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Prevention and Treatment of Venereal Diseases in the Lithuanian Army, 1919-1923

Viktorija Šimkutė 

ABSTRACT

In the early 20th century, many armies suffered from venereal diseases. Lithuanian army that participated in the Wars of Independence (1918–1920 [1923]) was no exception. Although venereal diseases did not claim many lives, they forced small army to give up the services of many soldiers. Historical analysis of archival documents of the Lithuanian Ministry of National Defense, military periodicals, Statutes and medical books of the Lithuanian army from the period 1918–1923, has been conducted. The venereal disease that bothered the Lithuanian army the most was gonorrhoea accounting for 78.4% of the overall incidence of venereal diseases in 1919. The Sanitation Department of the Lithuanian Ministry of National Defense took strict measures to stop the spread of gonorrhoea and other venereal diseases. This institution paid attention to regular health examinations, registration of patients, disease traceability, education, preventive treatment, isolation, and prostitution. In case of illness, treatment was carried out in a special hospital named II Separate Infirmary. Until 1923, the treatment was compulsory even to soldiers who have completed their service. Difficulties were encountered in different areas because the soldiers avoided treatment, hid their illness, and visited uneducated doctors. There was a lack of laboratories to carry out the research, and the treatment of the patients was expensive and harmful. Despite all the difficulties, the fight against venereal diseases in the Lithuanian army was won. In 1923, the incidence of gonorrhoea was twice as low. The incidence of other diseases has also decreased. Having carried out its main work the Sanitation Department narrowed its activities in 1923.

Keywords: 20th century, history of medicine, lithuanian, military medicine, venereal diseases

INTRODUCTION

The relationship between venereal diseases and the military was known for a very long time. The very first syphilis epidemic on the European continent began in the army of King Charles VIII which invaded Naples during the Italian Wars (1494–1498) (1). In fact, very little was known about how venereal diseases affected the armies in the 16th- to 18th centuries. Much more was written since the nineteenth century: These diseases affected the military during the Peninsular War (1807–1814), Crimean War (1853–1856), American Civil War (1861–1865), Franco-Prussian War (1870–1871), etc (2).

The problem of venereal diseases was especially acute during the First World War. At the beginning of 20th century nursing and treatment of venereal diseases was long, expensive and crude. Treatment of syphilis with arsenic and mercury compounds was harmful and caused side effects. Irrigation treatment of gonorrhoea was very painful (3). However, this was a conundrum not only from a medical point of view. The armies sought to gather as many troops as possible. Venereal diseases were a main cause of rejection and incapacity for duty (4). William Crawford Gorgas, a United States (US) Army physician and 22nd Surgeon General of the US Army, stated that “the army loses more days of service from its men due to venereal diseases than from any other cause (5).” In 1917, between 7500 and 9000 British men with these diseases were treated in hospital on a regular basis. Similar numbers were recorded in France and other countries (2). For this reason, armies tried to manage venereal diseases in a variety of ways. Attention was paid to preventive treatment with bichloride of mercury, protargol, calomel, and other substances. Prostitution reforms were implemented. Education was carried out through books, exhibitions, and other means. Soldiers were encouraged to use condoms, inform doctors about diseases and avoid sex. Much was said about the harm of drunkenness, which was considered one of the main causes of the spread of venereal diseases (6).

Lithuanian army which started participating in the Wars of Independence* at the end of 1918 faced a major problem of venereal disease. The newly created army did not have enough preventive and curative measures, and there was a great lack of awareness among the soldiers themselves. The health of the soldiers was not sufficiently checked when they were admitted to the army. Prostitution was difficult to regulate and easily accessible to soldiers. Seeing that the incidence of venereal disease was increasing and the army lost soldiers as a result for a long time, the Sanitation Department of the Lithuanian Ministry of National Defense took strict measures (7).

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Faculty of Pharmacy,
Lithuanian University of
Health Sciences,
Kaunas, Lithuania

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Correspondence
Viktorija Šimkutė,
Lithuanian University of
Health Sciences, Faculty of
Pharmacy, Sukileliu ave. 13,
LT-50161 Kaunas, Lithuania
Phone: +370 62455208
e-mail:
v.simkute.vi@gmail.com

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*Lithuanian Wars of Independence- the fights against Bolsheviks, Bermontians, and Poles which lasted from the end of 1918–1920. Sometimes the end of these battles is considered to be 1923, because then Lithuania regained the Klaipėda region. Whereas this date coincides with the narrowing of the activities of the Sanitation Department, the year 1923 will be considered the end of the struggles in this text.

Considering the lack of scholarly works in international journals about prevention and treatment of venereal diseases in the Lithuanian Army between 1919 and 1923, this paper seeks to review the measures taken by this institution and find out whether the fight against venereal diseases was successful.

Venereal Diseases in the Lithuanian Army

Lithuanian army recorded incidence of two types of venereal diseases: Syphilis and other venereal diseases. Three types of syphilis were distinguished: Primary syphilis or hard chancre (*ulcus durum*), secondary syphilis, and other forms of syphilis. Other sexually transmitted diseases included gonorrhea and chancroid or soft chancre (*ulcus molle*). The incidence of other venereal diseases was significantly higher than that of syphilis. For example, in 1920, 554 soldiers had syphilis, while 1357 soldiers had other venereal diseases. The biggest problem was gonorrhea, a disease accounted for 78.4% of the overall incidence of venereal diseases in 1919, and 71% in 1920. There were only a few or no patients with other forms of syphilis and chancroid (7).

The journal *Word of Soldiers* even contained a formula showing the rate at which venereal diseases spread in the Lithuanian army in 1919 (Fig. 1) (8). The formula pointed out that, for example, if there was one patient in May, then there were already two in June, four in July, nine in August, and six in September. The author of the article said that the number of patients almost doubles every month and called for all necessary preventive measures to be taken (8). Over time, the efforts taken by the Sanitation Department bore fruit. In 1919, 1.6% of soldiers had syphilis and 5.75% had other venereal diseases. Meanwhile, in 1923, 1% of soldiers had syphilis and 2.11% had other venereal diseases (Fig. 2). However, these numbers reflect only outpatient morbidity. It is likely that there were significantly more patients in both years (7).

Several causes led to the spread of venereal diseases in the Lithuanian army. First, the quick start of the Lithuania Wars of Independence forced to accept men without checking their health carefully. Newcomers were a major source of venereal diseases. Improper examination of them and failure to initiate treatment led to the spread of diseases within the army. Second, although Temporary Rules for the Regulation of Prostitution were adopted in 1919, it did not help to control the spreading of diseases. There were many unregistered prostitutes in the country and their health was not checked. For example, at the beginning of 1920, there were 103–104 registered prostitutes in Kaunas, the temporary capital of Lithuania, while 1000–1500 were unregistered (9). Major disagreements between the army and Lithuanian Department of Health arose over who should take care of the health screening and treatment of these women. Moreover, controlling prostitution was very difficult due to the lack of awareness and obedience of prostitutes. According to the rules, registered

Gregužės mėnesį ligonių buvo . . . a
 Birželio . . . a + a
 Liepos . . . (a + a) × 2
 Rugpjūčio . . . [(a + a) × 2] × 2 + a
 Šiek tiek mažiau už rugpjūčio mėnesį, būtent . . . (a + a) × 2 + (a + a).

Figure 1. The formula showing the rate at which venereal diseases spread in the Lithuanian army in 1919. It pointed out that the number of patients almost doubled every month. *Word of Soldiers, 1919, No. 29*

Source: Martynas Mažvydas National Library of Lithuania

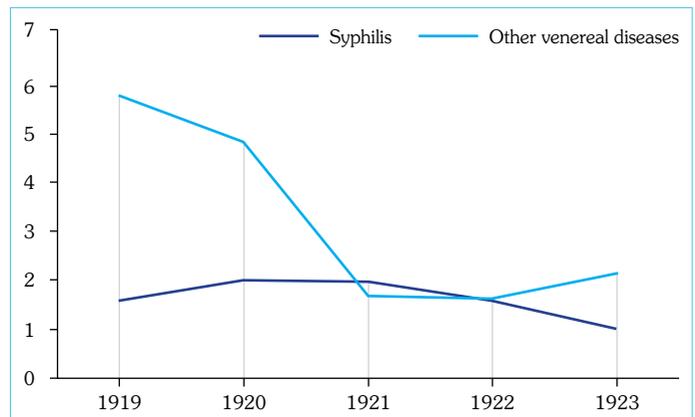


Figure 2. Percentage of the soldiers hospitalized with venereal diseases between 1919 and 1923

Made on the basis of Morbidity and Mortality in the Lithuanian Army by S. Barkauskas

prostitutes had to check their health twice a week and record health data in a sanitary booklet (10, 11). However, most of them avoided visiting doctors. Dr. Fuchsas stated that “the prostitute herself never goes to the doctor. It often happens that in the morning she receives a mercury injection and in the evening she is already catching men (9).”

In general, the poor understanding of venereal diseases among both prostitutes and the soldiers was the biggest problem. The journal *Soldier* wrote that “every man watches out the bite of the bee or the snake, but from the prostitutes, which is far more dangerous to health than the venom of the snake (12).” The soldiers hid their illness and the information about where and from whom they had contracted venereal disease. Men said they got infected because they smoked bad cigarette or urinated against the wind (13). Feeling ashamed of their colleagues, family, and doctors, soldiers went to see quack doctors, which only exacerbated the course of the disease. Sometimes soldiers thought they had to “return” the disease to the woman from whom they became infected to recover. In the case of prostitutes, similar trends prevailed. These women often followed the saying, “who brought the disease, let him take it away,” and in revenge sought to infect more men (12).

Disease management was also complicated by the fact that prevention and medicines were very expensive. The cost of treating venereal disease was in second place after surgical treatment (9). It was difficult for the new Lithuanian army suffering from deprivation to provide the soldiers with proper treatment in the 1st year.

Prevention of Venereal Diseases

As the first step, the Sanitation Department endeavored to conduct regular medical examinations and health registration of soldiers. The Temporary Sanitation Statute (1919) pointed out that soldiers should check their health once a month and singled out the importance of venereal and skin diseases (14). Later, the Conference of Army doctors suggested to do it twice a month. Every soldier infected with venereal diseases had a special book where the information about the course of treatment was written. This information was useful because it determined whether soldier can take a vacation or not: The doctor checked if the treatment was needed and gave special permissions confirming that soldier “is not dangerous for the public (15).”

Furthermore, the Sanitation Department pointed out that only cultured and clever soldier understands the danger of venereal diseases. For this reason, the army supplied periodicals with articles about it. No other disease prevalent at the time was as widely described in periodicals as venereal disease. Most of the articles consisted the information about the danger of prostitution, government resolutions, and situation in other countries. The course, symptoms, and treatment of them were described in detail. The text was intimidating and sometimes even threatening. The articles suggested to ban sick soldiers from marrying or to impose punishments (13). Many articles urged soldiers to avoid sex, as this was the only way to prevent disease. Moreover, a lot of attention was paid to drunkenness. The journal *Word of soldiers* wrote that “drunkenness in the military is the foundation of fornication” and promotes the spread of venereal diseases (16). An article entitled “Drunkenness and venereal diseases in the army of England” by A. Kriauciūnas was published in 1921. There was written that punishments for drunkenness (starting with 50 days in prison and finishing with death penalty) helped to stop the spread of syphilis in the army (17). The goal of articles like this was to affect the moral state of Lithuanian soldiers and to make them to be afraid.

Moreover, Literature Department of the Ministry of National Defense published special books: *Venereal Diseases, Instructions for Patients with Syphilis and Gonorrhea*, etc. showing soldiers how to protect themselves and what to do in the case of infection. Army doctors also got special books (*The Textbook for Sanitary Officers*) about the course of syphilis, clinical symptoms, and treatment ways. Still, written information was improved with lectures and exhibitions. Movable exhibition about venereal diseases was held in Kaunas for 10 days in 1922. Visitors could see 100 pictures, some diagrams, 50 mules and listen to the lecture “Venereal diseases not shame but disaster” by doctor Epšteinas. Most of visitors were soldiers (35.5%). Like all other exhibitions, they could visit it for free (18). Moreover, in 1922–1923, cinematographic parties were held in the regiment of the Grand Duke of Lithuania Kęstutis, during which films about venereal diseases were shown (19). A of these educational activities were entrusted to the emerging Society of Fight against Venereal Diseases in Lithuania (20).

Another important prevention measure was the fight against prostitution. The head of the Sanitation Department general Vladas Nagevičius was one of the first people in Lithuania, who started talking about the damage caused by prostitution in the country (11). However, the regulation of prostitution was in the power of the Lithuanian government. Although the country’s government

and doctors talked a lot about the necessary regulatory measures, these talks often did not transform into real work. For example, it was proposed to set up a brothel where certain people could constantly monitor the activities and health of prostitutes. Moreover, it was suggested to ensure that all brothels had prevention measures: Condoms, calomel ointment, protargol solution, brochures, etc. It was also suggested that prostitutes should be taught to identify syphilis symptoms on the bodies of soldiers and teach them to use preventive medications. According to the authors of this proposal, every prostitute had to have an Esmarch irrigator with potassium permanganate solution, protargol solution (5%), vaseline, and condoms. All of these proposals stemmed from examples of venereal disease and prostitution management in Germany, England, and other European countries. These examples also gave rise to ideas about the forced treatment of soldiers, the penalties for not using protargol and calomel after sex, and the forced use of Salvarsan every month among prostitutes (9). However, it was very difficult to implement all mentioned ideas due to the unconsciousness of prostitutes themselves, illegal prostitution, and the lack of resources. Most of suggestions remained unimplemented.

A lot of effort has been put into the traceability of the disease. Soldiers were asked to report the names of the women from whom they were potentially infected. This information was passed on the Health Department of the Lithuanian Ministry of the Interior. This institution had to check whether these women were in fact ill. However, when this mechanism reached a large scale, the Sanitation Department received reports of dissatisfaction from Lithuanian Department of Health. They demanded to send only the names of registered prostitutes because Lithuania did not have the resources and appropriate regulations to conduct large-scale research (21). However, this was not the only obstacle to proper disease traceability. Lithuanian Department of Health but also demanded to prosecute soldiers for all false accusations of women due to venereal disease (22). For this reason, the soldiers avoided to report about their illness and the potential source of venereal diseases.

Isolation and preventive treatment were other preventive measures in the Lithuanian army. Patients with venereal diseases were treated in separate hospitals. Separate work teams were formed from soldiers with syphilis to distinguish them from healthy ones (9). Moreover, sick or incompletely cured soldiers were not released for vacation or out from service to protect both society and the military (23). Various measures were given for preventive treatment. Protargol, calomel, and permanganate were available in dispensaries and sanitation stations. Soldiers who visited an outpatient clinic after sex were injected with protargol (20%) or albargin (4–5%) in urethra, the penis was applied with calomel ointment (12–15%) (7). Unfortunately, very little information about these measures was published in periodicals.

The Treatment of Venereal Diseases

Soldiers with venereal diseases were treated in the II Separated Infirmary in Aukštoji Panemunė (Kaunas) (Fig. 3). This hospital was established on August 4, 1920. From 1920 to 1923, 8844 soldiers were treated at the hospital. In the 1st day, II Separated Infirmary had 250 beds. However, as the number of people with venereal disease raised, the number of beds was increased to 600 and remained so until the hospital was closed in 1923 (24). The soldiers wrote in their memoirs that all patients were treated in separate wards, those with gonorrhea were separated from those with syphilis (25).



Figure 3. Department of Venereal Diseases at II Separate Infirmary (Aukštoji Panemunė, Kaunas) 1919–1920

Source: Lithuanian Central State Archives

The treatment of venereal disease itself was very long, expensive, and painful. Each venereal disease was treated differently. The patients with syphilis were treated with injections of salvarsan and mercury salts, and in the case of gonorrhea, the bladder, and ureter was washed with medication (25). The course of treatment for each venereal disease was described in detail in the special book for army doctors *The Textbook for Sanitary Officers* by A.J. Baranov. According to the book, when the first severe symptoms of gonorrhea began to appear, it was recommended to use only warm baths, cold compresses, and balm and oil as medications: *Balsamum Copaivae*, *Oleum Santali*, or *Gonorrhol*. The irrigation treatment was initiated when inflammation reduced and urination became easier. In the book, A. J. Baranov singled out three types of drugs used for this treatment: antiseptics (protargol and albargin), antiseptic astringent drugs (Argentum nitricum, Argentaminum, Larginum, Kalium permanganicum, etc.), astringent drugs (Zincum sulfuricum, Plumbum aceticum, Cuprum sulfuricum, Tanninum, etc.). These drugs have been injected or otherwise delivered to the urethra and were kept there for a few minutes. Such treatment was very painful and had to be repeated 4 times a day. If testicular inflammation began, irrigation treatment had to be discontinued. In this case, ice and narcotic ointments (*Extr. Belladonnae* 5.0 *Lythargyri unguentum* 20.0) had to be applied to the testicles. It was also recommended to use a mixture of *Methylum salicylicum* and Provençal oil. Cotton wool soaked in this mixture was placed on the testicles, wrapped in waxed paper and kept for 12 h (26). Intravenous glucose solution (50%) and tripoflavin solution (20%) were also used to treat gonorrhea. Barkauskas stated that at the time when tripoflavin was started to be used for the treatment, no complications of gonorrhea occurred. The treatment of the disease itself lasted for 5–6 weeks (7).

Soft chancre was treated in other ways. The ulcers were washed with disinfectant solutions: carbolic acid (2%), boric acid (4%), sublimate (0.1%), and sprinkled with iodoform, xeroform, dermatol, etc. If inflammation of the inguinal lymph nodes (*bubo inguinalis*) begun, then mercury ointment, ice, heating compresses were used sometimes X-ray irradiation was recommended (26).

According to *The Textbook for Sanitary Officers*, the treatment of syphilis depended on the stage of the disease. The first stage was

treated with mercurial patch or disinfectant bandage. Later, mercury or arsenic compounds (Salvarsan) were mainly used. They were administered subcutaneously or intramuscularly. Treatment with mercury salts lasted from 10 to 20 days every 3 months for a total of 2 years. Calomel ointment needed to be applied to calves, thighs, chest, back, and arms. Furthermore, there was recommended to wash the teeth with toothbrush and rinse the mouth with Bertolet salt as the prevention of tooth harmness (26). Barkauskas stated that soldiers tolerated treatment with neosalvarsan, *Hydrargyrum salicylicum*, bismogenol well: Only three cases of dermatitis occurred with neosalvarsan, sometimes vomiting, and fever appeared. Excision of ulcers which was popular in military hospitals in Germany and Austria was mentioned as one of treatment ways, too (7).

Treatment Challenges

In the Lithuanian army, doctors treating venereal diseases faced several challenges. First, the military lacked a laboratory to test soldiers for illness. In May 1922, a physician of the first ward at the II Separate Infirmary expressed dissatisfaction with the hospital's chief physician that the hospital did not have Wassermann laboratory to diagnose syphilis. It was stated that in a large number of patients and to ensure effective treatment, not only clinical examination of patients but also serological testing was necessary. II Separate Infirmary was the main hospital in Lithuania treating soldiers with venereal diseases, but it did not perform serological tests for syphilis. For this reason, blood samples were sent to the Institute of Hygiene. Here, the tests were done only once a week, so soldiers had to wait a long time for the results. This testing was also very expensive. Own laboratory would ensure faster tests and also would have require lower costs. A meeting of the infirmary doctors took place few days after this statement. During this meeting, it was decided to apply to the head of the Sanitation Department for permission to set up the Wassermann laboratory (27, 28).

Until 1923, all soldiers performing or released from service were compulsorily treated (7). This was important to prevent the spread of venereal diseases in both the society and the military. Unfortunately, this was not always implemented because soldiers who completed their service did not always return to continue treatment that had been initiated in the army. In 1922, the Chief Physician of the II Separate Infirmary stated that when sending requests for certain soldiers to return to the hospital to continue treatment, it turns out that those soldiers are no longer in the army: They are on vacation or left the service (29). To military doctors it was not always clear what to do in such cases. Although the orders referred to compulsory treatment, this was not always achieved. The main reason for this was the unconsciousness of the soldiers and the long treatment, which in the case of syphilis was carried out intermittently.

Soldiers avoided reporting about illness and engaged in self-medication or visited quack doctors. This was due to the sense of shame felt by soldiers with venereal diseases. The doctor Agnietė Ambraziejūtė-Steponaitienė wrote that those who agreed to treatment preferred hospitals that were closer to military units because in others soldiers could be seen by acquaintances (13). This was not always implemented. Therefore, the patients turned to uneducated doctors and herbalists. One soldier with a venereal disease wrote

that a friend advised him to use mercury ointment, cannabis, and shredded glass mixed with vodka. He also used various herbs, expensive pills “bought from a Jew.” These measures suppressed the symptoms for a while, but the disease itself only became more severe. In his diary, the soldier wrote:

Quack doctors have no knowledge, no medicine, no tools, it is clear that they cannot cure, and if they can, they can only drive the disease deeper so that it is not noticeable, and the disease still erupts over time and then the help of a real doctor no longer benefits (...). For a long time I considered myself healthy again (...). Then I quickly started to have a headache, hair loss, and wounds on my body (...). Those doctors only did evil (...). I started to rot (...). Now I lie like a rotting old stump (...). Don't remember me bad. Let my life be a lesson to everyone (12, 25).

One of the most important goals of the Sanitation Division was to make such cases as few as possible.

CONCLUSION

Venereal diseases severely affected the Lithuanian army in the 1st years of its existence. It was a small army that needed every man to fight the enemies attacking from all sides. Venereal diseases, although they did not claim many lives, forced army to give up the services of many soldiers. Moreover, treating and caring for sick soldiers with these diseases cost the military not only human but also a lot of material resources. It was a great burden for the Lithuanian army.

With the start of active work by the Sanitation Department in the management of venereal diseases, the situation started to improve. The incidence of gonorrhea, which was the most common venereal disease in the Lithuanian army, fell by more than a half till 1921. Strict health check-ups, mandatory treatment, and various preventive measures have led to drastic decline. Preventive treatment, isolation, education of doctors, and soldiers played an important role, too. It can be argued that prevention would have been even more effective if more attention had been paid to the regulation of prostitution. However, this area was not in the power of the army, but of the Lithuanian government. All the military could do in this regard was discourage soldiers from having sex.

Prevention was probably the most important tool in the fight against venereal diseases, because in the case of the disease, treatment still caused many side effects. Compulsory treatment in special hospitals, which lasted until 1923, was probably the only way to deal with the sick. However, the Lithuanian army faced a number of challenges in treating its soldiers, including their avoidance of treatment, laboratory-investigated deficiency, and costly treatment.

Consequently, it can be said that the activities of the Sanitation Department have yielded results. Having carried out its main activities in the treatment of soldiers and the prevention of diseases, this institution began to narrow its activities. The II Separate Infirmary, where soldiers with venereal diseases were treated, was liquidated in late 1923. The treatment of all sick soldiers was continued in the main military hospital.

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