements in newspapers to inform his patients (20).

Dr. Reşat Rıza Bey's perspective towards his patients is as striking as his advertisements in newspapers. Hüseyin Cahit Yalçın, one of the famous journalists of the period, describes Dr. Reşat Rıza Bey's patient-doctor relationship with the following lines: "All his patients were his friends. They were attached to him with unshakable hope and trust. He did not only

⁴ Prof. Dr. Franz B. Georg Dycke (1865-1938): Dr. Dycke, who came to İstanbul in 1898 at the invitation of the Ottoman Government, served in the internal medicine and dermatology clinics, especially microbiology, at Gülhane until 1907. He also served as the director of Gülhane Hospital and Practice School and Seririyati Hospital between 1904-1907 (5). Gülhane School of Practice and Seririyati Hospital was founded on December 30, 1898 under the leadership of Dr. Robert Rieder and Dr. Franz B. Georg Dycke (6). In addition, in the book of Dr. Elhac Rıza Tahsin, the following words are mentioned for Dr. Reşat Rıza Bey: "He is one of our distinguished physicians whose great services are expected for the future of Ottoman Medicine" (9,10).

⁵ Dr. August von Wassermann (1866-1925): German physician and bacteriologist. In 1888, after graduating from the University of Strassburg, he joined the Robert Koch Institute for Infectious Diseases. He soon became head of the institute's therapeutics and serum research department. In 1913 he moved to the Kaiser Wilhelm Institute, where he remained head of experimental therapeutics until his death. We know him with the Wassermann test which he developed together with the German dermatologist Dr. Albert Neisser (11).

⁶ Customs Laboratory: Products (mainly medicines and food) arriving at Customs were examined (12). It should also be noted as additional information, The Bacteriology and Emraz-ı Intaniye Institution was a private institution opened by Dr. Reşat Rıza Bey. In this institution, he had the opportunity to apply what he had learned especially at the Robert Koch Institute (4).

⁷ Süleyman Numan Pasha (1868-1925), Professor of Seririyat-ı Dahiliye at Gülhane, Head of the Department of Health and Inspector of Health of the Army. For detailed information, see (15).

⁸ "The Regulation on Emraz-ı Sariye ve İstilaiye (1330/1914), the Decree on the Obligation of the Typhoid Vaccine to be Administered in Locations Where it is Deemed Necessary (1330/1914), and the Regulation on the Organization for the Fight Against Syphilis in Kastamonu Province and Bolu Sancağı (1331/1915)" are some of the regulations prepared under the leadership of Reşat Rıza (4,9).

⁹ Bezm-i Âlem Gureba-yı Müslimin Hospital is a foundation hospital founded on March 12, 1847 by Bezm-i Âlem Valide Sultan, mother of Sultan Abdülmecid (16).

¹⁰ "Dr. Reşat Rıza, a specialist in internal medicine and tuberculosis, started the special treatment of tuberculosis of the lungs, tuberculosis of the lymph nodes in the neck, tuberculosis of the bones, and tuberculosis of the abdomen, and the administration of special resistance vaccines against tuberculosis to children raised by tuberculosis parents, to those who had had previous contact with tuberculosis patients, and to those who showed a predisposition to tuberculosis. Address: The new Varteliti Apartment at the mouth of the four roads in Nişantaşı." (17-19).

e217

deal with his patients like a foreign doctor, he gave them from his heart with sincere care and compassion and received deep devotion and gratitude in return." (21).

Dr. Reşat Rıza Bey also wrote articles on immunology and serology in Turkish, German and French in national and international journals such as Ottoman Serîriyyât Mecmuası, Sihhiye Mecmuasi, Medizinische Klinik and Deutsche Medizinische Wochenschrift. Looking at the content of these articles, it is understood that Dr. Resat Rıza Bey followed the medical literature of the period very closely. It is especially noteworthy that he evaluated current studies in the introduction of his articles and explained the differences of his own work (3,47-49,51). In addition to his academic publications, Dr. Resat Riza Bey participated in meetings at Gülhane Competitions, gave public lectures and shared his ideas with his fellow physicians (23,24).11 In addition, Dr. Reşat Riza Bey, one of the oldest members of the Turkish Medical Society, served on the executive committee and made significant contributions to the progress of the society. In particular, he organized the library of the society and prepared the index of the books himself (3,7).12

Dr. Reşat Rıza Bey, who had an important place in the history of Turkish Medicine by saving the lives of many people in war and peace with his work on typhoid, typhus, tuberculosis, dysentery, leprosy and syphilis, died in 1941 due to his progressive diabetes (Figure 3) (21).

Dr. Reşat Rıza Bey's Works

Dr. Reşat Rıza Bey is known to have contributed to the preparation of typhoid, cholera and dysentery vaccines for use in the Turkish army since 1911. The process of preparing these three vaccines was especially influenced by Dr. Wieting Pasha (1868-1922), Director of the Gülhane School of Practice and Seririyat Hospital in 1911. Dr. Reşat Rıza Bey, who, together with Dr. Mustafa Hilmi (Sagun) Bey, prepared typhoid vaccine with a lower number of bacteria, dead cholera vaccine and dysentery vaccines containing nine types of paradizanteria

Doktor Reşat Rıza Öldü

Bakteriyolog ve verem mütehassısı Doktor Resat Rızanın uzunca bir hastalıktan sonra öldüğünü büyük bir teessürle haber aldık. Reşat Rıza, Türk ilim havatının iftihar edeceği bir ilim adamı nümunesiydi. Kendi halinde yaşar, şöhretten, mevkiden kaçar, doktorluğu ticari unsur lardan uzaklaştırmak ve hastaya ve ailesine candan bir yardımcı olmak için elinden geleni yapardı. Merhumun teshisi çok kuvvetli idi. Tesadüf ettiği årızalar karşısında muhtelif ihtimalleri sayar, döker, akla uzak olanları hazfede ede en kuvvetli ihtimali teşkil eden teşhise yaklaşırdı. Bunda da tereddüdü varsa ve ilaçların ve tedbirlerin tesirini yokhyarak teshisin doğruluğunu tec rübeden geçirmek ihtiyacını duyuyorsa bunu da ayrıca söylerdi.

Doktor Reşat Rıza kitapları, böcek kolleksiyonları ve bahçesindeki çiç kleri arasında kendine mahsus bir inziva hayatı geçirirdi.

Reşat Rıza son zamanlarda hastalarını geri çevirmiye başlamıştı. Cenazesi Gülhane hastahanesinden kaldırılmıştır.

Figure 3. The news of Dr. Reşat Rıza Bey's death in Vatan Newspaper dated March 23, 1941 (27) (E.T. 02.07.2023).

bacilli, played an important role in maintaining the resistance of the army against epidemic diseases (3,4).¹³

What makes Dr. Reşat Rıza Bey unforgettable in our medical history is that he was the first person in the world to produce typhus vaccine in 1914. He found the *Rickettsia* that causes typhus, drew it in his notebooks and described how to prepare the vaccine (7,28,47). In this context, he first tested the typhus

¹¹ Ottoman Serîriyyât Mecmuası (1910-1914): Although the publication life of this journal, which covers general medical topics, is short, it contains articles by Dr. Süleyman Numan, Dr. Abdulkadir Noyan, Dr. Tevfik Sağlam, Dr. Hulusi Behçet and Server Kâmil Tokgöz, who were famous physicians of the period (22). Gülhane Musamereleri are medical meetings that started to be held at Gülhane in 1908. These meetings continued at regular intervals for a long time.

¹² In addition, the name of the medical society founded in 1856 as Cemiyet-i Tıbbiye-i Şahane was changed to Turkish Medical Society in 1925. Its library, which was created with great efforts, has not survived to the present day (25).

¹³ Prof. Dr. Julius Wieting Pasha (1868-1922): Dr. Julius Wieting, who came to Istanbul in 1902 at the invitation of the Ottoman Government to organize medical education, served as the director of Gülhane Hospital and Practice School and Seririyati Hospital from 1907 to 1914 after Dr. Deycke. During this period, he organized scientific meetings under the name of Gülhane Müsamere-i Tibbiyesi and conducted studies in the field of surgery (5). Dr. Mustafa Hilmi (Sagun) (1880-1967) was born in 1880 in the town of Sarlıca in Lesbos, graduated from the faculty of medicine in 1905 as a medical captain and then worked at the Gülhane Hospital and Practice School and Seririyat for four years. In 1910, he was appointed as Deputy Instructor of Internal Medicine and Microscopy at Gülhane Hospital and after a short time he was promoted to Chief of Bacteriology. He had the opportunity to work on typhoid, cholera, typhus, dysentery and plague vaccines and conducted vaccine studies with Dr. Reşat Rıza. After resigning from military service in 1921, he was sent to the Pasteur Institute in Paris in 1922 to further his specialization. After returning to his hometown, he was appointed as the Director of Ankara Bacteriology Center and later became the first director of Refik Saydam Central Institute of Public Health between 1932 and 1935. While he was the director, he established the B.C.G. vaccine laboratory for the first time within the Institute and was the first person to prepare the semple-type rabies vaccine (26).

vaccine he prepared on himself and then administered it to Dr. Musa Kazım. ¹⁴ The fact that he first administered the vaccine on himself in order to prevent typhus, which was particularly effective in the army, in a short time is an indication of great sacrifice (47). Dr. Reşat Rıza Bey's work on the typhus vaccine was also respected by his colleagues, especially Dr. Tevfik (Sağlam), Dr. Abdülkadir (Noyan) and Bacteriologist Server Kâmil (Tokgöz), who fought against infectious diseases at the front, visited Dr. Reşat Rıza Bey and received information about the typhus vaccine before moving to their duty areas (29,31,50). ¹⁵

The first person to widely apply the typhus vaccine prepared by Dr. Reşat Rıza Bey was Dr. Tevfik (Sağlam) Bey (1882-1963), the Chief Medical Officer of Army III (Caucasus Front). Dr. Tevfik (Sağlam) Bey visited Dr. Reşat Rıza Bey shortly before he left for Army III and received information about the vaccine, and on March 28, 1915, he prepared the first typhus vaccine and vaccinated nine officers, five of whom were physicians (29).¹⁶

"I personally prepared the first spot typhoid (typhus) vaccine on March 28, 1915 in Hasankale (Pasinler) and vaccinated nine officers, five of whom were physicians, at their own request. Subsequently, 510 people were vaccinated in Erzurum, 130 in Bayburt, 156 in Sivas, for a total of 805 people. Among these, there was no case of contagion attributable to the vaccine. Subsequently, both in the 3rd Army and later in the War of Independence, the vaccine proved its harmlessness." (29). Again, according to Dr. Tevfik (Sağlam) Bey, the vaccine did not show any adverse reaction and therefore, he determined the harmlessness of the vaccine and applied this vaccine to the 3rd Army (29).

Dr. Abdülkadir (Noyan) Bey (1886-1977), who was the Chief Public Health Advisor of Army VI (Iraq Front), also visited

Dr. Reşat Rıza Bey and received the necessary information about the vaccine, and he was transferred to his post in Army VI on 25 December 1915 (31). He explained the information he received from Dr. Reşat Rıza Bey about the preparation of the vaccine in his memoirs as follows:

"Considering that the antigen (microbe) is a blood antigen, if blood is taken from patients at high fever, defibrinated and kept in a bath at 60 degrees Celsius for one hour, the microbes in the blood will be destroyed and this antigen can be used as a vaccine. If 7-8 cubic centimeters of blood prepared in this way is injected under the skin or into the muscle, the body gains immunity against typhus." (31).¹⁷

Dr. Abdülkadir (Noyan) Bey administered the typhus vaccine, which he described as a vaccine conceived by Dr. Reşat Rıza Bey with his subtle intelligence, to the Eastern Front Commander Kazım Karabekir Pasha, the medical staff and soldiers at the front. In his memoirs, he stated that he could not administer this vaccine only to Field Marshal Colmar Freiherr von der Goltz and his personal physician Dr. Oberndörfer because Dr. Oberndörfer did not believe in this vaccine (31). In Dr. Abdülkadir Bey's memoirs, Dr. Oberndörfer and Field Marshal Colmar Freiherr von der Goltz died of typhus shortly afterwards: "It was not his fault that he was not vaccinated with typhus vaccine (referring to Colmar Freiherr von der Goltz). His doctor did not consent (Dr. Oberndörfer). It was not he who did not believe in the Turk, who did not value the work of the Turk, but his doctor who did not know the Turk. It is a strange twist of nature that he first punished the doctor who did not believe in the vaccine."18

A different version of the typhus vaccine was used by Dr. Hamdi Suat (Aknar) Bey (1873-1936) in Erzincan on April 25, 1915.¹⁹ Dr. Hamdi Suat (Aknar) Bey kept the blood taken during the most severe phase of the disease at -16 °C for

¹⁴ Dr. Musa Kâzım (1882-1939): He was born in 1882 in the Kalecik district of Ankara. In 1905, he graduated from the Military Medical School as a medical captain and then completed his internship at the Gülhane Hospital and Practice School and Seririyat for one year. He was then sent to Vienna to complete his specialization. After working at the Von Moorden Clinic for three years, Dr. Musa Kâzım Bey returned to the country and worked as a physician at Tuzla Tahaffuzhan for a while. In 1911, he was assigned to Yemen, and after serving there for two years, he returned to İstanbul and resigned from military service. Afterwards, he served as a member of the Health Council for a while and then was appointed as an internal medicine specialist at Gureba Hospital. In 1923, he resigned from this position and worked for the establishment and development of the sanatorium in Büyükada until his death (3).

¹⁵ Dr. Server Kâmil (Tokgöz) (1881-1943): He was born in İstanbul in 1881. He graduated from the Mülkiye (Civil) Medical School in 1902. After his graduation, he went to Paris to specialize in bacteriology. When he returned to İstanbul, he first became a Bacteriology Instructor and then the chief of bacteriology at the faculty of medicine. In 1942, he was appointed Director of Ankara Refik Saydam Hygiene Institution and died in Ankara in 1943 (3).

¹⁶ Gen. Ord. Prof. Dr. Tevfik Sağlam (1882-1963): He was an instructor of internal medicine at Gülhane and took active part in the Balkan War and the First World War. For detailed information, see (30).

¹⁷ Maj. Ord. Prof. Dr. Abdülkadir Noyan (1886-1977): Military sanitation instructor at Gülhane (32).

¹⁸ Field Marshal Colmar Freiherr von der Goltz (1843-1916): German Field Marshal, Commander of Army VI during the First World War. He served in the Ottoman Army between 1883-1896 and 1914-1916. For more information, see (33).

¹⁹ Dr. Hamdi Suat (Aknar) (1873-1936): Born in 1873 in Harput, Hamdi Suat Bey graduated from the Military Medical School in 1889 with the rank of lieutenant colonel. Following his graduation, he completed his compulsory one-year internship at the Gülhane School of Practice and Seririyat Hospital and was sent to Germany for his specialization. After completing his residency in Kiel, Leipzig, Würtburg, Kölbicher, Stohr, Rinafleisch, Fraenckel and Marchand Institutes, Dr. Hamdi Suat Bey returned to İstanbul and was appointed as the Anatomy and Pathology Instructor of Gülhane Drill School and Seririyat Hospital. He served in Erzurum during the First World War and successfully administered the typhus vaccine, which he prepared with a different method inspired by Dr. Reşat Rıza (3).

24-48 hours instead of heating it at 60 °C. In this process, he inoculated 1 mL on the first day, 2 mL on the fourth day and 3 mL on the seventh day. Dr. Hamdi Suat (Aknar) Bey, who first tried this method on himself, applied it to soldiers after it was successful and obtained good results (29,34,35). However, it is not possible to say the same positive results for Dr. Hamit Osman (Olcay) Bey, one of the typhus vaccine practitioners.²⁰ In March-April 1915, Dr. Hamit Osman (Olcay) Bey, on the other hand, used a different method and vaccinated patients with typhus at certain intervals (the beginning of the disease, the most severe period of the disease and the recovery period) with blood that he did not inactivate. Dr. Hamit Osman (Olcay) Bey, who vaccinated 304 people with this method, stated in his report that 114 people remained healthy and 190 people contracted typhus. Dr. Hamdi Suat (Aknar) Bey, on the other hand, reported that 49 people died as a result of the vaccination performed by Dr. Hamit Osman (Olcay). Following this, Dr. Hamit Osman Bey was dismissed and treated for mental illness for a year and a half (35).²¹

When the speeches and reports on the typhus vaccine administered by many military physicians, including Dr. Tevfik (Sağlam), Dr. Abdülkadir (Noyan) and Dr. Hamdi Suat (Aknar), were published in the Military Sanitary Journal in 1918, it brought along debates. In particular, Dr. Captain Haydar Cemal Bey, who had served in the 3rd Army, claimed that Armenian muhajirs were used as test subjects in the typhus vaccine and that hundreds of people had died. In the years when Istanbul was under occupation, such a controversy was considered quite "normal" and the Ministry of War opened an investigation into the incident. Subsequently, on December 31, 1918, Dr. Tevfik (Sağlam) Bey and Dr. Hamdi Suat Bey were asked to provide information about the typhus vaccine they administered (36).

Dr. Tevfik (Sağlam) Bey stated that he was the Chief Medical Officer of the 3rd Army during the war and that during this period Armenians subject to deportation were not vaccinated. He stated that he administered the vaccine for the first time to Dr. Selahaddin, Dr. Haydar, Dr. İhsan and Tevfik Bey, and that it was administered by Bacteriologist Abdülhalim Asım Bey in Hasankale (Pasinler) and Bacteriologist Alaeddin Bey in Bayburt. He also stated that the vaccination activities of Dr.

Hamdi Suat Bey, an anatomy-pathology specialist, in Erzincan were correct and that Dr. Haydar Cemal Bey's statements were untrue (36). Dr. Hamdi Suat Bey stated that he prepared a vaccine against typhus in Erzincan in late August 1915 and that he first vaccinated himself and then Bacteriologist Server Kâmil, Op. Fazıl, Dr. Hayri, Dr. Hayri, Dr. Edip, Dr. Abidin and Governor Tahsin Bey with this method and added that no Armenians were vaccinated during the Armenian deportation. The statements and reports received from Dr. Tevfik Sağlam Bey, Dr. Hamdi Suat Bey, Dr. Haydar Cemal Bey, Dr. Rafet Bey, Salahaddin Bey and two Armenian doctors were evaluated by the commission (Dr. Resad Rıza, Dr. Bacteriologist Refik (Güran), Dr. Akil Muhtar, Dr. Vasfi, Dr. Ömer Fuad, Dr. Zeki and Dr. Neşet Ömer Bey) established by the Assembly-i Âli-i Sıhhi. On June 5, 1919, the report written by the commission was approved by the Majlis-i Âli-i Sıhhi and the situation was also examined by the Allied forces and it was decided that there was no criminal element (34,36).

Another issue that Dr. Reşat Rıza Bey worked on was tuberculosis, which he described as one of the most dreadful diseases that wears down nations (37,38). By the 20th century, the population of the Ottoman Empire had remained at a very low level compared to European states.²² While mortality rates increased due to prolonged wars and epidemics, the decrease in marriage and birth rates led to the emergence of a population problem (41). Dr. Reşat Rıza Bey, who worked on the treatment of tuberculosis with tuberculin in Gülhane and later in his private practice, played an important role in the fight against tuberculosis with his knowledge and experience.

Dr. Reşat Rıza Bey, who adopted raising public awareness against tuberculosis as a duty, gave public conferences and also wrote works on the subject (23,37,42-46). Dr. Reşat Riza Bey tried to explain tuberculosis in the simplest way from diagnosis to treatment, especially in his work titled "Tuberculosis Everyone Should Know" (Figure 4). For example, he emphasized the importance of early diagnosis by stating that the symptoms of tuberculosis should be known by everyone and that these were mainly weakness, pallor, chest pains, aches and stings (37).

In addition, the following sentences of Dr. Reşat Rıza Bey, who saw public awareness as the main factor in treatment, are

²⁰ Dr. Hamit Osman (Olcay) (1892-?): Born in 1892 in İstanbul, Hamit Osman Bey graduated from the Military Medical School in 1913 and after completing a one-year compulsory internship at the Gülhane Practice School and Seririyat Hospital, he was appointed as an assistant in the internal medicine and bacteriology department of the same hospital. During the First World War, he served as the bacteriologist of Erzincan Range Hospital, but he was retired after many people died as a result of the typhus vaccine he prepared. He then went to Germany in 1921 to specialize in pediatric diseases. After working in Hamburg and Ependorf Hospitals, he returned to the country in 1923. Dr. Hamdi Suat Bey, who wrote articles on pediatrics, also served as the Chief of Himaye-i Etfal and the Second Chief of Hilal-i Ahmer (3).

²¹ For detailed information on the case of Dr. Hamid Osman, see (34).

²² According to 1914 population statistics, the Ottoman population was 18.520.016, while the European population reached 420.000.000 in the same years (39,40).

quite striking: "When it comes to treating tuberculosis patients in their homes, the fact that the physician assigned to the treatment of the patient, the patient's family around the patient, and the patient himself are obedient to reason and science and are not ignorant or indifferent has a great influence on the outcome of the treatment. If the patients are disobedient, impatient, stubborn and drug enthusiasts, there is no other option but to put them under the order of sanatoriums." (37). Finally, Dr. Reşat Riza Bey, who determines that only physicians should be consulted in the treatment of tuberculosis, but that the public usually applies to people who are not related to medicine for treatment, states that this situation is very inconvenient and ends his book with the following sentences: "If you are able (knowledgeable, conscious), buy a few copies of this book and present them to your friends. You will be bestowing on them the most precious of all things, health and well-being." (37).

In conclusion, Dr. Reşat Rıza (Kor) Bey is a physician who is not well known in our medical history, but has made history with his very important works. In addition to the typhoid, cholera and dysentery vaccines he and Dr. Mustafa (Sagun) Bey prepared together, the typhus vaccine, the first of its kind in the world, helped to reduce the losses caused by epidemics in World War I, especially on the Eastern Front, and later in the War of Independence. Dr. Reşat Rıza Bey, who made great sacrifices during the development of the typhus vaccine, worked on the vaccine for many years and first tested it on himself.



Figure 4. Dr. Reşat Rıza Bey's "Tuberculosis Everyone Should Know" (1914) (37).

In addition, the fact that Dr. Reşat Rıza Bey was a determinant in the production of typhoid and typhus vaccines with his work has brought him to a very important point in our medical history. He was also respected among his colleagues by publishing his knowledge and experience in national and international journals. In particular, it is an indication of this that the physicians who would fight epidemics at the front visited Dr. Reşat Rıza Bey and asked for his opinion before moving to their duty stations. It is quite remarkable that Dr. Reşat Rıza Bey, who was highly respected in his field with his knowledge and experience, was not included in the staff of Haydarpasa Medical Faculty (despite the many petitions he wrote). Finally, it is possible to say that Dr. Reşat Rıza Bey fought an important struggle in the treatment of epidemic diseases such as cholera, dysentery, typhoid and typhus, as well as tuberculosis, which made its impact felt more in the last period of the Ottoman Empire and the first period of the Republic, and in raising public awareness against this disease.

References

- 1. Aydar Hİ. Dr. Reşat Rıza Kor. Poliklinik 1941;8(94):343.
- 2. Unat EK. Osmanlı İmparatorluğu'nda Bakteriyoloji ve Viroloji. İstanbul: İstanbul Üniversitesi Cerrahpaşa Tıp Fakültesi Yayınları, 1970.
- 3. Erden F. Türk Hekimleri Biyografisi. İstanbul: Çituri Biraderler Basımevi, 1948.
- 4. Unat EK. Ölümünün 50. yılında Dr. Reşat Rıza Kor. Tıp Tarihi Araştırmaları 1993;5:213-23.
- 5. Terzioğlu A. Türkiye'de Görev Yapmış Olan Alman Asıllı Tıp ve Deneysel Bilim Dallarındaki Profesörlerin Biyografileri. Arslan Terzioğlu (ed.). Türk-Alman Tıbbî İlişkileri Simpozyum Bildirileri. İstanbul: İstanbul Üniversitesi Tıp Fakültesi Yayınları, İstanbul, 1981:131-216.
- 6. Ataç A. Gülhane Askeri Tıp Akademisinin Kuruluşu. Ankara: Atatürk Kültür Merkezi Başkanlığı Yayınları, 1996.
- Ünver AS. Dr. Reşad Rıza'nın Hayatı ve Mikrobiyolojideki Çalışmaları Hakkında. Zekâi Muammer Tunçman (ed.). XII. Türk Mikrobiyoloji Kongresi 7-10 Eylül 1966. İstanbul: Türk Mikrobiyoloji Cemiyeti Yayınları, 1968:183-9.
- 8. Ayberk NF. Merhum Dr. Reşat Rıza Kor 1877-1941. Poliklinik 1941;8(94):345-6.
- 9. Elhaç Rıza Tahsin. Tıp Fakültesi Tarihçesi (Mir'ât-ı Mekteb-i Tıbbiye). c.2. İstanbul: Özel Yayınlar, 1991.
- 10. Sabah Gazetesi, 27 Kasım 1899.
- 11. Haas LF. August von Wassermann (1866-1925). J Neurol Neurosurg Psychiatry 2003;74(8):1104. https://doi.org/10.1136/jnnp.74.8.1104
- 12. Gözel-Durmaz O. Osmanlı'da gıda güvenliği: Halk sağlığı ve uluslararası ticaret kıskacında mahlût zeytinyağları meselesi. Osmanlı Araştırmaları 2019;LIV:277-305. https://doi.org/10.18589/oa.632435
- 13. Sarı N. Mekteb-i Tibbiyye, TDVİA, c.29. 2004:2-5.
- 14. Sağlam T. Hoca, Hekim ve İlim Adamı: Süleyman Numan. Tevfik Sağlam (ed.). Süleyman Numan, İstanbul: Yayınevi Bilinmiyor, 1935:6-30.
- As E. Birinci Dünya Savaşı'nın Sıhhiye Dairesi Reisi ve Ordu Sıhhiye Müfettiş-i Umumisi Süleyman Numan Paşa (1868-1925)'nın hayatı ve askerî faaliyetleri. Uluslar Avrasya Sos Bilim Derg 2015;6(21):105-20.

- Yıldırım N. Gureba Hastanesi'nden Bezmiâlem Vakıf Üniversitesi'ne. İstanbul: Bezmiâlem Vakıf Üniversitesi Yayınları, 2013.
- 17. Akşam Gazetesi, 28 Mayıs 1922.
- 18. Unat EK, İhsanoğlu E, Vural S, Osmanlıca Tıp Terimleri Sözlüğü. Ankara: Türk Tarih Kurumu Yayınları, 2004.
- 19. Şemsettin Sami. Kâmûs-ı Türkî. İstanbul: Çağrı Yayınları, 2014.
- 20. Tanin Gazetesi. 11 Kasım 1924.
- 21. Yalçın HC. Doktor Reşat Riza. Poliklinik 1941;8(94):344-5.
- 22. Dinç G. Arap harfleri ile türkçe basılmış tıbbi süreli yayınlar üzerine bir inceleme I. Tıp Tarihi Araştırmaları 1990;4:16-40.
- 23. Cumhuriyet Gazetesi. 30 Eylül 1931.
- 24. Milliyet Gazetesi. 18 Ekim 1931.
- 25. Topçu İ. Osmanlı İmparatorluğu'nda ilk bilimsel tıp cemiyetleri. Düzce Univ Sos Bilim Enst Derg 2019;9(3):132-40.
- Tuna İ. Doktor Mustafa Hilmi Sagun'u kaybettik. Türk Hijiyen ve Tecrübî Biyoloji Dergisi 1967; XXVII (2-3):133-5.
- 27. Vatan Gazetesi. 23 Mart 1941.
- 28. Unat EK. Osmanlı İmparatorluğu'nda insanın bulaşıcı hastalıklarına karşı yapılan koruyucu aşılar. Dirim 1978;53(11-12):366-9.
- Sağlam T. Büyük Harpte 3. Orduda Sıhhî Hizmet. İstanbul: Askeri Matbaa, 1941.
- Sağlam T. Nasıl Okudum (Haz. Hüsrev Hatemi, Aykut Kazancıgil). İstanbul: Nehir Yayınları, 1991.
- 31. Noyan A. Son Harplerde Salgın Hastalıklarla Savaşlarım. Ankara: Son Havadis Matbaası, 1956.
- 32. Frik F. Gülhane Askeri Tıp Akademisi ve hocalarım. Dirim 1979;54(1-
- 33. Çalık R. Colmar Freiherr Von Der Goltz (Paşa) ve bazı görüşleri). Atatürk Araştırma Dergisi 1996;12(36);765-815.
- 34. Karatepe M. I. Dünya Savaşı yıllarında tifüs aşısının uygulanmasında türk hekimlerinin rolü. Mikrobiyol Bul 2008;42(2):301-13.

- 35. Unat EK. Birinci Dünya Harbinde Türk ordusunda tifüs savaşı. Cerrahpaşa Tıp Fak Derq 1989;20(2);255-63.
- 36. Özbay K. Türk Asker Hekimliği Tarihi ve Asker Hastaneleri, c.1. İstanbul: Yörük Basımevi, 1976.
- 37. Reşat Rıza. Veremi Herkes Bilmelidir. İstanbul: Matbaa-i Osmani, 1330/1914.
- 38. Tevfik İsmail. Müzmin akciğer vereminin tasnifi hakkında. Darülfünun Tıp Fakültesi Mecmuası 1927;9(10);612-22.
- 39. Karpat K. Ottoman Population 1830-1914: Demographic and Social Characteristics. Wisconsin: The University of Wisconsin Press, 1985.
- 40. Lindemann M. Erken Modern Avrupa'da Tıp ve Toplum (Çev. Mehmet Doğan). İstanbul: Boğaziçi Üniversitesi Yayınları, 2013.
- 41. Toprak Z. Türkiye'de Yeni Hayat. İstanbul: Doğan Kitap, 2017.
- 42. Tercümân-ı Hakîkat Gazetesi. 22 Ekim 1913.
- 43. Tanin Gazetesi. 12 Mayıs 1916.
- 44. Milliyet Gazetesi. 18 Eylül 1931.
- 45. Akşam Gazetesi. 29 Ocak 1922.
- 46. Reşat Rıza, Tüberkülin ile Tüberküloz Tedavisi. İstanbul: Matbaa-i Hayriye, 1327/1911.
- 47. Reşat Rıza, Mustafa Hilmi. Lekeli hummaya karşı aşı tecrübesi. Sıhhiye Mecmuası 1331/1915;3(8);609-22.
- 48. Reşat Rıza. Tifo aşısı. Sıhhiye Mecmuası 1329/1913;2(1);146-55.
- 49. Reşat Rıza. Eine allgemeine infektion durch einen soorpilz. Medizinische Klinik 1911;2(6):259-62.
- 50. Server Kâmil. Kafkas Cebhe-i Harbinde Lekeli Humma. Sivas: Sivas Matbaası. 1331/1915.
- 51. Deycke-Pasha, Reschad-Bei. Neue Gesichtspunkte in der Leprafrage. Deutsche Medizinische Wochenschrift 1905;31(13);489-92. https://doi.org/10.1055/s-0029-1188046