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## Health and War: The Memoirs of Military Hospitals from Minho, Portugal in 1801

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### ABSTRACT

This analysis of the military hospitals of Minho in 1801, is based on memoirs written in September of that year by the physician Bernardo Abrantes Almeida, inspector of the Entre Douro and Minho Army, in the aftermath of the War of *Laranjas* (War of the Oranges) between Portugal and Spain. After this conflict and foreseeing a new invasion, Portugal sought to audit its available health provision, to properly plan its defences. This report provides an important insight into the existing hospitals in Minho, the patients and the diseases treated in them, as well as the attitude of its author towards the hospitals of *Misericórdias* and those managed by the Order of *São João de Deus*. As a defender of the creation of State military hospitals, the author made a number of criticisms of the places of treatment used by the Crown and supplied a new model to treat military personnel.

### KEYWORDS

Health; disease; war; military hospitals of Minho; Order of São João de Deus; care; *Misericórdias*; correspondence

Studying the military hospitals of Minho in 1801, allows us to understand Portugal's experience of war and how prepared it was to combat illnesses and injuries affecting its troops. Hospitals were considered an essential part of war equipment, with nursing sick soldiers seen as in keeping with both offensive and defensive actions. In view of imminent attacks in 1801, the Portuguese Crown endeavoured to improve existing support structures. Traditionally, the Crown's strategy was to establish contracts with the local *Misericórdia* when there were active conflicts, to set up some royal hospitals and to appeal to the religious Order of *São João de Deus*. At the borders, such provision was vital; however, the importance of each element varied from place to place.

Following the French revolution, the Iberian Peninsula remained neutral. However, after France's declaration of war on England in 1793, neutrality was no longer possible and the two peninsular kingdoms adapted their positions, embodied in a mutual aid treaty against France, signed in mid-1793, in Madrid.<sup>1</sup> As war became imminent, Portugal also signed a treaty with England with "other protection clauses", namely, an aid convention between the two states.<sup>2</sup> The *Rossilhão* war (1793–1794) between England, France and Spain also involved Portugal. If the *Rossilhão* campaign initially went well for the Spaniards and the Portuguese, France defeated them, occupying significant territories in Spain.<sup>3</sup> This conflict ended with the signing of the Basel Peace treaty in 1795, between

France and Spain, further isolating the Portuguese. The Portuguese participation alongside the Spaniards in the *Rossilhão* war resulted in heavy casualties.<sup>4</sup>

In view of the perceived imminence of a Franco-Spanish attack on Portugal, defensive and offensive measures were taken through the recruitment of military personnel, but also by the strengthening of fortresses and the preparation of hospitals to treat the sick. Nonetheless, in an attempt to evade war, Portugal signed a peace treaty with France in 1797. When Napoleon came to power in 1799, he signed an agreement with Spain, forcing the Portuguese prince regent to abandon the alliance with England, and so strengthening the French position. However, the continued support provided by Portugal to England alarmed the Spanish and French and increased the possibility of a war between the two peninsular countries. Early in the following year, France signed an agreement with Spain, foreseeing the invasion of Portugal by Spain, if Portugal did not end its support for British interests; that is, if it did not close its ports to Britain and open them to the French and Spanish.

Faced with the refusal of the Portuguese prince regent to agree to Spanish demands in the beginning of 1801, the Spanish army invaded Portugal through the Alentejo, while in Minho, the Portuguese penetrated Galicia.<sup>5</sup> Several towns and villages near the Spanish and Portuguese border in Alentejo were taken and the Portuguese army was defeated, even though it was supported by British troops.<sup>6</sup> The conflict was short-lived, as it was not the objective of the Spanish to occupy Portugal, just to weaken it and make it align with the French position.<sup>7</sup> This war, known as the war of *Laranjas*, ended with the signing of the Badajoz treaty in June 1801, forcing Portugal to surrender its possessions taken in Galicia and to accept that the town of Olivença would not be returned from Spanish occupation.

Following its defeat in the *Rossilhão* campaign, and in the *Laranjas* war, and maintaining a neutral position while still very committed to England, Portugal could now only expect a new attack, of greater dimensions, as did in fact happen from 1807 onwards. It was, therefore, three months after the end of the *Laranjas* war that an assessment of the situation of military hospitals in Minho was made. The pressure from France, now allied with Spain, and the neutrality that Portugal insisted on maintaining in the conflict between France and England led to an assessment of the country's existing capabilities of responding to an impending war.

As part of this assessment, it was necessary to evaluate and inspect existing hospitals. However, it was also necessary to take into account the State's finances, with the provisions and preparations of the army, the garrisons of the border towns and villages and the ammunition available. Maintaining a capable defensive structure and an operating hospital network constituted two fundamental objectives of the prince regent, while trying not to displease the French. For the province of Minho, a memoir of the military hospitals was drawn up, written at the military hospital in Braga, by Dr Bernardo José de Abrantes e Castro. He finished his report on 19 September 1801.

Dr Bernardo José de Abrantes e Castro was born in 1771, in the county of Guarda, the son of José Ferreira de Castro and Maria de Abrantes, and died in 1833. He had studied medicine at the University of Coimbra, was a knight of the Royal House, and the Chief-Physician of the Royal Chamber and Advisor of the State. His background conferred on him an enormous social reputation, allowing him to reach senior positions in the Army. In 1801, he became inspector of the military hospitals of the Beira Division and was

sent to Minho to set up mobile hospitals. In 1805, he was given the role of inspector of all military hospitals. At a time when military academies proliferated throughout Europe and medical science was advancing, his career provides an insight into the training provided to the Army and an understanding of how science and technical knowledge were combined in its highest ranks.<sup>8</sup>

At the end of the 1700s, the need to set up structures to support troops was widely recognised. An order was issued in February 1797 for the whole Portuguese kingdom, determining that all inspectors, judges, ordinary citizens and other magistrates or justices would prepare and clear convents and other buildings necessary to establish military hospitals, as required by the Chief-Physician of the kingdom. It was stated that the provision should be complied with even in cases where the owners were in possession of privileges and exemptions.<sup>9</sup> National interests overcame those of private individuals at a time of crisis and in the absence of health structures that could benefit the troops.

In this matter Portugal followed the pattern established by other European States. In Europe, at the end of the seventeenth century and beginning of the eighteenth century, the need to construct military hospitals was widely accepted. These institutions made it possible to provide better means and resources to armies, which were constantly expanding, at a time when the life of a soldier with experience on the battlefield was extremely valuable. Alongside the creation of these hospitals, legislation was also created that ensured conditions for the management of these buildings and their patients. In England as early as the sixteenth century, Parliament felt the need to create the first system of benefits for sailors and soldiers.<sup>10</sup> In France, several decrees were drawn up between 1708 and 1718, which led to the creation of a military health service throughout the country, which grew throughout the eighteenth century, through a distribution network of these hospitals concentrated in border areas. In 1708, the Army could count on 50 military hospitals, a number that increased until the end of the century, rising to 90.<sup>11</sup> In the Spanish case, in 1739, a reform programme for the management of military hospitals was presented,<sup>12</sup> where not only the administrative and economic component was described, but also the concern to provide them with a capable clinical staff made up of doctors, surgeons and apothecaries. Equally, there was also concern to adopt new medical practices.<sup>13</sup>

Resorting to the use of *Misericórdias* hospitals had been a long tradition in Portugal, but, given the seriousness of the political-military situation and the increase in the number of patients in their hospitals, urgent measures leading to the creation of health structures that would safeguard the future, that is, to create permanent structures to treat the wounded and the sick of war, were felt to be necessary. Unfortunately, the hospitals of these confraternities were unable to serve all sick military personnel; several lacked proper conditions and were small and/or with limited resources. The order of 1797 made it imperative that Military Hospitals were to be built where there was a shortage, that is, in all places where there were soldiers to be treated.

In the region of Minho, several *Misericórdias* hospitals were involved in assisting troops. In Caminha, military personnel had been treated there since the seventeenth century War of Restoration up until 1802, after the War of *Laranjas*.<sup>14</sup> In Viana do Castelo, the local *Misericórdia* hospital had been treating and helping soldiers practically since it was founded. In the second half of the seventeenth century, this institution formulated a contract with the Crown, to provide hospital assistance to the military, much in line with the wider

landscape at the time, in Europe. The negotiations to establish the price to be charged for each patient were complicated due to disagreements between the two parties. The Army did not intend to exceed 200 reis daily and the *Misericórdia* fought for more money until an agreement of 190 reis per day was reached; the hospitals were forced to balance their expenses with legacies.<sup>15</sup>

Considering the small size of the hospital of the *Misericórdia* hospital there, the Crown set up its hospital in the town of Ponte de Lima and placed it in the hands of the Order of *São João de Deus*. Many soldiers were treated in their hospital, even after the town was later endowed with a military hospital. In Arcos de Valdevez, the *Misericórdia* treated soldiers in its hospital. In Valença, it is unknown if the *Misericórdia* had a hospital, but there seems to have been a hospital of some kind in town to care for the sick troops. In Monção, the soldiers were always treated by the *Misericórdia*, however it only had a formally organised hospital there from 1803 onwards. It was only able to treat the wounded through alms and severe cases were only treated at the leprosarium of *São Gião*. Perhaps because there was no hospital in an important bordering town or village, the State later built one in the town to treat soldiers. For these reasons, the actions of the Order towards the soldiers were often more visible upon their death, as they would fetch them from the battle lines and bury them. In Melgaço, the *Misericórdia* existed on a smaller scale when compared to others. It did not have a hospital, but it supported some soldiers by way of charitable donations during the War of Restoration. The situation was the same in Vila Nova de Cerveira and in Valadares.

In 1797, the new order set the daily price for each treated soldier at 240 réis for soldiers and 360 for officers. The price list was not fulfilled throughout the kingdom, as for treatment in the hospital of *Misericórdia* of Vila Viçosa, the hospital were paid only 180 daily réis, which changed to the stipulated price only in 1805. The amount differed between hospitals and was related to their ability to bargain with the Army, which operated on behalf of the Crown. In Viana do Castelo, the price was 190 réis but had oscillated through the second half of the seventeenth century between 180 and 200 réis per day.

To strengthen the network of military hospitals, the prince regent ordered the founding of hospitals in: Trás-os-Montes and Entre Douro e Minho in the region to the east; one in Vila Real and another in Vila Flor and in Minho; one in Porto; another in Braga; and one in Ponte de Lima. Shortly after, all except for Vila Flor, were operational and receiving sick or wounded soldiers. For economic reasons, the Vila Flor hospital was not built, with one in Vila Real and another in Chaves, taking its place.<sup>16</sup> However, in Trás-os-Montes there were other hospitals to treat the troops – the Order of *São João de Deus* had been operating in Miranda do Douro from at least the mid-eighteenth century.

Dr Bernardo José de Abrantes e Castro immediately visited the hospitals of Braga and Ponte de Lima and took measures regarding the treatment of the troops and the inspection of royal property. The doctor had tasks wider than monitoring the soldiers' treatments, as he was also responsible for overseeing the finances of these institutions. Noting the need for a treatment unit to receive patients from the border battle lines, he set up a hospital in Pias (Municipality of Monção) with 40 beds, since there was no building capable of accommodating more patients. There had been a hospital in the town of Monção since 1646, but this ceased to function in 1775.

Pias hospital would play an important role since it provided the initial care, allowing, if necessary, for the sick to be transported to Ponte de Lima and then to Braga, a city where

there was a larger hospital. The Pias hospital was set up between 8th and 13th June of 1801, in record time, since the circumstances demanded immediate action. It remained in operation until the end of August of that year, after which it closed. The references left by Dr Bernardo José de Abrantes e Castro revealed some discord in the correspondence between the different levels of authority regarding its closure.<sup>17</sup> Dr Bernardo José de Abrantes e Castro was against this procedure, but interests of economy prevailed at a time when the attacks from Spain were over.

There was also a Military Hospital in S. Miguel de *Fontoura* (Municipality of Valença), located 5 km from the military camp, with 50 beds for admissions. It functioned as a reinforcement of the military hospital of Valença, when overcrowded.<sup>18</sup> As a border town, through which many armies passed, Valença needed support structures and had had a military hospital in operation since 1646, which went defunct in 1668. Another hospital was later constructed, only to be shut down in 1834.<sup>19</sup> Both were delivered over to the medical order of *São João de Deus*.

The Order of *São João de Deus* was installed in Portugal in the sixteenth century after the Spanish Army had invaded Portugal. This religious brotherhood had the mission of assisting those wounded in war<sup>20</sup> and they gained some significance in the War of Restoration, assisting the wounded in combat. It was João IV who solicited the Order for the foundation of the royal military hospitals to treat soldiers during conflicts; these were mostly installed along the border, particularly in Alentejo. However, in most cases, soldiers were still assisted in the *Misericórdias* hospitals.

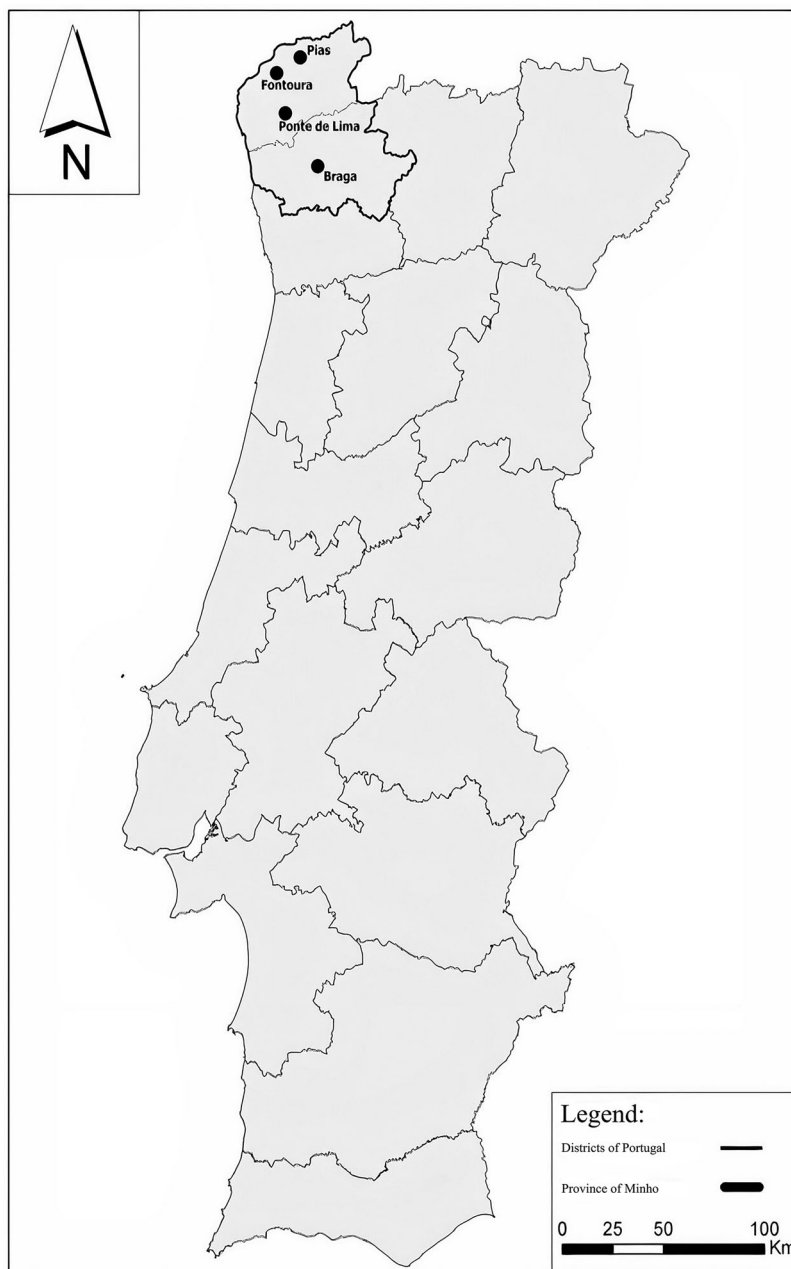
Like the Chaves hospital, the hospital at Valença was not part of the new Army Administration. The *Trasmontano* (from the region of Trás-os-Montes) hospital was administered by the Order of *São João de Deus*. Based on his knowledge of the functioning of the Almeida Hospital, managed by the same Order, Dr Bernardo José de Abrantes e Castro underlined the lack of charity and humanity towards the patients being treated there, but also the lack of hygiene. At the same time, he accused the religious orders of abandoning the sick, going to hunt and generally, enjoying themselves, causing their expulsion from the institution. According to Dr Bernardo José de Abrantes e Castro:

(...) the Hospital (Almeida) was in such a pitiful state that an unfortunate soldier would rather die in his barracks than enter a hospital where he'd die of hunger and where the filth ... [which] was unbearable, converted minor ailments and sickness into deadly diseases [...] The screams of the miserable soldiers, the pitiful state they found themselves reduced to, the voice of duty, of honour, of humanity, and of religion, produced no compassion in those religious orders, that only wanted to have fun walking between homes, playing in public billiards rooms, and getting involved in intrigues (...).

The hostility in the doctor's words about the hospitals administered by the religious order of *São João de Deus* must be analysed in the light of his objectives: the doctor was in favour of the installation of State Military Hospitals and the end of treatment in private hospitals and those run by the Order of *São João de Deus*. He advocated the creation of an effective network of Military Hospitals, which would free the Crown from dependence on these institutions.

However, the role performed by the religious order of *Soão joão de Deus* cannot be reduced to the position of Dr Bernardo José de Abrantes e Castro. In Portugal, as in Spain, the work they carried out around those faced with disease, mainly in moments of war, was important, in border localities and in areas with large accumulation of

troops.<sup>21</sup> After 1762, they had two hospitals in Almeida: one managed by the clinical order of *São João de Deus* and the “blood hospital”. The first was situated in the urban centre and would treat diseases, and the second located inside the city walls would handle surgery. By the end of the seventeenth century, in the context of ongoing war, the reinforcement of the religious staff at this hospital was solicited (Figure 1).



**Figure 1.** Location of the province of Minho. Source: Ana Cristina Araújo, “As invasões francesas e a afirmação das ideias liberais”, in *História de Portugal*, ed. José Mattoso, vol. 3 (Lisbon: Círculo de Leitores, 1993), 19–20.

The hospital of Fontoura was under the authority of Dr Bernardo José de Abrantes e Castro. Whenever necessary goods were missing, loans were made, until the Army was able to provide what was needed. The bureaucracy to which the doctor was subject to, did not allow him to act with the speed that was necessary, forcing the implementation of measures in co-operation with the locals, to respond to urgent situations. At other times it was the insufficiency of the public finances that compelled public contributions of clothing, food, and straw for the animals, or even rooms to accommodate the troops. This hospital closed its doors on 7th September 1801, having only operated for three months.

As the army moved according to the progress of its wars, hospitals would be built and closed. The hospital in Fontoura closed as the military staff that it was helping moved their quarters, and, therefore, it was no longer needed. Besides the two military hospitals mentioned that closed, in Entre Douro and Minho, there were the hospitals of Porto, Braga and Ponte de Lima, all with a high capacity for receiving the wounded and sick from war. In addition to these, the two cities and the village also had their local *Misericórdias* hospitals (Table 1).

In the regulation of military hospitals adopted in 1790, the procedure adopted by the healthcare professionals required nurses who were charitable men, diligent, clean and obedient to the orders of teachers and doctors, in order to contribute to the health of the ailing soldiers.<sup>22</sup>

For Dr Bernardo José de Abrantes e Castro, the hospitals of Chaves and Valença also needed change. He argued that they should likewise get rid of the religious order of *São João de Deus*, because they were only interested in the profits from the hospitals. The accusation was serious, but its author was aware of the scope of his words, claiming to act only in the interest of the Crown. The doctor understood that the healthcare of the troops was a function of the military hospitals, displaying his high regard for good hospital management. He considered that only through good hospital management, could the healthcare of the military be maintained. Inefficient treatment of disease and its propagation by the soldiers did not serve the national interests, as it involved a higher price in terms of human lives and national policy. Accordingly, he justified the new regulation of military hospitals as an instrument that made these healthcare centres “true nursing homes for the sick soldiers, and unquestionable monuments of Piety from His Royal Highness”.<sup>23</sup>

As can be seen, this idea that the doctor created of hospitals for treatment of the military required new attitudes and procedures. Thus, in keeping with the stipulations of the

**Table 1.** Military hospitals and hospital welfare.

Military hospitals	Number of beds
Braga	1000
Porto	300
Ponte de Lima	250 <sup>a</sup>
Valença	–
Pias	40 <sup>b</sup>
Fontoura	50

Source: BFDULP-FFME, *Memoir About the Military Hospitals' Functions Between Douro e Minho*, cx 72, n°14.

<sup>a</sup>In April 1801, there were 300–360 sick soldiers to be admitted to this hospital.

<sup>b</sup>There was a need for a bigger building to accommodate more beds.



Chief-Physician of the Armies, the most spacious buildings and ventilated places were chosen for these hospitals. The conditions for cleanliness of the patients and the infirmaries were highly valued, and the patients were separated according to illnesses. There were wards for medical patients, others for patients in surgery, and others for patients with contagious diseases.

According to the 1790 regulation, these hospitals possessed a body of servants available to attend and receive the sick soldiers day and by night. The body comprised the doctor, the surgeon (designated as professors), the head nurse, other nurses, nurses' helpers and other servants. There was also a chaplain, a registrar, and a steward. The regulation also determined that an hour before the visit of the professors, the nurses would open the windows, if the weather was hot and not windy, so as to not harm the health of the patients. In cold and windy periods, windows would only be opened for the time necessary to renew the air. Even so, caution had to be taken to keep the patients warm. This new mentality about the importance of hygiene had a great effect and resulted in a greater concern regarding the hygiene of spaces and patients, in hospitals in general. The nurses were also tasked with sweeping the floor, the cleaning and perfuming of the infirmaries and of pouring out and washing the chamber pots. However, the regulation considered that the best perfume was "cleanliness", that is, "the best precaution to preserve the contagion" and that it was a service that should be performed every morning and repeated whenever necessary. Also, it was prohibited to place scented herbs to cover signs of a lack of hygiene and care, without the authorisation of doctors and surgeons. In the infirmaries where there were offensive smells from contagious diseases, the burning of vinegar was ordered to overcome these smells, while at the same time purifying the environment.<sup>24</sup> In some *Misericórdias* hospitals, vinegar was also used to clean the infirmaries, while in others, as in São Marcos de Braga, hospitals were smoked with embers before the health professionals came to visit.<sup>25</sup>

The location of the hospital was also an important factor, since it was considered that "a hospital wrongly situated, with an impure air, becomes more impure with the breath, and the contaminated exhalations of the ailing patients".<sup>26</sup> Dr Bernardo José de Abrantes e Castro thought that this added to the lack of hygiene of the patients and infirmaries, contagion was more frequent. The distance separating the beds of patients should be strictly adhered to, so as not to become yet another factor contributing to death among the troops. He gives the example of the City of London in 1752, illustrating the deaths caused by the contagion of fevers among troops. The soldiers' health was at stake, as was the local population's, which, often, would suffer the same diseases as the soldiers.

However, the main focus of his report was on the cleanliness of the patients and infirmaries. Dr Bernardo José de Abrantes e Castro was an expert on the hygienist movement and wanted to see it applied in the military hospitals. This movement spread through Europe throughout the eighteenth century and gained importance in Portuguese intellectual circles, becoming prevalent gradually in hospitals. These new ideas arrived through several channels and gained support from public opinion and the manner in which the University of Coimbra would train its doctors. Hospital hygiene had already worried the Portuguese physician, Ribeiro Sanches, who in the second half of the eighteenth century proposed a set of measures aimed at improving public health.<sup>27</sup> However, this was difficult to achieve, since hospitals were often populated

by the poor, who were malnourished, and not always accustomed to complying with orders and rules.

The military hospitals presented conditions similar to other medical centres. The troops would arrive malnourished, tired and usually with diseases that would propagate easily as there were no healthy conditions, whether in campaigns or in the barracks. Life in the Army was exhausting, and troops were not always well-fed. In battle time, the days were occupied in attack and defence, but in the quieter periods there was also little rest, because of the tasks that had to be executed under strict military discipline like cleaning the tents, caring for the stables, the horses and the preparation and cleaning of the armaments. The economic situation of Portugal, and of Minho in particular, sharpened the harsh conditions of life of its population. By the end of the seventeenth century, and beginning of the next, precariousness increased. An agricultural crisis and military threats forced a large part of the population into poverty.<sup>28</sup>

Complying with the Military Hospitals Regulation of 1790, all the interneees were received by the chaplain. He was charged with caring for the new sick, administering the sacraments to them, and providing confessions to those that were immediately bed-ridden. He was required to record the name, day and month of birth, regiment and military company of the patient and made frequent visits to the wards. It was he who prevented the military from playing and holding conversations with one another, so as not to hinder tranquillity, nor to promote the contagion of diseases.<sup>29</sup> Patients' clothes were to be washed by the institution. Once cleaned, they were placed in each individual's backpack, to be returned at the time of discharge. It was only after they had been bathed in tepid water and put on a hospital-supplied shirt was the patient allowed to leave the infirmary. This procedure was similar in the *Misericórdias* hospitals.

If the patient did not need to lie down, he was given linen or "brum" trousers in the summer and wool in winter, a cap and a walking coat, so he could walk, be decently clothed and protected when temperatures dropped. Bedding was also under tight surveillance and could never be transferred from one patient to another without first being washed. It was anticipated that bedding would be washed periodically, every 15 days, and every 8 or even shorter intervals, if needed.<sup>30</sup> Although these provisions were set out in the Regulations, we know that the practice was different, and that clothing was not always replaced and washed at this interval due to lack of conditions. It was also established that health professionals should visit patients daily. In summer, these visits took place between 7 and 8 in the morning and in winter between 8 and 9. In the afternoon, the schedule was not set, but occurred in time for the recommended remedies to be made and given to the patients.

Soldiers of the regiments of infantry arriving from Ponte do Porto and Valencia were received in the Pias military hospital. The infantry was comprised of volunteers – the artillery came from Porto and Lixa, the cavalry came from Chaves, and the militiamen from Cabeceiras de Basto, Porto, Penafiel and Guimarães. Soldiers who fought in Minho in 1801 were practically all recruited from the same lands – Minho, Porto and Chaves supplied the men that came to fight on the Northwest frontier. It should be noted as well that soldiers of the infantry and cavalry were the ones that most resorted to the care of the hospital. As with the other hospitals, this too was set up in a rush to respond to a war situation. It received soldiers on the same day that it was ready and remained active until the end of August 1801. The hospital was closed by Francisco Almada,

inspector of the military hospitals, without notifying the Chief-Physician of the Armies, much to his displeasure.

During the three months that it was in operation, the hospital treated 210 patients with various illnesses, however, 39% of the internees had syphilis, 16.6% had intermittent fevers, 16.1% had typhus and 6% were wounded. In these four hospitals, syphilis would be the disease that affected the largest number of the military, nearly becoming a plague, since military life often involved the visits of prostitutes to the barracks. It should be noted, moreover, that the diseases prevalent in this hospital were also the most prevalent in most of the other hospitals in this study.

Lack of the elementary rules of hygiene and malnutrition already weakened the inmates and led to the spread of disease. But the poor sanitary organisation of the country was an important factor too. The lack of clean uniforms, which served in both summer and winter, helped to propagate pests and dermatological diseases. Additionally, their inadequacy failed to protect the soldiers from the cold and rigorous winter. This was also, perhaps, the reason, that military activity diminished in the winter because of the persistent need to preserve the soldiers' health. This same reflection was made by Ribeiro Sanches in the eighteenth century, when he analysed the health of the military and highlighted their main diseases (Table 2).<sup>31</sup>

At the Fontoura hospital, military from the regiments of infantry, artillery, cavalry and militiamen were treated, but the infantry and the cavalry comprised most of the hospitalisations. As can be seen from Table 3, the patients were all from the north of Portugal, implying that in this location, the military came from the surrounding lands, and the furthest came from Chaves. It is interesting to note that more soldiers were treated in Fontoura than in Pias, Ponte de Lima and Braga, although the last two hospitals were larger. However, since they were not involved in the theatre of war, they would receive only the most serious cases. Fontoura, on the other hand, was located about 5 km from the troops. It closed its doors in early September 1801, by order of Dr Bernardo Castro, when the last of the military completed their recovery.

The largest percentage of patients at Fontoura suffered from typhus (27.9%), whereas syphilis patients accounted for 23.5% of the hospitalisations. 16.2% suffered from intermittent fevers and 5.3% from scabies. Percentages of patients with all other ailments in the table were much lower. The prevalence of scabies was associated with the poor conditions of hygiene and the infectious nature of the disease. Faced with the lack of treatment, its propagation was fast.

Both the Pias and Fontoura hospitals, being close to the stage of battle, were considered first-line treatment units. Those in Ponte de Lima and Braga were located further from the battle front and served as back up hospitals.

Of the soldiers who entered the hospital of Ponte de Lima, only three died. One was a newly married soldier who was informed that he could not go on leave, which led him into a deep melancholic state, as a result of which he stopped eating.<sup>32</sup> He was first admitted to the Hospital of Fontoura and then to the hospital of Ponte de Lima. When he finally received permission to go home, he passed away. One of the main problems facing the troops was constant travelling. It caused fatigue, which sometimes led to exhaustion, and illness only aggravated it. Travelling on foot, or packed in carts, displacement by land could also be slow, with the potential to aggravate any sickness, as did happen to many soldiers.<sup>33</sup>

**Table 2.** Patients and diseases treated at the Pias hospital.

		Pias military hospital																							
Regiments		Typhus	Inter-mittent	Rheumatism	Tonsillitis	Ophthalmology	Deontology	Bladders	Chest pain	Hemoptysis	Asthma	Stroke	Constipation	Dyspepsia	Jaundice	Colic	Injuries	Wounded	Ulcer	Tumour	Skin rash	Scab	Syphilis	Haemorrhoids	
Infantry	2.º from Porto	12	7		2	1			4		1	1			1	1		6	4	2	1	2	34	1	80
	Valença	8	7				1						1			1		4			1	1	7	1	32
Artillery and infantry	Porto and Fixa	4	8					1					1		1			2	1	1	3	1	25		47
	Voluntária	1																					1		1
Cavalry	Chaves									1														2	3
Militiamen	Basto	1	1																				2		4
	Porto	3	5						1									1	1			2	2	1	17
	Penafiel	3	5														1						7		16
	Guimarães	1	1	1																		1	2		6
Civvies		1	1																						2
Workers																					1				1
Total		34	35	1	2	1	1	1	5	1	1	1	2	1	2	1	1	13	6	4	8	4	82	3	210

Source: BFDULP-FFME, *Memorandum About the Military Hospitals' Functions Between Douro e Minho*, cx 72, nº14.

**Table 3.** Patients and diseases treated at the Fontoura hospital.

		Fontoura military hospital																							
Regiments		Inter-Typhus	Rheu-mittent	Ton-matism	Ophthal-sillitis	Deon-tology	Blad-ers	Chest-pain	Hemo-ptysis	Asthma	Stroke	Consti-pation	Dys-pepsia	Jaun-dice	In-Colic	Wou-nded	Ulcer	Tum-our	Skin-rash	Scab	Syphilis	Haem-orrhoids			
Infantry	2.º from Porto	25	4		6													1				23	59		
	Viana	32	16	2		4	2	1	3			2			4			4			12	36	123		
Artillery	Porto	8	6		2					2		1						2	1	3	4	6	35		
Cavalry	Chaves	2	1																				3		
Militiamen	Vila do Conde	15	8	1						1	1	6		2	6							4	44		
	Viana		3					3									2	1				1	10		
	Guimarães		2													1				3			6		
	Barcelos	2	6		4			3										2				1	18		
	Maia		2																				2		
Workers																							1		
Total		84	49	3	12	4	2	12	3	2	1	1	7	2	2	10	1	2	8	2	1	6	16	71	301

Source: BFDULP-FFME, *Memorandum About the Military Hospitals' Functions Between Douro e Minho*, cx 72, nº14.

The diseases most reported at the military hospital of Ponte de Lima were syphilis (38.3%), ulcers (10.8%), intermittent fevers (10.4%) and typhus (10.1%) (Table 4).

São Marcos hospital in Braga received many patients, although we are certain that only the most serious clinical cases arrived here, and in most cases, these were patients with syphilis and amounted to 54.2% of the total number of patients in the four hospitals studied.

The military hospital of Braga was already functioning in March 1801.<sup>34</sup> The highest percentages of both typhus and syphilis cases were found at this hospital. Typhus had remarkably high death rates and these casualties necessitated new recruitment to keep the military body operational. Troops were poorly fed, lived in great proximity and easily contracted the disease. The contagious nature of the disease made it imperative to wash or destroy the clothing of those who had contracted it, however, conditions of the time did not always lead to such action. The lack of food supply at times further provides evidence of the weaknesses in the structure of support for military bodies.<sup>35</sup>

Typhus thus spread rapidly among soldiers (24.7%).<sup>36</sup> Syphilis, on the other hand accounted for the greatest number of hospitalised patients, intermittent fevers for 17.1% and scabies for 9.5% of those interned. The high percentages of syphilis cases drew attention to the high number of military men infected with syphilis.<sup>37</sup> In fact, *Sao Marcos* was the hospital in Minho to receive most syphilis patients, as it had its own structures to treat them and since the seventeenth century, had two annual "cure sessions" for the patients of this disease: one in spring and another in the beginning of autumn. It was not surprising, therefore, that most of those afflicted with it, were sent to Braga, a place where the entire archdiocese of Braga was treated.<sup>38</sup> With such widespread occurrence, there was the danger of venereal disease becoming chronic.<sup>39</sup>

Scabies was also seen in exceedingly high numbers. This disease, associated again with lack of hygiene, appeared in the poorest social groups and attacked both children and adults. In the military, contagion spread easily because of the living conditions of the troops. It is not known how they were treated in Braga, but at the *Misericórdia* Hospital in Ponte de Lima, at the same time, patients were administered sulphur and olive oil. Lack of bodily hygiene enabled the existence also of ringworm as well as the presence of fleas, bedbugs and lice, either on the body or in the uniform.<sup>40</sup>

Intermittent fevers reached high percentages in the four hospitals studied, although they were highest in Braga. Tired, poorly fed and lacking hygienic conditions, the soldiers weakened and became vulnerable to disease.<sup>41</sup> Very often, their condition worsened because of the difficulties involved in reaching the hospital itself given the difficult conditions of the roads which made the journey time consuming and complicated.

In Braga, the soldiers were hospitalised in several buildings, under the tutelage of the *Misericórdia* hospital. In July 1801, the commander of the hospital guard certified, in writing, the treatment given to some soldiers, as well as the meals served to them, the cleaning of their beds and the infirmaries, timely administration of medicines, and the affection with which they were treated.<sup>42</sup> The Army paid a daily contribution, but required that its patients be well cared for, and kept itself informed of the procedure adopted by the hospital. Despite important improvements in the late eighteenth century, the hospital did not have the capacity to accommodate all the military personnel needing treatment.<sup>43</sup> For this reason, they were hospitalised in other buildings, such as male convents. This is the only way we can explain the 1000 beds registered. This implies that there were several

**Table 4.** Patients and diseases treated at the Ponte de Lima hospital.

		Ponte de Lima military hospital																						
Regiments		Inter-Typhus	Rheu-mittent	Rheu-matism	Ton-sillitis	Ophthal-mology	Deon-tology	Blad-ders	Chest-pain	Hemo-ptysis	Asthma	Stroke	Consti-pation	Dys-pepsia	Jaun-dice	Colic	In-juries	Woun-ded	Ulcer	Tum-our	Skin-rash	Sy-philis	Haemo-rrhoids	
Artillery	Portos	2	5							4				14			9		2		3		39	
Cavalry	Chaves													1									1	
Infantry	2.º Porto	16	17	3	1	1		1	7		1	2	65	1	4	10	1	1		2	20	1	154	
	Valença									1			2			1					3		10	
	Viana	2	3			3		1		12	1		17			1		1		1	2		43	
Militiamen	Porto										3												3	
	Maia								1				1								1		3	
	Vila do Conde								1								1	1					3	
	Viana		2	1		1				1			3										9	
	Barcelos	3				1				2						1							7	
	Guimarães	1												2								1	4	
	Basto	1		1										1									3	
	Penafiel													4								1	5	
	Moncorvo	1	2																				3	
Total		29	30	5	1	5	1	1	1	27	2	4	2	110	1	4	23	1	3	2	3	31	1	287

Source: BFDULP-FFME, *Memorandum About the Military Hospitals' Functions Between Douro e Minho*, cx 72, nº14.

places where the military was welcomed and treated, although all the activities was coordinated by the *Misericórdia* hospital.

Contrary to the hospitals of Pias and Fontoura, which were dismantled after the conflict of 1801, those of Ponte de Lima and Braga remained active to meet future needs (Table 5).

The patients' diet was set out in the regulations, but the professors had the freedom to vary the diet regulations according to the illness and the state of the patient. The patient was served daily, 18 ounces<sup>44</sup> of bread, 16 ounces of meat and 2 of rice at dinner and 1 at supper. They were also served a broth, and the meal was accompanied by a pint of wine. For patients in recovery and, to accustom them to life outside the hospital, meat was sometimes replaced by vegetables, adapting the diet of the sick, so as not to be served foods considered indigestible.<sup>45</sup>

Food also served Dr Bernardo José de Abrantes e Castro as an occasion to accuse the hospitals run by the Order of *São João de Deus* and the *Misericórdias* of failing to provide good conditions for the sick. He argued that the meals served to them did not restore health and even caused, at times, a quick return to the hospital. This situation caused, in his view, extended costs for treatment for the Public Treasury and constituted a "shameful and cruel" fact that burdened the State by more than tripling the cost.

The treatment that a soldier received in the *Misericórdias* hospitals in fact, does show the decline in health of many military personnel and their return to the hospital.<sup>46</sup> It should be noted, though, that this may be related to the fact that not all hospitals had convalescence wards. The convalescence of the patients did not depend only on food; there were other factors, too. One can also think of the profit that this service yielded to the *Misericórdias*: the expenses of maintaining health were growing significantly, less and less bequests were being made and returns on loans were slow and difficult to collect. At such a time, having reliable revenue in the form of payment from the State, albeit slow, since the State always delayed payment, was very important. However, it can be argued that such responsibilities cannot be attributed only to the *Misericórdias*. The Army monitored these hospitals and the condition of the sick. As it paid for this assistance, it had an interest in reducing the length of patients' stay at the hospital. This attitude is evident in the average number of days of hospitalisation of the military, when compared to the rest of the patients.

The diet and time of administration of the drugs to the patients were recorded in the chief nurse, practitioners and second nurses, or minor nurses' logbooks and were inspected by the professors. It was the responsibility of the lower nurses to accompany the sick day and night in a manner that assistance was always available. Apothecaries in general were also attacked by Dr Bernardo José de Abrantes e Castro. They were accused of not delivering what was ordered by the doctors, of preparing remedies with cheap products and charging high prices that did not correspond to the quality of the products. This was the attitude of private establishments as well as hospitals, accused of being concerned only with profit. The Military Hospitals' Regulation of 1790 demanded doctors oversee particularly the apothecaries, with regard to the manipulation of remedies and the fulfilment of recipes, avoiding the "Fraud of the Apothecaries".<sup>47</sup>

To steer away from this situation and end the dependency on apothecaries, the referred to Regulation stipulated that each medical centre have its own apothecary. A footnote defends apothecaries in military hospitals, stating that these did not burden the public treasury in a similar manner. However, it added that no amount of money,



**Table 5.** Patients and diseases treated at the Braga hospital.

		Braga military hospital											
Regiments		Typhus	intermittent	Chest pain	Hemoptysis	Rheumatisms	Variola	Diarrhoea	Syphilis	Scabies	Contusion	Ulcers	
Infantry	2.º from Porto	9	7		1	2		1	70	2		3	95
	Valença	3	8	7	1		1	2	25	3			50
	Viana	1	2					1	14				22
Artillery	Porto	11	4	2		2			24	7	1	2	53
Cavalry	Chaves	14	6					2	18	4		1	45
	Bragança		1										1
Militiamen	Viana	2							1	1			4
	Maia	1							1				2
	Barcelos	1							1	1			3
	Basto			1					1				2
	Braga	4							2			1	7
	Guimarães	1											1
	Penafiel			1					1	1			3
	Moncorvo								2				2
Civvies								2				1	3
Workers		2	2										5
Total		49	34	11	2	4	1	7	162	19	1	8	198

Source: BFDULP-FFME, *Memorandum About the Military Hospitals' Functions Between Douro e Minho*, cx 72, nº14.

paid for the life of soldiers “so necessary to national defence”<sup>48</sup> would be enough. The Chief-Physician was responsible for examining the drugs from the apothecaries and the preparation of the compound remedies. In his absence, this task was put in the hands of the “first inspecting doctors”. As it turns out, the apothecaries came under strict surveillance as they constituted an important link in the chain of treatment.

To supply the apothecaries of the military hospitals, the Crown made some purchases from abroad. In July 1799, a shipment arrived from London, of two boxes with drugs and artefacts for the apothecaries of these hospitals. They came on the ship *Aarriot*, to be delivered to the Chief-Physician of the Armies.<sup>49</sup>

According to Dr Bernardo José de Abrantes e Castro, the apothecaries of the military hospitals had an interest in following the “law scrupulously, because the Law offered them rewards, and interests”. Additionally, the apothecaries and the practitioners should be available at any time of day and night, responding with efficacy to the needs of the patients and of the health professionals, as the availability of the remedies could mean the life or death of a soldier. He considered that the health of the patients depended on the appropriate choice of drugs and their preparation, proper feeding and hygiene of the sick and of the hospital. This concept is different from the reality of several other Portuguese hospitals at the time. The reality remained that the soldiers were fed poorly and would often receive food from the populace or even ended up paying for it themselves. As many could not afford it because their pay would often run late, they would end up eating poorly or even nothing at all.<sup>50</sup>

In defence of the military hospitals, Dr Bernardo José de Abrantes e Castro claimed their patients would heal faster than at the *Misericórdias* hospitals, where relapses were frequent. In fact, however, the lack of studies on the mortality rates in the military hospitals for this period prevents us from comparing them with those from the *Misericórdias* hospitals. Despite equipping the military hospitals with their own apothecaries, the subject remained controversial. There were those who would accuse them of being more expensive than the rest. However, Dr Bernardo José de Abrantes e Castro countered these accusations by stating that expense meant nothing when the issue was the defence of the nation.

The military hospitals of Minho (Pias, Fontoura, Ponte de Lima and Braga) were examples of efficacy in the treatment of the military, a fact attributed to the medicines, the professionalism of those that worked there, that remained “humble and without fault”, according to Dr Bernardo José de Abrantes e Castro. Cleanliness contributed equally to healing. The wards were swept daily and washed, when necessary, so cleaning prevailed, a concept that was improved at the advent of the eighteenth century.<sup>51</sup> When poorly fed, tired and sick, the military was subject to a slower recovery or even death. The food products and their quality were thus also essential for restoring the body.<sup>52</sup> However, the effectiveness of these establishments would only be complete if the soldiers left the hospital completely cured and avoided relapses. The doctor was aware that if these two factors were not put into practice, the State would lose: first because it would have to spend more on re-homing soldiers; and second, because there would be a loss of productive activity of those who had to replace the ailing military men. In this case, the Public Treasury would suffer twice.

In contrast to the effectiveness of the military hospitals, Dr Bernardo José de Abrantes e Castro would represent the “scandalous” state of the *Misericórdias* hospitals, in a clear

argument for the creation of new health centres for the members of the Army under the tutelage of the State. Compared to these hospitals, referring to the *Misericórdias* in Porto, he saw the military hospitals as being superior in all ways. However, the issue is more complex than it appears. When we study other sources, including those from the *Misericórdias*, we realise that the State was not always successful in negotiating the treatment of the military with these brotherhoods. Some would create barriers to receiving the military in their hospitals, as observed in Ponte de Lima.

Dr Bernardo José de Abrantes e Castro also accused the religious Order of *São João de Deus* of abandoning the sick, of neglect, a lack of humanity, lack of hygiene in healing spaces and of being only interested in profit. The *Misericórdias* hospitals were also considered as lacking curative efficacy, having poor facilities, being unhealthy and run by people concerned only with the financial aspects. This is contrasted with the advantages of the installation of military hospitals that were installed in airy and large spaces, where there was greater hygiene, more curative efficacy, greater vigilance on apothecaries, separation of patients according to diseases in their respective wards, places suitable for treatment of contagious diseases and having less cost to the State. Despite this, he does not compare mortality rates between them, which would be remarkably interesting to analyse.

On the other hand, the confraternities claimed that with their accumulated experience in this field, they had competent work teams and equipment, despite the many difficulties felt by all in hospitals and health care in general. There was also one important factor that cannot be overlooked: for almost two centuries, the *Misericórdias* responded favourably to the Crown when it was necessary to care for the sick soldiers in their hospitals and the studied hospitals had remarkably high rates of cured patients. This information is, however, not available for the hospitals run by the religious order of *São João de Deus*.

There is, however, another reality to consider: in many places, the *Misericórdias* hospitals were small units, clearly insufficient to receive large contingents of soldiers. There were also diseases that needed larger hospitals, as was the case with syphilis, which could not be treated in every hospital. With the French invasions, other military hospitals were created, but the *Misericórdias* continued to treat soldiers, in a period when the difficulties were many and came from various sectors. But if Bernardo José de Abrantes Almeida's memoir constituted an instrument of defence of military hospitals and of attack on those of the *Misericórdias* and the friars of *São João de Deus*, in order to consolidate a model of treatment for soldiers, its main aim was to prepare military hospitals for the approaching war. The State had to equip itself with hospitals destined for its military, while at the same time getting rid of poorly evaluated institutions, in order to be ready to wage war.

## Notes

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In accordance with the Taylor & Francis policy and my ethical obligation as a researcher, I confirm that I am a consultant and eligible to receive funding from Lab2PT – Landscapes, Heritage and Territory Laboratory, a company that may be affected by the research reported in the enclosed paper. I have disclosed those interests fully to Taylor & Francis, and am in possession of an approved plan for managing any potential conflicts arising from that involvement.

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