

# JANINA BORTKIEWICZ AND PUBLIC HYGIENE EDUCATION IN POPULAR MAGAZINES PUBLISHED IN VILNIUS, 1930-1939

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#### **ABSTRACT**

Because General Żeligowski's troops occupied Vilnius in the autumn of 1920 and Poland annexed it two years later, the health-care system that operated in Poland at the time began to be introduced in the city and the region. The official guidelines for health policy in Poland derived from the concept of hygiene proposed by Tomasz Janiszewski, the founder of the health system in the country, which focused on social hygiene. Universities played an advisory role in the Polish health system and were involved in educating the public on hygiene issues. In interwar Vilnius, the most prominent figure in this field was Janina Bortkiewicz-Rodziewiczowa, a researcher and senior assistant in the Department of Hygiene of the Faculty of Medicine at Stephen Bathory University. This article analyses her publications aimed at promoting science. It examines the means by which Bortkiewicz-Rodziewiczowa conveyed specific medical knowledge to a lay audience. It also discusses what topics she emphasised most and what reasons led to her choices, and how this correlated with priorities in medical science and health policy at that time. Finally, it touches on an interesting practical aspect, namely what public education strategies applied at the time can still be applied today.

KEYWORDS: public health, health education in 20th-century Poland, popular hygiene education, popularisation of medical science.

### **ANOTACIJA**

1920 m. Lenkijai aneksavus Vilnių, šiame mieste ir regione pradėta taikyti tuometinėje Lenkijoje veikusią sveikatos apsaugos sistemą. Oficialiomis sveikatos apsaugos politikos gairėmis Lenkijoje tapo šios valstybės sveikatos apsaugos sistemos kūrėjo Tomaszo Janiszewskio pasiūlyta higienos koncepcija, kurioje daug dėmesio buvo skiriama socialinei higienai. Universitetai Lenkijos sveikatos apsaugos sistemoje atliko patariamąjį vaidmenį ir dalyvavo šviečiant visuomenę higienos klausimais. Ryškiausių veiksmų šioje srityje ėmėsi Vilniaus Stepono Batoro universiteto Medicinos fakulteto Higienos katedros mokslininkė, vyr. asistentė Janina Bortkiewicz-Rodziewiczowa. Šiame straipsnyje analizuojamos jos publikacijos, skirtos mokslui populiarinti. Nagrinėjama, kokiomis priemonėmis autorė perteikė specifines medicinos žinias neprofesionalų auditorijai. Taip pat aptariama, kokias temas autorė labiausiai akcentavo ir kokios priežastys lėmė jos pasirinkimus, kaip tai koreliavo su to meto medicinos mokslo ir sveikatos politikos prioritetais. Galiausiai buvo įdomus ir praktinis aspektas – kokias tuo metu naudotas visuomenės švietimo strategijas galima pasitelkti ir šiandien.

PAGRINDINIAI ŽODŽIAI: visuomenės sveikata, sveikatos švietimas XX a. Lenkijoje, populiarus higienos švietimas, medicinos mokslo populiarinimas.

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### Introduction

The wave of epidemics caused by the devastations of the First World War drew public attention to the importance of preventive medicine.1 It was clear enough that treating diseases as a consequence rather than fighting the cause could not be an effective strategy. In addition, a second wave of industrialisation had reached Eastern Europe, posing additional challenges. In the first years after the war, many European countries set themselves the task of creating local and central administrative institutions that would ensure the targeted improvement of public health.<sup>2</sup> Proponents of the new health-care approach argued that the most important goal of the health-care system was an individual who did not need treatment and who created added value in society. The science of hygiene served this purpose. Hygiene covered many areas, such as occupational hygiene, school hygiene, physical education and sports hygiene, and racial hygiene emerged. The number of 'non-treating' doctors was steadily increasing.<sup>3</sup> Popular hygiene education, with a particular emphasis on women and children, was an essential component of the state's public health strategy at the time, as these groups of society were the most teachable, including hygiene education.4

After the annexation of Vilnius by the Poles, the city and districts came under Polish political rule. Therefore, the same system that operated in Poland was applied in Vilnius. The Polish minister of health and architect of the health-care system Janiszewski (Tomasz Janiszewski, 1867–1939) proposed his own concept of hygiene, which became the official guidelines of that time's health-care policy, with an emphasis on social hygiene. It reveals the purpose and tasks of preventive medicine at that time. General hygiene, or the means needed to prevent diseases and ensure the good health of the population, was divided into smaller tasks: personal and public hygiene. The goal of personal hygiene was to protect the individual, while the goal of public hygiene was to protect the public. Public hygiene was divided into two parts, physical and social hygiene. Physical hygiene focused on the effects of natural, physical factors (weather, clothing, lighting, food) on human health, and social hygiene focused on the effects of cultural factors on human health. Social hygiene was divided into three parts, according to the field of action: social pathology, social prevention, and social treatment (social medicine). Social pathology focused on

<sup>&</sup>lt;sup>1</sup> WIĘCKOWSKA, Elżbieta. Udział naczelnego nadzwyczajnego komisariatu do walki z epidemiami w zwalczaniu chorób zakaźnych (1920–1923). *Archiwum historii i filozofii medycyny*, 1996, r. 59, z. 1, s. 123–129.

<sup>&</sup>lt;sup>2</sup> KARAFFA-KORBUTT, Kazimierz. *Zarys hygieny*. Wilno, 1925, s. 10–15.

MART, Grzegorz. Metody i narzędzia propagandy higieny międzywojnia. In Zawód lekarza na ziemiach polskich w XIX i XX wieku. Red. Bożena URBANEK. Warszawa, 2009, s. 212–223.

<sup>&</sup>lt;sup>4</sup> RUDZIŃSKI, Henryk. *Próby realizacji zagadnień zdrowotnych na wsi wileńskiej* (Odbitka z miesięcznika "Zdrowie Publiczne", nr. 5). Warszawa, 1936, s. 1–11.

the influence of social factors on the onset of disease. Social prevention sought to prevent the impact of negative cultural factors on human health. Social treatment (social medicine) was based on the cooperation between medical-social institutions, such as health insurance funds. etc.<sup>5</sup>

The biggest problem of the period were the so-called social diseases.<sup>6</sup> They were widespread and extremely dangerous mostly due to their chronic character were caused by cultural factors, because poorly educated people would ignore less visible chronic diseases for a long time, in contrast to acute diseases, which demanded quick attention.<sup>7</sup> As a result, these diseases caused significantly more deaths in the local population. Moreover, in the case of acute disease, due to the clear symptoms, a person has limited possibilities of contact with other people. In contrast, in the case of chronic ones, the person has contact with others for a long time, and therefore becomes a much bigger threat to the rest of society. To a large extent, they could be treated by social prevention.<sup>8</sup> Such diseases include tuberculosis, trachoma, alcoholism, high maternal and child/infant mortality (due to social factors), cancer, venereal diseases, mental illness, rheumatism, and work-related diseases.<sup>9</sup> Some authors also add rickets,<sup>10</sup> rheumatism, cancer, and occupational and psychological disorders, as well as cardiovascular diseases, to the list of social diseases.<sup>11</sup>

There have been very few studies in the Vilnius region directly or indirectly related to popular public education by medical professionals and the popularisation of hygiene science. We have managed to find some contextual information on this issue in an article by Grzegorz Mart.<sup>12</sup>

The research by Miroslaw and Jaromir Jaszke<sup>13</sup> is also partly related to the question, which helped us shed a light on the development of the school of hygiene itself in Poland and the Vilnius region during the period in question. However, the authors did not set themselves the task of researching the popularisation of hygiene science as the task of hygienists at that time.

<sup>&</sup>lt;sup>5</sup> ŽALNORA, Aistis. The role of the Hygiene Department of Stephen Bathory University in the development and promotion of public Health in Vilnius in the years 1922–1939. *Studia Historiae Scientiarum*, 2018, vol. 17, pp. 51–87.

<sup>&</sup>lt;sup>6</sup> JANISZEWSKI, Tomasz. Określenia higieny i jej działów. *Zdrowie*, 1931, t. XLVI, nr. 1-2-3, s. 71-79.

<sup>&</sup>lt;sup>7</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 22, s. 14.

<sup>&</sup>lt;sup>8</sup> Dwadzieścia lat Publicznej Służby Zdrowia w Polsce Odrodzonej 1918–1938. Warszawa, 1939, s. 53–54.

<sup>&</sup>lt;sup>9</sup> JANISZEWSKI, Tomasz. Określenia higieny i jej działów. *Zdrowie*, 1931, t. XLVI, nr. 1–2–3, s. 71–79.

<sup>&</sup>lt;sup>10</sup> MART, G. Op. cit.

<sup>&</sup>lt;sup>11</sup> Dwadzieścia lat Publicznej Służby Zdrowia..., s. 60.

<sup>&</sup>lt;sup>12</sup> MART, G. Op. cit.

<sup>&</sup>lt;sup>13</sup> JASZKE, Mirosław; JASZKE, Jaromir. Problematyka higieniczna w polskich ośrodkach akademickich okresu międzywojennego (1919–1939). *Archiwum historii i filozofii medycyny*, 1997, r. 60, z. 4, s. 327–329.

Braczkowska Bożena conducted one of the most detailed studies on the Department of Hygiene at Vilnius University. The study reveals in detail the most important features of the department's institutional development, but little attention is paid to the scientific activities of the department. Finally, the most comprehensive studies devoted specifically to the scientific activities of Vilnius University's Department of Hygiene are the studies carried out by Aurimas Andriušis, Rimantas Stukas and Aistis Žalnora. However, Janina Bortkiewicz's activities in the field of the popularisation of hygiene science and popular hygiene education were not disclosed in those articles either.

To conclude, none of the previously mentioned works set themselves the task of researching non-scholastic but science popularisation articles published by Vilnius University's Department of Hygiene during the interwar period. The issue has not been examined until now.

In this article, therefore, we will focus on the popularisation of hygiene in Vilnius' rural and urban population via popular public magazines, particularly when written by the medical profession's hygienists, with a focus on Janina Bortkiewicz, who contributed the most to these activities. Therefore, we set the goal of the study as determining what public health problems at the time the researcher at the Department of Hygiene of Vilnius University tended to emphasise most, and how this correlated with the official guidelines of public health policy at the time. To reach our goal, we used the method of comparative analysis of primary and secondary sources. The hypothesis we raised in our study was whether the ideas described in the popular articles by Janina Bortkiewicz correlate with formal health-care policy guidelines, or if there were any other, possibly personal, aspirations. Finally, the author of the article was interested in a practical aspect, namely what details/similarities in the mentality between the interwar period and contemporary society can be found in the articles by Janina Bortkiewicz, and what public education strategies could be reused today.

<sup>&</sup>lt;sup>14</sup> BRACZKOWSKA, Bogumiła. Zakład Higieny Uniwersytetu im. Stefana Batorego w Wilnie. *Archiwum historji i filozofji medycyny*, 1998, r. 61, z. 1, s. 65–68.

<sup>&</sup>lt;sup>15</sup> ANDRIUŠIS, Aurimas; STUKAS, Rimantas. Higiena Vilniaus Stepono Batoro universitete 1919–1939 metais. *Medicina*, 1998, t. 34, nr. 5, p. 494–496.

<sup>&</sup>lt;sup>16</sup> ŽALNORA, A. The role of the Hygiene Department...

# The hygiene situation in the Vilnius region and the Department of Hygiene at Stephen Bathory University in 1922–1939

The sanitary situation in the Vilnius region has been reviewed by Vilnius hygienists in many articles, and even in the doctoral thesis of Kasper Rymaszewski.<sup>17</sup> However, the final conclusions and the most important tendencies were disclosed in the work of Henryk Rudziński (1887–1966). In 1936, as physician at the Second Internal Clinic of Stephen Bathory University and head of the Vilnius Voivodeship Health Department, he reviewed the sanitary situation in the Vilnius region, and stated that communicable and social diseases in rural areas had a dual nature: on one hand they spread easily due to the underdeveloped and poorly maintained health systems, and on the other hand they were also related to ignorance and inertia among the rural population.<sup>18</sup>

As has already been mentioned, one of the essential components of Polish public health policy strategy at that time was public health education. However, we can easily affirm that educating the rural population, which was still the majority in those days, was not an easy task. According to Rudziński, a preaching doctor from the city or a sanitary inspector was unacceptable to villagers; therefore, villagers tended to trust the services of quack doctors, folk healers or wise-women instead. Even if a villager wanted professional medical care, it did not mean that such help would necessarily be provided. Many were intimidated by the high cost of medicines and treatment. Finally, the villager could not understand the link between the lack of hygiene as a cause and the disease as a result. Therefore, the scientific institutions that organised cooperation with local authorities played a particularly important role in introducing the population to the basics of hygiene, explaining the real mechanisms of disease, combating prejudice and reducing the gap between doctor and patient, promoting hygiene awareness, and improving health care.

In 1922, the Department of Hygiene at the Faculty of Medicine (MF) of Vilnius' Stephen Bathory University (SBU) was established at the initiative of Kazimierz Karaffa-Korbutt (1878–1935).<sup>20</sup> Despite the innovative direction at the Ministry of Health promoted by T. Janiszewski, the science of hygiene itself, and the social aspects, was still quite a young scientific discipline in Poland.<sup>21</sup> Out of the five interwar medical

<sup>&</sup>lt;sup>17</sup> RYMASZEWSKI, Kasper. Sanitarne opisanie m. Wilna. Wilno, 1924.

<sup>&</sup>lt;sup>18</sup> RUDZIŃSKI, H. Op. cit., s. 1–1.

<sup>&</sup>lt;sup>19</sup> RUDZIŃSKI, H. Op. cit., s. 1–1.

<sup>&</sup>lt;sup>20</sup> TRZEBIŃSKI, Stanisław. Wydział Lekarski Uniwersytetu Stefana Batorego w latach 1919–1929. Wilno, 1931, s. 48

<sup>&</sup>lt;sup>21</sup> JASZKE, M., JASZKE, J. Op. cit., s. 327–329.



Figure 1. The staff in the Department of Hygiene of the Faculty of Medicine at Stephen Bathory University. From the left: Janina Bortkiewicz-Rodziewiczowa, Stanisław Rondomański, Władysław Karaffa-Korbutt, Kazimierz Rodziewicz, Aleksander Safarewicz. Photo from private collection, available at: <a href="https://upload.wikimedia.org/wikipedia/commons/e/ea/Stanis%C5%82awowi\_Rondoma%C5%84skiemu\_koledzy.jpg">https://upload.wikimedia.org/wikipedia/commons/e/ea/Stanis%C5%82awowi\_Rondoma%C5%84skiemu\_koledzy.jpg</a> (accessed 15.6.2021)

faculties, three had a separate department of hygiene. One such department was in the Faculty of Medicine at Vilnius' Stephen Bathory University.<sup>22</sup>

In 1923, the Department of Hygiene was operating on Etmonų Street in the Vilnius Analytical Station, and later, from 1925, it settled permanently in Antakalnis Military Hospital. It was a separate building with a usable area of 456 square metres. The department had a library, which in 1928 had 625 volumes of scientific literature, including 98 volumes of the German magazine *Archiv für Hygiene* (Hygiene Archive)<sup>23</sup>. Karaffa-Korbutt based the teaching on the German tradition of hygiene science. The Department of Hygiene paid a lot of attention to occupational hygiene. About a third (19 out of 54) of the publications by the head of the department during the period under review were devoted to issues of occupational hygiene. <sup>24</sup> This was probably due to the scientific specialisation of Kazimierz Karaffa-Korbutt himself. Nevertheless, when

<sup>&</sup>lt;sup>22</sup> Dziesięciolecie Medycyny w Polsce Ludowej 1944–1954. Warszawa, 1954, s. 176.

<sup>&</sup>lt;sup>23</sup> BRACZKOWSKA, B. Op. cit., s. 65–68.

<sup>&</sup>lt;sup>24</sup> ŽALNORA, A. The role of the Hygiene Department...,

assessing the extent of urbanisation in Vilnius at that time, it can be assumed that the analysis of socio-medical problems in the countryside was an equally important task.

Speaking about the poor hygiene situation in the Vilnius region, Henryk Rudziński called for an initiative to organise health prevention measures 'from below'. 'Rural women in particular can be a big support for such actions, as they always try to improve their lives more than their negligent men.'<sup>25</sup>

Possibly because of this, Janina Bortkiewicz (1892–?), the only lady in the Department of Hygiene at SBU MF, was better at educating the public in the Vilnius region. Our research has revealed that no other employee in the Department of Hygiene at the time paid so much attention to hygiene education as she did. From the year 1922, when the Department of Hygiene was established, until the beginning of the 1930s, we did not find much information about other long-term public educational activities by other members of the department, which suggests that Janina Bortkiewicz should be associated with the beginnings of purposeful long-term hygiene education at Vilnius' SBU MF Department of Hygiene. Another reason for her purposeful public hygiene activities might be her personal life. In contrast to the head of the department Kazimierz Karaffa-Korbutt, she was of local origin. Janina was born and grew up in the Vilnius region, so she must clearly have been familiar with the local situation.

Janina Bortkiewicz-Rodziewiczowa was born in Vilnius in 1892. In 1912 she graduated from an ordinary high school in Vilnius. In 1916, she entered the Sluck Medical Institute, from which she graduated in 1920. In 1924, her diploma was notified at Stephen Bathory University. In the next few years she worked in Vilnius hospitals and at the Dom Dzieciątka Jezus sanitary station. <sup>26</sup> In 1926, she was appointed junior assistant in the Department of Hygiene. Later, in 1929, she was appointed senior assistant in the same department. <sup>27</sup> In 1936, she became an adjunct. Later, in 1939, she became temporary head of the Vilnius Hygiene Department. <sup>28</sup> Up to 1936 she published at least eight scientific articles, mainly on school hygiene and occupational hygiene. Two of her works in 1933 and 1935 had probably the most professional and social value.

In 1933, Janina Bortkewicz-Rodzewiczowa examined the hygiene conditions in Vilnius' primary schools. Room temperature, air circulation, humidity and other parameters were studied. It was found that only a small number of Vilnius schools met the comfort conditions. Schools were recognised as too cold for normal activity by

<sup>&</sup>lt;sup>25</sup> RUDZIŃSKI, H. Op. cit., s. 1–11.

<sup>&</sup>lt;sup>26</sup> CV of Janina Bortkiewicz, 13 February 1926. *Lietuvos centrinis valstybės archyvas* (Lithuanian Central State Archives, *LCVA*), f. 175, ap. 3IXB, b. 65, l. 52.

<sup>&</sup>lt;sup>27</sup> TRZEBIŃSKI, S. Op. cit., s. 49.

<sup>&</sup>lt;sup>28</sup> ANDRIUŠIS, A.; STUKAS, R. Op. cit., p. 494–496.



Figure 2. Janina Bortkiewicz, passport photograph from her personal files in *LCVA*, f. 55, ap. 3, b. 2520, 1930

the schoolchildren's bodies in winter, and poorly ventilated and too hot in the summer. This affected negatively the working capacity and the health of the schoolchildren. Janina concluded that because of these conditions, and for other reasons, many of the schoolchildren who were studied developed overwork, and later anaemia and nervousness.<sup>29</sup>

In 1935, a work by Bortkewicz-Rodzewiczowa on school dispensaries was published. She shared her experience and analysed the activities of these institutions, their results, and the most important health disorders of schoolchildren in Vilnius. In 1921, the schoolchildren's dispensary founded by doctor Moszyński in the territory of 'Central Lithuania' became an

important starting point in improving the health status of schoolchildren in Vilnius. Treatment was free, so school doctors could send any child for treatment without hesitation. Medicines that were as cheap as possible were prescribed on the same day after the examination. The outpatient clinic was open from noon till evening, the time when schoolchildren could attend. If the outpatient specialists could not help a patient, he was sent to other medical institutions. The outpatient clinic also performed an education and caring function: schoolchildren liked visiting, because of the pleasant, sincere communication and the psychological support provided to them. They had the opportunity to come to the dispensary alone without their parents, if their parents could not be with them at that time.<sup>30</sup>

Janina and her departmental colleagues also took an active part in the education of medical professionals and non-professionals. In 1928, with the help of the Vilnius City Magistrate, courses for school physicians were put on by the SBU Department of Hygiene. Several professors gave lectures on different topics relating to school hygiene. In 1932, Bortkiewicz-Rodziewiczówna gave similar courses at the Woman's Agrary School in Antovili (Antaviliai). Similar courses were given by F. Kasperowicz in the Józef Piłsudski Technical School in Vilnius.<sup>31</sup>

<sup>&</sup>lt;sup>29</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. *Badanie katatermometryczne szkół powszechnych w Wilnie* (Odbitka z "Pamiętnika Wileńskiego Towarzystwa Lekarskiego", r. 8, z. 1–2). Wilno, 1933, s. 1–60.

<sup>&</sup>lt;sup>30</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Przychodnia Szkolna w Wilnie. *Pamiętnik Wileńskiego Towarzy-stwa Lekarskiego*, 1935, r. 10, z. 1, s. 1–25.

<sup>&</sup>lt;sup>31</sup> ŽALNORA, Aistis. The role of the Hygiene Department..., pp. 51–87.

However, we consider over 79 popular articles<sup>32</sup> and other authors' accounts, almost up to 100,<sup>33</sup> on various hygiene topics to be the most significant contribution to the education of society of that time. We also found several more of her articles in magazines from later years. There may have been more published, but we do not know exactly how many. Nor do we know any more facts about her further personal life. The latest data on the scientist can be found in the reports of Stephen Bathory University, as well as other literature written before 1936,<sup>34</sup> and in later publications,<sup>35</sup> but the fate of Janina Bortkiewicz after the Second World War is not clear.

# Janina Bortkiewicz' articles in the magazine 'Our Friend'

Since not all the magazines from that time have survived, we tried first to find when Janina's educational activities could have started. For this purpose, we checked the archival documents of the Department of Hygiene, and later investigated the magazines themselves. We presumed that Janina's first articles on hygiene appeared in the early 1930s, as a report by Stephen Bathory University's Department of Hygiene first mentions the fact that Janina Bortkiewicz looked after public hygiene education in 1932.<sup>36</sup> Two magazines are mentioned in the report: *Nasz przyjaciel* (Our Friend) and *Droga do zdrowia* (The Path to Health). Her popular articles on topics of hygiene were published in both magazines.

After checking previous issues of the above-mentioned magazines, we were convinced that the author's works had not been published in the above-mentioned magazines before 1930. The first articles appeared in 1930,<sup>37</sup> so a little earlier than mentioned in the reports, but the date is possibly quite accurate, as judging from the biographical data, she was appointed senior assistant researcher at Stephen Bathory University only in 1929.<sup>38</sup>

The magazines had slightly different audiences and goals. The first, *Nasz przyjaciel*, was a weekly newspaper describing the most important issues of the time, including relatively few medical topics. The second, *Droga do zdrowia*, was a specialised popular medical magazine. The articles printed in them differ. The first contains simple content, such as basic tips for ordinary non-medical, at least literate, people, probably

<sup>&</sup>lt;sup>32</sup> Uroczyste posiedzenie w Krakowie i w Wilnie ku uczczeniu pamięci Prof. D-ra Kazimierza Karaffy-Korbutta (Odbitka z "Archiwum higjeny", z. 1, t. IV). Wilno, 1936, s. 65.

<sup>&</sup>lt;sup>33</sup> ANDRIUŠIS, A.; STUKAS, R. Op. cit., p. 495.

<sup>&</sup>lt;sup>34</sup> Uroczyste posiedzenie..., s. 65.

<sup>&</sup>lt;sup>35</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Zatrucia zawodowe. *Droga do zdrowia*, 1939, r. 9, nr. 3, s. 10.

<sup>&</sup>lt;sup>36</sup> The Faculty of Medicine at Stephen Bathory University. Dean's Annual Report for the academic year 1932–1933.. *LCVA*, f. 175, ap. 3IXb, b. 91, l. 123–124.

<sup>&</sup>lt;sup>37</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny ogólnej. *Nasz przyjaciel*, 1930, nr. 4, p. 7.

<sup>&</sup>lt;sup>38</sup> TRZEBIŃSKI, S. Op. cit., s. 49.

mostly in the rural population. The articles in the second magazine are more detailed, partly specialised, and require a minimum of medical literacy. The extent of the impact of the magazines also varies. *Nasz przyjaciel* was published as a local Vilnius region weekly magazine. *Droga do zdrowia* was published in Krakow, and was intended for the whole of Poland, including the Vilnius region. Therefore, we decided to analyse them separately as two different examples of public popular education strategy.

From No 5 1930, Janina Bortkiewicz had a column 'Wiadomości z higjeny ogólnej' (General Hygiene News) in the magazine *Nasz przyjaciel*, in later issues there is a shorter version, 'Wiadomości z hygieny' (Hygiene News). In the introductory part of the article, the hygienist presented the purpose of her section, that is, to talk about things that bother society most, namely diseases. Unfortunately, she did not disclose more of her causes for aspiration in printing this column; however, some of the details of the bigger picture could be found in the articles themselves.

The researcher devoted the first article to the issue of communicable diseases. Bort-kiewicz identified the main threat of communicable disease in the rapid spread from home to home, and therefore, unlike non-communicable diseases, causing enormous harm to society as a whole.<sup>39</sup> In order to explain the dangers of communicable diseases, the hygienist started with general knowledge about microorganisms, their habitats, benefits and harm. Bortkiewicz emphasised that microorganisms, like any other organisms, could be both beneficial and harmful to humans. Therefore, she was not in a hurry to start with harmful microorganisms; she started with useful ones. She identified saprophytes as beneficial to man, i.e. they decompose dead bodies. Without these bacteria, there would soon be no room on the Earth to live.<sup>40</sup> And again, she did not burden the reader with much information. The articles are short. The rest of the story is left for the next issue.

In No 6 1930, continuing the argument about the benefits of saprophytes to humans, she talked about fermentation bacteria that help us make bread, wine, beer and other fermented products. Finally, as Bortkiewicz writes, saprophytes also live in our gut, which helps us to digest. The author names neutral bacteria that neither help nor harm people. However, in the last part of the story, she focused on malignant bacteria, namely parasites. The bacteria grow in the cells of a plant, animal, or the human circulatory system, feeding at the expense of the host, which causes a disease, often a serious illness, and even death. When the parasites have nowhere to live, they have to look for a new living victim. And then the aforementioned saprophytes have a job to do, namely to break up the decaying body. So these two bacteria have completely opposite missions, and both are important.<sup>41</sup> The article

<sup>&</sup>lt;sup>39</sup> BORTKIEWICZ, J. Wiadomości z hygieny ogólnej..., s. 7.

<sup>&</sup>lt;sup>40</sup> Ibid., s. 6–7.

<sup>&</sup>lt;sup>41</sup> Ibid., s. 5.

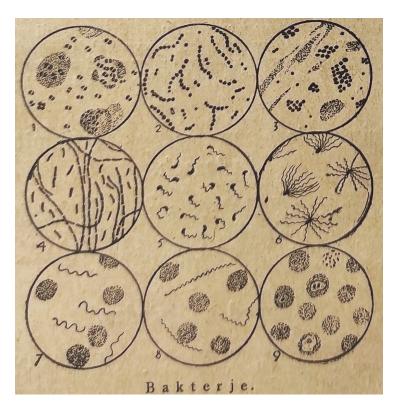


Figure 3. The most common bacteria. Source: BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 7, s. 5

enriched the reader with a completely new perspective, as we are used to seeing microorganisms from our own perspective, and not vice versa. The aforementioned perspective could also be found in the much later popular books by Peter Radetsky<sup>42</sup> and Arno Karlen.<sup>43</sup>

In the next issue, Bortkiewicz continued her story about bacteria, presented pictures of some of the most well-known types of bacteria, and described vividly the principles of microscope operation and the importance of the microscope in bacterial research.<sup>44</sup> We can notice the author's efforts to encourage the interest of the reader in the micro-world, which was still little known to the average person at that time, as well as to present the story as playfully as possible, probably in order to move on to a more complicated part later. Moreover, by addressing the younger reader, a child or his mother, in that way she probably tried to encourage their curiosity and

<sup>&</sup>lt;sup>42</sup> RADETSKY, Peter. *The Invisible Invaders. The Story of the Emerging Age of Viruses*. New York, 1991.

<sup>&</sup>lt;sup>43</sup> KARLEN, Arno. *Man and microbes: disease and plagues in history and modern times*. New York, 1996.

<sup>&</sup>lt;sup>44</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 7, s. 5.

willingness to cooperate. We could presume that this skill came with her physician's practice in hospitals and outpatient clinics.

The researcher later explained the feeding and reproduction mechanisms of bacteria, the conditions that promote or inhibit it, e.g., exposure to sunlight, extremely high temperatures, etc.<sup>45</sup> In the next issue, the author approached the subject of communicable diseases again. She named the most common infectious diseases, such as measles, smallpox, typhus, scarlet fever and pertussis, and explained the ways infectious diseases spread. Bortkiewicz denied the popular myth that diseases lived in 'contaminated air'. Most likely due to the theory of miasma, which existed before the era of bacteriology, the theory of 'bad air' was still common in the rural population. She concluded that the main source of infectious diseases was the person himself, or the bodily fluids he lost during respiration, coughing, etc. Diseases could also spread through objects such as upholstered furniture, children's toys, food and water. 'And the only case when bacteria can be in the air is when someone with tuberculosis spits on the floor, and then, together with the dust, the pathogens rise and settle on surfaces. As a result, tuberculosis can often affect young children who are constantly crawling just on the floor.' 46 In other issues, Janina talked about immunity and the types of it, and finally about artificial immunity, namely vaccination, how vaccines are developed, and how they help.<sup>47</sup> That indirectly suggests that interwar society was about to question the mechanisms of vaccines and vaccination, similar to modern anti-vaccine movements.

In later articles, Janina Bortkiewicz discussed the risks of various diseases due to age, gender,<sup>48</sup> malnutrition and occupation. Finally, she denied another popular myth about colds. 'It's not the cold, but bacteria that cause disease and the temporary weakening of the body due to lack of heat.' <sup>49</sup>

Another column appears in issue 12 in 1930. Bortkiewicz answers questions from readers. It could also be mentioned that she gave public lectures on the radio on issues of hygiene. On Infortunately, we were unable to find records of radio broadcasts or more detailed information about these activities. Readers' questions, like the articles themselves, indirectly suggest the level of knowledge of public hygiene and domestic details of the time. For example, a Ms Montwiłłowa, who most likely asked for information on some kind of lung disease (the readers' question were not disclosed, just the answers), was advised to visit a doctor to find what particular lung disease she was suffering from, and to avoid any contact with children, who are much more

<sup>&</sup>lt;sup>45</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 8, s. 13–14.

<sup>&</sup>lt;sup>46</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 9, s. 13–14.

<sup>&</sup>lt;sup>47</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 11, 12, 13, 14.

<sup>&</sup>lt;sup>48</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 11.

<sup>49</sup> Ibid.

<sup>&</sup>lt;sup>50</sup> Uroczyste posiedzenie..., s. 65–70.

susceptible to the disease. Bortkiewicz advises not to sleep with children in the same bed, not to kiss them, or to dress children in their clothes, etc.<sup>51</sup>

Issue 19 in 1930 begins with another relevant topic: where to find proper medical care. Bortkiewicz reveals the widespread practice of self-medication that was still prevalent at the time. 'Although it is clear that in the event of disease a patient should see a doctor as soon as possible, people first go to their neighbours and try the same medicines that helped them. After that, they go to a *felczer*, a midwife or just a wise-woman who will "talk away" the illness with incantations, and hope that will help. And when none of this helps, they finally decide to visit a doctor, but it is too late as the patient dies and the doctor is then blamed for the disease.'52

There was another narrative spreading among rural people: the doctor prescribes medication, but the patient thinks the medication is not working. Bortkiewicz strictly forbade giving a patient the same medication that helped a neighbour, even possibly for the same illness, because different people have different organisms. She added that the only person who knew what should be prescribed was the doctor. In addition, the neighbour's medication was usually not even for the same illness. Doctors always prescribed medication only after diagnosing the patient, and not vice versa. About the action of drugs, the scientist wrote, not without some mild irony: 'There are no drugs in the world that work at the very same minute they were administered. That would be a miracle, and doctors unfortunately do not believe in miracles.'53 Bortkiewicz also drew attention to the indifference of the rural population in the case of chronic disease. If a chronic disease, unlike an acute one, did not come with severe symptoms, the villagers tended to ignore it for a long time, sometimes entire years. 'I have repeatedly examined schoolchildren with fully developed tuberculosis, which had been going on for half a year, or even a year, but the child's mother says that the child was apparently sick for only two months, although the mother admits that she has not paid attention to the state of health of the child for quite a long time, because there was no time to take care of it. The child was happy and willing to go to school anyway.'54 As in other articles, Janina concluded with a summary. In this case she showed the differences between acute and chronic diseases.

Several of her other articles in the 1930 issues of *Nasz przyjaciel* were devoted to fighting people's fear of hospitals. Just like over a century ago, people still saw the hospital as a place to die. However, in the light of the facts, death was usually a result of a late appointment with a doctor, rather than the incompetence of the

<sup>&</sup>lt;sup>51</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 12, s. 13.

<sup>&</sup>lt;sup>52</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 19, s. 12–13.

<sup>53</sup> Ibid

<sup>&</sup>lt;sup>54</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 22, s. 14.

doctors.<sup>55</sup> There were other causes of these fears of hospital. Villagers felt uncomfortable with the regime of the hospital that had to be followed: to lie in bed, to take medication regularly.<sup>56</sup> Finally, some villagers feared being treated and examined by young specialists, namely future doctors. Bortkiewicz responded rhetorically to the last statement: 'And what harm does it do us to be examined by young doctors under the supervision of professors? No one has yet died from auscultation or percussion. In addition, those young doctors quite often diagnose a patient even better by examining the same patient several times, in contrast to the professors, who have less time per patient. Later, the patient is monitored in the hospital by many more specialists.'<sup>57</sup>

Bortkiewicz reveals another interesting phenomenon: 'Why do people like all kinds of quack doctors.' Her answer was short: 'Because the quack doctors do not ask to follow any regime. It is enough to have one of their incantations, and that's all basta. A person who does not understand the complexity of disease mechanisms as a whole is always looking for the easiest path. That is how the quack doctors exploit the situation.'58 In the latter part, she claimed that the only guaranteed professional a person could find was a university doctor (who obviously has a diploma that proves his knowledge). Bortkiewicz also gave some rather unusual advice: 'And if you want to go to private practitioners, go to Christian doctors, but not Jewish doctors, who send their debtors to the market to look for possible patients.'59 This remark is strange. However, she later clarified the statement: 'That is, the patient needs to look for a doctor, not vice versa." From the general context, it looks as if she was referring to unlicensed medical practitioners and the old-time practice of marketplace medicine. Lastly, her remarks give us a picture of a still quite chaotic medical market, where quack doctors still had a niche to practice in, possibly for financial reasons and the lack of strict state regulations and control.

When talking about the specialisation of doctors, Bortkiewicz touched on a topic that is still relevant today, the reputation of doctors and the evaluation of their work. At that time, people often turned to midwives, *felczers* (hospital attendants), Sisters of Charity, pharmacists, etc, instead of approaching doctors for help. However, as the researcher noted, none of them could provide full care in all cases, because none of them had been trained for it. The nurse was trained to nurse, the pharmacist to prepare medicines, the midwife to deliver babies, etc. Janina presented the work of a tailor and his apprentices as an analogy. 'One apprentice knows how to

<sup>&</sup>lt;sup>55</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 23, s. 13.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

<sup>&</sup>lt;sup>58</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 29, s. 13.

<sup>&</sup>lt;sup>59</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 32, s. 7.

<sup>60</sup> Ibid.

make blouses, another trousers, the last one how to tailor women's or men's coats. However, if you asked someone who knows how to make sleeves or trousers to make you a coat, it will only work half-way. Why? Because he is not a specialist.' She pondered out loud: 'It seems such a simple thing to make clothes, but we don't go to anyone to make trousers or shoes, we go to craftsmen, and at the same time the most important thing, our health, we entrust to 'four apprentices' or 'several half-trained shoemakers' so they can treat us as they know how. Finally, when nothing can be done any more, we go to the doctor.'61 And again, it was only one side of the same coin. Bortkiewicz admitted herself that due to the lack of social insurance (or in other words the high costs of treatment for patients to pay themselves), villagers in the countryside tried to avoid visiting a doctor for as long as possible.<sup>62</sup>

In several consecutive issues, the doctor developed another topic, namely treatment at home. Probably the most valuable information is the living conditions and mentality of people in those days. If someone had to be treated at home, she advised that the nursing be done by one or two people, but not the whole family, otherwise no one knew exactly the patient's daily routine or his condition was, or how many and what medicines the patient had taken. Therefore, it would limit the effectiveness of systematic nursing. To achieve this, the person who is appointed to be the nurse has to be relieved of all other responsibilities in the home. Moreover, Bortkiewicz emphasised, not everyone can nurse. The person himself needs to be strong, young, healthy and calm at the same time.<sup>63</sup>

In a later issue, the doctor talked about how to maintain a patient's personal hygiene. Perhaps the most interesting aspect of the article was the rudiments of the popular folk belief in *plica polonica* or Polish plait.<sup>64</sup> The belief that it was a separate disease was widespread in the Polish-Lithuanian Commonwealth for several centuries. Even until the late 19th century, this belief was supported not only by local people but by medical doctors as well. It was believed that its formation was also a kind of treatment of the body itself, and therefore it was forbidden to cut off the culprit.<sup>65</sup> Janina recommended patients cut their hair short to make it easier to comb and wash. And she also added: 'Hair is easily entangled in a clump of dirty hair called a culprit. Lice settle in that plait. The patient scratches. This irritates the scalp, but people are often afraid to cut off the parasite-ridden plait, because they believed after they cut it they'd immediately "become blind" or "their legs and arms would get twisted".'66

<sup>&</sup>lt;sup>61</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 30, s. 14.

<sup>&</sup>lt;sup>62</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 23, s. 13.

<sup>&</sup>lt;sup>63</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 33, s. 6–7.

<sup>&</sup>lt;sup>64</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 45, s. 11–12.

<sup>65</sup> SAKALAUSKAITĖ-JUODEIKIENĖ, Eglė; ŽALNORA, Aistis. Plica polonica fenomenas XVIII–XIX a. Vilniuje. Laboratorinė medicina, 2017, t. 19, nr. 2 (74), p. 136–142.

<sup>&</sup>lt;sup>66</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 45, s. 11–12.

Speaking about oral hygiene, the doctor advised the patient to rinse the mouth with a weak boron solution and brush the teeth with cotton wool,<sup>67</sup> which basically suggests that a toothbrush and toothpaste were not yet widely used in Vilnius at that time. Other recommendations were related to the well-being of both the patient and the care-giver. Cautiously, the hygienist recalled that a person who provides nursing at the same time cannot prepare food for the rest of the family, otherwise he or she would risk infecting everyone.<sup>68</sup>

From the context and other contemporary research,<sup>69</sup> we can assume that it was difficult to maintain decent hygiene conditions in rural hovels, and not easy to find the right corner to put the patient in. Nevertheless, Bortkiewicz warned that light must reach a patient when lying in bed, as it is very important in fighting against infectious diseases. In addition, it is difficult for a doctor to examine and monitor a patient in a dark corner. She also added that it is also necessary to ventilate the room regularly. 'If someone falls ill, rural people immediately light a fire in the fireplace and stoke it up, and do not allow anyone to open the doors or windows "because the cold is harmful". And what I really have to say is that stuffy and humid indoor air is bad in the case of every disease.'<sup>70</sup>

Finally, Bortkiewicz also provided practical advice on a patient's diet. Like today, relatives tended to give their loved ones an extra treat: sauerkraut, sausage, or something else the patient loved. However, Bortkiewicz strictly forbade treating the patient with anything the doctor would not recommend, arguing that it could seriously harm the patient. If the family did not know what could be given to the patient, it was better to feed him something light, such as porridge, a baguette, kissel, etc.<sup>71</sup>

What is also interesting in Bortkiewicz's articles is the vivid picture of the day's traditional community curiosities. Some very difficult-to-imagine details are described. If the average person today would probably understand that a patient needs to rest from the attention of visitors, we could not often say that about the rural community at that time. Bortkiewicz writes: 'It quite often happens when coming to the sick that it is difficult to get into a house to inspect the patient because it is already full of visitors: women and children often come, even from a nearby village, and sit there all day. And when you start examining the patient and try to trace the early symptoms of disease, all the elderly ladies, *babuszki*, immediately start advising on what could be wrong with the patient and how to treat him. However, if you ask what the patient ate, how his stomach worked or if he had enough sleep, or what his temperature

<sup>67</sup> Ibid.

<sup>68</sup> Ibid.

<sup>&</sup>lt;sup>69</sup> ALSEIKA, Danielius. *Vilniaus krašto lietuvių gyvenimas*. Vilnius, 1935, p. 8–11.

<sup>&</sup>lt;sup>70</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 46, s. 11–12.

<sup>&</sup>lt;sup>71</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 48, s. 11–12.

was yesterday, whether he coughed, no one knows anything. Why? Because everyone was busy talking about their own memories or a neighbour's illness, but no one pays attention to the patient they came to visit.'<sup>72</sup>

Another topic of Janina Bortkiewicz's stories was specific infectious diseases, namely influenza and tuberculosis. Here, it is necessary to provide some context. Although flu was not a very common disease in sanitary doctors' reports at the time, there could have been a diagnostic gap, because until 1933 the cause of the flu, the flu virus, had not yet been identified.<sup>73</sup> Therefore, it is possible that the disease and its complications in the reports of the sanitary doctors simply fell into other categories of disease, such as pneumonia, which was one of the most common causes of death in the Vilnius region in the 1920s.<sup>74</sup>

Speaking of influenza, Dr Bortkiewicz described the disease as an epidemic. She identifies influenza in 1930 as an epidemic in the Vilnius region. According to her data, 769 cases were detected in the Vilnius voivodeship that year (n = 1275,000). The hygienist highlighted several important things that patients should know, including strict bed mode for the patient. Otherwise, the risk of complications arises. In the fifth issue in 1931, the hygienist continued her story about influenza and its complications, the danger to health, and even life. Bortkiewicz gave a clinical description of an extremely dangerous form of influenza which started with nosebleeds on the very first day. We can presume that this form of influenza was a kind of specific mutation from that period. Unfortunately, today it is difficult to trace accurately what form it was.

For several later issues, Bortkiewicz continued with detailed descriptions of another disease, tuberculosis. Her first conclusion was that tuberculosis was mostly a disease of the poor; however, it also spread among the rich who avoided physical work. Tuberculosis spread in almost every social group as one of the most life-threatening diseases. Again, in short, some context should be given. The statistical data from that time in Vilnius shows crude tendencies in tuberculosis mortality. From 1923 to 1938, an average of 21.8 people in Vilnius died of typhoid and 15 of diphtheria, and about eight from dysentery. Meanwhile, tuberculosis alone took an average of 303 citizens annually in the third decade (1923 to 1933). In the years 1930 to 1937, the number of newly recorded tuberculosis cases in the Vilnius province averaged 3,118

<sup>72</sup> Ibid.

<sup>&</sup>lt;sup>73</sup> KARLEN, A. Op. cit., p. 105.

ŽALNORA, Aistis. Visuomenės sveikatos mokslo raida Stepono Batoro universiteto Medicinos fakultete ir visuomenės sveikatos būklė Vilniaus krašte 1919–1939 metais. Daktaro disertacija. Vilnius, 2015.

<sup>&</sup>lt;sup>75</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1930, nr. 51.

<sup>&</sup>lt;sup>76</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1931, nr. 5, s. 11–12.

<sup>77</sup> Ibid.

cases per year. <sup>78</sup> Therefore, the reason for Bortkiewicz's decision to describe this particular disease in detail is clear.

Analysing the causes of the spread of tuberculosis, Dr Bortkiewicz finally finds the courage to criticise dirty country men for their ugly habit of spitting on the floor. 'It is not only proof of messiness and an absence of any culture, but also a clear attack on health.'<sup>79</sup> If a person still needed to spit somewhere, the doctor suggested using a special spittoon for people sick with tuberculosis. She also stated that it was very common to become infected by talking, close communication, or kissing. Therefore, she forbade all aunts to kiss small babies, and in general to forget the bad habit of showing babies to relatives who could be tuberculosis carriers and easily infect a small child, whose immunity is much weaker at that age.<sup>80</sup> 'Do not sleep with a child in the same bed,' she argued. Do not use the same dishes, spoons, etc. The same clothes must not be used by parents and children. If it was necessary to use the same clothing, it should be placed outdoors in sunlight or in the winter cold for several days, as the sun and cold kill bacteria.<sup>781</sup>

In other issues, Janina Bortkiewicz described in detail factors that determine resistance or vulnerability to tuberculosis, such as age group, gender, and work conditions. Finally, she also talked about insomnia, weakness and vulnerability caused by difficult experiences, such as disappointment in love and its consequences, insomnia, and a loss of appetite as precursors to tuberculosis (TBC).<sup>82</sup> Another problem highlighted by the researcher was that clear symptoms of tuberculosis appear very late, from a few weeks to several years. However, the more difficult the living conditions, the shorter that period is. As in previous examples with children, villagers did not notice the symptoms of the disease for a very long time, and they did not pay attention to things such as a loss of appetite or abnormalities in the heartbeat, because they had to work. Therefore, the people with the most advanced TBC would usually be from the countryside, while townspeople would usually react more quickly and realise that they still had access to successful treatment.<sup>83</sup>

Other articles explain how disease was treated when antibiotics were not yet known. Tuberculin injections from the drugs iodine and arsenic were used, but they also had side effects. Therefore, that was not the best solution. Hastead, Bortkiewicz suggested treating TBC at home or in a sanatorium by a specific regime and nature. The main conditions were a lot of light, fresh air and sun. Staying outside for as long as possible

<sup>&</sup>lt;sup>78</sup> ŽALNORA, A. Visuomenės sveikatos mokslo raida..., p. 93–94.

<sup>&</sup>lt;sup>79</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1931, nr. 6, s. 10.

<sup>80</sup> Ibid.

<sup>81</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. Nasz przyjaciel, 1931, nr. 7, s. 10–11.

<sup>&</sup>lt;sup>82</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1931, nr. 12, s. 11–12.

<sup>&</sup>lt;sup>83</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1931, nr. 14, s. 13.

<sup>&</sup>lt;sup>84</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1931, nr. 38, s. 9–10.

and walking in both winter and summer were the treatment, as sunlight kills TBC bacteria. Quartz lamps were also useful as a substitute for sunlight. Another important preventive measure was fish oil. She also recommended a diet high in fat and protein, and as little flour as possible, and more milk, dairy products, vegetables and fish.<sup>85</sup>

Unfortunately, Bortkiewicz's recommendations on nutrition in reality were difficult to implement. Data collected by Felix Kasperowicz, another researcher at the Department of Hygiene, revealed nutrition hygiene problems in the city. Just over a third of the families surveyed were able to eat meat at least once a day. Almost half consumed meat or meat products only one or two times a week, and in some cases once in two weeks. The reason for this diet was simple: meat was expensive. Almost half (47%) of the respondents stated that there was no butter in their diet at all; 25% of respondents consumed butter once a week. The low consumption of butter in Vilnius was determined by the same factor, the high price of the product. As a result, almost half the respondents tried to compensate for the lack of butter with cheaper but less nutritionally valuable products, namely pork fat, lard and margarine. Urban residents also rarely ate eggs: 27.6% of respondents ate eggs less than once a week, and 11.1% of respondents did not eat them at all.<sup>86</sup>

Issue 50 in 1931 carried the author's somewhat different kind of work about qualified nanny-nurses in the Vilnius province. According to her, for six years from 1925, with the efforts of the Vilnius paediatrician Wacław Jasiński (1881–1936), many qualified nanny-nurses were educated. Bortkiewicz's article was intended to discuss issues related to this area. On one hand, sometimes unmotivated girls became nurses who did not always work very hard. On the other hand, their employers often made unreasonable demands on them, and the girls were malnourished. As a consequence, they declined to work. The hosts then hired less-paid unqualified country girls instead, who unfortunately did little to help the children in their development. Bortkiewicz encouraged change on both sides. On one hand, the better selection of more motivated and better qualified girls was needed. On the other hand, the ladies/gentlemen who employed them should treat them better if they wanted a qualified nanny-nurse to stay and work for them. Finally, she urged decent girls to take up this good job and help bring up the next generation.<sup>87</sup> Again, some context is needed. Janina Bortkiewicz herself participated actively in training nurses and physicians in Vilnius. Together with her colleagues in the department, she gave general hygiene and social hygiene courses for the Vilnius Sisters of Charity.88

<sup>&</sup>lt;sup>85</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1931, nr. 19–21.

<sup>&</sup>lt;sup>86</sup> ŽALNORA, Aistis. Development of Dietary Hygiene in Vilnius in 1922–1939. In *Czystość i brud. Higiena między wielkimi wojnami (1918–1939)*. Red. Walentyna KORPALSKA, Wojciech ŚLUSARCZYK. Bydgoszcz, 2017, s. 287–297.

<sup>&</sup>lt;sup>87</sup> BORTKIEWICZ, Janina. Wiadomości z hygieny. *Nasz przyjaciel*, 1931, nr. 50, s. 14.

<sup>88</sup> ANDRIUŠIS, A.; STUKAS, R. Op. cit., p. 498.

# Janina Bortkiewicz's articles in the magazine 'The Path to Health'

The articles in the magazine *Droga do zdrowia* (The Path to Health) appeared a couple of years later than in the previous magazine, and their content and form differ. The language of the researcher is more business-like, and the topics are different. There are no didactic elements in the articles, such as a summary of the most important ideas at the end of the article, but the article has one clear topic. This is perhaps because of the difference in the readership. In this case, it is likely that the main audience was the more educated people of the city who could afford to subscribe to a magazine specifically devoted to health issues.

The first issue in which we find an article by Bortkiewicz is issue 4, 1933. The issue was devoted to the problem of rheumatism. Her article 'Where to Rent a Healthy Apartment' is clearly related to the main topic of the issue, as well as to the priorities in public health policy, since defeat of rheumatism was among them.<sup>89</sup> The hygienist wrote that the basic conditions necessary for a healthy life in order to prevent rheumatism and other diseases were sunlight and the right temperature. This was difficult to achieve, especially in big cities. It was most sensible to live on the second floor or higher, but not on the top floor, because they were the coldest in winter. It was not a good idea to choose to live on the first floor or the ground floor because it was very close to the ground, which could be humid and lack sunlight. It was a bad idea is to rent an attic, because it was very cold there in winter and unbearably hot in summer. But the worst decision was a semi-basement or basement apartment. They were always wet and dark. They were the most common cause of rheumatism and serious diseases, and even death in young children. Those apartments also flooded quite often. Therefore, if possible, she suggested to avoid renting an apartment in a big city, but rather a small house or part of one outside a city, where there was more greenery, gardens, forests, etc. There was also more fresh air and sun there.90 Bortkiewicz's recommendations were based not only on theory but also on experience. In 1931, a huge flood left many poor Vilnius citizens homeless and made their miserable living conditions even more complicated, as they had to move house and live in even more crowded conditions.91

An article in 1935 was devoted to the hygiene of the apartment. According to the scientist, every grown-up person must have their own corner or their own room. One room could accommodate more people on condition that one person had an

<sup>&</sup>lt;sup>89</sup> Dwadzieścia lat Publicznej Służby Zdrowia..., s. 60.

<sup>90</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Gdzie mam wynając zdrowie mieszkania. *Droga do zdrowia*, 1933, nr. 4, s. 6.

<sup>&</sup>lt;sup>91</sup> ČIBIRAS, Povilas. Mano kelias į mokslą ir medicinos praktiką. *Vilniaus medicinos istorijos almanachas*, 1997, nr. 1, p. 273–308.

area of at least 20 square metres. Children must have a separate bedroom and an area of ten to 12 square metres each.<sup>92</sup> We can notice parallels with an official health policy line. The minister Janiszewski mentioned above was critical of small living areas: 'It must be legally prohibited to equip rooms with an area of less than 12 square metres.'<sup>93</sup>

It was not good, Bortkiewicz continued, for adults to share a bedroom with children. But the worst was to have a large and beautiful salon for guests and at the same time to make family members sleep in small and cramped rooms. The price of such a fancy salon is tired and sick children with scrofula.' Therefore, the most important room in the apartment was not the living room, i.e. the salon, but the bedroom(-s), where we spend a third of our time. Another important room was the kitchen. The kitchen must be clean and tidy. It must be separate from the other rooms, as a lot of

steam is generated during cooking.94

Issue 5-6 in 1936 was devoted to the topic of the lighting of an apartment and the work space. The researcher stated that insufficient exposure to light had a bad effect not only on the eyes but also on the nervous system. Dim light could easily cause short-sightedness, but bright lighting could also cause eye diseases. She made recommendations on where to place a lamp on a desk, and how to hang a lamp for general room lighting. <sup>95</sup> These recommendations are now outdated in the sense of norms for lighting.

Issue 10 in 1937 was devoted to scarlet fever. The hygienist described all the symptoms of scarlet fever, as well as possible complications: ear infections, and heart and kidney disease. Due to the possible complications, the researcher warned that it was necessary to treat a sick child with the disease for at least



Figure 4. A closed-type hospital ward. Source: BORTKIEWICZ-RODZIEWICZOWA, Janina. Szkarlatyna czyli płonica. *Droga do zdrowia*, 1937, nr. 10, s. 6

<sup>&</sup>lt;sup>92</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Higjena mieszkań. *Droga do zdrowia*, 1935, nr. 3, s. 6.

<sup>&</sup>lt;sup>93</sup> GAWIN, Magdalena. *Rasa i nowoczesność: Historia polskiego ruchu eugenicznego (1880–1952)*. Warszawa, 2003, s. 182.

<sup>94</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Higjena mieszkań. Droga do zdrowia, 1935, nr. 3, s. 6.

<sup>&</sup>lt;sup>95</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Oświetlenie mieszkania I warszatów pracy. *Droga do zdrowia*, 1936, nr. 5–6, s. 10.

three weeks, even if the child looked healthy. In addition, hospital treatment was necessary in order to ensure adequate medical care and nursing, as well as to prevent further spread. The disease was highly contagious, spreading easily through pimples that peeled off at a certain stage of the disease. The disease also spread via objects touched by the patient: toys, books, etc. It also spread due to communication with the patient. Therefore, she warned readers strictly not to go to a house where someone had scarlet fever. From a modern point of view, probably the most traumatising experience was the isolation of children in closed-type hospital wards, where they were held for several weeks.

Scarlet fever was not fully controlled by vaccination at that time.<sup>97</sup> The disease did not have high mortality rate, but it was the third most common disease in Vilnius.<sup>98</sup>

The last issue of the magazine we managed to uncover was issue 3 in 1939. Janina Bortkiewicz wrote about occupational poisoning, especially by poisonous metals. She considered lead and mercury poisoning to be the most common. At that time, lead was used in printing, art and construction. Mercury was used in the manufacture of lamps, bulbs, barometers, gilding, etc. Both metals were highly dangerous, so Janina recommended either not using these metal compounds at all in manufacturing, or at least taking all possible precautions. As the scientist observed, a number of industrial workers did not take any precautions, because they simply did not know about the possible risks. 99 Bortkiewicz's recommendation largely coincided with Kazimierz Karaffa-Korbutt's recommendations. The latter suggested simply abandoning all potentially hazardous substances in industry as the best way to avoid occupational poisoning. 100

### Conclusions

The analysis of Janina Bortkiewicz's popular public health education articles has revealed that the author's activities correlated to a large extent with the health challenges of the time in the Vilnius region and the guidelines for health policy, namely the fight against social diseases. Topics such as tuberculosis, influenza, rheumatism, scarlet fever, and other dangerous diseases at that time, were examined in detail in the works of the hygienist.

<sup>96</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Szkarlatyna czyli płonica. *Droga do zdrowia*, 1937, nr. 10, s. 6–7.

<sup>&</sup>lt;sup>98</sup> ŽALNORA, A. Visuomenės sveikatos mokslo raida..., p. 94.

<sup>99</sup> BORTKIEWICZ-RODZIEWICZOWA, Janina. Zatrucia zawodowe. Droga do zdrowia, 1939, nr. 3, s. 3.

<sup>&</sup>lt;sup>100</sup> KARAFFA-KORBUTT, Kazimierz. *Walka z kurzem w przemyśle*. Wilno, 1924, s. 10.

As a medical practitioner, she fought against popular superstition, ignorance and charlatanism, which were directly related to the delayed referral of patients to doctors, as a result of which even curable diseases could be a cause of death. This may have been her most important personal aspiration as a doctor to prevent as many avoidable deaths as possible. Her chosen strategies in public education appealed to the reader's rational mind, and at the same time, through vivid comparisons, the reader was able to realise the limitations of his health-care-related knowledge. But at the same time, the author did not try to humiliate or criticise her readers too harshly. It can be assumed that this strategy came from years of practice and common sense, and ultimately from the author's human qualities, such as empathy. Moreover, Bortkiewicz gave a lot of advice on professional health care and disease prevention, which could have been very useful in nursing or in daily routine.

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Aistis Žalnora

Santrauka

Tarpukariu Lenkijos sveikatos apsaugos sistemoje universitetai atliko patariamąjį vaidmenį, taip pat padėjo įgyvendinti sveikatos politiką. Vilniaus Stepono Batoro universiteto Medicinos fakulteto Higienos katedros vedėjas profesorius Kazimierzas Karaffa-Korbuttas (1878–1935) ir jo studentai dalyvavo šviečiant visuomenę higienos klausimais. Mūsų tyrimo metu surinkti pirminiai duomenys rodo, kad ryškiausių veiksmų šioje srityje ėmėsi vyresnioji asistentė ir adjunktė daktarė Janina Bortkiewicz-Rodziewiczowa (1892–?). Vietinėje ir valstybės spaudoje ji paskelbė daugiau kaip 100 populiarių straipsnių įvairiomis higienos švietimo temomis, pavyzdžiui, apie mikrobus, klaidingus liaudies įsitikinimus ir prietarus, slaugą namuose, infekcines ligas apskritai, konkrečias infekcines (socialines) ligas, asmens higieną, taip pat buto ar darbo vietos higieną, profesinės sveikatos problemas ir kt.

Janinos Bortkiewicz viešosios higienos klausimams skirtos publikacijos buvo tiesiogiai susijusios su sveikatos apsaugos iššūkiais to meto Vilniaus krašte ir oficialios sveikatos politikos gairėmis, t. y. kova su socialinėmis ir užkrečiamosiomis ligomis, tokiomis kaip tuberkuliozė, gripas, skarlatina, reumatas, darbininkų ligos ir kt.

Tai, jog Janina Bortkiewicz, kaip gydytoja, dirbo vietos ligoninėse ir ambulatorijose, taip pat Vilniaus Stepono Batoro universiteto Higienos katedroje, leidžia teigti, kad ji buvo gerai susipažinusi su vietos sveikatos apsaugos situacija. Ji taip pat dalyvavo sveikatos priežiūros specialistų ir neprofesionalų švietimo veikloje. Tačiau užuot pasirinkusi formalų stilių ir pamokslavusi, savo populiariose publikacijose ji aiškiai ir kūrybiškai kreipėsi į skaitytojus, stengdamasi paskatinti jų smalsumą ir norą bendradarbiauti. Tikriausiai tai buvo susiję su jos gydytojos praktika vietos ligoninėse ir ambulatorijose.

Būdama mokslininkė, ji stengėsi kuo paprasčiau paaiškinti to meto visuomenės sveikatos problemas ir jų sprendimo būdus, kad tai suprastų paprasti žmonės. Tačiau kartu jos straipsniai buvo informatyvūs, apgalvoti ir konstruktyvūs. Juose buvo pateikiama tikslinga informacija, kuri galėjo sėkmingai padėti spręsti sveikatos problemas ir numatyti galimas grėsmes. Autorė stengėsi paaiškinti daugelį socialinių reiškinių, glaudžiai susijusių su šiomis ir kitomis socialinėmis ligomis. Mokslininkė stengėsi įtikinti skaitytojus pasikliauti mokslu grįsta medicina.

Jos stilius buvo paprastas ir aiškus, tačiau jam taip pat būdingas gausus žodynas ir spalvingi posakiai, kurie ne visada pasiduodavo tiksliam vertimui į kitas kalbas. Straipsniai turėjo aiškų didaktinį tikslą. Mokslininkė nebijojo oponuoti klaidingiems paprastų žmonių įsitikinimams ar tiesiog griauti populiarius mitus. Tačiau kartu ji nesistengė pamokslauti,

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teisti ar primygtinai reikalauti savo nuomonės pripažinimo. Savo straipsniuose ji tik išdėstydavo tuo metu mokslui žinomus faktus. Kai kurie iš jų šiandienos mokslo kontekste jau yra pasenę, tačiau daugelis autorės praktinių patarimų ir jų pateikimo būdas tebėra aktualūs ir šiandien. Todėl jos straipsniai yra geras pavyzdys ir šiandienos mokslininkams, siekiantiems populiarinti savo mokslo srities žinias.

Populiariuose Janinos Bortkiewicz straipsniuose pateikti aprašymai daugiausia autobiografiniai, paremti jos pačios praktika, išsamūs, vaizdžiai atskleidžiantys to meto visuomenės pažiūras, todėl leidžia suprasti visuomenės medicininio raštingumo, higienos lygį. Juose taip pat pateikiama nemažai universalių samprotavimų apie socialinę ligų kilmę, jie ir šiandien lieka aktualūs, ypač kalbant apie mažiau išsilavinusias visuomenės grupes.