

NURSING CARE GIVEN TO THE PLAGUE INFECTED
PATIENTS IN THE HOSPITAL GENERAL OF MADRID (SPAIN)
IN THE 17TH CENTURY

CUIDADOS ENFERMEROS OFRECIDOS A LOS ENFERMOS DE
PESTE EN EL HOSPITAL GENERAL DE MADRID (ESPAÑA) EN EL
SIGLO XVII

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ABSTRACT: This study reveals the work developed by the nurses of the Hospital General of Madrid (Spain) in the treatment of the plague, and the training they received for their welfare tasks in the 17th century.

Since the end of the 16th century, nurses knew and implemented a set of techniques and medicines to alleviate the terrible disease of the plague and, despite the scarce knowledge about the disease existing at the time, they sought to prevent the contagion with hygienic and dietary measures, and physical isolation. This study shows through which actions and in which conditions nurses worked to deal with such a terrible disease.

All this helps to get a full knowledge of the development of the work done by nurses in the last five centuries and, therefore, to determine the evolution and shaping of the nursing profession in our country.

KEYWORDS: Plague disease; nursing care; constitutions of hospitals; Obregones Nurses; nursing teaching treatises.

RESUMEN: El presente estudio muestra el trabajo desarrollado por los enfermeros del Hospital General de Madrid (España) en el tratamiento de la peste y la formación que recibían en el siglo XVII.

Desde finales del siglo XVI, los enfermeros conocían y aplicaban un amplio conjunto de técnicas y medicamentos para aliviar la terrible enfermedad de la peste, a pesar del reducido conocimiento que sobre ella existía en la época. Los enfermeros buscaban la prevención del contagio y la mejora de la salud de los enfermos en base a medidas higiénicas y dietéticas en un entorno de aislamiento físico. Este estudio muestra en qué condiciones trabajaban los enfermeros para enfrentarse a esta terrible enfermedad. Todo ello nos irá mostrando la evolución

experimentada por el trabajo enfermero desde el siglo XVI y cómo ha ido conformándose la profesión.

PALABRAS CLAVES: peste; cuidados de Enfermería; constituciones de hospitales; Enfermeros Obregones; tratados para la enseñanza de la Enfermería.

INTRODUCTION. OBJECTIVES

Man is a changing being through time, a historical animal, and this has led to differently understand the constant reality of the human disease in different cultures and in different times, said Professor Laín Entralgo¹. This is especially shown in situations of disasters, natural disasters or major epidemics that have endangered the very existence of the human being in the world he inhabits.

The importance of epidemics, including plague, by its far-reaching consequences for the population (high mortality, economic crisis, hunger, ...), justifies the emergence of a growing number of studies that approach it from different points of view in our days: medical, demographic, economic, ethical, religious, literary, etc.²

In general, it can be said that Europe has suffered intermittently the scourges of this epidemic from the mid-1300s onwards, disappearing in the first half of the 18th century. After the very serious spread in 1348, during the second half of the 14th century four big waves occurred. In the first half of the 15th century, although less generally, three other waves took place, strongly appearing again throughout the second half of the century. For the European territory, between 1450 and 1500, more than 1,000 affected places have been mentioned; from 1501 to 1550, about 1,500; from 1551 to 1600, the amount rises to 1,775. Since then, it descends notably to detect only 173 from 1601 to 1650. Similarly, for some large cities such as Paris or London, there is a resurgence of the plague in the course of the 16th century³. In Spain, the last three waves of plague before its final disappearance at the

1. Laín Entralgo 1987, p. 17.

2. Medical historiography published from half a century up to now about epidemic diseases in general and the plague or other diseases thus considered contagious in Spain, in particular, is wide. This can be seen by just consulting, as some examples, the *Índice Histórico-Médico Español*, which appeared in the issues of *Cuadernos de Historia de la Medicina Española*, or the already a classic *Bibliografía Histórica de la Medicina Española*, published by Professor Luis S. Granjel in the years 1965 and 1966. In addition, among the monographic works on the plague and its consequences in different parts of Spain, we should highlight the José Luis Betrán Moya's *Historia de las epidemias en España y sus colonias (1348-1919)*, in which a wide bibliography is included.

About the plague and its influence in Europe, it is still a need to consult Jean-Noël Biraben 1975-76. Also numerous are the publications, since the 60s and the 70s of the last century, of communications and papers in national and international symposiums such as the *V Congreso Nacional de Historia de la Medicina*, organized by the Sociedad Española de Historia de la Medicina, held in Madrid the 29th and 30th of September and the 1st of October, 1977, when this theme was dealt with in a monographic way, giving way to new studies and publications.

3. Carmona García 2005a, p. 11. On the consequences of this epidemic in the 16th and 17th centuries, it is also advisable to consult Carmona García 2005b and Carmona García 2009.

end of the 17th century, although already very distant from each other, were 1596-1602, 1647-1654 and 1676-1685, being the first the most serious one for Castile⁴. Since its entry in Santander in 1596, coming from the North Sea⁵ in a boat that had left the port of Dunkirk, the famous *Rodamundo*, the plague was spreading slowly through towns and villages from Northern Spain (Galicia, Asturias, Palencia, Valladolid, Madrid, Toledo), and it even reached Murcia. Practically, the plague was eradicated in Western Europe in 1720-1721, when the last great epidemic of Marseille ended, a plague which did not affect the Spanish peninsular lands⁶.

Throughout history, and as a result of this interest awoken by the so called “bubonic plague”, “pestilential disease” or “black death”, between the 15th and the 18th centuries, a large number of texts were printed which were intended to meet and fight the epidemic. Even in our days we find this interest in the plague is present, finding writers who, in his novels, historically recreated it and brought it to the screen with great success, showing us the terrifying atmosphere of this disease called “black death” for some of the symptoms presented, and that devastated whole towns and villages from antiquity until the end of the Modern Age.

All of these books included descriptions, treatments and health measures seeking to alleviate, in some way, the terrible effects of these epidemics. But nothing was known of the causative agent and the way to combat it, since it was not up to little more than a century ago, in 1894, when it is discovered by the Franco-Swiss doctor Alexandre Emile John Yersin. Nowadays, the plague is considered as one of the oldest recognised zoonoses, caused by the bacterium *yersinia pestis*, whose name was given in honour of its discoverer. The vector of the disease is the rat flea (*xenopsylla cheopis*). It is usually transmitted to human beings through the bite of infected rodent fleas or by inhaling droplets expelled by the coughing of an infected person or animal (for example, domestic cats); the latter constitutes what is known as the pneumonic plague, which could spread quickly⁷.

These treatises resorted to official medicine, religion, and popular beliefs; everything was valid but little or nothing could be done when the disease had already been contracted. Thus, in the *Tratado de la peste, y fiebre pestilente*, (Treatise of the plague and pestilent fever), composed by Dr Gerónimo Basilio Beçón and published in Zaragoza in 1655, described the plague as follows: “The plague is a venomous disease of the heart, deadly, really severe and contagious, sprung from a poisonous contagious with every substance, total enemy of the heart, whose functions it suddenly and completely destroys, introducing harmful accidents of any kind.”⁸ In all these books, composed by physicians and surgeons in the 17th century, we find this concern to find the causes and treatment of this disea-

4. Betrán Moya 2006, pp. 56-57.

5. Pérez Moreda 1980, 257-281.

6. Betrán Moya 2006, p. 60. About the eradication of the plague in Europe there are several theories. See this same work, pp. 60-66.

7. Division of Vector-Borne Infectious Diseases. National Center for Infectious Diseases. Centers for Disease Control and Prevention. Atlanta (EE. UU.). Available on: <http://www.cdc.gov/ncidod/dvbid/dvbid.htm>.

8. Beçón 1655, p. 10.

se, but they do not reach their scientific reality yet⁹. It is important to remember that the conceptual framework in which the pathology will apply in the modern world –sixteenth, seventeenth and eighteenth centuries– runs between the fight for survival of the old traditional Galenism, which would still be maintained until the 18th century, and the disease as it is now understood according to what the senses inform about it –empirical pathology, Sydenham–, to a mechanical view of the human body –iatromechanic pathology– or according to the organismic design and chemistry of that body – iatrochemistry pathology¹⁰.

Nevertheless, and despite that abundant medical literature, we find a significant lack in what refers to works that highlight the role played by one of the professionals working in hospitals and who was responsible for the administration of care: the nurse¹¹.

From the 17th century some treatises composed by nurses are known (lay and religious nurses) which had as its main objective the training of nurses working in hospitals, in the army, the navy, in prisons, and in the private houses. Among them, basically two stand out: the manuscript *Directorio de Enfermeros* (Directory of Nurses)¹², written by the nurse Simón López and completed in 1668, and *Instrucción de Enfermeros* (Instruction of Nurses)¹³, a work composed by the *Mínima Congregación de los Hermanos Enfermeros Pobres*, known as “*Enfermeros Obre-*

9. Among the abundant bibliography of this time, 16th and 17th centuries, dealing with the plague and its consequences, we highlight the following treatises: Porcell Sardo 1565; Ximénez Sauariego 1602; Rossel 1632 and Viana 1637.

10. Albarracín Teulón 1987.

11. In this same line of research, the author explores the theme, among others, in the works: García Martínez 2014; García Martínez (a) 2014 and García Martínez (b) 2014.

12. The complete title on the manuscript's book cover is *Directorio de Enfermeros y artífice de obras de Caridad para curar las enfermedades del cuerpo. Con la práctica de sauer aplicar las Medicinas que ordenan los Médicos con el mejor arte y Método que ai en ella. Según los Doctores, Anatomistas, que enseñan y señalan las partes de nuestro cuerpo donde se han de hacer. Dispuesto en ocho Tratados por Simón López, Barbero de un hospital incógnito. Dedicado a todos los que con Caridad desean hacer este oficio Methódicamente. IHS. Ms 259. Biblioteca Universitaria of Salamanca. Universidad of Salamanca.*

In 1997, the author of the present study, together with Antonio C. García Martínez, published a work with the sponsorship of the *Consejo General de Enfermería* of Spain. The complete transcription of the text goes together with an extensive introductory study, an index of the subjects studied and a glossary of terms, something that allows the reader to contextualize the work in its time. See García Martínez, García Martínez, Valle Racero 1997. In the same year, it is translated into English under the title *Nursing Directory* and in 2001 it is published again, expanded and after a revision of its contents. See García Martínez, García Martínez 2001.

13. The 1625 publication, based on that from 1617 and extended by the Obregon nurse Andrés Fernández, bears the title *Instrucción de enfermeros, para aplicar los remedios a todo género de enfermedades, y acudir a muchos accidentes que sobreuenen en ausencia de los Médicos. Compuesto por los Hermanos de la Congregación del Hermano Bernardino de Obregón, en el Hospital General de Madrid, y agora nuevamente por el Hermano Andrés Fernández. Hermano mayor de dicha Congregación, y Hospital General, corregido y emendado, y añadidas muchas, y notables advertencias, utilísimas y necessarias para todos, assi Médicos como Cirujanos, y enfermeros. En Madrid, En la Imprenta Real. Año M.DC.XXXV.*

The work includes an annex of another text dedicated to the care given in the final moments of life, a treatise of the good death titled *Tratado de lo que se ha de hazer con los que están en el artículo*

gones” (Obregones Nurses). This last publication saw six editions between the 17th and 18th centuries, as well as its translation into Portuguese. These are works which include the experience of its authors at work as hospital nurses and therefore possess a high testimonial value. These treatises describe the functions carried out by nurses, the techniques they employed, the knowledge they possessed in the various fields of knowledge –Anatomy, Botany, Pathology, and Physiology–, and deeply reflect the developments that were being experienced about the care provided in the Spanish hospitals of the time; they meant a progressive break with the medieval world.

The responsibility of care, treatment, and cure of the sick in the hospitals fell on various health professional groups of high qualification, mainly doctors, surgeons, and apothecaries. Alongside them, a figure that existed since long time ago, but with little known and clear role and duties, was gradually taking definite shape throughout the 16th century; we are talking here about the nurse. It was in this century when this figure develops more clearly, receiving new and more specialized functions for which it was necessary to improve their levels of theoretical and practical training to meet the growing needs they faced up in hospitals in matters of disease and health at the beginning of the Modern Age¹⁴.

The development of medicine and science in general, and its practical application demanded that this part of the staff, the nurse, knew and applied the set of techniques and care the most frequent diseases of the time required and that the medical science began to investigate and learn¹⁵.

The objective of this study is to get to know the care given by nurses to patients infected of plague and those diseases called “pestilential” admitted to the Castilian hospitals in the 17th century.

de la muerte, sacado de diuersos libros espirituales. Con privilegio. En Madrid, En la Imprenta Real. Año M.DC.XXV.

14. There are abundant studies which show the contribution of the orders and congregations to the care of the sick, both masculine and feminine, especially in times of epidemics between the 16th and the 17th centuries, highlighting the basic role of the *Orden de San Juan de Dios*, the *Congregación de los Enfermeros Obregones*, the Order founded by San Camilo de Lelis or the *Hijas de la Caridad*, among others. García Martínez (2015). This subject is developed, among others, by Langlois 1984, Álvarez Gómez 1989, Álvarez Gómez 1990, Charry 1995 and Raponin 1989, and in a monographic way and more recently in the *XIV Congreso Nacional y IX Internacional de Historia de la Enfermería* held in Santander from the 7th to the 9th of May, 2015 (Round Table: “*El papel de las religiosas en el reconocimiento oficial de la Enfermería*” (The Role of Religious Women in the Official Acknowledgement of Nursing, chaired by Dr Antonio Claret García Martínez).

From the foundation of these congregations and hospital orders, Hernández Martín (Hernández Martín 2015, p. 92) states that it is possible to start assuring the health assistance and, from that point onwards, make available the recognition of these institutions as the precursors of modern nursing. Later on, in the 18th and 19th centuries, after the historical confiscations in Spain, the new health politics is far from covering all of the health areas. The most needy sick people, the chronic patients, the elderly, the impaired... are also the most neglected. This is why the Church started focussing its charity and assistance functions to those neglected areas by the civil powers. (Hernández Martín 2015, pp. 94-95).

15. A wider reference to the work carried out by the nurse in this century, especially in times of epidemics and which has served as a basis for the present study, can be seen in the cited work: García Martínez (b) 2014.

MATERIAL AND METHOD

In carrying out this work, the following sources have been used as documentary and bibliographic:

- *Constituciones del Hospital General de Madrid*. (Constitutions of the Hospital General of Madrid) 16th - 18th centuries.
They included the work, tasks, and functions developed by the staff working in this hospital, highlighting that of the Obregones nurses. The first news we have are dated December 6th, 1589, and bear the title “[Constituciones] Para el Régimen del Hospital General y para servir a los pobres y su curación, desde el año de 85 y renobada sus Constituciones el año de 5 por Don Juan de Layseca y Albarado, Decano del Real Consexo y Cámaras de Castilla, en sus Juntas que todos los jueves tenían en diferentes Casas agregadas a dicho Hospital [...]” ([Constitutions] for the Regime of the Hospital General and to serve the poor and their healing, since the year 85 and being their Constitutions renewed on the year 5 by Don Juan de Layseca y Albarado, Dean of the *Real Consexo y Cámaras* of Castilla at the Meetings they held every Thursday in different houses added to the Hospital [...]).¹⁶ Equally preserved are the Constitutions of the Hospital General of the years 1611, 1705, and 1780.
- *Constituciones y Regla de congregaciones y órdenes dedicadas al cuidado enfermero* (Constitutions and Rules of congregations and orders dedicated to the nursing care)
- *Constituciones y regla de la Mínima Congregación de los Hermanos Enfermeros Pobres, Dispuestas y ordenadas por Ntro. Pre. y fundador el Venerable Bernardino de Obregon, escritas de su mano y manda sus hijos las observen y Guarden. En Madrid por Francisco De Ocampo. Año de 1634*. (Constitutions and Rules of the Mínima Congregación de los Hermanos Enfermeros Pobre, arranged and sorted by Our Pres. and founder, the Venerable Bernardino de Obregon, written from his hand, and he orders his sons observe them and comply to them. In Madrid, by Francisco De Ocampo. Year 1634).
There is a second edition of these Constitutions of the year 1689.
- *Tratados docentes enfermeros redactados por enfermeros*. (Instructional treatises for nurses written by nurses).
- *Instrucción de Enfermeros* (Instruction of Nurses), composed by the Obregones nurses¹⁷. The book incorporated another text about the “good way of dying” entitled *Tratado de lo que se ha de hazer con los que están en*

16. A copy of these Constitutions can be found at the Archivo Regional de la Comunidad de Madrid. Fondo Diputación. Hospital General y de la Pasión, with signature 5.222 (Former signature: 118).

17. *Instrucción de Enfermeros* came to know, according to our research, six editions (years 1617, 1625, 1651, 1664, 1680 and 1728) and a translation into Portuguese printed in Lisboa in the year 1742. We have located copies of this work in libraries from different European countries and America (Spain, France, Great Britain, Italy, Brazil, Argentina, Mexico and the United States, among others).

el artículo de la muerte, sacado de diuersos libros espirituales. Con privilegio. En Madrid, En la Imprenta Real. Año M.DC.XXV (Treatise of what has to be done to those who are at death's door, taken from various spiritual books. With privilege. In Madrid, the Real Print. Year 1625).

- *Directorio de Enfermeros, y artífice de obras de caridad para curar las enfermedades del cuerpo. Con la práctica de sauer aplicar las medicinas que ordenan los médicos con el mejor arte y método que ai en ella*, compuesto por el enfermero Simón López (Directory of Nurses, and the architect of charitable works to cure the diseases of the body. It includes the practice of knowing how to apply the medicines ordered by physicians with the best art and method in it, written by the nurse Simón López)¹⁸.

The analysis of these sources has allowed us to see the work carried out by the nurse, both in normal situations of everyday life and special cases of epidemics, as it is the case of plague or pestilential diseases, during the 16th and 17th centuries.

THE NURSING WORK IN HOSPITALS DURING THE EPIDEMICS OF PLAGUE IN THE 16TH AND 17TH CENTURIES.

When the plague was spreading through a given region, a terrible juncture was felt, characterized by the harmful effects that led to the long-lasting and persistent crisis of subsistence, appearing scarcity, deficiency, and shortage of food, all of which caused a high mortality¹⁹.

At the end of the 16th century, from 1596, the plague epidemic affected a great part of Spain, leaving a very large number of deaths in its wake. Historian Colmenares, one of those who narrated those effects on the population in the capital of Spain, Madrid, and its surroundings, described the symptoms of the disease in the following way:

*"[...] active, malignant and contagious illness; it lits in choleric constitutions, so abundant in Spain, with scabs or tumours, and anthrax in groins, throats, and arms, quick and irregular pulse, with sweating and vomiting, all of them signs of noxiousness and contagion [...]"*²⁰.

The situation in cities suffering from the illness during those years had to be terrible, taking severe measures of all kinds (health, economic, legal, etc.) to combat it or, at least, mitigate its impact. These measures included the following:

1. Banning "all meetings or competitions, comedies, schools, and even sermons."

18. The definitive manuscript was concluded in the year 1668 and is located in the Biblioteca Universitaria of Salamanca, with signature Ms 259.

19. The ravages of the plague among the population are analysed, among others, in the cited work Carmona García 2005a, pp. 119 y ss.

20. Villalba 1803, pp. 127-128.

2. Notifying neighbours about the arrival of the illness and its consequences.
3. Placing hospitals outside the city. In the case of Madrid: “the hermitages of Santa Lucía, Santa Catalina, and the plagues, to the East; and the Hospital of San Lorenzo, to the West. The Hospital of the Convalecientes was also working, being in the process of its building at the moment.”
4. The Hospital General de la Misericordia and the Hospital de los Desamparados were kept within the city for non-affected patients.
5. In terms of clothing of the health staff (surgeons, barbers, and any worker of the hospitals), it was decreed that they were dressed in “leather or buckram to provide some resistance to the contagion”, although an explanatory note specified that such a measure was not very useful: “Note. Leather dress is not perfect at times of plague for not becoming infected, but it is rather exposed to receive and keep the contagion [...]”
6. At sun setting, in squares and streets, lighting “bonfires of juniper, fragrant wood brought by sea from the Sepúlveda mountains; and everyone shall burn incense in their homes.”
7. Abundantly providing the drugstores “and doctors’ public wages shall be increased.”
8. That the deceased were buried “within six hours after their death.”
9. Burning the bedclothes from infected houses in the designated places.
10. “That everyone considered that this damage and such a widely spread plague called for general care and love with the afflicted and tried to soothe the divine wrath with actions of penance”²¹.

This set of measures, mainly in public health²² –whitewash houses, clean and disinfect houses and streets as well as coins, gold and silver jewellery with vinegar and putting them in the oven’s heat...–, would help reduce the deadly effects in case of epidemic of plague or of diseases at the time considered as of pestilential nature, the croup or “angina anthrax” and the “typhoid”.

When an epidemic of great magnitude was declared, virtually all health centres accepted the infected, so the recommendation or prohibition for certain hospitals of not seeing them was not always observed, as it was the case of the Hospital General of Madrid in the epidemic of 1599, in which the Obregones nurses practiced during the last third of the 16th century until the end of the 19th. On August 6th of that same year, the founder of the Congregation, Bernardino de Obregón, died while taking care of a patient infected with the plague with his own hands²³.

In these tragic circumstances, we can imagine the difficulty to find staff to work as a nurse or caregiver in hospitals, having been documented cases of health staff (doctors, surgeons ...) fleeing from such dramatic situations, even being prosecuted by justice so that they complied with their professional obligations. In the Constitutions and Rules of the Obregones nurses, one of the points the aspirant

21. Villalba 1803, pp. 128-129.

22. Robles Carrión, Vega Vázquez, Pachón María 2012, p. 41.

23. García Martínez (b) 2014, p. 119.

should swear to enter the Congregation and then exercise as a nurse was as follows:

*“Q (uestion) 5. You have already seen, Brother, more or less, what the Brothers have as practice and obligation, that is to cure or serve the poor sick, day and night, all diseases, of any quality and condition, although be it the plague, do you dare doing it? A. Yes, I do, with the help of God, and the good doctrine of Your Mercy”*²⁴.

In a different part of these Constitutions, describing the obligations that the Obregones nurses had, he said:

*“The fourth vote is hospitality, promising to serve God and heal the poor sick, all the days of your life, both in hospitals and prisons, armies and navies, in whatever kingdom and place where obedience thus sends you although there is the plague or other contagious illness”*²⁵.

And, finally, on this same point, the Constitutions collected that refusing to attend a patient infected with plague could result in expulsion from the Congregation²⁶.

Some of the general measures applied in those centuries to combat the plague, as well as the difficulties known to exercise the health professions, one might wonder: what was the work developed by a nurse at a hospital in the 17th century? What care did he/she administered to the patients affected of plague? To try to answer these questions, it is necessary to refer to the nurses' treatises above mentioned, *Directorio de Enfermeros* and *Instrucción de Enfermeros*, composed in the 17th century.

“DIRECTORIO DE ENFERMEROS” AND THE CARE ADMINISTERED BY THE NURSE IN AN EPIDEMIC OF PLAGUE

In relation to the professionals giving care, Domínguez-Alcon notes that the training of the caregiving staff during the period 1531-1820 becomes progressively apparent, something which materializes in the edition of books and manuals

24. Mínima Congregación de los Hermanos Enfermeros Pobres 1634, Chapter III: *De los que deuen ser admitidos al hábito de nouicio, y el modo con que se han de admitir* (On those who must be admitted to take the veil of novice and on how it must be done), p. 18.

25. Idem., Chapter IV: *De los que deuen ser admitidos a la Cruz, y los quatro votos, y del modo con que se han de admitir*, (On those who must be admitted in the Cross and the four vows, and on how it must be done), p. 25.

26. Idem., Chapter V: *De las penitencias que deue el superior imponer por culpas más graues que las ordinarias* (On the penance that must be imposed by the Superior on more serious charges than the usual), p. 44.

that include differentiated content according to those to whom they are aimed (nurses, midwives...)²⁷.

One of these books, the manuscript *Directorio de Enfermeros*, dedicates seven chapters to the subject of the plague, those from 100 to 106²⁸, including the work to be developed by the nurse in the hospital²⁹ and the public health measures that should be taken for its prevention and for avoiding its spread. We have divided the nurses' work in four groups:

CARE AND MEASURES TO TREAT THE AIR CONDITIONS INSIDE AND OUTSIDE THE HOSPITAL

The nurse was responsible, during the months of cold weather, for the air purification of the hospital wards: elimination of stench and their causes. To do so, they burned various aromatic herbs such as laurel, juniper, cypress, rosemary, and pennyroyal mainly, or the use of other substances such as incense, *bálsamo de gota* (drop balm). The *pomos* were also employed³⁰, a kind of balls made with different ingredients, normally aromatic:

*"[...] and, thus, the nurse must make sure with all his/her good practice that in the places, rooms, passages, sick bays, corridors, offices, and everywhere the stench is present, laurel, ash tree, juniper, mastic, cypress are burnt; this is for the trees. About the herbs, common rue, rosemary, sage, savin, savory, myrtle, lavender, topped lavender, thyme, pennyroyal, and many other fragrant things. Of the aromatic ones, the complex and the simple ones, as well as pills, joss sticks, incense, benzoin, styrax, drop balm, and others that the physician can invent and order, burning one or the other at different times. The pomos, well-seasoned and placed on small braziers with embers, are very good to correct the air and they last as long as you want, taking into account that all of these things, or most of them, cannot be used in hot weather; apart from the pomos"*³¹.

27. Domínguez-Alcón 2015, p. 153.

28. In the first chapter, number 100, titled *De lo que deuen observar los enfermeros en tiempo de peste en las enfermerías y aposentos y en toda la casa y fuera de ella donde huuiere apestados* (On what nurses must observe in times of the plague in the infirmaries and the whole place, and outside it where there are infected people), Simón López distinguishes between the occurrence of the plague in the cold months or "cold constellation" and in the warm months or "hot constellation", specifying the care to give in each period.

29. López 1668, paragraph 482. In this chapter, and providing that the work was aimed at the training of nurses, the author insists in: "I do not deal with what they [doctors and surgeons] do or must do, but with what the nurse must do, because the rest would be so wide to cover."

30. The *pomo* (*poma*) is a kind of ball made with certain ingredients, commonly odoriferous, with a perfuming function. It could be put into a bottle or small glass made from glass, crystal, china or metal or, as the urse advised, in a small brazier which helped spreading the scent from the substances prescribed by the doctor. In chapter 105 of the work, it deals with the elaboration and making of these "*pomos*".

31. López 1668, paragraph 483: "En constelación fría" (In cold constellation).

This preventive measure was advised for all houses, hospitals, convents, streets, squares, and yards, given that it was “a very necessary precaution and medicine.”³²

In times of plague, it was of prime importance to fight the stench and its causes because they were synonymous with putrefaction or decomposition of organic matter; they were especially important, emphasizing that in towns or villages there should not be “stinking places, latrines, fish houses, dunghills, drains³³, lakes or large pools with stagnant water, rotten vegetables and fruits, and dead animals”; and the reason given was “because all this helps and gives more strength to the corrupt air, leading to a high risk for the population”³⁴.

The *pomas*, designed to prevent the spread, were made of metal, usually silver, or, if it was not possible, of juniper wood, a large lemon, or a pippin³⁵, also large. They should be round and holey, about the size of a cowbell. After making the holes in the lemon or pippin, through them they introduced cloves and cinnamon sticks, previously wet in water, and pink vinegar, and if possible, in addition, some beads of amber or musk. All spiced with roses, violets and water lily carnations’ powder, called “river figs”, pouring citron and lemon seeds and shells mixed with tragacanth sap³⁶ previously soaked in water and pink vinegar. Finally, a little bit of laudanum was added, making *poma*.”

During cold weather, (*cold constellation* in the Spanish of the time), the *poma* was done with powders of benzoin³⁷ and styrax, cloves, cinnamon, nutmeg, amber, and musk, as the doctor prescribed.

In the warmer months of the year, what Simón López called the *hot constellation*, the work of the nurse to combat the plague focused primarily on air ventilation –by opening windows and doors–, clothing ventilation, and cleaning of sick bays and rooms, “disinfecting” them with pink vinegar mixed with water or “those who can’t do it, with common vinegar³⁸ and water”. After sweeping and washing sick bays with fresh water, it was recommended to spray the walls and floors with a solution consisting of five or six parts of water and one part vinegar, being ad-

32. Idem., paragraph 483.

33. *Albañar (albañal)* (Drain, sewer): (From the hisp. arab. *alballá'a*; literally, *tragona*). Canal or tube which removes waste water. Deposit of wastes. Real Academia Española 2001. Word: “albañal”.

34. López 1668, paragraph 484.

35. The “*camuesa*” is the fruit of the *camueso*, a type of apple tree. Translated from the Dictionary of the Real Academia Española 2001.

36. *Alquitira*. (From the hisp. arab. *alkitira*, and this from the clas. arab. *kaṭīrā*). *Tragacanto*. A shrub from the papilionaceae family, of about two meters high, with abundant branches, with leaves composed by elliptical leaves, white flowers in axillary spikes and fruit in leaf sheath. It grows in Persia Asia Minor, and from its trunk and branches naturally flows a white rubber widely used in pharmacy and the industry. Translated from the Dictionary of the Real Academia Española 2001. Word: “*alquitira*”.

37. *Menjuy. Menjuí. Benjuí*. (From the arab. *lubān ḡāwī* ‘Java incense’). Aromatic balm obtained by the incision in the bark of a tree, from the same botanic type as that produced by the *estoraque* in Malaca and in several Sunda Islands. Translated from the Dictionary of the Real Academia Española 2001.

38. López 1668, paragraph 485.

visible that the curtains were porous or made of canvas. Also very useful was to include those plants in the room and place a “washbowl of sedge”³⁹ or, in absence of this, the powders of the same mixed with strong white vinegar. This cleansing was extended to the objects present in the sick bays, such as spittoon or bedpans and, in general, everything that could cause stench. From this, one can notice the growing concern over hygiene issues.

All these measures would be ineffective, states Simón López, if the many objects and belongings that had been in direct contact with infected person were not thrown out, “the filth of the plague-infested”⁴⁰, as the nurse called them.

For this purpose, great holes must be opened in the ground to put all these objects in (clothes, dirty bandages, gauzes, used plasters, and other objects) and the organic matter (sputum, vomit, blood, urine, and excrements), creating as many layers as necessary.

Everything that had to do with the plague-infected people who died in hospitals was really important. Simón López also deals with the subject and teaches the procedure to bury the dead.

Simón López completes the measures with a set of practices that nurses and other people should apply every day in times of epidemic: personal hygiene measures and means to establish a proper distance separation with the sick and those suspected of having the disease. These measures range from “rinsing the mouth many times a day with water and white vinegar”, in the said proportion of 6;1, as much the person could bear; “always taking with him/her a clean cloth or new wet sponge in water and pink vinegar, or common vinegar if not possible, to apply it to the mouth or nose when the person was in contact with the patient”; “introducing cotton wicks in the nose, previously soaked in amber or musk”⁴¹; “keeping the distance with the patient to avoid breathing in the exhaled air of the sick”; “make sure to be careful not to breath in the exhales air of the patient”⁴².

Other recommended practices were to massage the heart several times a day with an ointment of three or four drops of Mathiolo oil and the same quantity of good white wine, putting on top a bit of red taffeta or a loose silk skein, also red, previously softened with your fingers⁴³. It was also advised not to buy clothes or belongings from places suspicious of the presence of the disease, in order to prevent the infection.

39. Idem., paragraph 485. The “*almofia*” is a kind of vessel in the shape of a mug, long in diameter and low in depth, which mainly serves to wash the face and hands..

40. Idem., paragraph 486. Chapter 102: “Oyas que se han de hacer para enterrar las inmundicias de los apestados” (Pots to use to bury the infected people’s wastes).

41. *Almizcle* (Musk). (From the hisp. arab. *almisk*, this from the clas. abr. *misk*, and this from the pelvi *mušk*). Greasy substance, sticky, of intense smell, which some mammals secrete from the prepuce glands, in the perineum or near the anus, and, by extension, substance secreted by some birds in the gland under the tail. For its sticky quality and smell, musk is the base material used in certain cosmetic and perfumery preparations. Translated from the Dictionary of the Real Academia Española 2001.

42. López 1668, paragraph 489.

43. Idem., paragraph 491.

Finally, measures of psychological type: how to avoid the gaze of infected patients: “Do not look at them at the face, or stare at them, as we say, because it is very bad”⁴⁴.

Altogether, they represent basic but necessary hygiene measures from the medical point of view, which were based on past experiences transmitted through the uses and habits more than on the basis of a scientific knowledge of the disease.

CARE AND DIETARY MEASURES FOR THE TREATMENT OF THE PLAGUE

Dietary measures played an important role in the nursing work. These measures were directed both to the infected and those “in danger” of getting infected, and were based on “good rule and in the use of some of the manuals, remedies and good maintenance, and moderate drinking.”⁴⁵ The book is a true dietary treatise. The nurse Simón López advised for infected patients that meals should be few, of quality, and easy to digest. Meat occupied an important place in this scheme and he recommended ram, hen, capon, partridge meat, chickens and cocks, young rabbits, kid, veal, young birds of the wild pigeon, quail, and other mountain birds, being these preferred to the water birds.

As for the meat preparation, to grill it was preferred rather than to cook it. In the stew, vegetables of the type of borage, savory, sorrel, and spearmint were recommended. Lemons, bitter oranges, sour grape juice, and parsley cooked with elder vinegar or common vinegar are good for the sauce that accompanied the roasted and cooked food.

At the beginning of meals, it is advised to eat fruit, such as fresh cherries, plums, sweet limes, sour oranges with sugar, and a mixture of sweet and sour pomegranates. And for dessert, both after lunch and dinner, roasted pippins were good, as well as roasted quince and sweet pears. Among the canned food, it was recommended the pear, quince, black salsify, cilantro comfit or red roses, depending on the time of the year.

Simple dried figs were considered to be very good for the chest and lung and were thought to be medicinal for the plague, bad moods, and the poison, because, among other effects, they facilitated the digestion⁴⁶. The use of these foods in Castilian hospitals follows a long tradition which has its roots in the classical world. Simón López states that figs were eaten since ancient times, and so mentioned it Pliny and Mithridates, King of Pontus, and the same idea was later used by Pompey. As an antidote, Mithridates used a recipe based on figs, walnuts, common rue, salt, and wine. Subsequently, this result would be equally recognized by Arab doctors such as Rasis.

44. *Idem.*, paragraph 489.

45. *Idem.*, paragraph 495: “On the food and drinks for the sufferers of the plague”.

46. *Idem.*, paragraph 744.

Melons were also recommended, but not the irrigation ones; they should be fragrant and sweet, not green, mature, or “overripe because these have already began to rip”, also advising against those sown on an infected or watery land, “because that will be eating the plague.”⁴⁷

And, in terms of a type of food as basic as the bread, and based on a motto by Avicenna and Galen, it was recommended that the bread they ate was were baked the previous day, well-seasoned, and that “the wheat used to make it were first cleaned of any strange thing and not harvested in a pestilential year.”⁴⁸

In relation to the amount of food, moderation was always mentioned, not to fill the stomach in excess, especially at dinner, which should start with a salad made from parsley, borage, chicory, and purslane, with a bit of spearmint. Capers were also good for salads and could be mixed with the previous one. To bring herbs into the stew, this meal could be accompanied by herbs of marjoram, sage, sorrel, scabious, bugloss, and lemon balm. If they wanted to make a salad with the last mentioned plants, these should be stewed with some oil and pink vinegar or elder, and sugar.

Those who felt “well and with appetite” could dine half a chicken or half a stewed wild pigeon’s young bird, or a fricassee, and for those who were weaker, the recommendation was a dinner based on fresh, sucked out or boiled, peeled, stewed with pink vinegar or elder, and sugar.

Water⁴⁹ should also be controlled, especially in times of plague, and as an integral part of the diet. It was recommended to boil it with salsify or bugloss root, adding a slice of cinnamon. Golden water was specifically advised in this disease; for the healthy ones, it was advised to add half or one ounce of lemon or pink syrup, or to previously eat a scabious root or three tablespoons of quince jelly or sour grape juice.

And, for those who had lost their appetite, as a consequence of the disease, it was allowed to eat fish of the type of a small trout (or *lancurdia*), bermejuela, Iberian nase, plaice, sole, or crayfish (the last one was particularly suitable for those infected with the plague). All this was prescribed to whet the appetite.

Along with the wide range of foods recommended for patients infected of the plague, Simón López collects some dietary contraindications in times of epidemic, like not eating cucumbers, figs, early fresh or greens figs, peaches, or fresh grapes.

Citing medical authorities, as the doctors Zamudio, physician of the Royal Chamber, and Lázaro, one of the prologue writers and censor of *Directorio de Enfermeros*, both doctors who operated during the plague in 1598, Simón López gives a list of disapproved food, as the tamed oxen, which are considered “to be

47. Idem., paragraph 770.

48. Idem., paragraph 787.

49. As a therapeutic and dietetic element, there is a complete treatise dedicated to water among the eight which conform *Directorio de Enfermeros*, the seventh one, titled: “Tratado 7.º De la calidad del agua y cuál es la mejor, y de todo género de aguas cocidas que beuen los enfermos y el modo de coçerlas con su peso y medida” (7th Treatise. On the quality of water and on which is the best one, and on every type of cooked water the sick drink and the way of cooking it with its weight and measures).

the same as the plague”, water birds and, in general, all kinds of cured meat and fresh goat, sheep, lamb, hare, rabbit, and deer meat.

With regard to breakfast, Simón López recommends a “breakfast preventive of pestilence”, based on the intake of fresh or canned cherries, juice (orange, lemon, or sour pomegranates), sponge cake or two or three bites of good bread. As for the canned food, he specifies that the flower of borage, bugloss and black salsify were excellent, as well as putting into the mouth a cinnamon stick or cider peel, lemon or leaf of common rue, as the physician or the season prescribed (hot or cold)⁵⁰.

The list of foods is wide, which allowed administrators of hospitals the choice depending on the time of the year that the epidemic was taking place and the acquisition of resources depending on availability and price.

CARE AIMED AT THE PSYCHOLOGICAL AND SPIRITUAL SUPPORT OF THE NURSE ASSISTING AN INFECTED

If the arrival of an epidemic of plague in a place caused terror among the population, the fear the staff that assisted in the suffered hospitals should be indescribable. Therefore, the implementation of a series of measures was necessary to maintain and even encourage the mood of the nurses, who were the ones who had a major and frequent physical proximity with the sick.

Simón López devotes several paragraphs to this aspect: preparing the mood of nurses in the situations they were going to experience in the next few months, until the epidemic passed (though these recommendations were also addressed to all those who had a plague-infected patient in his care)⁵¹.

In this context and time, psychological help had a distinctly religious and spiritual character. Simón López prepared nurses in a double direction: strength of body and also of spirit, both of them needed to deal with the disease; the rigorous implementation of all the hygiene measures exposed, together with a good breakfast intake to meet with the demands of the hard day’s work and strengthen the body to better confront the disease, which was really close to them. Psychological guidelines had a strong spiritual charge and were directed to the strengthening of the faith as the best means to achieve God’s help: “banishing all fear and apprehension of being infected, because God looks after those who do it in the name of love, and he will not avoid helping them, as he is able to free us from these and other major illnesses and dangers of what our little faith make us fearful and sceptical, so God helps us.”⁵² Simón López insists in the need that, when dealing with the care given, the nurse shall do it with complete conviction, with confiden-

50. López 1668, Chapter 104: “Desayunos preserbatuios de pestilencia para enfermeros y asistentes que podrán también servir para los enfermos tocados de peste” (Preserving breakfasts for the plague for the sick and assistants, which can also be used with the sufferers of the plague).

51. Idem., paragraph 488: “Exhortation for the nurse and those who assist the infected”.

52. Idem., paragraph 488.

ce in himself and in God, without hesitation, having “faith in his Glory” as his the best “breakfast” to start the day:

“And, this way, he must encourage and lift the spirits of his fellows, because starting with a sense of revulsion, few faith and fear of being infected, he must not enter the organization because, in this way, it will be true that he will be infected; let us put ourselves in the hands of God to enter the service with valour to serve the infected because He will also trust us and free us from being infected, if that is His will”⁵³.

Terror was greater in those situations in which the spread of infection was really fast: “when it is the air which is infectious and corrupt, the infection is really fast and, as has been said, in an instant it plays its role and kills many people, and fleeing from this danger is very difficult.”⁵⁴

The scientific knowledge of the 17th century was very limited and, when the epidemic occurred was of much virulence, Simón López certainly knew that little could be done to fight it, with the exception of the given measures to try to alleviate it; for this reason, he warned that the best remedies were the spiritual ones. These were the first to be applied “by putting ourselves in the hands of God.”

These psychological treatments with a strong religious and spiritual base were well organized. A general confession should be made, together with acts of contrition and prayers. The narrations about the spread of the epidemics of plague throughout Europe were creating a whole set of popular beliefs that quickly circulated through all the places and marked the way of living the infectious disease and confront her.

When medical treatments do not give the expected results, the human being has resorted (and still does) to the relief of superior forces, whether in the field of religion or of magic. Either way, this set of psychological measures proposed by Simón López helped to withstand the hard days of confinement in the hospital both to the infected and the “clean” patients, promoting an atmosphere of devotion that was extensible to the rest of the city.

OTHER MEASURES AND RECOMMENDATIONS

All the measures proposed by Simón López joined other general ones, also applicable during those periods in which there was no spread of the plague, but that had to be maximized in these circumstances. Hospitals, which were originally designed as spaces for health recovery, were considered especially feared centres in moments of contagion.

The measures against the spread of the plague at hospitals should also take into consideration other aspects of the patient, such as the safe elimination of bodily

53. Idem., paragraph 488.

54. Idem., paragraph 480.

fluids, excrements, saliva, and mucus. It was thought that the lack of elimination of them could lead to the aggravation of the disease: “the stomach must be in a good condition because the retention of excrements is very harmful.”⁵⁵ In addition, in the event that the patient could not pass a motion daily, the nurse should use an external aid⁵⁶ or enema every three days, or as the doctor prescribed.

Rest and exercise were also important, and both must be moderate. Physical exercise was recommended when it was hot and it should be taken in the morning and fasting, after a light breakfast, and could be increased after two hours; in winter, it was recommended to take exercise in the afternoon, five hours after the sick had eaten⁵⁷.

Another set of hygiene measures was aimed at cleaning the clothes, both the personal ones with which the patient had been admitted and those used in the beds, baths, and other. In order to avoid infection, Chapter 30 is dedicated to this issue, highlighting the importance of changing clothes and sheets of the patients and those suffering from “acute illnesses”, among which was the plague, a practice little or non-extended at all in the 17th century. This chapter justifies such a measure: “Notice how necessary it is to change clothes and sheets to those suffering from acute diseases.”⁵⁸

Simón López tries to eradicate the practices used in hospitals from long ago, tenuous and causing harmful effects on the health⁵⁹, among them, dressing a healthy person with a shirt before giving it to the sick in order to warm it up and make it more pleasant to the touch. To eliminate the moisture from clothes, Simón López proposed as follows:

“There is a common thought, as Dr Lázaro states in his censorship, which is not easy to eliminate, that clothes and sheets to be changed to these patients must be worn by a healthy person because, in the end, he soils them and the patient needs them clean, and to remove the damp they could have there is the option of using fire and pills or other aromatic things”⁶⁰.

It describes in detail how to change the bed linen and clothes, the time at which they should do it and the most appropriate techniques for those cases in which the

55. Idem., paragraph 492: “Del conçierto del vientre, exerciçio y sueño de los amenazados a peste” (*On the bowel movement, exercise and sleep for the plague infected*).

56. Clister. (From the Lat. *clyster*, and this, from the Greek κλοστήρ, from κλύζειν, clean). Enema. (From the Lat. *enēma*, and this, from the Greek ἐνεμα, lavative). Liquid medicament introduced through the anus with an appropriate instrument to drive it, and commonly serves to clean and discharge the abdomen.

Emollient. (From the Lat. *emolliens*, -entis, making soft). Said of a medicament: having the quality of softening or soothing the skin. Translated from the Dictionary of the Real Academia Española 2001.

57. López 1668, paragraph 493.

58. Idem., capítulo 30, paragraph 171.

59. Idem., paragraph 173: “Cómo se han de preparar la camisa y sábanas para ponerlas a los enfermos de enfermedades malignas y cómo se han de poner” (*How to prepare the shirts and sheets for the sufferers of malignant illnesses and how to use them*).

60. Idem., paragraph 173.

patient presents difficulties of mobility. Very important were the measures to be taken in the own room of the hospital, keeping windows closed and heating it to prevent the sick from cooling, detailing the required staff to do it right: a nurse and an assistant.

Other texts prepared by Spanish nurses in the 16th century also emphasized this. Thus, the rules Bernardino de Obregón (1540-1599) –founder of the *Mínima Congregación de los Hermanos Enfermos Pobres*, popularly known as Obregones nurses)– wrote in the mid-sixteenth century, state it for convalescent patients:

“Those admitted will be noted down in a book and, when any of them suffer a relapse, he/she will be placed next to the sick bay where he/she will be cured, that day, month and year, and the same for those stated by the physician, after properly having recovered, because when their relatives come to ask after their health, it can be said what has been done to them.”

Change their bed linen, pillows, clothes and white clothing at their tables at least three times a month, if not every week, because the best medicine to heal the sick is cleaning everything and the charity and good condition of their nurses [...]”⁶¹.

The experience of Simón López as a nurse in Castilian hospitals for more than 25 years had given him the deep knowledge of the daily work in the same, from his organization and its administration, to the treatment of the more varied diseases.

NURSING CARE IN PESTILENTIAL DISEASES IN *INSTRUCCIÓN DE ENFERMEROS*

In the *Instrucción de Enfermeros* treatise, we also find the work carried out by the nurse before infectious and epidemic diseases, what was called “of pestilential nature”. Among these, the “croup”⁶² and the “typhoid”⁶³ were highlighted, causing epidemics and a high mortality. In relation to the croup, the Obregon nurse Andrés Fernández, author of the treatise, includes the measures and the care given, which we will describe below.

First, the nurse recommended the sick gargling with different substances: pink vinegar, barley water and sugar or pink syrup, milk and sugar, or other compounds. Health education was important: teaching the patient how he/she should correctly carry out the technique:

61. García Martínez 2008, p. 216. The cited text corresponds to folio 63v in the manuscript constitutions.

62. The *garrotillo* is the name given to the diphtheria at the time, the croup, a very common disease among children and which commonly causes death by asphyxia. García Martínez, García Martínez 2001, p. 454.

63. The *tabardillo* provoked a foul temperature and abundance of blood which manifested through marks on the skin. Nowadays it is thought it could be the epidemic typhus. García Martínez, García Martínez 2001, p. 460.

“The nurse will administer a drink, the poaching the physician had ordered, and affirmed in bed, lifting the head to face the sky and opening the mouth to gargle, until he loses breath, and then the process will be repeated, gargling again as before, so that the patient do it three or four times every hour, taking care not to swallow the liquid because it contains egipcíaco ointment and other things that are not convenient to digest. And, just in case the doctor shall command to take juleps (kind of drink made with distilled water, syrup and other medicines) or water with sugar, it will be ordered to first gargle, not to swallow some of the materials of the croup”⁶⁴.

After gargling, and if the patient had sores in the throat, the nurse should carefully heal them to do no harm:

“When dealing with these sores it must be done softly, so that, although it is the scab is peeled off, it is not removed, but only to apply the remedy on top and wait for nature to do its effects, helped by the remedy because, in another way, the part becomes irritated and the patients feel like choking and so it very quickly starts again”⁶⁵.

In addition, the nurse applied oil ointments in the throat with chamomile, chicken fat..., or plasters made of a decoction of mallows, chamomile, swallows nests, beans flour and barley, among other substances. It was really good, said the author, the ointment of orange blossom butter mixed with sweet almond oil or chamomile. Together with the previous treatments, the nurse also performed ligatures, which could be of three types: soft, ordinary and painful or by garrotte. For each of these treatments, the nurse explained in detail how the technique should be performed. Thus, these ligatures were as follows:

“These ligatures must be done on the flesh of the arms and of the thighs in this way. If the ligatures must be soft, they will be like this. The nurse will take a plait or thin rope and tie it in the middle of the fleshy part, six fingers above the knee, which is the thigh, and with a half-knot, the nurse will gradually tighten it by pulling from both ends of the cord”⁶⁶.

In these “pernicious” or infectious diseases, requiring complex and varied treatments (bleeding, enemas, ointments, ligatures, etc.), it was important that the nurse knew how to correctly manage them and in the order indicated, so that the result of the treatment was the expected. Throughout the pages of the treatise, there is a great insistence on the methodical work of the nurse:

“Doctors often order many remedies together, such as the ointment, bleeding, julep (kind of drink made with syrup, distilled water and medicines), soaked cloths, enemas, early eating; it seems to be convenient to say which one of those remedies

64. Fernández 1625, pp. 27-28.

65. Idem., p. 30.

66. Idem., pp. 76-77.

*will be first, so that it is all for the good of the patient and so that the nurse can properly work [...]”*⁶⁷.

All of the above was equally applicable to other diseases considered “pestilential”, as it is the typhoid case. The nurse also insisted on the importance of hygienic measures such as, for example, changing the clothes of the infected patient (bed linen, clothes, etc.). The author describes it in the following way:

*“And because we have started dealing with cleaning, now we will talk about if, in the pernicious diseases such as the smallpox, typhoid and malignant fevers, it will be good to change the clothes if they are dirty, and the answer is positive because the clothes are soaked with the infected vapours resulting from the suffered temperature and, if those clothes are later used for a healthy person, it will not be strange that they infect the healthy person, it is very obvious, isn't it?”*⁶⁸.

And, finally, together with care, the nurse did not forget the diet, stating what was beneficial or harmful for the sick in these pathologies:

*“And, because there are patients with such a lack of appetite, we state which foods can be given to each genre of sick and the most common things that should be observed: for those patients suffering from typhoid, anthrax, erysipelas, open wounds, they should not be given parsley, except when there is no other option, for being hot and having elements which can be added to the pernicious mood and the blood, and it would increase; to those patients, lemon juice or sour grape juice and, best of all, it is the lemon, as the sour grape juice is an astringent”*⁶⁹.

BY WAY OF CONCLUSION

The several outbreaks of the plague occurred in Spain during the 16th and 17th centuries gave rise to an abundant medical literature about this disease, which was widely disseminated throughout the country. In these documents, medical treatment, public health measures, and measures of other kind were collected to be applied in hospitals, but little or nothing was said about the work carried out by the nurse.

As documentary sources for the work done by nurses in the 16th and 17th centuries, we highlight as of great interest: the constitutions of hospitals, the constitutions and rules of institutes dedicated to the care (Obregones nurses, San Juan de Dios brothers,...), manuals and nurses treatises written by and for nurses, and different documentation generated in the same hospitals.

67. Idem., pp. 111-112.

68. Idem., p. 127.

69. Idem., p. 140.

Among the training treatises written by nurses and aimed at the training of nurses in the 17th century, two of them stand out: *Directorio de Enfermeros*, by Simón López, and *Instrucción de Enfermeros*, by the Obregones nurses.

The authors of these treatises collected throughout his works, in a didactic manner, its tasks and functions, as well as the care and measures to manage patients admitted to hospitals in case of plague or other diseases of *pestilential* nature, such as the croup and the typhoid; the nurse acted on the environment (air purification, water,...), dietary measures, measures aimed at the psychological and spiritual support of the nurse, and other various measures (importance of the rest of the sick, measures to avoid infection, etc.)

These works ultimately allow us to know, as few historical sources can show it, the actual state of the hospital health system in Castile in this century and, in particular, such a concrete episode as it was the epidemics of plague.

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- agora nueuamente por el Hermano Andrés Fernández. Hermano mayor de dicha Congregación, y Hospital General, corregido y emendado, y añadidas muchas, y notables aduertencias, utilíssimas y necessarias para todos, assí Médicos como Cirujanos, y enfermeros, Madrid.
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