Epidemics in Minho between the 19th century and the first two decades of the $\rm 20th^1$

Epidemias no Minho entre o século 19 e as primeiras duas décadas do século 20

Alexandra Esteves* https://orcid.org/0000-0003-0660-9485

Sílvia Pinto** https://orcid.org/0000-0002-7183-4067

Abstract

With the present article, we aim to put forward our research findings on the diseases and epidemics that plagued Portugal and, in particular, the region that borders the Spanish province of Galicia: Minho. To this end, we mainly looked into medical reports and the local press. Throughout the 19th century and the first decades of the 20th, several diseases brought death and misery to the people in Minho, notably, cholera, smallpox, typhus, and the pneumonic flu. At the same time, poverty, along with a lack of hygiene care, and the precarious living conditions of the general population, amongst other factors, triggered the advent and spread of all kinds of diseases. In order to fight them and prevent their escalation, several measures were adopted by the health and administrative authorities; however, they were not always well accepted by the people, as they undermined their livelihood and lifestyle. **Keywords:** Minho - diseases - epidemics - hygiene – hospitals.

Resumo

Com o presente artigo, pretendemos apresentar os resultados de investigação sobre as doenças e epidemias que assolaram Portugal e, em particular, a região que faz fronteira com a província espanhola da Galiza: o Minho. Para o efeito, debruçámo-nos sobretudo sobre os relatórios médicos e a imprensa local. Ao longo do século XIX e das primeiras décadas do século XX, foram várias as doenças que trouxeram a morte e a miséria às populações minhotas, nomeadamente a cólera, a varíola, o tifo e a gripe pneumónica. Paralelamente,

^{*}PhD in Contemporary History. Aassistant professor at the History Department of the University of Minho. Email: alexandraesteves@ics.uminho.pt

^{**} PhD student in History at University of Minho. Email: silviadfpinto.24@gmail.com

¹This initiative was supported through the Multiannual Funding of the Landscape, Heritage and Territory Laboratory (Lab2PT), Ref. UID/04509/2020, financed by national funds (PIDDAC) through the FCT/MCTES.

a pobreza, a falta de cuidados de higiene e as precárias condições de vida da população em geral, entre outros fatores, desencadearam o aparecimento e a propagação de todo o tipo de doenças. Para as combater e evitar o seu agravamento, foram adoptadas várias medidas pelas autoridades sanitárias e administrativas; no entanto, nem sempre foram bem aceites pela população, pois prejudicavam a sua subsistência e estilo de vida.

Palavras-chave: Minho - doenças - epidemias - higiene - hospitais.

Introduction

The 19th century was marked not only by the revival of "old" diseases, but also by the emergence of others, namely cholera². Typhus, which had been present in Europe since the 15th century, can be found in the first group. In that century, the disease was linked to a lack of hygiene and associated with the poor, who were considered responsible for their spread, but of other illnesses too. In the 1800s, and despite improvements to the health care system, there were several diseases threatening and killing the population: typhoid fever, smallpox, measles, whooping cough, amongst others.

In the 19th century, the hygiene movement grew and its followers sought to promote its ideals and reach the lower classes, who were considered a threat, due to their behaviour thought to be promiscuous, immoral and marginal. The poor tended to be the scapegoats, when attempting to explain the emergence of pestiferous outbreaks. This perspective was also reflected in the media that dictated hygiene to at the core of their mitigation. On the other hand, old illnesses resurfaced and with them came new fears. This was the case with the flu that plagued Europe for centuries, but only saw its peak in the 1800s. In that same period, the Russian flu also appeared and killed one and a half million people. It reached the Portuguese territory, along with the Spanish flu pandemic, in 1918 and 1919³. Tuberculosis also became a reason for high concern and was understood to be a social problem, one that required

²SNOWDEN, Frank. Epidemics and Society. From the black death to the present. Yale, Yale University Press,2020; HARDY, Anne. The Epidemic Streets: Infectious Diseases and the rise of preventive medicine 1856-1900). Oxford, Oxford University Press,1993; CONH, Samuel. Epidemics: Hate and Compassion from the plague of Athens to AIDS, Oxford, Oxford University Press, 2018.

³ FERRERO, Sara Garcia. *La gripe de 1889-1890 em Madrid*, PHD dissertation. Universidade Complutense, Madrid, 2018.

concerted efforts to be adopted by the several sections of society if it was to be fought⁴.

With this work we aim to present a list of diseases and epidemics that plagued Portugal and those that mostly concerned the health authorities throughout the 19th century and the first two decades of the 20th. For this purpose, we examined the local press, reports on some of the outbreaks that affected the country, in addition to some theses argued by medical doctors at the Medical Schools for Surgery in Lisbon and Porto. The present work also includes the measures chosen to fight them and adopted based on the knowledge and judgement of the time. The enforcement of these solutions was translated, albeit gradually, into behavioural changes that aimed to improve the overall living conditions of the population.

As the findings of Pasteur and Koch were made public, concerns over hygiene and health grew. In 1900, the following could be read in *Echo de Guimarães*: "After the findings of Pasteur, one of the happy heroes in the study and discovery of life's phenomena, the cause for terrible diseases inflicting suffering and claiming lives, has been determined to originate from infinitely small creatures, so small that they cannot be seen in the naked eye (...)⁵."

The supply of drinking water to the communities, in order to reduce the risk of some pathologies, like the typhoid fever⁶, became critical. Other example of the impact of the new findings can be found behind the decision undertaken by the Board of Santa Casa da Misericórdia in Guimarães to send a doctor from their hospital to Germany to find out the best method to "*cure the terrible tuberculosis disease discovered by dr. Koch (...)*". The ultimate aim of this initiative was to build a ward for tubercular patients⁷.

It is also key is to refer the health standards featuring the municipal postures codes that indented to regulate the behaviour and practices of the locals. The Guimarães' code from 1842 listed, among others, the following restrictions: building tanneries and candle making factories in the city centre; selling spoiled or tampered products and food products; throwing filth out

⁴ VIERA, Ismael Cerqueira. *Conhecer, Tratar e Combater a "Peste Branca". A Tisiologia e a luta contra a tuberculose em Portugal (1853-1975), Porto: Edições Afrontamento/CITCEM, 2016.*

 $^{^5}$ Echo de Guimarães, 28 de janeiro de 1900. nº 5.

⁶ In 1899, the following was written in the newspaper Religião e Pátria: "Results obtained from the study of typhoid fever revealed an encouraging example that saw the epidemic fall in all the cities that undertook the necessary measures to prevent the typhoid germ from coming into contact with drinking water". Religião e Pátria, 31 de agosto de 1889, n.º 46.

⁷*Religião e Pátria*, 3 de dezembro de 1890, n.º 47.

the window before 11 o'clock at night in the summer, and from 9 o'clock at night during the winter time; using the streets to store litter. However, and according to the sources, just because these regulations existed did not mean they were complied with⁸.

In the Braga district alone, there were several health issues hindering the fight against diseases and epidemics. A large portion of the population worked in the fields and their houses did not excel in cleanliness or comfort. For a typical Minho person, their home was considered an extension of their work, and often included rooms designed for that end that were also used to keep animals. The population ate poorly, their diet was not rich and was mainly focused on the consumption of corn bread, salted fish and vegetables. The broth was at the core of their diet and meat was a rarity on the table. It was a repetitive diet characterized by the lack of key groceries that weakened the bodies and made workers vulnerable to diseases. To complete this circle of deprivation, there was a lack of basic personal hygiene and the quality of their daily clothing was questionable, which tended to be grimy and patchy and highly insufficient when it came to protect the bodies against the cold and rain.

According to the 1878 census, Guimarães had 10000 residents. In 1883, 378 people died in the city, 13 of which perished as a result of epidemics and contagious diseases. Given the circumstances, this number seems rather irrelevant and it could be undersized. The deadliest disease was tuberculosis (40 deaths). Several diseases causing constraints to the digestive system were responsible for 97 deaths that were then, followed by deaths from complications to the respiratory system (laryngitis, bronchitis, pneumonia, etc.). Given the predominance of these type of illnesses, improvements to the city's hygiene and health conditions were urgent to tackle. Mortality was occurring across different age groups, but the high rate of infant mortality was evident (35% of deaths were of children under 10 years of age)⁹. The population's resistance to change the old routines and accept the medical diagnosis and treatment hindered the overall improvement to the health system.

⁸ GUIMARÃES, Luís José de Pina. *Vimaranes. Materiais para a História da Medicina Portuguesa*, Porto, Araújo & Sobrinho, 1929, p.290.

⁹ MEIRA, Joaquim José. "Higiene local". In *Revista de Guimarães*, 1884, vol.1, nº3, pp.130-135.

Still, there were several developments made in the 19th century, such as the advances in vaccination, the increase and widespread of hospital offer and the creation of institutions geared towards the specialized treatment of certain pathologies, namely asylums and sanatoriums. Also noteworthy is the foundation of the Bacteriological Institute, in 1892, intended for the antirabies treatment and initially headed by Luís da Câmara Pestana, a hygienist, university professor and one of the pioneers in the field of bacteriology in Portugal.

Like in other European counties, and as tuberculosis grew, so did the urgency for a specialized response to emerge and tackle the disease that affected thousands of people and caused high mortality rates. Highly contagious, tuberculosis affected both rich and poor alike, although the latter were more exposed to "the white plague". At the end of the 19th century, and following on the discovery of its causative agent, significant progress was made in mitigating the disease. In the words of Miguel Bombarda spoken in June 1899, "*It is a microbe disease, a transmissible disease and therefore an avoidable disease*". In 1882, Koch had already identified the agent responsible for the disease, and only the mechanisms that would protect the population against it were needed to develop.

Miguel Bombarda insisted on the idea that it was a preventable disease and one that could be cured with rest, a varied diet and good breathing air. To fight it, he would prioritize the improvement of the overall living conditions of the populations, particularly the working class, along with propaganda and awareness-raising actions. The eradication of the so-called "organic" poverty was deemed urgent to help avoid the impact of the disease, which had become a social problem mainly affecting the poor and linked with their precarious lifestyles, practices and traditions. Miguel Bombarda not only theorized about the disease but also ended up becoming the driving force behind the National League against Tuberculosis, alongside a group of medical doctors in 1899¹⁰.

In 1899, the National Assistance for Tuberculosis was established under the initiative of queen Amélia. The institution aimed to fight tuberculosis by building sanatoriums and dispensaries, while supporting the neediest of patients. Its funding came from membership fees, a fund operated by the State and allowances coming from municipalities and welfare institutions. The latter scheme generated a certain level of discomfort because, and

¹⁰ VIEIRA, Ismael Cerqueira. "Alguns aspectos das campanhas antituberculosas em Portugal: os congressos da Liga nacional contra a tuberculose (1901-1907)". In *CEM/Cultura, Espaço & Memória*, 2011, 2, p. 269.

according to those who were unhappy with it, the municipal vehicle tax and the "confraternities' tenth" were needed by the local communities¹¹. The gathering of resources in the capital was a fear and so was the outflow of funds that would be essential to assist at a local level, and which included the confraternities money during a time that was prone to see investments made in asylums for the beggars and for those suffering from childhood traumas.

As the 19th century progressed, concerns over the so-called "chest disease" increased and continued into the first decades of the following century. In 1899, the Medical Association of Braga argued that, similarly to Lisbon, Porto or Coimbra, this administrative district needed a sanatorium, and indicated Falperra to be the best place to build a mountainous sanatorium destined to treat all those suffering from pulmonary tuberculosis¹². The urgency in creating this type of hospital facility was justified by the high number of tubercular patients in the district, who lived in conditions of dire poverty and were hospitalized in general hospitals, where they could easily be exposed to other pathologies and make their health much worse. For the city of Guimarães in particular, support was claimed for the installation of a disinfection station that would facilitate the overall assistance of people suffering from infectious diseases¹³.

With regard to health legislation, it is worth mentioning a publication that regulated the hygiene sector dated from the 24^{th} of November, 1879. In the 1890s, the fear of a cholera outbreak led the health services to be placed under the government wing (decree of 20^{th} of June, 1890). In 1895, the Bacteriological Institute was founded and, four years later, so was the Central Institute for Hygiene. In 1901, at the beginning of the new century, health and charitable services were integrated into the kingdom's ministry.

The most challenging health scenarios resulted from the occurrence of several epidemics simultaneously, which happened several times throughout the 19th century but also in the first decades of the 20th. The north of the country saw pneumonia, smallpox and typhus appear in several different places and having consequences that were heightened by the adverse political, social and economic circumstances lived at the time.

Our work focuses in Minho, a territory that borders the Spanish province of Galicia and which, according to João de Meira, was still unknown

¹¹ O Commercio de Guimarães, 18 de julho de 1899, n.º 1404.

 $^{^{\}rm 12}$ O Commercio de Guimarães, 8 de agosto de 1899, n.º 1409.

¹³ O Commercio de Guimarães, 7 de julho de 1899, n.º 1401.

to most Portuguese people in the beginning of the 20th century¹⁴. He classifies it as a cursed land and a place where workers failed to make a living and ended up starving. In his own words, "*In Minho, one dies of hunger, dies from work, dies from the little protection they have against the weather*"15. This is a region divided into two areas: Alto Minho and Baixo Minho. The former currently includes the municipalities of Caminha, Arcos de Valdevez, Paredes de Coura, Ponte da Barca, Ponte de Lima, Viana do Castelo, Vila Nova de Cerveira, Monção, Melgaço, Valença and the latter houses the municipalities of Braga, Barcelos, Vila Nova de Famalicão, Esposende, Amares, Celorico de Basto, Cabeceiras de Basto, Póvoa de Lanhoso, Vizela, Vila Verde, Vieira do Minho, Fafe and Terras de Bouro. Despite this division, which is fictional, the entire Minho region shared the same difficulties, namely the precarious living conditions, the diseases and epidemics, and the lack of assistance to those who were ill.

Epidemics

Smallpox had been a public health problem for several centuries. The disease failed to be eradicated in Portugal with vaccination, given the resistance from a significant part of the population to get vaccinated, but which became mandatory in 1899. Regardless, this order only really began being enforced in 1911, when it was decided that all children would be vaccinated in their first year alive and then, revaccinated between 7/8 and 14/15 years of age.

In the 19th century and during the first decades of the 20th, smallpox, an endemic disease, grew into epidemic outbreaks that particularly affected children. The disease lived to become some sort of a ritual of passage from childhood to adolescence. In 1881, several children suffering from the disease were admitted to the São Marcos hospital¹⁶. 1884 registered a particular violent outbreak in the municipality of Caminha, which, in turn, led to the establishment of a sanitary cordon around the parish of Seixas, a fishing community prone to the occurrence of illnesses prompted by several types of deprivation weakening the population¹⁷.

¹⁴ MEIRA, João Monteiro. O concelho de Guimarães (Estudo de demografia e nosografia). Dissertação Inaugural apresentada à Escola Médico-cirúrgica do Porto. Porto, Typographia a vapor da empresa Gudes, 1907, p.127.
¹⁵ Ibid, 130.

¹⁶ O Commercio do Minho, 16 de junho de 1881, n.º 1:243.

¹⁷ A Estrela de Caminha, 30 de dezembro de 1884, n.º 123.

In the 20th century, and when pneumonia was already in the past, the epidemic typhus and smallpox continued affecting the country. In Guimarães and to fight these illnesses, several measures were adopted that included: the cleaning of public spaces, the removal of herds of pigs from the urban fabric, the prohibition to sell fruit, milk and sardines from door-to-door and on public sidewalks, the conduction of house visits meant to verify the compliance with the Postures Code. To ensure public safety, outdoor singing and night gatherings were banned, alongside the presence of prostitutes roaming the city¹⁸. In April 1919, it was common to find several children suffering from smallpox wandering the streets of Braga. Careful attention was therefore needed to be given to bystanders and to the overall sanitary state of the city, which presented serious problems when it came to sanitation and the concentration of filth¹⁹.

The 19th century started with the arrival of cholera in Europe, where it remained throughout the entire century and into the following one²⁰. In Portugal, the fear that was impregnated into the population could not be disconnected from a certain alarmism propagated by the newspapers of the time, and which made big headlines with the disease and included illustrations that associated it with death. This was not an exclusively Portuguese circumstance, since other countries' newspaper headlines also printed catastrophic reports on cholera, thus hiding or neglecting other diseases that continued to kill.

If certain 19th century illnesses were associated with some notions of romanticism, as for example tuberculosis, which even end up inspiring writers, painters and composers, cholera, on the other hand, was associated with an unhealthy lifestyle, with misery and promiscuity attributed to the poor. At the same time, it was also used to warn public opinion and bring health and hygiene notions to the forefront. It ended up leading to reforms, to the reinvention of institutions and to the update of both health and cleaning legislation²¹.

Portugal was first hit by cholera in 1833. Several measures were adopted to fight it, despite the profound lack of knowledge on it. In May that year,

¹⁸ *Gil Vicente*, 5 de outubro de 1919, n.º 52.

¹⁹ *O Commercio do Minho*,15 de junho de 1919, n. 6.803.

²⁰ ROSENBERG, Chales. *The Cholera Years: The United States in 1832, 1849 and 1866, Chicago and London, The* University of Chicago Press, 1987.

²¹ ALMEIDA, Maria Antónia. "A epidemia de cólera de 1853-1856 na imprensa portuguesa". In *História, Ciências, Saúde – Manguinhos,* 2012, 18, nº4.

and following on the news that the epidemic was spreading fast to different parts of the kingdom, shipments loaded with pine cones, laurel branches and rosemary, among other products, arrived in Guimarães, only to be burned by the residents at night and outside of their homes²². With the exception of the city of Braga, the district of Braga was not highly affected by the 1833 outbreak.

News that cholera or the yellow fever was raging elsewhere made the country startle, especially when the news came from neighbouring Spain²³. It was therefore necessary to control the entries by both land and sea, and prevent, in this case, the vessels coming from "dirty ports" to dock at the national ports. The intense relations with Brazil required special attention to be paid to the health status of that country, where cholera, yellow fever and the bubonic plague were spreading in the 19th century. The situation in the Portuguese India was also being monitored, giving the endemic status of the disease in the region. In 1878, it mainly affected the area of Salcete (a municipality in the district of South Goa) that saw the number of victims being so high that, according to local reports, "it was very difficult to bury the corpses in some areas"²⁴.

In the 1850s, Europe was infected by a third wave of cholera, which succeeded the one that took place in 1848-1849. The epidemic entered Spain via an infected vessel coming from Cuba, which prompted caution in the borderlands. The disease was in full swing in the Galicia region since November 1853, but the Health Council's delegate of the district of Viana do Castelo was only made aware of this in January 1854. The truth was that two cases had already been registered in Valença, in December 1853²⁵. One was a woman who had been to Galicia and infected her husband, both of whom died afterwards²⁶. Their house was both fumigated and isolated and their bodies were directly taken to the cemetery and given no funeral ceremonies.

²² FARIA, João Lopes. *Efemérides Vimaranenses*. Guimarães, Sociedade Martins Sarmento,1833, p. 138.

²³The same thing happened in 1918, on the other side of the border, when news emerged that in the city of Porto was suffering from an outbreak of epidemic typhus. in, HERRERA, Antonia Durán. "La Pandemia de gripe em la provincia de Badajoz". In A Gripe Espanhola de 1918, Guimarães, Casa de Sarmento-Centro de Estudos do Património, Universidade do Minho, 2020, p.297.

²⁴ Commercio do Minho, 22 de outubro de 1878, n.º 852.

²⁵ESTEVES, Alexandra. "A cólera no norte de Portugal de oitocentos: medos, providências e protagonistas". In BORGES, Julio Hernandez; LOPO, Domingos Gonzaléz (ed.) *Antiguos e nuevos desafios*, Santiago de Compostela, Alvarellos Editora, 2017.

²⁶ Conselho de Saúde Pública do Reino, Breve Relatório da Cólera Morbus em Portugal, nos anos de 1853 e 1854, (Lisboa: Tipografia Universal, 1855) 12-13.

In order to control the epidemic, communication with Spain was interrupted, a sanitary cord was installed, the mail was fumed and a lazaretto was built in the Forte de Lovelhe site. Despite all the precautions, two more cases were identified and resulted from smuggling practices that continued to take place between Alto Minho and Galicia. Initially, the consequences of the disease were limited to these four cases, but it did return in May, at a time when the sanitary cord was no longer being respected²⁷. Under these circumstances, the number of cases rose to 12 in a short period of time.

To put a stop to this second outbreak, more energetic decisions were taken. The municipality of Valenca was gifted with a hospital for patients suffering from cholera; the region was divided into health districts, each under the supervision of a physician; governors were advised to report any identified cases; doctors would be accompanied by nurses when visiting patients. Like in other epidemic outbreaks, aid committees were assembled and in charge of, among other tasks, supervise the compliance of duties on behalf of the municipal medical police and oversee the adoption of hygienic precepts²⁸. Notwithstanding, after May 1854, cholera continued to spread around Galicia and returned to Minho in 1855, but now with more violence. This second major outbreak began in the district of Guarda, and later affected the districts of Vila Real, Bragança, Viseu, Porto and Aveiro. Subsequently, it reached the coastal communities, especially the region between Caminha and Figueira da Foz. However, it was in the Algarve region that cholera proved to be more vicious and deadlier. To prevent it from spreading, the steps adopted in 1853/54 were reinstated, but some of the measures could not be implemented due to a lack of both human and material resources. Despite these limitations, civil, ecclesiastical and military authorities across the country, as well as city councils, hospitals, health care institutions and medical doctors joined forces in fighting this scourge. It is also worth mentioning the involvement of private individuals, who donated important funds for the cause.

Cholera only reached four areas in the district of Braga: Esposende, Barcelos, Braga and Guimarães²⁹. The first cases appeared in Esposende, in the summer of 1855. Once again, the proximity with Porto dictated the spread of the disease. Sequentially, it went to Fão, a village in the municipality of Esposende, where, proportionally, the largest number of victims was found.

²⁷ Ibid.,12-13.

²⁸ Ibid,.12-13.

²⁹ Conselho de Saúde Pública do Reino, Relatório da epidemia de cholera-morbus de Portugal dos anos de 1855 e 1856 (Lisboa: Imprensa Nacional, 1858) 240.

It then moved to Barcelos, Braga and Guimarães³⁰. In the city of Braga, the disease was first identified in patients in hospital and the peak of the epidemic was reached between mid-August and late September³¹. Guimarães was the least affected area, as it can be observed in Figure 1. Here too, the first cases were diagnosed in hospital. The number of infected people in the surrounding rural parishes mainly referred to members of the poorest communities, but they were not very high in number³².

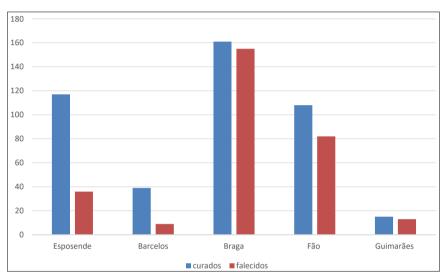


Figure 1 - Number of cholera patients, cured and deceased, in the district of Braga, in 1855.

Source: Relatório da epidemia de cholera-morbus de Portugal dos anos de 1855 e 1856. Lisboa: Imprensa Nacional, 1858.

With the exception of Barcelos, the disease victimized more women than men, as it can be observed in Figure 2, and which can be explained by the demographic background of the region shown in Table 1.

³⁰ Ibid.,241-241.

³¹ Ibid., 244-25.

³² Ibid,. 245.

Municipality	Number of female residents	Number of male residents	Total
Braga	23 454	16 881	40 338
Barcelos	23 021	19 402	42 426
Esposende	6 565	5761	12326
Guimarães	21 256	17749	39005

I able I	Table	21
----------	-------	----

Source: Relatório da epidemia de cholera-morbus de Portugal dos anos de 1855 e 1856. Lisboa: Imprensa Nacional, 1858.

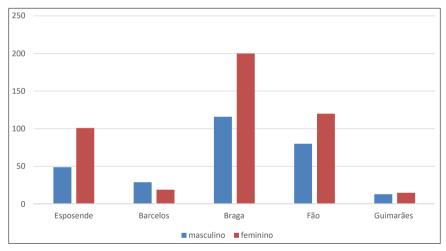
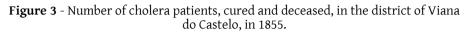
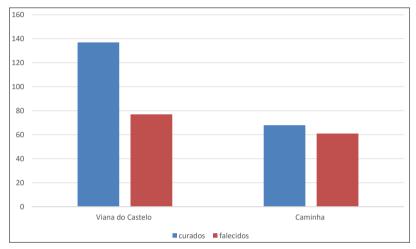


Figure 2 - Gender of cholera patients in the district of Braga, in 1855

Source: Relatório da epidemia de cholera-morbus de Portugal dos anos de 1855 e 1856. Lisboa: Imprensa Nacional, 1858.

In the district of Viana do Castelo, it was feared that cholera would arrive through the neighbouring region of Galicia, as it had happened before; however, that fear failed to materialize. In the city of Viana do Castelo, which had 7000 residents, the first cases were reported in August, and in the village of Caminha, with 2000 residents, the first cases were identified the following month. In both sites, the outbreak lasted for two months, but the impact was greater in the latter municipality, because it registered the highest number of deaths. According to contemporary interpretations, the lethality of the Caminha outbreak may be explained by the lack of hygiene among the population, along with the unhealthy conditions reported in the dwellings, which were in line with what had happened in other occasions elsewhere³³.





Source: Relatório da epidemia de cholera-morbus de Portugal dos anos de 1855 e 1856. Lisboa: Imprensa Nacional, 1858.

Cholera patients were either treated at home or sent to hospitals, including the premises that were meant to receive cholera patients that had been set up in the meantime. The number of infected people admitted to the hospitals in Viana do Castelo and Caminha was not high, which meant that a significant portion of patients was treated at home. This circumstance may be explained by the small size of hospitals and their poor response ability, although there is a chance that there was also some level of resistance on behalf of the population to be willing to go to a hospital environment, given their association with poverty and abandonment.

In 1865, news about cholera raging Spain arrived. The same happened in the 1880s and 1890s. In 1884/85, and as a consequence of news coming from Galicia, a sanitary cordon was installed to control whoever came from the other side of the border and to make sure that all new arrivals were forced to go through Valença. In the 20^{th} century, the fear of cholera did not dissipate.

³³ Ibid., 254.

In September 1919, the Directorate-General for Health issued a telegraphic newsletter to the health units in mainland Portugal and the archipelagos of Madeira and the Azores, requesting to be informed about the number of ships that had docked the ports in August coming from "dirty" ports located in countries where the cholera epidemic was raging.

Quarantines and sanitary cordons were challenged for being considered ineffective, whilst requiring great human efforts, as they involved the mobilization of the military and of other resources, and caused huge losses of all sorts. In the Viana do Castelo district alone, and despite efforts to control the movement of both people and goods between the two sides of the border, smugglers did not interrupt their activities. Criticisms were also targeted at quarantine stations installed in narrow buildings, and which lacked the necessary hygiene conditions to operate. After Koch's discovery, criticisms about the futility of these measures rose in tone, and the efforts of governments were believed to be best put to practice if they were to improve the healthiness of the population³⁴.

In spite of the advances registered in the 1800s, the supernatural status of the disease persisted and remained throughout the 20th century. The disease was understood to be a divine punishment, and its effects were to be mitigated through religious ceremonies, prayers, promises and processions. In August 1885, in Guimarães, an image of Nossa Senhora da Penha was transported in a penance procession between the Capuchos church and Colegiada³⁵.

Identified in the 15th century, typhus continued to spread around Europe. Depending on the context in which it appeared, it received different names (*tabardillo*, spotted fever, jail fever, ship fever, among others) and it was often misunderstood for typhoid fever³⁶. In fact, it was mistaken for other illnesses (typhoid, flu, scarlet fever, measles), which led to wrongful and late diagnoses.

Portugal had been afflicted by typhus outbreaks since the late 15^{th} century, and the disease nearly became endemic. It started being more frequent in the 19^{th} century, and at times it ended up reaching the entire

³⁴ BARROS, Flávio Norberto. A inutilidade dos cordões sanitários. Porto, Imprensa Portuguesa, 1875.

³⁵ FARIA, João Lopes. Efemérides Vimaranenses, Guimarães: Sociedade Martins Sarmento, 11 agosto 1835, p.136.

³⁶ According to the doctor Eurico Taxa Ribeiro, typhus was different from the typhoid fever "due to its etiology, its sudden beginning, the lack of epistaxis and abdominal symptoms, the appearance of exanthema, a temperature drop and the length of time the disease was active. The only thing that is common between the two is the state of prostration, which also seems to be more intense in typhus" in RIBEIRO, Eurico Taxa. O Typho exanthematico: breve estudo, Porto, Imp. C. Vasconcellos, 1906, p. 59.

kingdom, as for example in 1832. Other times, it only impacted a few regions. Almost the entire territory continued to be affected in the following century, in particular the northern and central areas. In the 20^{th} century, the years in which typhus caused the greatest number of deaths were 1918/19, when 1725 and 1252 people died, respectively, according to data determined by J. A. David Morais³⁷.

Despite the idea that kept associating typhus with the most disadvantaged social groups, history on the disease revealed that it is purely democratic: it reached cities and villages alike; military and civilians; prisoners, harlots and individuals with a questionable lifestyle; many doctors also became its victims. At a later stage and already in the 20th century, the Jewish people were blamed for the origin of the disease in Nazi Germany. This accusation became part of the argument used to trigger their persecution and extermination³⁸.

In the 19th century, typhus, also known as *tabardilho* or spotted fever in modern Portugal, continued to spread with some level of regularity in the northern lands, especially in the cities. The same thing happened in the 20th century to the point of Ricardo Jorge classifying the country as a "country of typhus"³⁹. Both coastal and mountainous areas were not free from the disease. In reality and until 1920, several sites in the Minho region had been affected, namely, Castro Laboreiro, Arcos de Valdevez, Melgaço, Paredes de Coura, Barcelos, Famalicão, Santo Tirso, Guimarães and Viana do Castelo, amongst others.

The city of Braga was seriously affected by typhus in the first centuries of contemporaneity. In November 1890, news emerged that an outbreak was raging the city centre⁴⁰. In the 20th century, the disease returned in full force to the district of Braga. In February 1918, cases abounded in Porto and hospitals were already showing signs of saturation. In the following month, two individuals with epidemic typhus⁴¹ were admitted to the Guimarães hospital. In April that same year, prisoners infected with the disease were identified in the Guimarães jail. In the city of Braga and in the neighbouring rural parishes the situation was alarming.

³⁷ MORAIS, David. "Tifo epidémico em Portugal: um contributo para o seu conhecimento histórico". In *Medicina Interna. Revista da Sociedade Portuguesa de Medicina Interna.* 2008, 15, nº 3.

³⁸WEINDLING, Paul. Epidemics and genocide in Eastern Europe, 1890-1945, Oxford, Oxford University Press, 2011.

³⁹ JORGE, Ricardo. Tifo exantemático ou tabardilho. Relatórios apresentados ao Conselho Superior de Higiene, Lisboa, Imprensa Nacional, 1918.

⁴⁰ O Commercio de Guimarães, 6 de novembro de 1890, n.º 605.

⁴¹O *Commercio de Guimarães*, 26 de março de 1918, n.º 3212.

Among the measures adopted were the creation of a delousing station that was later transformed into a hospital: the Espírito Santo Fever Hospital. The site was an old school that belonged to the Espiritanos, a foreign religious order who operated in different premises, until it settled in the Espírito Santo College. Its construction began in 1877, and it still exists under the name of Sá de Miranda Secondary School. As one can understand from the images published in the work of Eurico de Almeida, this institution functioned as a hospital for those suffering from typhus, but it also received patients infected with Spanish influenza.

The Health delegate decided to make this facility available due to its optimal hygiene conditions. At the time, the best way to fight typhus, a highly contagious disease, was to isolate patients in suitable hospitals with good ventilation systems, whilst disinfecting all those who had been in contact with them.

When the typhus epidemic began, only one of the school pavilions was occupied and converted into a ward. Subsequently, the building's ground floor served as a staff cafeteria, and became a location to treat convalescent patients. In 1919, a women's ward was created in that same area. The first floor received pensioners suffering from the illness. Building works were conducted and the hospital started having electrialc light sources and water pipes. Iron beds were placed in five spacious and airy rooms. The human resources staff included two nurses and two assistants, a male and female delousing carer, a servant, a housekeeper and two supervisors dealing with the stretchers⁴². Its administration was entrusted to an officer from the Red Cross. According to Eurico de Almeida, 677 patients suffering from this epidemic were in hospital at the peak of the outbreak, in April 1919. Attached to the hospital was a delousing station.

Between March 1918 and August of the following year, 2,068 cases of typhus were reported in Braga, of which 1304 were women and 764 were men. In 1919, 1041 individuals affected by this epidemic were admitted to the civilian hospitals in Braga, and this was also the main cause for hospitalization and death⁴³. These figures were not just the result of the typhus outbreak, but also of the Spanish flu also reported that year. Regarding the occupations

⁴² ALMEIDA, Eurico de. *O tabardilho em Braga*, Lisboa, Tipografia Belenense, 1920.

⁴³ Anuário Estatístico de Portugal. Ano de 1919, (1924).

of those affected, there is a clear predominance of blue-collar workers, field workers and shoemakers⁴⁴.

The situation in the city of Braga became particularly dramatic due to the crossing of typhus with smallpox and Spanish influenza, and these events demanded resources to be scattered around. On the other hand, political events marking the first two months of 1919, with the northern Monarchy, made it difficult to fight the disease. Once the situation was handled, a health police was created and tasked with identifying patients and daily visiting the sites believed to be the hotspots for the spread of the disease⁴⁵. They were also in charge of locating all suspicious individuals roaming the streets, particularly the dirty and ragged ones, and ordering the cleaning of houses considered potential focal points for contagion⁴⁶. After a case of infection was confirmed, the doctors should inform the health police, who, in turn, would contact the disinfection station and send the patient to hospital. Before entering the hospital, patients had to be deloused. For this purpose, several delousing stations were created, namely in the rural parishes where the disease was present.

The effects of the Great War, along with the pneumonic flu pandemic and the political turmoil felt at the time, amongst other factors, prevented significant improvements to be made to the public health system. There was also an ongoing resistance towards medical authority and its intervention in the population's life. In Braga, several people refused to be deloused and reacted violently, claiming that "there had always been lice"⁴⁷. There were even those who complained to the Ministry of Interior about the existence of forced baths in the city, which, according to those who denounced it, was a rather discriminatory treatment of workers. At the time, there was a municipal spa that was rarely used by the communities. It also happened that even the highest social strata were reluctant to accept some of the prophylactic measures in force. These highly controversial opinions echoed in the local press, as for example, in the newspaper A Cidade, published in Braga. In July 1919, and with regards to the anti-typhus campaigns carried out in villages, journalists did write about prophylactic baths being the cause behind the admission of both men and women to asylums⁴⁸. All these circumstances were

⁴⁴ ALMEIDA, Eurico. *O tabardilho em Braga*, Lisboa, Tipografia Belenense, 1920, p.67.

⁴⁵ Ibid., 68-70.

⁴⁶ Ibid., 68-70

⁴⁷ Ibid., 111.

⁴⁸ A Cidade, 17 de julho de 1919.

aggravated by an insufficiency of human resources and a lack of preparation of those who had to provide assistance. Also notorious was the lack of sensitivity shown by some clinicians in the way they dealt with patients, especially those who were hospitalized.

In Guimarães, dirt and social problems, namely prostitution, were reported in the local press. The quote that follows was taken from *O Commercio de Guimarães*, and is rather informative: "I do not remember ever seeing Guimarães so dirty. At night, the appetizer of thirteen-year-olds on street corners is the candour of their souls and the syphilis in their bodies (...).⁴⁹" The increase of typhus cases in the city led to the referral of patients to the Santa Luzia hospital, intended for those suffering from typhoid fever. In 1919, the Directorate-General for Health made 1000\$ 000 Portuguese *reals* available for improvement works to be carried at the hospital.

There have been three major plague pandemics in history: in the 6th, 14th and 19th centuries. The latter manifested in 1855 and originated in China, more precisely in the province of Yunnan, but it ended up reaching other regions, including Hong Kong in the 1890s. From this city, it spread out to different parts of the globe via boats that carrying the main transmitter of the disease: rats. India was one of the most affected territories by this calamity⁵⁰. The city of Porto was the first place affected in Europe, with 320 cases registered, out of which 132 were lethal. The spread of the plague could only be stopped after 1905, as a result of the strengthening in the surveillance system at ports and in boats.

The first bubonic plague cases were reported in Porto in July 1899. The fight against the disease was led by Ricardo Jorge, a physician at the Municipal Health and Hygiene Services in Porto and a Professor of Forensic Medicine at the Medical School for Surgery in the city. When trying to mitigate the disease, the doctor had to face public opinion and an opposition that disputed the measures aimed at controlling the plague. They were understood to cause economic distress and the number of deaths recorded in the meantime did not seem to justify the means. On 23rd of August, 1899, the most feared decision was adopted: a sanitary cord was established to isolated the city from the rest of the kingdom. Whoever violated the established rules was at risk of being punished with up to six months in prison. It should be noted that

⁴⁹ O Commercio de Guimarães, setembro de 1919, nº 3336.

⁵⁰ CHASE, Marylin. The barbary plague – The Black death in victorian San Francisco, Nova Iorque, Random House, 2004.

the population of Porto was not very collaborative in fighting the disease: several families failed to report the illness of their members, refused to take them to hospital and prevented the disinfection of their homes⁵¹. The disease spread with acute severity to the islands and around the neighbourhoods of the poor workers that were real unhealthy location. Several measures had to be adopted to control the disease, including mandatory baths, medical visits that culminated in the isolation of the ill and the destruction of anything that would facilitate contagion, including clothing.

Resistance to the state intervention that was aimed at regulating behaviours and altering practices that were inconsistent with public health was a reality in several different regions of the globe between the end of the 19th century and the first decades of the 20th. A few examples are the so-called Vaccine Rebellion in Brazil, and the popular uprising fuelled by the press against the urban transformations projected in Rio de Janeiro, and which were part of a set of measures meant to combat the plague, smallpox and yellow fever.

At the conference focused on the sanitary wellbeing of the populations that took place in Venice in 1897, it was decided that countries infected with the plague would have to notify others about their health status⁵². As part of a group of preventive measures, it was anticipated that passengers on board of infected ships would remain in isolation if they presented symptoms, while the rest of the passengers would remain under observation for ten days straight. Any vessel considered suspicious would be visited by a doctor, while the passengers and crew would remain under surveillance. Portugal adopted even stricter measures for vessels coming from India.

The fear of the plague spreading led several locations, namely the Minho cities of Guimarães and Braga, to be aware about the advance of the epidemic. Guimarães was divided into zones that were meant to be used for home visits; the stables were inspected by the municipal veterinarian; the cleaning and removal of garbage from public spaces was carried out; sources from where the population could get drinking water were signalled; disinfectant was distributed around the poor communities; individuals that were suspected from being infected were transferred to a location prepared

⁵¹ COELHO, Carlos Alberto. A peste do Porto de 1899, Porto, Imprensa Portuguesa, 1900, p.85.

⁵² GARNEL, Maria Rita. "Portugal e as conferências sanitárias internacionais (Em torno das epidemias oitocentistas de cholera-morbus)". *Revista de História da Sociedade e da Cultura*, nº9, 2009.

to receive them⁵³. Some of the local press did criticize its counterpart Porto for the lightness of their approach and even for the arrogance with which it dealt with the disease, in addition to the opposition that the Porto society demonstrated for the sanitary measures.

In August 1899, a public notice from the district's civil governor was published in the press in Braga, and it established a set of decisions aimed at controlling the movement of people while the epidemic lasted in Porto. This document contained, amongst others, the following resolutions: the names of individuals who were not from the city but who frequented public places would be handed to the police commissioner; whoever presented symptoms that indicated plague would immediately contact the health authorities, so that a quick diagnoses could be made and thus, prevent the spread of the disease⁵⁴; whoever came from Porto could only reach Braga via the Famalicão station, where there was a disinfection unit. In fact, an inspection post was planned and intended to operate in all municipalities, which in Braga, Barcelos and Famalicão operated at the railway station. Failure to comply with these guidelines could lead to legal proceedings, however not everything went by as planned, as suggested by Braga's newspaper Comércio do Minho on the 7th of October, 1899. It reported some level of negligence on the part of the authorities when allowing the entrance of newspapers, goods and people from Porto without having gone through disinfection procedures at the control post⁵⁵.

The city of Braga was ready for the possibility of being hit by the outbreak that was affecting Porto. To this end, it was divided into nine distinct health units that were under the supervision of a doctor, a pharmacist and a police officer. A house located in São Gergório street was selected to receive potential patients suffering from the epidemic. São Marcos hospital decided that each patient could only be visited by one family member and that doctors should be on duty between 8:00 a.m. and 10:00 p.m. On the other hand, the fear of the plague led to other institutions other than the health authorities to be involved, namely the Misericórdias and the Volunteer Fire Brigade, who were willing to help out if the city was to be affected by the disease. The Catholic Church was also intervening, namely through the Archbishop, who urged the population to report any problems arising from a sanitary point of view

⁵³ O Commercio de Guimarães, 22 de agosto de 1899, n.º 1413.

 $^{^{\}rm 54}$ Commercio do Minho – 24 de agosto de 1899, ano XXVII, nº 3:957.

⁵⁵ Commercio do Minho – 7 de outubro de 1899, ano XXVII, nº 3:976.

and denounce any plague cases they were aware of. The idea that there was a level of punishment associated with the disease led many to seek refuge in the supernatural world and organize religious services and public prayers⁵⁶. Civil society also had something to say about an epidemic that was limited to the city of Porto. The population encouraged the collection of funds meant to finance the cleaning of public spaces and eliminating rats and fleas that were considered the main vehicles for the spread of the plague.

Despite all the disruption they caused, epidemics also help to raise awareness and promote reforms, especially when it comes to public health. Any shortcomings associated with diseases become a priority and pressure increases with regards to put words into practice. Other than all the weaknesses already mentioned, several locations continued to bury their dead inside churches and in churchyards, which was a common practice that continued into the first decades of the 20th century⁵⁷. However, the absence of cemetery infrastructures had become a reality in epidemic times. In fear of the plague the Municipality of Amares built a cemetery and assembled a wooden shed for the isolation of all those affected by the disease⁵⁸.

Mankind has been a target of the flu for centuries, but it mainly affects the elderly and the more fragile humans. It was considered a "common disease, but fortunately almost harmless"⁵⁹. It's true that it has not been heavily studied by historians, with the exception of the pneumonic flu, better known as Spanish influenza. Its study is linked with its pandemic status, and the high number of associated deaths. There are those who argue that over 100 million people died from it, and it is reported to have affected and victimized healthy young adults aged between 20 and 40 years of age⁶⁰. It left the world with severe economic and social problems, and a large number of orphans and widows⁶¹.

⁵⁶ Commercio do Minho – 5 de setembro de 1899, ano XXVII, nº3:962.

⁵⁷ ESTEVES, Alexandra. "A pneumónica no norte de Portugal: impacto e medidas", In Alexandra ESTEVES (coord.), *Sociedade e pobreza: mecanismos e práticas assistenciais (séculos XVII-XX)*. Vila Nova de Famalicão, **Húmus**, 2018.

⁵⁸ Commercio do Minho, 26 de agosto de 1899, n.º 3958.

⁵⁹ These are the words of the doctor João de Meira, when analyzing the illnesses responsible for the admission of patients to hospital in Guimarães, in 1904. In that year, 117 individuals were hospitalized with the flu, but no deaths were registered in MEIRA, João Monteiro. *O concelho de Guimarães (Estudo de demografia e nosografia)*. *Dissertação Inaugural apresentada à Escola Médico-cirúrgica do Porto*. Porto: Typographia a vapor da empresa Gudes, 1907, p.137.

⁶⁰ LINDEMANN, Mary. Medicina e Sociedade no Início da Idade Moderna- Novas abordagens da história europeia. Lisboa, Editora Replicação, 2002.

⁶¹ OXFORD, John. "Influenza. A pandemic of the 20th century with special reference to 1918; virology, pathology and epidemiology". In *Medical Virology*. 2000, n°10.

Other consequences attributed to it are: a disbelief in progress and, above all, in the medical know-how, the consequent development of alternative medicines and, from a more conservative standpoint, an attachment to the spiritual level, as the disease was understood to be a punishment, a divine retribution on humanity for the sins committed⁶². This reaction was rather visible in Portugal. In May 1918, when the pneumonic influenza arrived from Spain, the country was going through a very complicated situation: the impact of the Great War was being felt in all sectors; food products were rare; hunger was a reality; there was a strong social upheaval; strikes and warehouse robberies followed; typhus, smallpox were still around, in addition to tuberculosis spreading. A real "reaper of death" situation was affecting several different locations in the country.

The first wave of Spanish flu was felt between May and July 1918, and it was faced with a certain level of lightness. The country failed to be prepared for what was coming in late August that same year, when the disease spread through the district of Porto, starting in Vila Nova de Gaia and following its course all the way to Trás-os-Montes, the Beira regions and, finally, hitting the entire country⁶³. Soldiers who were authorized to return home brought the poisonous 'gift' with them. The harvest season was upon the rural lands, and families and neighbours gathered for the agricultural work; the fishing communities were busy and so were the factory workers. The summer months ended with men and women returning home, with spa towns and seaside resorts being emptied and churches continuing to be filled with believers attending liturgical ceremonies. Considering the events described, and in line with what took place in other countries, the fast spread of influenza was linked to a high number of factors.

The second wave, deadlier than the first, was followed by another one, in 1919. There are those who argue that the occurrence of a fourth wave took place in the autumn and winter of 1919-1920. Despite some challenges and inaccuracies in determining the causes of some of the deaths, it has been estimated that pneumonic influenza killed around 60 thousand people in Portugal. In 1889-1890, the world was hit by the Russian flu. Portugal was under its effects, especially around the capital. The collective memory was still well aware of this pandemic and, for that reason, when news reached the country coming from the other side of the border about the flu epidemic,

⁶² SPINNEY, Laura. El jinete pálido. 1918: la epidemia que cambió el mundo. Barcelona, Editorial Planeta, 2018.

⁶³ ESTEVES, Alexandra & PINTO, Sílvia. "A pneumónica em Portugal. A construção de uma memória". In Revista Mundos do Trabalho, 2020, nº12.

newspapers were quick to remember the 1889 epidemic and its very similar origin $^{\rm 64}.$

Like several places in the country, the city of Braga showed plenty of gaps at a health department level, circumstances that had already been evident during the typhus epidemic, but which became highly serious with the arrival of pneumonic flu. On the other hand, the city's population faced a shortage of essential utilities. In September 1918, there was no olive oil, no sugar and no rice in several of the city's grocery stores for well over a month⁶⁵.

The decisions to put a stop to the Spanish flu in Braga were several: the hospital destined to house the typhoid's patients and located in the Espírito Santo College, was adapted to receive pneumonic flu patients; the washing of the streets was reinforced and carried out by municipal and volunteer firefighters; the pharmacies' opening hours was extended and the Sunday rest was abolished⁶⁶. Other approved measures included: all cars in the city were mobilized to help the victims as soon as it was possible; eucalyptus leaves and pine branches were to be burned to purify the air in the city streets and squares; the herds of pigs had to be removed from the city centre and sent to slaughterhouses; military nurses were on call to help coping with the increase number of patients admitted to the São Marcos hospital;, touching the dead inside churches was forbidden due to the rapid increase in the number of deaths ⁶⁷. Despite the high number of cases registered in the rural parishes, the situation was particularly serious in the city. To explain the events, the lack of sanitation and the existence of open sewers, from where nauseating smells would emanated, were believed to be some of the responsible agents. Other reasons were linked with the fact that pig farming was being conducted in the city, along with a staple lack of cleanliness in the streets, the violation of the municipal guidelines, and malpractices when handling water outside, which transformed the streets into real dumping spots.

According to data coming from the Braga health delegate and published in 1919, in October and November 1918 and coinciding with the peak of the pandemic in Portugal, the district of Braga reported 4773 victims, of which 2646 were female and 2127 male. The municipalities that were mostly affected were Barcelos and Braga, as shown in Figure 4.

 $^{^{\}rm 64}$ Commercio do Minho 30 de maio de 1918, n.º 6696.

 $^{^{\}rm 65}$ Commercio do Minho, 1 de setembro de 1918, n.º 6723.

 $^{^{\}rm 66}$ Commercio do Minho, 13 de outubro de 1918, n.º 6735.

 $^{^{\}rm 67}$ Commercio do Minho, 17 de outubro de 1918, n.º 6736.

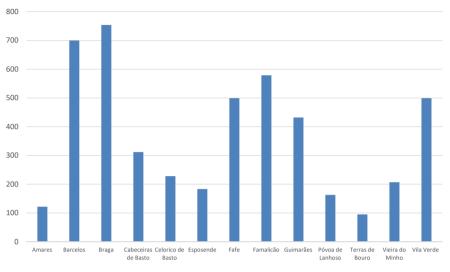


Figure 4 - Number of victims of pneumonic flu in the district of Braga in October and November 1918.

Still in October, churches in Guimarães reopened and religious ceremonies were resumed, but funerals continued to be held at night between 8:00 p.m. and 10:00 p.m. Prayers for the dead were only allowed inside churches and the corpses had to be deposited in lead coffins. Like in other countries, the Catholic Church accepted that funeral celebrations had to follow these rules, but that was not the case in some parts of the country⁶⁸. Guimarães newspapers reported not only the situation experienced in their municipality, but also around neighbouring areas. On the 28th of September, 1918, the newspaper O Commercio de Guimarães highlighted the high number of deaths in Vila Real and Amarante and noted that patients were sent to the Misericórdia hospital⁶⁹. On the 1st of October, the overcrowding of this facility was announced and the hospital was transformed from a place for those with lice to a field hospital. Churches closed and Nossa Senhora da Penha pilgrimage was cancelled, along with other religious celebrations. In that same month, the opening of the school year was postponed and fairs and other pilgrimages were also prohibited.

Source: Commercio do Minho, 12 de outubro de 1919, n.º 6837.

⁶⁸ In Lisbon, for example, no night funerals were held.

⁶⁹ O Commercio de Guimarães, 28 de setembro de 1918, n.º 3264

Civil society was mobilized to help mitigate the effects of the pandemic in different regions of the country. In this sense, and among other initiatives, aid committees were assembled in different locations, donations were made, public subscriptions were created, food, clothes and other goods were donated for those suffering from the disease and their families.

The press played a key role throughout the pandemic, despite the limitations imposed by censorship, and it did not fail to associate itself with efforts targeting the neediest. *Gil Vicente* newspaper ran a public subscription that favoured pneumonic flu victims, and managed to collect the amount of 30\$00 Portuguese *reals* to be distributed via the newspaper's editorial staff in a series of raffle tickets of 50 cents each.

Institutions like the Red Cross, the Misericórdias and the Volunteer Fire Brigade joined efforts in fighting the pandemic. In Guimarães, the Volunteer Fire Brigade assembled groups to raise awareness and donations to the hospital. Similar initiatives were also organized in Viana do Castelo. Religion was seen as a kind of relief, one that mitigated the suffering and the imminent threat of death. Guimarães held a procession of penance: the image of São Sebastião left the church of São Dâmaso and went through the streets of the city. It was followed by believers "praying the rosary, and asking God the end of the terrible epidemic that was spreading across the country"⁷⁰.

The daily life of the population in Minho was often threatened by other diseases, namely diphtheria and typhoid fever. Sometimes, the latter would live out to have near epidemic contours, given the high number of cases registered in a single geographical area. This dictated the need for additional measures to be adopted, as for example the creation of provisional hospitals⁷¹. Other diseases became an issue of public health and demanded a prompt response from the State, as it happened with hydrophobia. The high number of cases caused by canine attacks led to the foundation of the Royal Bacteriological Institute of Lisbon, in 1895, headed by Luís Câmara Pestana. The following year, and under the initiative of the physician Arantes Pereira, the Pasteur Institute in Porto opened its doors⁷².

Rabies was also a common illness in the 1800s, but it was rarely mentioned in previous historical accounts. In his thesis on hydrophobia, Luís

⁷⁰ O Commercio de Guimarães, 19 de outubro de 1918, n.º 3270.

 $^{^{71}}$ This is was what happened in 1883, in Castro Laboreiro, at the municipality of Melgaço. A Estrela do Lima, nº 14, 17 de outubro de 1882.

⁷² ANDRADE, Carlos Alberto Salgado de. Ligeira contribuição para o estudo da Raiva em Portugal, Porto, Imprensa Comercial, 1901.

Câmara Pestana referenced two healers who, during the reign of king João III, received a license to treat and "bless" the disease. Amato Lusitano and Zacuto Lusitano also mentioned it in their works. Throughout the 17th and 18th centuries, references to it can be found along with some treatment proposals. Communities had their special remedies to cure the bites of rabid dogs. Victims in the north had to go to the capital to find out if they had rabies or not, and they were to be accompanied by the head of the animal that attacked them and which had been put down in the meantime. Municipalities' headquarters provided support for the needy victims with the help of Misericórdias⁷³. In order to receive free support from the Royal Bacteriological Institute of Lisbon, patients had to fulfil certain requirements: be present at the county headquarters and bear certificates signed by the governor. When they were minors, the parents' state of poverty had to be attested⁷⁴.

Another disease that was endemic in some regions of Portugal was malaria, also known as fevers, or intermittent fevers. It was commonly reported in swampy areas, with stagnant waters that were used for rice cultivation. Minho was not one of the most affected areas. However, in the so-called "Bertiandos Valley" in the municipality of Ponte de Lima, there were several cases of fevers diagnosed in a wetland site. In 1856, the desiccation of the São Pedro de Arcos lagoon in the municipality of Ponte de Lima had already been discussed. It intended to help obtain fertile land for the practice of agriculture, and to drain the still waters that were at the origin of diseases classified as being serious, namely intermittent fevers that more frequently than not caused death⁷⁵. In the northern bank of the Cávado river, in Esposende, there were also cases of intermittent fevers⁷⁶.

⁷³On the 31st of October 1906, the head of the municipality of Monção requested support from the director of Santa Casa da Misericórdia to finance the transportation to the Royal Bacteriological Institute of Lisbon of Manuel Fernandes Covas, Nicolau Fernandes Covas, Isolina Fernandes Covas, Ermelinda Fernandes Covas and Francisca Martins, all of whom were from the Carvalhas site in the parish of Longos Vales, and had been bitten. The Municipal Archives of Monção (hereinafter AMM), *Livro do copiador de correspondência da administração do concelho de Monção para várias autoridades*, 1906-1907-1908.

⁷⁴ AMM, Livro do copiador de correspondência da administração do concelho de Monção para várias autoridades, 1906-1907-1908.

 $^{^{\}rm 75}$ A Aurora do Lima, 22 de outubro de 1856, n.º 427.

⁷⁶ CARVALHO, José Rodrigues de*. Chorographia palustre de Portugal*, Porto, Typ. a Vapor da Real Officina de S. José, 1899.

Conclusion

In the 19^{th} century and the beginning of the 20^{th} , and despite progresses being made and reforms carried out in Portugal, infectious diseases kept on affecting the daily lives of populations and often came as epidemic outbreaks.

As a result of the advances made in several areas, namely in the transportation sector, borders were blurred and distances were shortened. Contacts between people became more frequent and diseases also started circulating more easily. Aware of this reality, and with the aim of controlling and preventing the spread of epidemics, the authorities restricted the movement of both people and goods, closed borders, inspected vessels, imposed sanitary cords and quarantines. These measures were not always understood and accepted by the population, as they compromised their way of life, whilst causing them serious losses.

As the agents responsible for the infectious diseases were identified, new weapons were created, but the war was far from being over. Progresses achieved failed to eliminate the supernatural connotation of the diseases, and to avoid them or to mitigate their effects, divine intervention was sought, and the help of priests was welcomed. Epidemics were often seen as signs of divine discontent and the need to appease the anger of God through masses, promises and processions was a reality. Once the catastrophe was over, populations resorted to thanking the supernatural again and continued holding the same rituals.

Fully aware about the religiosity of the people in Minho, health authorities used parish priests to raise the population's awareness towards accepting vaccination and adopting better hygiene habits. In times of epidemics, they were asked to help out in identifying and reporting to the competent authorities whoever was suspected of being ill.

When it comes to the study of epidemics and diseases in general, it is key to consider and understand the backgrounds. These are the only ways to comprehend not only the effects of the diseases, but also how the populations handled them, as their points-of-view are great windows to analyse the success or the failure of some of the measures adopted in their fight.

References

ALMEIDA, Eurico de. O tabardilho em Braga. Lisboa, Tipografia Belenense, 1920.

Anuário Estatístico de Portugal. Ano de 1919, (1924).

ALMEIDA, Maria Antónia. A epidemia de cólera de 1853-1856 na imprensa portuguesa. In História, Ciências, Saúde – Manguinhos. 2012,18, nº4.

ANDRADE, Carlos Alberto Salgado de. Ligeira contribuição para o estudo da Raiva em Portuga. Porto, Imprensa Comercial, 1901.

BARROS, Flávio Norberto de. A inutilidade dos cordões sanitários. Porto, Imprensa Portuguesa, 1875.

CARVALHO, José Rodrigues de. Chorographia palustre de Portugal. Porto, Typ. a Vapor da Real Officina de S. José, 1899.

CHASE, Marylin. The barbary plague – The Black death in victorian San Francisco Nova Iorque, Random House, 2004.

COELHO, Carlos Alberto. A peste do Porto de 1899. Porto, Imprensa Portuguesa, 1900.

COHN, Samuel. Epidemics: Hate and Compassion from the plague of Athens to AIDS. Oxford, Oxford University Press, 2018.

Conselho de Saúde Pública do Reino, Breve Relatório da Cólera Morbus em Portugal, nos anos de 1853 e 1854, Lisboa, Tipografia Universal, 1855, pp. 12-13.

DURÁN Herrera, Antonia, "La Pandemia de gripe em la provincia de Badajoz". In A Gripe Espanhola de 1918. Guimarães, Casa de Sarmento-Centro de Estudos do Património, Universidade do Minho, 2020, pp. 277-320.

ESTEVES, Alexandra. A cólera no norte de Portugal de oitocentos: medos, providências e protagonistas". In Borges, Julio Hernandez; Lop, Domingos Gonzaléz (Ed.). Antiguos e nuevos desafios. Santiago de Compostela, Alvarellos Editora, 2017.

ESTEVES, Alexandra. A pneumónica no norte de Portugal: impacto e medidas. In Esteves, Alexandra (Coord.). Sociedade e pobreza: mecanismos e práticas assistenciais (séculos XVII-XX). Vila Nova de Famalicão, Húmus, 2018.

ESTEVES, Alexandra and PINTO, Sílvia. A pneumónica em Portugal. A construção de uma memória. In Revista Mundos do Trabalho 2020, nº12.

FARIA, João Lopes. Efemérides Vimaranenses. Guimarães, Sociedade Martins Sarmento, 1833.

FERRERO, Sara Garcia. 'La gripe de 1889-1890 em Madrid'. Phd dissertation. Universidade Complutense, Madrid, 2018.

GARNEL, Maria Rita, "Portugal e as conferências sanitárias internacionais (Em torno das epidemias oitocentistas de cholera-morbus". In Revista de História da Sociedade e da Cultura, 2009, nº9.

GUIMARÃES, Luís José de Pina. Vimaranes. Materiais para a História da Medicina Portuguesa. Porto, Araújo & Sobrinho, 1929.

HARDY, Anne. The Epidemic Streets: Infectious Diseases and the rise of preventive medicine 1856-1900), Oxford, Oxford University Press, 1993.

JORGE, Ricardo. Tifo exantemático ou tabardilho. Relatórios apresentados ao Conselho Superior de Higiene, Lisboa: Imprensa Nacional, 1918.

LINDEMANN, Mary. Medicina e Sociedade no Início da Idade Moderna- Novas abordagens da história europeia. Lisboa, Editora Replicação, 2002.

MEIRA, Joaquim José de. "Higiene local", Revista de Guimarães 1, nº3 (1884): 130-135.

MEIRA, João Monteiro de. O concelho de Guimarães (Estudo de demografia e nosografia). Dissertação Inaugural apresentada à Escola Médico-cirúrgica do Porto. Porto, Typographia a vapor da empresa Gudes, 1907.

MORAIS, David. Tifo epidémico em Portugal: um contributo para o seu conhecimento histórico. Medicina Interna. Revista da Sociedade Portuguesa de Medicina Interna. 2008,15, nº 3.

OXFORD, John. Influenza A pandemics of the 20th century with special reference to 1918; virology, pathology and epidemiology. In Medical Virology, 2000, 10.

RIBEIRO, Eurico Taxa. O Typho exanthematico: breve estudo, Porto: Imp. C. Vasconcellos, 1906.

ROSENBERG, Charles. The Cholera Years: The United States in 1832, 1849 and 1866 Chicago and London, The University of Chicago Press, 1987.

SNOWDEN, Frank M. Epidemics and Society. From the black death to the present Yale, Yale University Press, 2020.

SPINNEY, Laura. El jinete pálido. 1918: la epidemia que cambió el mundo. Barcelona: Editorial Planeta, 2018.

The Municipal Archives of Monção (hereinafter AMM), Livro do copiador de correspondência da administração do concelho de Monção para várias autoridades, 1906-1907-1908.

VIEIRA, Ismael Cerqueira. Conhecer, Tratar e Combater a "Peste Branca". A Tisiologia e a luta contra a tuberculose em Portugal (1853-1975). Porto, Edições Afrontamento/CITCEM, 2016.

WEINDLING, Paul. Epidemics and genocide in Eastern Europe, 1890-1945. Oxford, Oxford University Press, 2011.

Article received for publication on 21/09/2023 and approved on 16/10/2023.