



# Vaccination Practices in Ottoman Schools

## Osmanlı'da Okullarda Aşı Uygulamaları

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### Abstract

This study focuses on the measures taken against epidemics and vaccination in schools, which were one of the main points of spread of diseases in the Ottoman Empire. With the Vaccination Regulations that came into force in 1885, 1894, 1907 and 1915, the primary target of compulsory smallpox vaccination was children. In this context, the vaccination of children in the center and periphery, the appointment of health officials to do this work, and the extent to which the theory was reflected in practice were evaluated through archival documents. In addition, the introduction of a vaccination requirement for the enrollment of children in private and public schools, the implementation of this requirement not only in ibtidâi schools and rüştiyes but also in higher education institutions such as the School of Engineering, and the introduction of the Penal Code in cases of contradiction are among the important steps taken by the state in this regard. In particular, the fact that the supervisory authorities worked together to contribute to the decision-making process in the identification and isolation of children infected with the disease in schools, the cleaning of schools and the vacation of schools, when necessary, shows the importance attached to the issue of epidemics and vaccination.

The primary target of compulsory smallpox vaccination in the Ottoman Empire was children. As a matter of fact,

the official announcement about the vaccine published in Takvîm-i Vekâyi dated March 21, 1847 begins with the statement that the vaccine protects children from smallpox, and for this reason, a fatwa was issued in accordance with Sharia. Subsequently, within the scope of the practice of free vaccination, various locations in İstanbul were identified and physicians and officers were appointed by Mekteb-i Tibbiye, and while the state made all-out efforts, the fact that the disease was still effective was attributed to parents not paying enough attention. For this reason, it was announced that it was now decided that children who went to school and had not yet developed smallpox and had not been vaccinated would be vaccinated by appointing a physician, those who did not go to school would be vaccinated in vaccination shops in their neighborhoods, and the births of not only boys but also girls would be reported to the official authorities by imams and mukhtars (1).<sup>1</sup>

From 1885 and onwards, the issues mentioned here were more thoroughly covered in the Vaccination Regulation<sup>2</sup> and Instructions<sup>3</sup> and the increasing control of the state could be

<sup>1</sup> Takvîm-i Vekâyi : Published on November 1, 1831 in Turkish, the first official newspaper of the Ottoman Empire.

<sup>2</sup> The totality of the articles that show the provisions that an institution or organization must comply with, statute (2).

<sup>3</sup> Tâlimat: An official order given from a superior authority to a subordinate in order to inform them of the matters to be followed. Tâlimatnâme: Regulation (2).

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recognized. For example, the obligation to vaccinate children within the first six months after their birth is one of the articles of the 1894 Regulation (3).<sup>4</sup> Article Four of the 1904 Regulation on Vaccination reiterates that children must be vaccinated within six months of birth, and states that those who do not comply with this provision will be fined according to the relevant article of the Penal Code (7). In İstanbul and the provinces, imams and mukhtars were obliged to report births in every city, town, sub-district and village within one month to the directors and heads of the municipalities to which they were affiliated. In towns and villages without a municipality, the mukhtar would notify the municipality of the accident to which he was affiliated (7). According to the Vaccination Instruction of the same date, notifications made to the municipality in İstanbul and the provinces would be recorded in a book, and a list of those due for vaccination would be prepared and given to municipal physicians and vaccination officers. Every three months, municipal physicians and vaccination officers would prepare a booklet showing that they had vaccinated in their area of duty in accordance with the schedule (containing information such as the district, neighborhood, household number, name, age, date of birth, father's name, name of the vaccination officer, and certificate number of the person vaccinated) and would send it to the Ministry of Medicine. Municipal physicians or vaccination officers were obliged to vaccinate unvaccinated people in their areas of duty at the appropriate times according to the schedule given to them. However, they had to notify the district directors to announce and warn the population that they would be coming to vaccinate them, and they had to re-examine them eight or twenty-five days after the vaccination (7).

When official announcements and recommendations did not have the expected effect, more effective methods were used to ensure that families vaccinate school-age children as well as newborns. The most important of these

was the requirement that all children in public and private schools be vaccinated and that a certificate of vaccination was required for enrollment in any school in the First Article of the Vaccination Regulation of 1885, which determined the principles of the legal regulation on vaccination (8). Thus, schools, where diseases spread rapidly due to the mass gathering of children, but which also provided the opportunity to vaccinate a large number of children at the same time, became places where mass vaccination was practiced and supervised. Pursuant to the provision that those who did not get vaccinated would not be admitted to school, parents who were forced to have their children vaccinated could do so at the pharmacies on duty in İstanbul<sup>5</sup>, at the *Mekteb-i Tibbiyye-i Şâhâne*, or at the vaccinators temporarily assigned by each municipal department two or three times a year. In the provinces, they had to apply to the local physicians or the vaccination officers in charge in places where there were no physicians (8).<sup>6</sup>

Another method used to achieve the goal of vaccinating every child was to identify and vaccinate those who enrolled in schools without a certificate and students whose five-year vaccination period had expired. Doctors were assigned for medical checks in schools. While vaccination officers could only examine and vaccinate unvaccinated students, doctors were responsible for medical examinations and identifying children with infectious diseases, in addition to vaccinating unvaccinated children. Since graduates of the *Mekteb-i Tibbiyye-i Adliyye-i Şâhâne* were appointed to military hospitals and army units, graduates of the *Mekteb-i Tibbiyye-i Mülkiye* were used for this purpose. The duties and authorities of the doctors called "country physicians" (later government physicians), who would assume a very important role in terms of public health, especially in the provinces, were determined by the 1871 *İdâre-i Umûmiyye-i Tibbiyye Nizamnâme*. The first and second articles of the *Nizamnâme* stipulated that hometown physicians would be appointed in İstanbul by

<sup>4</sup> Article 254 of the 1858 Penal Code, in the section on *Umûr-i Tehaffuziyye ve Tanzîfiyye* (*Umûr-i Tehaffuziyye ve Tanzîfiyye*), states that those who do not comply with the rules on protection and cleanliness will be fined from one white five to five white five (4). The term *mecidiye*, which is the general name of the gold and silver coins minted during the reign of Abdülmecid II (1839-1861), was commonly used to denote silver coins with a value of 20 kuruş. Silver *mecidiye* were popularly referred to as "white *mecidiye*, sim *mecidiye*". A quarter, on the other hand, refers to a fifth, i.e. 5 kuruş, which is ¼ of the silver kuruş called 1 *mecidiye*. The value of the quarter *mecidiye*, which was worth 4 kuruş 35 coins when they were first minted, was accepted as 4 kuruş 30 coins with the decision dated 1880-1881, see (5,6).

<sup>5</sup> Four days a week, school teachers began to take turns to see patients in the medical office of the *Mekteb-i Tibbiyye-i Şâhâne* in İstanbul. Here, İstanbulites were examined and treated as outpatients, while students had the opportunity to increase their practical knowledge. Until sunset, all patients were examined free of charge without discrimination between Muslims and non-Muslims, men and women, and the medicines of poor patients were given free of charge from the *Eczahane-i Âmire* located in the school. However, it was quite difficult for some neighborhoods to reach the office due to the distance. Considering this difficulty, examination and treatment units were opened in selected pharmacies in the central districts of İstanbul for those who suddenly became ill, called "on-call areas", where the school's physicians and surgeons would take turns to serve day and night. After the *Mekteb-i Tibbiyye-i Mülkiye* began to graduate, they were also assigned to the pharmacies on duty. With the organization of municipal health affairs and the increase in the number of hospitals in İstanbul, the need for these health units decreased and they were closed in 1895 (9).

<sup>6</sup> In a document dated August 1888, it is stated that smallpox vaccinations were given to children by physicians and surgeons in the pharmacies on duty in İstanbul and by school vaccinators at the *Mekteb-i Tibbiyye-i Şâhâne*. We can also see a request by the Ministry of Medicine for the appointment of three mobile vaccination officers for İstanbul and one for each of the provinces to vaccinate children in neighborhoods and schools according to the order determined by the vaccination inspector who regularly toured İstanbul and its surroundings (10). For another example dated 1889, see (11,12).

the Şehremaneti<sup>7</sup> and in the provinces by the governors in consultation with the Nezâreti Umûr-i Tıbbiye-i Mülkiye and their salaries would be paid by the municipality to which they were attached. The duties of hometown physicians included examining the patients in their jurisdiction twice a week free of charge, vaccinating those who requested free of charge on the days of examination, immediately notifying the necessary authorities in case of an infectious disease and taking measures (14). According to the Vilâyât-ı İdâre-i Sıhhiye-i Nizamnâmesi of 1913, which included regulations on government physicians, there was to be a government physician in each province, and it was reiterated once again that their responsibilities included regular vaccination in accordance with the Vaccination Regulation (Articles 1 and 11) (15).

We can use the correspondence between the Ministry of Education and the Ministry of Medicine dated 1888 to determine how the existing decisions and provisions regarding the assignment of doctors in vaccination practices were reflected in practice. Here, it is possible to obtain information on the identity of the doctors who traveled around the schools in İstanbul and vaccinated them, as well as the institution to which their per diems belonged. When the Ministry of Education informed the Ministry of Medicine that there was no provision in their budget for the payment to be made to the doctors, and that it would be enough to be "proud of such a good service as the Sultan's military officers", the Ministry of Medicine responded that military physicians were not available to perform this service and that those who were assigned with the order were not military officers. Emphasizing that these physicians and surgeons were not capable of traveling to many districts at their own expense, the Ministry of Medicine argued that the expenditure should be reimbursed from the teachers who admitted students to the schools despite the provision that no unvaccinated students should be admitted. The Ministry of Education argued that the teachers could not afford to pay such a penalty. As a result, it was decided to warn the school teachers to be more careful and to issue an official notification stating that the cost of the vaccine would be charged to the teachers if anyone accepted (16). The request of the Ministry of Education, dated 1889, to assign doctors to medical examinations in schools and the response of the Ministry of Medicine is another illustrative example in this regard. In the aforementioned response, the Nezâret's request for the examination of children with

contagious diseases in schools was answered by the Nezâret by stating that due to the scarcity of sanitation inspectors and their heavy workload, they would not be able to carry out the required examination and inspection, but if the Nezâret of Education deemed it appropriate due to the importance of the matter, private doctors could be employed for the examination of school students, as in Europe. The Ministry of Education, on the other hand, stated that there was no need for this and that it was appropriate for the Mekteb-i Tıbbiye-i Mülkiye to continue to carry out these duties (17).

The purpose of medical examinations was to identify unvaccinated students and those with contagious diseases and to vaccinate those who had not had vaccines. In the 1894 notification on the rules that private school principals had to follow in addition to the Maârif Nizamnâme and Talimatnâme, the request to always pay attention to issues related to the health of the students and to have the students examined by a physician when necessary is an expression of the sensitivity on this issue (18).<sup>8</sup> In addition to the general announcements made to public and private schools, we also encounter orders given directly to school principals. For example, in December 1888, the Directorate of the Leyli Girls' Industrial School was asked to examine the students and immediately expel those with contagious diseases from the school, and to have the unvaccinated ones vaccinated by their parents and the orphans vaccinated by the school physician. Mehmed Şevki Efendi, the school physician, who took action upon receiving the order, examined the students and in the report he prepared, he named twelve students who he determined to have diseases such as Dâülhanâzir (sycosis, glandular tuberculosis), eczema, and inflammation of the lymph nodes (adenitis) and who were to be expelled from the school (19).

Students who were unvaccinated or whose vaccination period had expired were identified not only through medical examinations, but also by checking the dates of the certificate of vaccination, which had to be presented during enrollment in schools. What makes the 1894 inspection at a school in Kasımpaşa Zincirlikuyu different from the others is the finding that none of the students had a vaccination certificate (20). After identifying students whose vaccination periods had expired or who were unvaccinated, schools were required to apply to the municipality they were affiliated with for vaccination. For this purpose, we can find official warnings from the center to school directorates. One of these is the request dated December 1894 and January 1895 by the

<sup>7</sup> The beginning of the modern municipal organization is the Şehremanet. In 1854, İstanbul Şehremaneti was established to regulate the mobility caused by the Crimean War in the capital city. The Ottoman government established the Sixth Dâire-i Belediye in Galata and Beyoğlu, a harbor area inhabited mainly by foreigners. In 1868, following this example, the whole of İstanbul was divided into fourteen municipal departments. In the provinces, modern municipal organization was initiated with the 1864 provincial ordinance. İstanbul Municipality was divided into nine branches in 1910 (13).

<sup>8</sup> In fact, in the manuscript submitted to the Nezâret, there is an article stating that a doctor should be appointed to take care of the health of the students in private schools by allocating an appropriate amount from the school's income and that this doctor should visit the schools two to three times a week.

Directorate of Mekâtib-i İdâdî<sup>9</sup> to notify school principalships with a circular that they should apply to the municipal department physicians of the municipality where the schools were located in order to have unvaccinated children or children whose five-year period had expired in İstanbul vaccinated (21). It is evident that the Nezâreti of Education's warnings to central and provincial departments about not admitting unvaccinated students to schools and conducting regular controls were continuous. As a matter of fact, taking into account the warning of the medical inspector in 1913, the Nezâret's order to all school principals and teachers to notify the schools in İstanbul and the provinces to check the students' testimonials and to compel those whose five years had expired or who could not show their testimonials to be vaccinated, even though the vaccination period was five years and a new vaccination was required at the end of the period, is an expression of this (22). Again for İstanbul, in 1914, the Directorate of Education requested that the dates on the vaccination certificates of the students in the schools be checked, that those who had been vaccinated for more than three years and those who had been vaccinated but failed to be vaccinated should apply to the medical committee of the municipality to be vaccinated again, and that the results be reported (23).<sup>10</sup> The response to the warnings can be seen in the application of the Eyüp Sultan Zükûr (Boys) Rüştiyesi to the Fatih Municipality to send a vaccination officer since the five-year vaccination period for some of its students had expired (26). In the Ottoman Empire, vaccination requests were mainly supplied by the Telkîhhâne-i Şâhâne. As a matter of fact, the statistical records of the Telkîhhâne-i Şâhâne of the early 20<sup>th</sup> century include schools such as Mekteb-i Mekteb-i Fünun-ı Harbiye-i Şâhâne, Mekteb-i Sultaniye Müdüriyeti, Aşiret Mekteb-i Müdüriyeti, Mekteb-i Sanayi Müdüriyeti, Baytar Rüştiye-i Askeriyesi, Halkalı Ziraat Mektebi, French School in Kadıköy, Mülkiye Baytar Mektebi (27,28).<sup>11</sup>

Not only in ibtidâi schools and rüşti schools, but also in higher education institutions such as the school of

engineering, those who were unvaccinated were vaccinated upon examination. When the engineer school physician informed the Directorate on March 3, 1912 that some students needed to be vaccinated against the smallpox epidemic that was effective at the time due to the expiration of the vaccination period, the 30 vaccine tubes needed were requested from Gülhane Hospital, another institution that produced vaccines other than Telkîhhâne (29). On March 7, 1914, during the vaccination of the students of the school of engineering, the Şehremaneti asked for 50 vaccine tubes and 100 vaccine certificates, as deemed necessary by the school physician. On March 10, 50 more tubes and 100 more certificates were requested, as the previous request was deemed insufficient, indicating that the vaccination controls of the students were monitored by the school physician and those identified were regularly vaccinated (30).

However, despite all these orders and prohibitions, the presence of unvaccinated students in schools could not be prevented. In January 1887, after the decree came into force, the Ministry of Education was aware that there were many unvaccinated students in schools. Considering the smallpox outbreak that was effective in some districts of İstanbul at the time, the Nezâret warned those concerned, especially teachers, to facilitate vaccinators upon the<sup>12</sup> request of the Meclis-i Tibbiye-i Mülkiye and Sıhhiye-i Umûmiye (December 1886) (32). In a document addressed to the Nezâreti of Education in 1890, the Nezâreti was asked to sternly warn teachers after the medical inspector stated that some Muslim and Christian schools in Bakırköy, Karagümrük and Samatya were opposed to vaccination by teachers (33). However, the circulars and warnings issued by the Ministry of Education to school administrators and teachers did not solve the issue of unvaccinated students even in İstanbul. As a matter of fact, in 1898, a document addressed to the Greek, Armenian and Catholic Patriarchs, the Bulgarian Exarchate, the Chief Rabbi's District Governorate and the principals of Mekâtib-i Husûsiye-i İslamiyya stated that those without a vaccination certificate

<sup>9</sup> İdâdî: Secondary school that educates students for higher education; high school (2).

<sup>10</sup> However, the practice was not without problems. In 1913, the Fatih Municipality Vaccination Officer went to Fatih and Numune-i Şükrân boys' high schools and vaccinated the students, but he did not give a certificate to the school administrations that the children had been vaccinated, nor did he visit the schools again for a second examination. Apparently, this was not the only example. The İstanbul Directorate of Education stated that the same situation was encountered in other schools as well, and the city government was to be notified to issue a warning to the vaccination officers in the municipal offices "so that the very important issue of vaccination would not be left unattended" (24). For the request of the İstanbul Directorate of Education, see (23,25).

<sup>11</sup> This statistic was provided by Sadreddin Konevî-Turgutoğlu Library and we are grateful for their assistance.

<sup>12</sup> It would be appropriate to give brief information about the institutions mentioned in the text regarding the protection of public health: Cemiyet-i Tibbiye-i Mülkiye is established in 1869. Its mission was to appoint health personnel such as physicians, pharmacists and midwives to municipalities. In 1906, this Cemiyet-i Tibbiye-i Mülkiye was renamed as Meclis-i Maârif-i Tib and affiliated to the Nezâreti Umûm Mekâtib-i Askeriye. After the proclamation of the Second Constitutional Monarchy (1908), it was renamed as Meclis-i Umûr-ı Tibbiye-i Mülkiye ve Sıhhiye-i Umûmiye and later abolished and replaced by the Directorate of Sanhiye-i Müdüriyet-i Umûmiyesi on March 1, 1913 under the Ministry of Interior. With a special law enacted in 1914, the Ministry of Interior was also renamed as the Ministry of Sanitation, and the Directorate of Sanitation, Quarantine and Hejaz Sanitation Departments were placed under the command of this ministry. The Directorate of Sanitation established provincial health directorates and accident government medical offices. In 1909, the Directorate of Müessesât-i Hayriye-i Sıhhiye was established under Şehremaneti in order to improve and modernize existing health institutions and to fight against infectious and epidemic diseases (31).

would not be admitted to schools, but when smallpox was seen in Fındıklı, the traveling vaccination officer sent to the region announced that 260 unvaccinated students were found to be unvaccinated in the Leyli and Nehari Şemsül-Mekâtib and Mekteb-i Süheyli and that they were vaccinated. Subsequently, the Ministry of Education is asked to notify the teachers to prevent such irregularities. However, not content with this, the Telkîhhâne Directorate requested that the teachers in the aforementioned schools be punished in accordance with article 254 of the Penal Code “as an example for others” for their “indifference” and that the Şehremaneti be notified that if unvaccinated people and children within the municipality were not vaccinated, the relevant municipal department’s medical committee would be held responsible. We learn from the same document that the Nezâreti of the Umûm Mekâtib-i Askeriye-i Şâhâne stated in its memorandum dated December 18, 1897 that the directors of Şemsül-Mekâtib and Mekteb-i Süheyli, who were found to be negligent, should be fined 25 kuruş in cash and forwarded to<sup>13</sup> Umûr-ı Tibbiye-i Mülkiye teller, and that the municipalities should quickly vaccinate the unvaccinated children in their regions with the announcement of their crimes (35).

On March 1, 1898, the Ministry of Interior informed the Ministry of Education that the chief inspectorate had provided information on the violation of sanitary procedures within the municipalities and that it had been revealed that there were many unvaccinated children in some of the schools within the Fourth Dâire-i Belediye. Despite repeated warnings, students were admitted to schools without a certificate in violation of the Nizamnâme, and in addition to the re-notification, the plan was to punish such school principals “as an example against their peers” and to announce their punishments in the press (36).

The legal basis for the penalty demands was article four of the 1885 Regulation, which stipulated that those who admitted and enrolled students without a vaccination certificate would be fined (8). However, their announcement in newspapers, in other words, their disclosure, took the punishment to another level. Another important point to be emphasized here is the coming together of different institutions on the issue of vaccination in schools, which was based on the 1885 Nizamnâme, since the medical faculty was responsible for inspecting whether the provisions were being implemented in İstanbul and the provinces, while the Ministry of Interior was

responsible for their enforcement (8). Although not mentioned in the Nizamnâme, these institutions were actually carrying out their responsibilities through the Ministry of Education. As a matter of fact, in December 1888, the Ministry of Medicine, which was responsible for the inspection of the vaccination practice, expressed its discomfort with the fact that there were unvaccinated children despite the obligation to vaccinate children in all public and private schools in accordance with the Regulation, and that vaccinators were requested from schools only when smallpox was observed, and conveyed to the Ministry of Education the request of the Majlis-i Tibbiye-i Mülkiye and Sıhhiye-i Umûmiye to pay attention to this issue due to the importance of the matter (17).<sup>14</sup> In another document dated 1888, while the Ministry of Education requested the Ministry of Education to give due importance to this issue by stating that there were still unvaccinated children in schools, in February 1889, the Ministry of Education issued a warning to school principals to have unvaccinated students vaccinated, and the Ministry of Medicine also requested the Ministry of Education to conduct medical examinations of students and identify those with infectious diseases (38).

In addition to the admission of unvaccinated students and the failure to identify those who had expired, it is also necessary to add the lack of dates on the certificate of attainment among the complaints against the schools. The date, which must be recorded on the certificate, is important in terms of follow-up. Because when vaccination dates were not recorded on the schedules containing the names of the students, it was not known when the students were vaccinated. For this reason, principals and teachers were warned to write the date on the vaccination records (39). Another complaint was that vaccination certificates were taken at the time of enrollment and admission to the school, but they were later lost, which caused students to have to be vaccinated again. For example, in a document dated June 1914, it is explained that although the vaccination certificates given to the vaccinated students should be returned to the parents of the students after being recorded in the book by the school administrations, they were not returned during the inspections and were usually lost, causing the children to have to be vaccinated again. In response to this problem, the Şehremaneti Directorate of Sanitation requests that all public and private school administrations be notified to return the certificates to their owners after registration (40).

<sup>13</sup> In the 1869 Maârif Nizamnâmesi (Education Regulation), it was stated that the salary of the head teacher at the primary school would be 800 kuruş and the salary of the assistant teacher 500 kuruş (Article 22), while the salary of the idâdi teacher would be 6000 kuruş (Article 37) (14). However, these salaries were almost never realized. Beginning in the 1880s, teacher salaries decreased. Head teachers’ salaries decreased from 800 to 500 kuruş and assistant teachers’ from 400 to 200 kuruş. Teachers belonged to the group of civil servants with low salaries. In the same period, the district governor of an accident received 1500-2000 kuruş and the quarantine physician 1000 kuruş (34).

<sup>14</sup> Although male and female students in all public and private schools were obliged to be vaccinated and to present vaccination certificates in accordance with the Vaccination Regulation, since it was found that there were unvaccinated students, the request of the Ministry of Medicine for the necessary attention to be paid to this issue was delivered to the Ministry of Education by the Ministry of Interior on December 24, 1888 (37).

That the warning was not effective can be seen in the complaint of 1922 by the Şehremaneti that the school administration did not return the vaccination certificates required for the enrollment of children in school, and therefore the student had to get a second vaccination upon renewal or transfer of enrollment (41).

In the institutional context, the Nezâreti of Education, in its supervision of the vaccination practice, directs the complaints and requests submitted to it by the Nezâreti of Medicine, the Nezâreti of Internal Affairs and the Şehremaneti to the school officials as sub-units through the directorates and makes them responsible. In fact, in a document dated January 20, 1887, it is seen that in response to the warnings of the Ministry of Medicine to be more careful in the vaccination issue, the duty of explaining to parents that they should get their children a certificate of martyrdom was assigned to principals and teachers (32). Therefore, according to the administrators, the failure to comply with the prohibitions on vaccination and the inability to effectively combat epidemics was due to the failure of school principals and teachers to fulfill their duties properly. In fact, the institutions authorized for vaccination were in agreement on this issue. The center to which complaints and requests for stricter controls were directed was the Ministry of Education. For example, on December 10, 1888, the Mekteb-i Tibbiye-i Askerîye sent a complaint to the Ministry of Interior from the Mekteb-i Tibbiye-i Askerîye stating that there were still unvaccinated children in schools even though officers were available to vaccinate those who applied every day in the pharmacies of the guard and the Mekteb-i Tibbiye Nezâreti free of charge, and that the schools were requested to provide vaccinators only when smallpox was seen in municipal offices. For this reason, the Majlis-i Tibbiye-i Mülkiye and Sıhhiye-i Umûmiye conveyed its opinion to the Ministry of Education that a warning should be issued to those concerned regarding the full implementation of the provisions of the Regulation (17).

In another example dated June 11, 1913, sent from the Şehremaneti to the Nezâreti of Maârif, it was complained that some school administrators did not pay attention to this, even though it was extremely necessary to prevent smallpox by examining whether students in all public and private schools were vaccinated or not and not allowing those who did not have a certificate or whose period had expired to attend school. However, smallpox, which was effective at the time, caused 80-100 deaths. While emphasizing that they were trying to vaccinate as much as they could, the Şehremaneti argued that their hard work could only be effective if the prohibitions were observed in schools where children were gathered. Therefore, the Ministry of Education was expected to ensure that all school officials complied with the provisions of the Regulation. In his letter dated May 21, 1913, the Nezârif Nezâreti Sıhhiye Müfettiş-i Umûmisi drew attention to the fact that although

those who did not have a vaccination certificate should not be enrolled and admitted and those whose vaccination period had expired should be vaccinated again, this was not given due importance in some schools. As an authorized official, his opinion was that school principals and teachers should be instructed to check the vaccination certificates of the students and that those who lacked vaccination certificates should be obliged to be vaccinated (22). In response to this request, in May and June 1913, the Ministry of Education asked the İstanbul Provincial Directorate of Education to check all public and private school students to ensure that they were vaccinated and to remind school administrations to be always vigilant about not allowing children with expired certificates to continue their education. Here, it is once again stated that some school administrations do not pay attention to this issue, which is extremely important for the prevention of smallpox, whereas the efforts of the Şehremaneti can only be beneficial with strict supervision in schools (22,42,43).

One of the requests of the Şehremaneti from the Ministry of Education was to put an end to the obstacles of the communities and families against vaccination and to ensure vaccination in schools. For example, on December 31, 1890, the Sixth Municipal Department requested the Ministry of Education to make an announcement to the school authorities, claiming that while a severe smallpox epidemic was raging in the vicinity of Hasköy, many students in the Jewish schools in the region were unvaccinated because the rabbis did not allow vaccination and five children died in a week. Thereupon, in a letter dated January 6, 1891, the Nezâret asked the Chief Rabbi's District Governor's Office to ask the rabbis to stop preventing vaccination (44). In 1898, the Greek, Armenian and Catholic patriarchs, as well as the directors of the Bulgarian Exarchate and the Chief Rabbinate were notified of the necessity to comply with the rules regarding vaccination in non-Muslim schools (35).

In another example, in a letter to the Ministry of Education dated February 28, 1910, the Şehremaneti complained about the lack of compliance with the Vaccination Regulation in foreign and non-Muslim schools within the Sixth Dâire. Accordingly, students without vaccination certificates were admitted and showed reluctance in the administration of smallpox vaccine. It is clear that this attitude would harm the goal of eradicating smallpox completely. Therefore, the Nezâret requested that the relevant school directorates be warned to vaccinate the unvaccinated students as soon as possible, while those without a certificate were not admitted. As a matter of fact, on March 5, the request of the Directorate of Tedrisât-ı Hususiye of the Ministry of Education to accompany and facilitate the officers appointed for the vaccination of students in foreign and non-Muslim schools was forwarded to Salih Efendi, the Inspector of Maârif-i Umûmiye. According to Salih Efendi's statement to the Nezâret on March 7, he had

first applied to the municipality to find out the identity of the vaccination officer after it was understood from the letter of the city government that the vaccination officer was being challenged in these schools. He then invited the officer and began to investigate by asking him about the difficulties he encountered. As a result of his investigation, the inspector's opinion was that all schools were under the control of the state. For this reason, it was absolutely inappropriate to notify non-Muslim schools through their spiritual leaders to comply with the provisions of the Nizamnâme regarding vaccination. As for the foreign schools, most of them declared that they would not even deign to accept the vaccination officer but would apply to their embassies and act accordingly. Considering that this shows the necessity of adopting the regulation on Mekâtib-i Hususiye as soon as possible, the inspector is of the opinion that an attempt should be made through the embassies to warn the relevant school directorates and the Ministry of Foreign Affairs should be informed about the situation since it concerns public health (45). Taking the assessment into consideration, on March 10, the Ministry of Foreign Affairs requested that an announcement be made to foreign embassies regarding the acceptance of vaccination officers in their applications to schools. In a statement to the Şehremaneti, it was stated that since the inspector's report revealed that some schools admit students without vaccination certificates, a letter had been written to the Ministry of Interior to announce in the newspapers that the provisions of the regulation had to be followed and to the Ministry of Foreign Affairs for the foreign schools' side of the issue (45).<sup>15</sup>

Although principals and teachers were the targets of criticism, their discontent with their demands being left unanswered was also reflected in the documents. For example, on November 12, 1894, when it was found that the students of the Hadika-yı Marifet School in Kasımpaşa Zincirlikuyu did not have vaccination certificates and most of them were overdue for vaccination, a vaccination officer and enough vaccine tubes were requested from the Ministry of Medicine and Telkîhhâne both in writing and verbally, but no results were obtained for six to seven months. In his letter dated November 13, 1894, the Inspector of Mekâtib-i Aliye and Hususiye once again reiterated that although the Ministry of Medicine and Telkîhhâne had been repeatedly asked for vaccines, no action had yet been taken, and requested that the Ministry of Medicine or the Directorate of the Sixth Dâire-i Municipality comply. However, on December 11, the Ministry of Mekâtib-i Askeriye-i Şâhâne announced that vaccine vials could not be provided unless requested by an authorized vaccinator,

and therefore the school should apply to the municipality to which it was affiliated (20).

On May 3, 1913, in a document sent from Beşiktaş Teşvikiye Mekteb-i İbtidâiyesi to the İstanbul Directorate of Education, it was stated that since the vaccination period for twenty children had expired, two official applications had been made to the Beşiktaş Sanitary Department for renewal, but since it was reported that the doctors were unable to come due to their shortage, it was requested that the execution of the vaccination be forwarded to the Sanitary Inspectorate (43). On May 6, the Directorate of Education in İstanbul was informed that the school was infected with mumps and humre (snake/erysipéle) and that the school had applied to the Sixth Dâire-i Municipality's Board of Sanitary Inspectors after the previous day's visit to the school by the Medical Inspector İhsan Bey, who reported that swift and urgent measures should be taken but was rejected by the said committee. In fact, not only was it not accepted, but according to the janitor, the document was thrown on the ground with "extreme insult" and he was told not to apply again. However, since such an attitude towards a request belonging to a medical inspector for the "protection of the health and well-being of the children of the homeland, which is always above everything else," was a violation of the "dignity of the government," the school demanded that the necessary legal action be taken. On May 7, the İstanbul Provincial Directorate of Education reminded that municipal medical officers were obliged to take the necessary measures in matters pertaining to public health, and the school administration would not delay in demanding the necessary action, expressing its discomfort with the response given to the municipal doctors and officers despite having made an official application to them (43).

It is seen that the tension between the institutions continued in June. In June 1913, the Şehremaneti responded with a letter claiming that it was Teşvikiye Mekteb-i İbtidâiyesi that did not comply with the Regulation. In the statement, the principal and teachers are again held responsible. Since, according to the Vaccination Regulation, vaccination officers were not obliged to go from house to house to vaccinate, and since such a procedure was not possible in a city with a population of one and a half million, it was the duty of the teachers at the school not to admit children who were unvaccinated or whose vaccinations were over five years old. In fact, apart from the fact that the school in question was responsible, the tone of the document became harsher, and it iwase emphasized that the complaint and application of the head teacher was either his ignorance of the Regulation or his lack of knowledge as well as his failure to comply with it.

<sup>15</sup> On May 3, 1910, the Ministry of Foreign Affairs was to share with the Ministry of Education the information they had received that students in German, Austrian and Italian schools were vaccinated by doctors sent by the consulate. Another document dated 1911 stipulates that children of foreign subjects must present a certified document showing their identity and a certificate of vaccination when enrolling in schools (46).

At the end of the reply, which strains the official language, it is stated that the school directorate should act accordingly since vaccination operations are being carried out in Beşiktaş for Nişantaşı, as vaccination is assigned to various locations everywhere, but it is accepted to send a vaccination officer for one time only (47).

The schools responsible for the operation of the vaccination program would send information on the fulfillment of their duties to the Directorate of Education, which in turn would send it to the Nezâret. For example, according to a document dated December 30, 1907, Vasfiye Hanım, Midwife and Vaccination Officer, vaccinated 471 students at Küçük Mustafa Paşa and Fatih İnas Rüştiye schools, as well as nehari and industrial schools and Dârülmualimât (Girls' Teacher Training School) against smallpox in nine days (48). A document dated May 21, 1908 from the Ministry of Education's Mekâtib-i Rüştiye İdâresi also records that Vasfiye Hanım vaccinated 1099 students at the Leyli and Nehari Girls' Industrial, Üsküdar Girls' Industrial, Beşiktaş, Sultanahmet, Molla Gürani, Fındıklı, Kocamustafa Paşa, Kadıköy Hamidiye, Üsküdar Hamidiye, Bakırköy Hamidiye, Mirgun and Eyüp schools in twenty-five days (49). As in the capital, schools in the provinces also forwarded vaccination information to the provincial directorates of education, which in turn forwarded it to the Nezâret. For example, in 1894, 93 children from Mersin ibtidâi<sup>16</sup> and rüştiyesi students were vaccinated against smallpox by the local municipality physician and given their certificates by the local municipality physician, and the information received from the school was sent to the Adana Maârif-i Umûmiye Directorate and then to the Nezâret (50).

In addition to the vaccination practice, the problems encountered were also communicated to the center through the directorates. In 1892, the Directorate of Education in Beirut informed the Ministry of Education about the vaccination practice in the schools in the region and the problems arising from the specific characteristics of the region. Accordingly, a large number of students in Beirut schools were unvaccinated, and it was observed that "it was not possible to explain to their parents" and that they were not accepted because they were not vaccinated, or when their attendance was terminated, they went to foreign schools and did not return to Muslim schools because they were vaccinated there compulsorily. As a result of the application made to the governorship because of the cooperation with the sanitary inspectorate and with the benefit of the orders sent by the center regarding the implementation of the vaccine, fresh vaccine pens were brought to the municipality at the municipality's expense and vaccination was started. The data presented to the Directorate

of Education in Beirut by Lieutenant Colonel Salih Efendi, Surgeon of the Beirut Hospital, on how many students were vaccinated in the existing ibtidâi schools on a compulsory basis was sent to the Nezâret (51).

The question posed by the Director of Education in Van in 1895 to the rüştiye teachers that most of the students in Van were not vaccinated due to the lack of vaccination officers and physicians in the provinces and what action should be taken to get them vaccinated is actually important in terms of showing the helplessness of the teachers in the provinces despite the pressure from the center. The Mekâtib-i Rüştiye İdâresi would leave the solution of the problem, which was conveyed to the center with the record that most of the children were not vaccinated because there were not enough vaccination pens even in the center of Van, to the Ministry of Interior, which was responsible for the implementation (52). In 1901, in response to the requirement that graduates of military schools who were physically fit for military service should bring their vaccination certificates with them for their enrollment and admission to the secondary school, a physician and a vaccination officer would be sent to Süleymaniye upon the notification from the that no vaccination had been carried out in Süleymaniye until then and that there was no official to do so (53).

We believe that it would be appropriate to discuss the vaccination practice in schools with the fight against infectious and epidemic diseases, as it would allow for a more comprehensive evaluation. First of all, it should be noted that when an infectious disease was seen in schools, vaccination was accelerated, and the spread of the disease was tried to be prevented by taking vacations. In the information given by the Şehremaneti to the Ministry of Education in 1897, it was reported that diphtheria and smallpox were found in the children of two houses in the same neighborhood within the First Dâire-i Belediye, and that it was revealed during the investigation that the children had contracted the disease from the school they attended, and that the necessity to suspend the school in question for an appropriate period was included in the report of the municipal medical committee (54). In the report of Dr. Arif Efendi, who was assigned to vaccinate the children in Kasımpaşa against smallpox, we have the opportunity to closely follow the process regarding the follow-up of the disease and the measures taken. Accordingly, Arif Efendi, who was assigned when the disease was seen in Kasımpaşa within the Sixth Municipal Department, went to the neighborhood with Mehmed Ali, one of the sergeants of the said department, and Eşref Efendi, one of the police officers, and met with Imam Cafer Efendi. Ibrahim, the two-year-old son of Demirci Tahsin, a member of the Coptic group

<sup>16</sup> Although the first modern primary schools established by the state in Istanbul were known as ibtidâi mektebi, the term child school was generally used for all primary schools until the 1880s. Beginning in the 1880s, only neighborhood schools became known as child school, whereas the primary schools established by the Nezâreti of Maârif gradually came to be known as ibtidâi mektebi (34).



on Ambar arkası Street, had contracted smallpox twenty-five days earlier. His other child, seven-year-old Hasan, had fallen ill eight days after İbrahim. In the same neighborhood, Demirci İbrahim's five-year-old son named Sait had been ill with the same disease for twenty days. Demirci Ali's three-year-old son Halil had been sick for eighteen days. In addition, Sandalyeci Ali's two-year-old daughter Hacer and Mehmed's one-year-old daughter were ill. Smallpox was suspected in Çalgıcı Rifat's five-year-old child named Şaban and the four-year-old daughter of Yorgancı Rıza Efendi on Cami-i Şerif Street. As a precautionary measure, Arif Efendi suggested that the ibtidâi school in the neighborhood be temporarily closed and that the children be prevented from having contact with each other. The doctor's investigation revealed that the disease had broken out in Demirci Tahsin's house. A total of nine children fell ill. Smallpox vaccination would be carried out in Kasımpaşa and as a precautionary measure, at least 20 fresh vaccine pens would be sent to the municipal official in Kasımpaşa. In another document dated December 8, 1887, we learn that the number of people infected with smallpox in Kasımpaşa reached twenty. Already in November 1887, the Nezâreti of Internal Affairs, Şehremaneti and the Nezâreti of Medicine had been informed about this issue. In its reply dated December 1, 1887, the Ministry of Medicine stated that Dr. Arif Bey had been sent to the place in question and

prepared a report and shared his opinion that the measures recommended by the doctor, such as temporarily suspending the school and preventing children from contacting each other, were appropriate (55).

In the late 19<sup>th</sup> century, in addition to smallpox, diphtheria was another disease that threatened children in schools and worried administrators.<sup>17</sup> In 1895, diphtheria serum began to be produced in the Ottoman Empire and 3750 bottles of the local diphtheria serum called Dr. Nicole serum were sent to various parts of the empire between January 1899 and November 1900 (56). In the context of vaccination in schools and measures against smallpox and diphtheria, we can use the statistics on morbidity and mortality in İstanbul published by the Şehremaneti İdâre-i Sıhhiyesi. In the first of these statistics, which includes data collected from municipal offices, the one-year sanitary statistics for the year 1324 (March 1908-1909) provide information on the use of vaccines and serum in addition to smallpox and croup cases.

A total of 54.819 smallpox vaccinations were given, 39.718 in households and 15.101 in apartment centers.

A total of 107.405 vaccinations were administered, 72.092 in households and 35.313 in the center (57).

**Table 1.** Smallpox and croup cases in one year's medical statistics for the year 1324 (March 1908-1909)

Disease	Death
Croup-Diphtheria	62 (6 in hospitals)
Smallpox	318 (31 in hospitals)

**Table 2.** One-year medical statistics for the year 1324 (March 1908-1909): Cases of croup treated with serum by the Municipal Committee of Health

Healing	Deceased
216	36

**Table 3.** One-year medical statistics for the year 1324 (March 1908-1909) showing cases of croup in those not treated with serum

Healing	Deceased
28	26

**Table 4.** Smallpox cases of vaccinated and unvaccinated people in the one-year sanitary statistics for the year 1324 (March 1908-1909)

	Healing	Deceased
Vaccinated	163	54
Non-vaccinated	51	264

**Table 5.** Smallpox and croup cases in one-year medical statistics for the year 1325 (March 1909-1910)

Disease	Death
Croup-Diphtheria	42 (3 in hospitals)
Smallpox	32 (7 in hospitals)

**Table 6.** One-year medical statistics for the year 1325 (March 1909-1910) showing the cases of croup treated with serum by the Municipal Committee of Health

Healing	Deceased
316	29

**Table 7.** One-year medical statistics for the year 1325 (March 1909-1910) showing the number of cases of croup in those not treated with serum

Healing	Deceased
-	13

**Table 8.** Smallpox cases of vaccinated and unvaccinated people in the one-year sanitary statistics of the year 1325 (March 1909-1910)

	Healing	Deceased
Vaccinated	37	4
Non-vaccinated	49	28

<sup>17</sup> For Zeynel Özlü's detailed study on diphtheria and preventive health services in the late Ottoman Empire, see (56).

**Table 9.** Statistics for the years 1326 and 1327 (1910-1911) (58)

	Disease	Death
<b>1326 (1910)</b>	Diphtheria	60
	Smallpox	1
<b>1327 (1911)</b>	Diphtheria	74
	Smallpox	221

The mortality rate for diphtheria, which causes death before treatment with serum, was 10%. In 1325 (1909/1910), out of 345 cases of diphtheria treated with serum by municipal physicians, 29 cases resulted in death, and these were those who presented after the third day of illness or those who had a very severe illness. Since fresh serum produced in the Bacteriology Center was always available in municipal offices, it was obligatory to inform the municipality of suspected children. Pursuant to the decision of the Assembly of Medical Sciences and Sıhhiye-i Umûmiye, every effort is made to give serum when diphtheria is seen among school students (57).

According to the description given in the aforementioned statistical records, from 1901 to 1904, the smallpox showed a tendency to disappear almost completely, but increased in late 1904, and after causing considerable damage in 1905, it decreased again in 1909, causing only a few deaths in 1910, and no cases were seen until December 1911-January 1912. However, during this period, it reappeared and increased gradually, causing 221 deaths in four months. The sanitary administration of the Şehremaneti cited the failure of the population administration to report new births to the municipal offices on time and the indifference of parents to have their children vaccinated as reasons. Among the reasons listed was the fact that the need to be revaccinated every three or at least every five years did not become widespread among the public. This is why smallpox could not be completely eradicated from İstanbul. In this way, the Şehremaneti, while stating that the failure was not theirs, strengthens its defense by stating that 39589 vaccinations were performed in 1910 and 77.619 vaccinations were performed in 1911. Moreover, the opposition of the majority of the population to vaccination during the smallpox invasion is recorded as the most important difficulty faced by the institution. However, the cases of death from smallpox in 1910 were not among the vaccinated, but all were unvaccinated. In 1911, there were 43 deaths among the vaccinated and 154 among the unvaccinated (58).

Despite these explanations on smallpox, it can be said that Besim Ömer, the head of the Council of Medical Sciences, Civil Administration and Sıhhiye-i Umûmiye, did not agree with the

Şehremaneti on the fulfillment of responsibilities, at least in the case of smallpox. In his letter addressed to the Ministry of Interior dated January 22, 1910, Besim Ömer stated that due to the spread of diphtheria and the number of deaths in İstanbul at that time, fresh serum and the necessary tools and materials should always be kept in the municipal centers, but an investigation revealed that they were not available. For this reason, it was deemed necessary for the municipal physicians to have the necessary equipment and materials and for the Şehremaneti to be warned about the availability of fresh serum in the municipalities. In addition, it was ordered to the Ministry of Education to report every case in schools to the municipalities, and it was aimed to prevent the spread of the disease by examining students every day in schools with diphtheria (59).

We can follow the identification and isolation of children who contracted the disease in schools in the Ottoman Empire, as well as the process for doing so, through documents. For example, in February 1896, the subject of the correspondence between the Şehremaneti and the Nezâreti Maârif was a case of croup in a school. This example can give us an idea about the reporting of croup and the measures taken at the end of the century. When news was received that the daughter of Mustafa Bey, the medical doctor of the Tenth Dâire-i Belediye, and a few other children at the Girls' Industrial School had contracted the disease, it was apparently deemed necessary by the Şehremaneti to assign a municipal medical committee and an officer from the Nezâret to investigate the whereabouts of the children's homes and whether treatment and cleaning had been carried out (60).<sup>18</sup> Upon the order of the Nezâret, Şevki Bey, the school physician, and Halil Bey, who was assigned from the First Municipality Department's Committee of Health, inspected and examined the school and prepared a report. According to this report, it was revealed that Mustafa Bey's daughter at the school was not Azize, but his other daughter Saliha Hanım had croup and was not involved with the school. As a result, Saliha was brought to the school for a while by her mother to be with Ms. Azize, but no cases of croup were found before and after her arrival, and it was reported to the Ministry of Education that the disease had nothing to do with the school (60).

In cases of infectious diseases, attention is paid to cleaning the school before it is opened as well as its vacation. As a matter of fact, after the death of a student from diphtheria at the end of the 19<sup>th</sup> century, the necessity of ensuring the necessary sanitary conditions at the Beyazid Rüştüye School, which was opened after twelve days of vacation without

<sup>18</sup> The fight against the disease was carried out by municipalities. The municipal organization consisted of directorates or local branch offices headed by a director. The duties of the Directorate Heyet-i Sıhhiye, which was affiliated to the municipality, included taking measures to prevent contagious and epidemic diseases, establishing relations with the provincial sanitary directorate for this purpose, and vaccinating against disease (56).

complete cleaning, was mentioned in the report submitted to the Inspectorate General by the Head of the First Dâire-i Belediye Heyet-i Sıhhiye, and the authorities who took the report into consideration issued a warning to the School Directorate (61).

Circulars were issued to school authorities on what to do in case of infectious diseases such as smallpox and croup. Accordingly, during a severe smallpox epidemic in March 1909, school principals and teachers were instructed to pay attention to the vaccination dates of the students and to have those who had expired vaccinated immediately, and when smallpox was seen in a school, if it was an ibtidâi school, the teacher should immediately cancel the school, and if it was a rüştiye school, only the class should be canceled and the situation should be reported. If the sick child had siblings and relatives residing together, they should not be allowed to attend school either (62). We also have documents containing explanations on the measures to be taken in response to applications from the provinces. In October 1905, when diphtheria was detected in the town of Ilisan, the Directorate of Education in Monastery asked the Nezâret by telegram what to do when a medical report revealed that schools would be closed for a while. The answer given was to send the student home immediately in case of a contagious disease, not to admit him/her until he/she recovered, and the quarantine period was over, to clean the school building according to the scientific method, and to take a vacation when the majority of the students had the disease (63). A document dated March 1908 provides information on the sanitary measures to be taken in case of contagious and epidemic diseases in schools. Accordingly, when an infectious disease is found in a school, it will be closed for a week to twelve to fifteen days and can be reopened after scientific cleaning. If the disease was smallpox, all students in the school would be vaccinated (as many as 3500 children were vaccinated against smallpox). Furthermore, for the convenience of school principals and teachers, and to make statistics when necessary, only those who contracted infectious diseases were to be recorded in a printed book called *emrâz-ı sâriye* (infectious diseases) and *müstevliye* (epidemic) book. The waiting period was six weeks for scarlet fever, four weeks for measles, six weeks for smallpox, four weeks for croup, and six weeks for whooping cough, and the student would not be admitted to school until this period was completed (64).

An example of acting according to instructions can be seen in the Defterdar Mehmed Bey İbtidâi School in Göksu in 1911. According to the document submitted to the İstanbul Vilâyeti Maârif Müdüriyeti by teacher Osman Bey, when smallpox is seen among the children, they are vaccinated by the municipal physician, cleanliness is maintained, and a ten-day vacation is given (65). In a telegram sent to the Ministry of Education from Erzurum in April 1910, it is reported that the

Bayburt Rüştiye School in Erzurum was closed for ten days due to the outbreak of croup among the students (66).

When smallpox and diphtheria are reported in schools, the school is inspected. Suspicion is sufficient for the authorities to take action. For example, in April 1907, the school was inspected upon a report of smallpox in Atpazarı Inas Rüştiye Mektebi, but no smallpox was found during the inspection. Only one student was found to have a mild case of chickenpox. While it is also noted that the student was vaccinated against smallpox, what is noteworthy for us is the concerns of the informant and the authorities about smallpox (67).

In December 1909, when ten-year-old İsmail Zihni, one of the students of the Maarif School in Aksaray, and another child from the same school contracted croup, the Şehremaneti informed the İstanbul Police Directorate, which in turn notified the Ministry of Interior (68). In January and February 1910, the subject of the correspondence between the Şehremaneti, the Ministry of Interior and the Meclis-i Tibbiye-i Mülkiye and Sıhhiye-i Umumiye Riyaseti was the measures to be taken to prevent the spread of the disease. On December 28, 1909, the Ministry of Interior reported the matter to the Assembly of Medical Sciences and Public Health. On January 8, 1910, Besim Ömer, the head of the Meclis-i Tibbiye-i Mülkiye and Sıhhiye-i Umûmiye, informed the Ministry of Interior that in order to prevent the disease in schools where croup was seen, first of all, the student should be isolated at home and other students who were in contact with the patient should be medically examined, diphtheria serum should be used in suspected cases, and the school should be disinfected, and if the school was treated in this way, there would be no need to close the schools. Among the sanitary measures listed by Besim Ömer was that students should not be allowed to continue attending school unless they submitted a report stating that bacteriological examinations proved that there were no diphtheria bacilli in their throats after they recovered (69).

School vacations were intended to keep children at home and isolate them from other children. However, the fact that some families concealed the disease and enrolled their children in other schools necessitated the joint action of the medical and education authorities. For example, on July 5, 1888, a report that two children had died of croup necessitated a visit to the Jewish School in Büyükdere for an investigation. The school was closed, and when those in the know were asked, it was learned that the principal had closed the school because the students' fees were insufficient and that the students there had been dispersed to other schools. Investigations were also carried out at a nearby school with about 30 children, where 4-5 students were enrolled, and it was reported that none of the students had croup or died. Although the children who had been transferred were not sick, the Büyükdere Quarantine

Physician was also consulted to decide whether the school should be canceled. According to the information received from the physician, the two children who had attended the Jewish School but had died in their own homes had croup, and neither the other Jewish schools nor the Greek Armenian schools in the region had contracted the disease in the past twenty-two days, so there was no need for the school to be closed (70). Despite the close monitoring and sensitivity in this example, another example dated April 1910 shows us that private school administrations did not comply with the ban. Although the aforementioned record states that in the event of a contagious disease in ibtidâ schools, children should stay at home until the disease disappears, a document from the İstanbul Directorate of Education explains that it was learned that some students had applied to private schools in the neighborhood and enrolled (71).

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