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Corresponding Author:
Francesco Bianchi
tzimbar@gmail.com

Healthcare and Medicine in Medieval Western Hospitals

Francesco Bianchi

Contract professor of Medieval History at the University of Verona

Abstract

Medicine and Medieval Hospitals

Hospitals are an innovation dating back to Late Antiquity, and their proliferation in the Western world is closely tied to the advancements of Christianity and ecclesiastical institutions. Since their inception, hospitals have provided various forms of aid to various categories of destitute individuals, which could include medical treatments in line with Gospel precepts. However, for much of the Middle Ages, the majority of hospitals struggled to secure the services of medical practitioners on a permanent basis, albeit with some exceptions. Towards the end of the Middle Ages, though, the processes of medicalization within the realm of hospital care gained greater intensity and prevalence. This transformation was facilitated by the increased availability of both financial resources and proficient medical personnel, particularly physicians and surgeons trained in academic settings.

Keywords: Hospitals - Middle Ages - Healthcare - Medicine

The origins of hospitals in the Western world are closely linked to the development of monasticism[1]. Andrew Crislip has pinpointed the late 4th century as the period when the first hospital emerged, representing "the institutional extension of the monastic health care system and related commodities and services". In monastic hospitals "the sick were guaranteed health care from a variety of professional and nonprofessional providers, a system that was without precedent in ancient Mediterranean society. The sick had access to a range of medical treatments corresponding to the best types available outside the monastery: dietary treatment, pharmaceuticals, surgery, rest, and comfort care"[2].

The institutionalization of hospitality and healthcare services followed the spread of churches and monasteries, which embraced the evangelical teachings about one's neighbor, addressing all needs without specific distinctions. This explains why, during the Early Middle Ages, hospital structures were primarily reliant on ecclesiastical institutions, which, in turn, received constant funding, known as the *quarta pauperum*, mainly designated for charitable actions. While there were sporadic hospital initiatives sponsored by sovereigns or lay aristocrats, the primary impetus came from religious entities. Monks and bishops were obliged to set an admirable example, as highlighted by the Benedictine rule and the teachings of Pope Gregory the Great, emphasizing the evangelical duty to extend assistance to the indigent and the infirm[3]. Furthermore, the corporal works of mercy mentioned in *Matthew* 25:35-45 provide explicit guidance on the behavior that Christians are obligated to adopt in response to requests for aid, particularly as a means of safeguarding their spiritual salvation.

The devotional motivations and charitable intentions inherent to Christian ethics persisted even into the Late Middle Ages. During this period, there was a significant increase in initiatives by lay individuals or groups aimed at establishing and/or managing hospitals. This surge reached a point where these initiatives surpassed the older welfare institutions associated with ecclesiastical entities, in both quantity and significance. Nonetheless, for a long time, Catholic hierarchies retained oversight of hospitals, regardless of whether their administration was secular or ecclesiastical, as hospitals were considered *pia loca*, akin to churches and monasteries.

From the 13th century onward, hospitals underwent widespread processes of municipalization, and, by the end of the Middle Ages, explicit claims of secularization emerged. A significant example is the case of Simone Vespucci, a Florentine silk merchant who, in the 1400s, founded the Hospital of Santa Maria dell'Umiltà (also known as San Giovanni di Dio). To underscore the secular nature of the institution, Vespucci had it certified by a notary that "dictum hospitale […] perpetuo sit et reputetur, et reputari debeat, et esse intelligatur et censeatur, et intelligi et censeri debeat, res et locus, penitus et totaliter, proprius, purus, privatus, laicalis, secularis, et profanus, et non religiosus nec ecclesiasticus"[4]. These statements about secularization are unequivocal. However, they do not negate the dedication of the hospital to Santa Maria and

San Giovanni, reflecting genuinely Christian devotional sentiments. Overall, these are distinct signals that foreshadow the pursuit of early social policies based on effectiveness, alongside spiritual goals tied to the quest for eternal happiness.

The Christian origins of the Western hospital tradition are undeniable. Although contemporary hospital management generally no longer adheres to religious mandates and pious sentiments, except for institutions run by religious orders, their fundamental roots remain evident. This continuity is manifest through historical dedications that bear clear Christian signs. Consider, for instance, the case of Saint Bartholomew's Hospital in London, founded in 1123 and still named after the same apostle and martyr. Furthermore, the use of the quintessential Christian emblem – the cross – serves to symbolize the presence of medical, paramedical, and pharmaceutical facilities, albeit not exclusively.

Now, let us delve into the degree of medicalization of care services provided by medieval Western hospitals. While this may not be the ideal platform for a comprehensive comparative evaluation with other civilizations, it is worth briefly acknowledging that, for a significant portion of the Middle Ages, hospitals in the Byzantine Empire and Muslim lands stood out for their early specialization and medicalization compared to the West, although there may be exceptions[5].

The corporal works of mercy include assistance to the sick, as evoked by the words "I was sick and you looked after me" (*Matthew* 25:36). Moreover, Jesus' actions are characterized by frequent instances of miraculous healings, contributing to the depiction of Christ as the divine healer: "Christ was portrayed as the divine physician who cured men's spiritual diseases. Disease was equated with sin and health with virtue, as Augustine makes clear in one of his sermons"[6]. In Christian thought, illness is tied to sin, physical rehabilitation to moral rehabilitation, and miraculous healing to an act of faith. This sentiment is exemplified by the figures of the martyr Saints Cosmas and Damian, who embody both medical expertise and miraculous abilities. Their worship is deeply rooted in both hospitals and sanctuaries, both being places of healing[7]. Consequently, Christianity encourages the treatment of bodily infirmities, nurturing the hope for divine intervention through miracles, alongside earthly intervention facilitated by the mercy of one's neighbor. However, this perspective is not devoid of ambiguity. At times, the salvific significance of physical suffering is emphasized, and, in the case of certain saints, bodily suffering is not avoided[8]. On the contrary, it assumes a privileged role as a sign of spiritual perfection[9], as demonstrated by the stigmata of Saint Francis of Assisi or the deeper wounds that cover the body of the lesser-known Saint Theobald of Provins, following the *imitatio Christi*[10].

In the early centuries of the Middle Ages, a significant portion of *xenodochia* or *hospitalia*, on one hand, and *scriptoria*, on the other, were closely associated with churches or monasteries. Therefore, spaces dedicated to the care of the sick and those intended for the transmission of ancient knowledge, including medical wisdom, were

managed by the same ecclesiastical institutions. It is noteworthy that there are at least 158 manuscript codices from the Early or High Middle Ages that originate from ecclesiastical contexts and are entirely or partially dedicated to medical sciences, comprising a total of 1098 medical texts[11]. Nevertheless, it is not easy to determine to what extent the clinical practices of this era drew from the teachings of medical texts copied by scribes.

Monastic rules appear to have primarily reserved comprehensive medical assistance solely for monks themselves, at least until the 12th century. However, from the High Middle Ages onward, there are documented cases of hospitals established by bishops, which employed qualified medical personnel to assist pilgrims and the infirm[12]. In this context, the renowned *Plan of Saint Gall* is particularly enlightening. Created in the early 9th century at the Reichenau Abbey and presented to Gozbert, the abbot of Saint Gall, this intricate plan spans five stitched-together parchment sheets (measuring 113x78 cm) and includes approximately 350 captions illustrating different sections of an idealized abbey and their respective functions. Notably, the plan showcases the *scriptorium* and the library, alongside a hospice for pilgrims and the poor. Most notably, the plan incorporates medical facilities such as a house for bloodletting and purging, a complex of infirmaries, a residence for physicians, a pharmacy, and a garden of medical herbs[13]. This depiction underscores once again the interrelated nature of sites for knowledge dissemination and those dedicated to medical and charitable assistance. Indeed, these facets were conceived as integral and harmonious components of the same Christian society.

Furthermore, the assimilation of Arabic and Greek medical knowledge into Western culture, achieved through the translation of scientific texts into Latin, was predominantly undertaken within ecclesiastical centers, especially between the 11th and 13th centuries. An illustrative case in point is the cathedral of Toledo[14].

The connection between ecclesiastical settings and medical care is further emphasized by the existence of hospital orders[15]. An exemplary instance is represented by the statutes enacted by the general chapter of the Hospitallers in 1182. These statutes stipulated that the large Hospital of Saint John in Jerusalem would be served by "quatuor sapientes medici […], qui urinarum qualitates et infirmitatum diversitates discernere sciant, et qui in medicinis conficiendis consulere possint eis"[16]. Moreover, the statutes established additional care protocols, as also evidenced by other contemporary documents, and a papal letter from 1184 mentions the presence of four surgeons alongside the four physicians in the same hospital[17].

The emergence of the first medical schools in the Western world dates back to the High Middle Ages, with the School of Salerno taking the lead. Although its origins remain somewhat unclear, they are typically placed around the year 1000. The subsequent centuries witnessed the proliferation of universities offering medical programs, with the School of Montpellier becoming operational as early as the 12th century[18]. The

advent of graduate physicians laid the groundwork for both secularization and further advancement of medical sciences in Europe. This development occurred outside the traditional ecclesiastical contexts of studying and transmitting medical knowledge based on Galenic principles, but it is important to consider the limitations imposed by the Church on clergy regarding the practice of medical professions[19].

University-educated physicians expanded and systematized the availability of healthcare practitioners, setting them apart from those emerging from non-academic environments, such as surgeons and barbers (*barbitonsores*), as well as apothecaries and other therapists (both men and women), often characterized by a more experiential approach to medicine[20]. Naturally, these figures were also identifiable within the hospital. According to a biographical list of medical practitioners active in Britain from the Anglo-Saxon period to the early 16th century (excluding barbers), the number of practitioners nearly tripled, rising from 117 in the 12th century to 310 in the 13th century, and eventually reaching 350 in the 14th century[21]. This escalation underscores the growing presence and importance of medical professionals over these centuries.

Between the 12th to the 14th centuries, Europe witnessed a significant proliferation of hospitals in both urban and rural settings. To provide quantitative overview, here are a couple of statistics related to two distinct regions within Western Europe. In the major urban centers of the Lombardo-Venetian plain, 75% of the 356 hospital foundations recorded between the 8th and 15th centuries occurred within the 12th to 14th centuries. A similar percentage is observed in the region stretching from Aachen to Mulhouse, encompassing the area between the Rhine and the Meuse, where 72% of the 528 hospitals (excluding leper houses) documented throughout the medieval period were founded or first mentioned between the 12th and 14th centuries[22].

Most of these hospitals grappled with limited resources, barely enough to accommodate and feed a small number of passing indigent individuals or provide assistance to the disabled, but not sufficient to employ specialized medical personnel on a permanent basis[23]. The financial capacity to engage doctors or other healthcare professionals for continuous service was a rare occurrence, and the assistance offered by most hospitals founded between the High and Late Middle Ages retained a character more inclined toward charitable support than comprehensive therapy. Nevertheless, it is worth acknowledging that the therapeutic efforts undertaken by medieval hospitals went beyond the sporadic or continuous involvement of more or less specialized physicians. These efforts, indeed, included the provision of tailored dietary regimens, the offering of spiritual comfort, and sometimes the creation of aesthetically pleasing environments, such as the frescoed *Pellegrinaio* within the Hospital of Santa Maria della Scala in Siena[24]. These measures could have a positive impact on the psychophysical well-being of the patient, on the regulation of the *res non naturales* (the six non-natural factors influencing health) and facilitate the healing of the body.

Nevertheless, the more pervasive processes of medicalization began to impact large urban hospitals starting from the 13th century, with further acceleration observed during the 14th and 15th centuries. This change was possibly more pronounced in Italy when compared to other regions of Europe[25]. For instance, considering Florence, it has been pointed out that "the 'medicalization' of hospitals in the first half of the Trecento cannot, however, simply be attributed to the urgings of the medical profession. It was also a part of a more general growing belief in the efficacy and importance of medical practitioners in public health"[26].

Hospitals garnering the favor of urban bourgeoisie and local ruling classes could benefit a steady influx of donations, accumulate substantial assets, and secure costant stream of income. This financial flow allowed them not only to concurrently assist numerous individuals in need but also to employ full-time medical experts, including those with university education. At times, municipal authorities themselves assumed the responsibility of funding physicians for major city hospitals, in addition to paying the salaries of the first public medical officials. The onset of this trend dates to the 13th century, when civic administrations expanded their scope to include health matters[27]. For instance, as early as 1270, a hospital in Padua named Domus Dei was granted an annual allocation of 75 lire by the municipality for paying "unus vel plures medici tam in physica quam cyrologia ad providendum et curam habendum de infirmis dicte domus"[28]. Another significant example comes from the Catalan city of Tortosa. In 1346, the municipality had already hired public medical staff, including two physicians, two surgeons, and a *herbolarius*. The principal duty of the medical practitioners was to treat the "malaltes des espital", while the apothecary was "obliged to go daily to the hospital of the city and make up the clysters, juleps, and ointments that he knows how to prepare for the hospital, with his own hands, free and for no payment"[29].

Overall, it can reasonably be argued that, by the end of the Middle Ages, hospitals had become more receptive to the provision of therapeutic services and the involvement of medical professionals while retaining their charitable purposes. The lack of medicalization of healthcare services was primarily due to constraints in economic resources rather than cultural factors. The hiring of medical practitioners and the provision of medical care in major urban hospitals were largely dependent on the extent of their financial endowments. As a result, the increase in economic resources facilitated the hiring of dedicated administrative staff responsible for ensuring proper financial and accounting management of substantial assets[30]. These developments have not only encouraged the growth of administrative roles, but also the increase in documents production. In turn, this documentation extended beyond normative and financial matters, beginning to encompass more aspects of assistance and therapy. For example, the practice of recording incoming patients and documenting deaths became widespread, especially in better-equipped hospitals[31]. This evolution in record-keeping reflected enhanced organization and emphasis on comprehensive patient care within these institutions.

The medicalization of hospitals gained further momentum due to the economic and societal ramifications in Western civilization during the last two centuries of the Middle Ages, marked by devastating wars, famines, and plagues. The recurring outbreaks of plagues, starting from the mid-14th century, compelled civic authorities to implement innovative health policies, guided by a new public authority, known in Italy as *Uffici di Sanità* (Boards of Health). This period also saw the establishment of hospital facilities dedicated to the isolation of contagious patients, called *lazzaretti* (plague hospitals), characterized by a greater focus on healthcare rather than charity[32]. The establishment of numerous *lazzaretti* was part of broader hospital reforms that took place in Europe between the 15th and 16th centuries, leading to a clearer distinction between institutions focused on medical care and those aimed at social assistance[33]. The reorganization of the traditional healthcare and welfare system sought to overcome the generalist approach typical of the medieval period, favoring instead specialization and the infusion of medical principles into the delivery of care. This trajectory also included the incorporation of pharmacies within hospitals, a practice documented as early as the 14th century, and which spread throughout the 15th century[34].
As noted by Giorgio Cosmacini, the hospital reforms of the 15th century marked the beginning of a "nuova era sanitaria" (new healthcare era)[35]. Although these reforms did not negate the hospital's role as a charitable foundation, they elevated it to a privileged position for medical care based on scientific principles. The case of Pavia provides a significant example of this transformation. The services offered by the Hospital of San Matteo, founded in 1449 by a confraternity of laymen, were regulated by statutes that ensured the admission of individuals "sive pauper, sive dives, sive ignobilis, sive nobilis, sive indigena, sive alienigena", without distinctions of class, origin, or status, thus adhering to the charitable tradition of the medieval period. However, these statutes explicitly stated that "soli infirmi qui et decumbentes sunt et qui fideli et vero medicorum hospitalis iudicio curari sanarique possunt adhibitis congruis medicine remediis" would be admitted[36]. This provision established an unprecedent criterion for healthcare guidance, imparting a stronger therapeutic direction to the hospital's mission and new triage procedures that followed stricter criteria for evaluating and defining the needy than the evangelical parameters.
These trends, destined to mature in the centuries that followed, marked the beginning of a closer integration between the advancement of medical knowledge in academic spheres and its practical application or experimentation in hospital environments. Confirmation of this phenomenon stems from the involvement of medical professors in clinical activities within hospitals, combined with the use of hospital facilities for anatomical examinations. For instance, in the city of Padua, which hosted one of Europe's leading medical schools[37], the Hospital of San Francesco served as a venue for anatomical dissections as early as the mid-15th century, with admission charged. In the following century, this hospital began to be used as a university clinic

by professors from the local university and their students. However, documents from the 15th century already highlight the presence of university physicians and their apprentices within Padua's hospitals, with notable cases recorded within the aforementioned Domus Dei[38]. This interaction between academia and hospital environments foreshadowed the deeper synergy that would develop over time, eventually leading to the dynamic relationship between medical education, research, and patient care that characterizes modern medical institutions.

Giovanni Battista Da Monte, a professor of practical medicine who assumed the role in Padua from 1539, also held his lectures within the Hospital of San Francesco. His perspective was rooted in the belief that "in the hospital two things can be seen and practiced, namely diseases and their symptoms"[39]. In Venice, the College of Physicians and the College of Surgeons organized their anatomy lectures at the Hospital of Santi Pietro e Paolo between 1487 and 1563[40]. Between 1482 and1483, Jehan Henry, a canon of Notre-Dame and superintendent of the Hôtel-Dieu in Paris, the largest hospital in France, wrote the *Livre de vie active de l'Hôtel-Dieu de Paris*. This book aimed to provide a sort of service manual inspired by devotional feelings while addressing the professional duties of hospital's medical staff[41]. Additionally, Gabriele Zerbi, who held a chair in theoretical medicine at the University of Padua, in his work *De cautelis medicorum* from 1495 argued that "the good doctor is he who has been well exercised as a young man in practice, having sought out hospitals and other places where there are many patients, diseases, and skillful doctors"[42].

Last but certainly not least, towards the end of the Middle Ages hospitals themselves embraced the responsibility of training specialized medical professionals. An illustrative example is the charitable institution of Santa Maria dei Battuti in Treviso, on the Venetian mainland. In the late 14th century, this hospital began awarding scholarships for medical education to aspiring students at the University of Padua. Once graduated, these students had the opportunity to secure employments within the hospital itself[43]. During the same period, hospitals could also house small collections of medical texts: for example, the Hospital of Santa Maria della Scala in Siena inherited three volumes of Galen and one of Avicenna in 1365[44]. This attests that hospitals were not solely arenas for medical practice but also actively promoted medical education and the preservation of medical knowledge.

Throughout the Middle Ages, hospitals were regarded as privileged spaces for the embodiment of Christian *caritas*, a principle that inherently involved the care of the sick from the outset. However, under the guidance of both ecclesiastical and lay figures, these institutions steadfastly maintained their commitment to providing healthcare services, adapting their efforts to different levels of intensity, available resources, and medical expertise. Simultaneously, hospitals remained receptive to incorporating advancements in medical sciences that were emerging from academic centers as the Middle Ages drew to a close.

In conclusion, as John Henderson eloquently articulated, “the hospital itself played a central role in the development of Renaissance medicine, a role that is often ignored by historians of medicine, who concentrate instead on the development of learning within the university world, the evolution of the medical profession or the careers of individual physicians”[45].

Bibliography and notes

Non-ISO4 abbreviations
Q St UniPd = Quaderni per la storia dell’Università di Padova
Ric st soc rel = Ricerche di storia sociale e religiosa

Websites:
Jehan Henry, Livre de vie active de l’Hôtel-Dieu de Paris: https://www.calameo.com/read/0040218272001b4dbfc02
St Gall plan: https://www.e-codices.unifr.ch/it/list/one/csg/1092

Printed primary sources & Studies
Agrimi J, Crisciani C, Carità e assistenza nella civiltà cristiana medievale. In: Grmek MD (ed.), Storia del pensiero medico occidentale. Vol. I, Antichità e Medioevo. Bari-Roma: Laterza; 1993. pp. 217-59.
Agrimi J, Crisciani C, Malato, medico e medicina nel Medioevo. Torino: Loescher; 1980.
Albini G, Città e ospedali nella Lombardia medievale. Bologna: Clueb; 1993.
Albini G, Ospedali e cibo in età medievale. In: I gusti della salute. Alimentazione, salute e sanità ieri e oggi. Atti del convegno (Silea, 13-14 maggio 2000). Reggio Emilia: Tecnograf; 2000. pp. 39-59.
Albini G, Pauperes recreare: accoglienza e aiuto ai poveri nelle comunità monastiche (secoli VI-XI). Hortus Artium Mediev 2017;23(1):490-99.
Allan N, Hospice to Hospital in the Near East: An Instance of Continuity and Change in Late Antiquity. Bull Hist Med 1990;64(3):446-62.
Banchi L (ed.), Statuti senesi scritti in volgare ne’ secoli XIII e XIV e pubblicati secondo i testi del Regio Archivio di Stato in Siena. Vol. III, Statuto dello Spedale di Santa Maria di Siena, 1318-1387. Bologna: Gaetano Romagnoli; 1877.
Beccaria A, I codici di medicina del periodo presalernitano (secoli IX, X e XI). Roma: Edizioni di Storia e Letteratura; 1956.
Bianchi F (ed), Teobaldo di Provins. Un ‘convertito’ tra Francia e Italia nell’età di Gregorio VII. Atti del convegno di studi (Vicenza e Badia Polesine, 19-20 ottobre 2012). Roma: Viella; 2013.
Bianchi F, Archivi e fonti per la storia degli ospedali urbani della terraferma veneta (secc. XIII-XV). In: Marino S, Colesanti GT (eds), Memorie dell’assistenza. Istituzioni e fonti ospedaliere in Italia e in Europa (secoli XIII-XVI). Ospedaletto: Pacini; 2019. pp. 83-131.
Bianchi F, Dal xenodochium all’hospitale. Origini e sviluppi delle istituzioni ospedaliere nel medioevo. In: Bianchi F, Silvano G (eds), Saggi di storia della salute. Medicina, ospedali e cura fra medioevo ed età contemporanea. Milano: FrancoAngeli; 2020. pp. 11-54.

Bianchi F, Il governo della carità. L'ospedale di San Francesco e il patriziato di Padova nel XV secolo. In: Maddalena C, Rippa Bonati M, Silvano G, Sanità, amministrazione e cura. La ricerca della salute a Padova tra pubblico e privato (sec. XV-XX). Milano: FrancoAngeli; 2013. pp. 11-43.
Bianchi F, La Ca' di Dio di Padova nel Quattrocento. Riforma e governo di un ospedale per l'infanzia abbandonata. Venezia: Istituto veneto di scienze, lettere ed arti; 2005.
Bianchi F, La carità come impresa nell'Italia tardomedievale. In: Vilar-Rodríguez M, Pons-Pons J (eds), Los hospitales y las pandemias en España e Italia desde una perspectiva histórica. San Vicente del Raspeig: Publicacions de la Universitat d'Alacant; 2022. pp. 57-90.
Bianchi F, La Repubblica di Venezia di fronte alla peste e la nascita dei primi lazzaretti. In: Basso P, Bruno D, Varanini GM, Annibaletto M (eds), Il Lazzaretto di Verona. Storia di un monumento cittadino. Milano: Skira; 2021. pp. 210-7.
Bianchi F, Network ospedalieri urbani nella pianura lombardo-veneta (secc. XII-XV). In: Piccinni G (ed.), Alle origini del welfare. Radici medievali e moderne della cultura europea dell'assistenza. Roma; Viella; 2020. pp. 225-48.
Bianchi F, Słoń M, Le riforme ospedaliere del Quattrocento in Italia e nell'Europa Centrale. Ric st soc rel 2006;69:7-45.
Brodman JW, Charity and Welfare: Hospitals and the Poor in Medieval Catalonia. Philadelphia: University of Pennsylvania Press; 1998.
Bullough V, A Note on Medical Care in Medieval English Hospitals. Bull Hist Med 1961;35(1):74-7.
Bylebyl JJ, The School of Padua: Humanistic Medicine in the Sixteenth Century. In: Webster C (ed.), Health, Medicine and Mortality in the Sixteenth Century. Cambridge: Cambridge University Press; 1979. pp. 335-70.
Conejo da Pena A, "Lum, noblesa, ornament, laor, glòria e amplitud": los hospitales y la renovada imagen de la ciudad bajomedieval. In: Huguet-Termes T, Verdés-Pijoan P, Arrizabalaga J, Sánchez-Martínez M (eds), Ciudad y hospital en el Occidente europeo, 1300-1700. Lleida: Milenio; 2014. pp. 415-45.
Cosmacini G, L'arte lunga. Storia della medicina dall'antichità a oggi. Bari-Roma: Laterza; 2011 (new, updated and expanded edition).
Cosmacini G, Storia della medicina e della sanità in Italia. Dalla peste europea alla guerra mondiale. 1348-1918. Bari-Roma: Laterza; 1998 (1st ed. 1987).
Cremascoli G (ed), San Gregorio Magno, Omilie sui Vangeli, Regola pastorale. Torino: UTET; 1968.
Crislip AT, From Monastery to Hospital: Christian Monasticism & the Transformation of Health Care in Late Antiquity. Ann Arbor: The University of Michigan Press; 2005.
Crotti R, Il sistema caritativo-assistenziale nella Lombardia medievale. Il caso pavese. Pavia: Cardano; 2002.
D'Andrea DM, Civic Christianity in Renaissance Italy: The Hospital of Treviso, 1400-1530. Rochester: University of Rochester Press; 2007.
D'Angelo E, Scuola medica salernitana. In: Federico II. Enciclopedia fridericiana. Vol. II. Roma: Istituto della Enciclopedia italiana; 2005. pp. 651-8.
D'Aronco MA, The Benedictine Rule and the Care of the Sick: The Plan of St Gall and Anglo-Saxon England. In: Bowers BS (ed.), The Medieval Hospital and Medical Practice. Aldershot-Burlington: Ashgate; 2007. pp. 235-51.

Darricau-Lugat C, Regards sur la profession médicale en France médiévale (XIIe-XVe). Cah. de Civilis Médiévale [on line] 1999;6. DOI: https://doi.org/10.4000/crm.939.

Delaville Le Roulx J (ed.), Cartulaire général de l'ordre des Hospitaliers de S. Jean de Jérusalem (1100-1310). Tome I, (1100-1200). Paris; Ernest Leroux; 1894.

Dols MW, The Origins of the Islamic Hospital: Myth and Reality. Bull Hist Med 1987;61(3):367-90.

Duranti T, Ammalarsi e curarsi nel medioevo. Una storia sociale. Roma: Carocci; 2023.

Edwards JC, Medical and Spiritual Healing of Death and Disease in Medieval Miracle Stories. In: Jones L, Varlık N (eds), Death and Disease in the Medieval and Early Modern World: Perspectives from across the Mediterranean and Beyond. Woodbridge: The University of York; 2022. pp. 177-200.

Esposito A, Rehberg A (eds), Gli ordini ospedalieri tra centro e periferia. Atti della giornata di studio (Roma, 16 giugno 2005). Roma: Viella; 2007.

Ferragud C, La introducción de los practicantes de la medicina en los hospitales del Reino de Valencia durante la Baja Edad Media. In: Huguet-Termes T, Verdés-Pijoan P, Arrizabalaga J, Sánchez-Martínez M (eds), Ciudad y hospital en el Occidente europeo, 1300-1700. Lleida: Milenio; 2014. pp. 305-24.

French R, The Medical Ethics of Gabriele de' Zerbi. In: Wear A, Geyer-Kordesch J, French R (eds), Doctors and Ethics: The Earlier Historical Setting of Professional Ethics. Amsterdam-Atlanta: Rodopi; 1993. pp. 72-97.

Gargan L, Studenti trevigiani a Padova fra Tre e Quattrocento: il lascito di Tommaso Salinguerra. Q St UniPd 1980;13:1-35.

Ghidetti E, Diana E (eds), La bellezza come terapia. Arte e assistenza nell'ospedale di Santa Maria Nuova a Firenze. Atti del convegno internazionale (Firenze, 20-22 maggio 2004). Firenze: Polistampa; 2005.

Grmek MD, Le médecin au service de l'hôpital médiéval en Europe occidentale. Hist Philos Life Sci 1982;4:25-64.

Henderson J, The Renaissance Hospital: Healing the Body and Healing the Soul. New Haven-London: Yale University Press; 2006.

Horden P, A Non-natural Environment: Medicine without Doctors and the Medieval European Hospital. In: Bowers BS (ed.), The Medieval Hospital and Medical Practice. Aldershot-Burlington; Ashgate; 2007. pp. 133-45.

Horden P, How Medicalized Were Byzantine Hospitals?. M&S 2005;10:45-74 (now also in Id., Hospitals and Healing from Antiquity to the Later Middle Ages. Aldershot: Ashgate; 2008).

Horden P, The Earliest Hospitals in Byzantium, Western Europe, and Islam. J Interdiscip Hist 2005;35(3):361-89.

Il Pellegrinaio dell'ospedale di Santa Maria della Scala. Atti della giornata di studi (Siena, 26 novembre 2010). Arcidosso: Effigi; 2014.

Jacquart D, Micheau F, La médecine arabe et l'Occident médiéval. Paris: Maisonneuve et Larose; 1990.

Jankrift KP, Herren Kranke, arme Siechen. Medizin im spätmittelalterlichen Hospitalwesen. In: Bulst N, Spiess K-H (eds), Sozialgeschihte mittelalterlicher Hospitäler. Ostfildern: Jan Thorbecke; 2007. pp. 149-67.

Kuuliala J, Saints, Infirmity, and Community in the Late Middle Ages. Amsterdam: Amsterdam University Press; 2020.

Le Blévec D, La part du pauvre. L'assistance dans les pays du Bas-Rhône du XIIe siècle au milieu du XVe siècle. Vol. II. Rome: École française de Rome; 2000.

McVaugh MR, Medicine before the Plague: Practitioners and their Patients in the Crown of Aragon, 1285-1345. Cambridge: Cambridge University Press; 1993.

Miller TS, The Birth of the Hospital in the Byzantine Empire. Baltimore-London: Johns Hopkins University Press; 1985.

Miller TS, The Knights of Saint John and the Hospitals of the Latin West. Speculum 1978;53(4):709-33.

Mitchell PD, The Infirmaries of the Order of the Temple in the Medieval Kingdom of Jerusalem. In: Bowers BS (ed.), The Medieval Hospital and Medical Practice. Aldershot-Burlington: Ashgate; 2007. pp. 225-34.

Moulinier-Brogi L, L'originalité de l'école de médecine de Montpellier. In: Leone A, Sangermano G (eds), La medicina nel Medioevo. La "Schola Salernitana" e le altre. Atti della giornata di studio (Salerno, 1 giugno 2002). Salerno: Civitas Hippocratica, 2003, pp. 111-26.

Naso I, Medici e strutture sanitarie nella società tardo-medievale. Il Piemonte dei secoli XIV e XV. Milano: FrancoAngeli; 1982.

Nicoud M, Governing Health: The Doctor's Authority, the Patient's Agency, and the Reading of Regimina sanitatis Literature. Early Sci Med 2023;28:8-33.

Palmer R, L'assistenza medica nella Venezia cinquecentesca. In: Aikema B, Meijers D (eds), Nel regno dei poveri. Arte e storia dei grandi ospedali veneziani in età moderna, 1474-1797. Venezia: Arsenale; 1989. pp. 35-42.

Park K, Doctors and Medicine in Early Renaissance Florence. Princeton: Princeton University Press; 1985.

Passerini L, Storia degli stabilimenti di beneficenza e d'istruzione elementare gratuita della città di Firenze. Firenze: Le Monnier; 1853.

Pauly M, Peregrinorum, pauperum ac aliorum transeuntium receptaculum. Hospitäler zwischen Maas und Rhein im Mittelalter. Stuttgart: Steiner; 2007.

Penco G (ed.), S. Benedicti Regula. Firenze: La Nuova Italia; 1958.

Pergola R, I luoghi del tradurre nel Medioevo. La trasmissione della scienza greca e araba nel mondo latino. Lecce: Pensa Multimedia; 2016.

Pilsworth C, Healthcare in Early Medieval Northern Italy: More to Life than Leeches?. Turnhout: Brepols; 2014.

Prescott E, The English Medieval Hospital, c. 1050-1640. London: Seaby; 1992.

Ragab Ah, The Medieval Islam Hospital: Medicine, Religion, and Charity. New York; Cambridge University Press; 2015.

Risse GB, Mending Bodies, Saving Souls: A History of Hospitals. New York-Oxford: Oxford University Press; 1999.

Sandri L, Ospedali e utenti dell'assistenza nella Firenze del Quattrocento. In: Pinto G (ed.), La società del bisogno. Povertà e assistenza nella Toscana medievale. Firenze: Salimbeni; 1989. pp. 61-100.

Saunier A, La vita quotidiana negli ospedali del Medioevo. In: Le Goff J, Sournia J-Ch (eds), Per una storia della malattia. Bari: Dedalo; 1986 (orig. ed. Paris 1985). pp. 235-46.

Silvano G (ed.), L'arte medica. La Scuola padovana e la medicina in Europa e nel mondo. Roma: Donzelli; 2022.

Siraisi NG, Medieval & Early Renaissance Medicine: An Introduction to Knowledge and Practice. Chicago-London: The University of Chicago Press; 1990.

Sironi VA, Ospedali e medicamenti. Storia del farmacista ospedaliero. Roma-Bari: Laterza; 2007.

Sordini B, Il cibo e la cura. In: Belli M, Grassi F, Sordini B, La cucina di un ospedale del Trecento. Gli spazi, gli oggetti, il cibo nel Santa Maria della Scala di Siena. Ospedaletto: Pacini; 2004. pp. 9-62.

Stolberg M, Bedside Teaching and the Acquisition of Practical Skills in Mid-Sixteenth-Century Padua. J Hist Med Allied Sci 2014;69(4):633-61.

Talbot CH, Hammond EA, The Medical Practitioners in Medieval England: A Biographical Register. London: Wellcome Historical Medical Library; 1965.

Wallis F (ed.), Medieval Medicine: A Reader. Toronto: University of Toronto Press; 2010.

1. For the drafting of this article, in addition to the studies and sources cited in the footnotes below, I mainly relied on the following general works: Grmek MD, Le médecin au service de l'hôpital médiéval en Europe occidentale. Hist Philos Life Sci 1982;4:25-64; Siraisi NG, Medieval & Early Renaissance Medicine: An Introduction to Knowledge and Practice. Chicago-London: The University of Chicago Press; 1990; Agrimi J, Crisciani C, Carità e assistenza nella civiltà cristiana medievale. In: Grmek MD (ed.), Storia del pensiero medico occidentale. Vol. I, Antichità e Medioevo. Bari-Roma: Laterza; 1993. pp. 217-59; Risse GB, Mending Bodies, Saving Souls: A History of Hospitals. New York-Oxford: Oxford University Press; 1999. pp. 69-165; Bianchi F, Dal xenodochium all'hospitale. Origini e sviluppi delle istituzioni ospedaliere nel medioevo. In: Bianchi F, Silvano G. (eds), Saggi di storia della salute. Medicina, ospedali e cura fra medioevo ed età contemporanea. Milano: FrancoAngeli; 2020. pp. 11-54; Duranti T, Ammalarsi e curarsi nel medioevo. Una storia sociale. Roma: Carocci; 2023.
2. Crislip AT, From Monastery to Hospital: Christian Monasticism & the Transformation of Health Care in Late Antiquity. Ann Arbor: The University of Michigan Press; 2005. pp. 8, 100.
3. Penco G (ed.), S. Benedicti Regula. Firenze: La Nuova Italia; 1958. pp. 115-7, 145-7; Cremascoli G (ed.), San Gregorio Magno, Omilie sui Vangeli, Regola pastorale. Torino: UTET; 1968. p. 139; Agrimi J, Crisciani C, Malato, medico e medicina nel Medioevo. Torino: Loescher; 1980. pp. 98, 100-5; Cosmacini G, L'arte lunga. Storia della medicina dall'antichità a oggi. Bari-Roma: Laterza; 2011. pp. 119-32; Albini G, Pauperes recreare: accoglienza e aiuto ai poveri nelle comunità monastiche (secoli VI-XI). Hortus Artium Mediev 2017;23(1):490-9.
4. Passerini L, Storia degli stabilimenti di beneficenza e d'istruzione elementare gratuita della città di Firenze. Firenze: Le Monnier; 1853. p. 894.
5. Dols MW, The Origins of the Islamic Hospital: Myth and Reality. Bull Hist Med 1987;61(3):367-90; Miller TS, The Birth of the Hospital in the Byzantine Empire. Baltimore-London: Johns Hopkins University Press; 1985 (whose conclusions, however, are criticized in: Horden P, How Medicalized Were Byzantine Hospitals?. M&S 2005;10:45-74); Horden P, The Earliest Hospitals in Byzantium, Western Europe, and Islam. J Interdiscip Hist 2005;35(3):361-89; Ragab Ah, The Medieval Islam Hospital: Medicine, Religion, and Charity. New York; Cambridge University Press; 2015.
6. Henderson J, The Renaissance Hospital: Healing the Body and Healing the Soul. New Haven-London: Yale University Press; 2006. p. 113.
7. Allan N, Hospice to Hospital in the Near East: An Instance of Continuity and Change in Late Antiquity. Bull Hist Med 1990;64(3):446-62; Miller TS, ref. 5. pp. 58-61, 63-6.

8. Agrimi J, Crisciani C, ref. 3. pp. 64-5, 85-94; Edwards JC, Medical and Spiritual Healing of Death and Disease in Medieval Miracle Stories. In: Jones L, Varlık N (eds), Death and Disease in the Medieval and Early Modern World: Perspectives from across the Mediterranean and Beyond. Woodbridge: The University of York; 2022. pp. 177-200.
9. Kuuliala J, Saints, Infirmity, and Community in the Late Middle Ages. Amsterdam: Amsterdam University Press; 2020.
10. Bianchi F (ed.), Teobaldo di Provins. Un 'convertito' tra Francia e Italia nell'età di Gregorio VII. Atti del convegno di studi (Vicenza e Badia Polesine, 19-20 ottobre 2012). Roma: Viella; 2013.
11. Beccaria A, I codici di medicina del periodo presalernitano (secoli IX, X e XI). Roma: Edizioni di Storia e Letteratura; 1956; Pilsworth C, Healthcare in Early Medieval Northern Italy: More to Life than Leeches?. Turnhout: Brepols; 2014. especially pp. 73-104.
12. Miller TS, The Knights of Saint John and the Hospitals of the Latin West. Speculum 1978;53(4):710-5; Grmek MD, ref. 1. pp. 32, 35.
13. D'Aronco MA, The Benedictine Rule and the Care of the Sick: The Plan of St Gall and Anglo-Saxon England. In: Bowers BS (ed.), The Medieval Hospital and Medical Practice. Aldershot-Burlington: Ashgate; 2007. pp. 235-51; Wallis F (ed.), Medieval Medicine: A Reader. Toronto, University of Toronto Press; 2010. pp. 94-7. The plant of St Gall (St. Gallen, Stiftsbibliothek, Cod. Sang. 1092) is available for online consultation: https://www.e-codices.unifr.ch/it/list/one/csg/1092.
14. Pergola R, I luoghi del tradurre nel Medioevo. La trasmissione della scienza greca e araba nel mondo latino. Lecce: Pensa Multimedia; 2016. Arabic medicine had absorbed and integrated the teachings of Hellenistic, Indian, and Chinese medical sciences, exerting a significant influence on Western medicine starting from the 11th century: Jacquart D, Micheau F, La médecine arabe et l'Occident médiéval. Paris: Maisonneuve et Larose; 1990; Cosmacini G, ref. 3. pp. 140-65.
15. Esposito A, Rehberg A (eds), Gli ordini ospedalieri tra centro e periferia. Atti della giornata di studio (Roma, 16 giugno 2005). Roma: Viella; 2007.
16. Delaville Le Roulx J (ed.), Cartulaire général de l'ordre des Hospitaliers de S. Jean de Jérusalem (1100-1310). Tome I, (1100-1200). Paris: Ernest Leroux; 1894. p. 426.
17. Miller TS, ref. 12. pp. 717-9; Wallis F (ed.), ref. 13. pp. 462-5, 473-7. Even the Templars included the use of specialized medical personnel: Mitchell PD, The Infirmaries of the Order of the Temple in the Medieval Kingdom of Jerusalem. In: Bowers BS (ed.), The Medieval Hospital and Medical Practice. Aldershot-Burlington; Ashgate; 2007. pp. 225-34.
18. Moulinier-Brogi L, L'originalité de l'école de médecine de Montpellier. In: Leone A, Sangermano G (eds), La medicina nel Medioevo. La "Schola Salernitana" e le altre. Atti della giornata di studio (Salerno, 1 giugno 2002). Salerno: Civitas Hippocratica, 2003. pp. 111-26; D'Angelo E, Scuola medica salernitana. In: Federico II. Enciclopedia fridericiana. Vol. II. Roma: Istituto della Enciclopedia italiana; 2005. pp. 651-8; Cosmacini G, ref. 3. pp. 167-87.
19. Darricau-Lugat C, Regards sur la profession médicale en France médiévale (XIIe - XVe). Cah de Civilis Médiévale [on line] 1999;6:§26-27. DOI: https://doi.org/10.4000/crm.939; Wallis F (ed.), ref. 13. pp. 363-5.
20. Duranti T, ref. 1. pp. 73-110.
21. Talbot CH, Hammond EA, The Medical Practitioners in Medieval England: A Biographical Register. London: Wellcome Historical Medical Library; 1965.

22. Bianchi F, Network ospedalieri urbani nella pianura lombardo-veneta (secc. XII-XV). In: Piccinni G (ed.), Alle origini del welfare. Radici medievali e moderne della cultura europea dell'assistenza. Roma; Viella; 2020. pp. 225-48; Pauly M, Peregrinorum, pauperum ac aliorum transeuntium receptaculum. Hospitäler zwischen Maas und Rhein im Mittelalter. Stuttgart: Steiner; 2007.
23. Saunier A, La vita quotidiana negli ospedali del Medioevo. In: Le Goff J, Sournia J-Ch (eds), Per una storia della malattia. Bari: Dedalo; 1986 (orig. ed. Paris 1985). p. 236.
24. Albini G, Ospedali e cibo in età medievale. In: I gusti della salute. Alimentazione, salute e sanità ieri e oggi. Atti del convegno (Silea, 13-14 maggio 2000). Reggio Emilia: Tecnograf; 2000. pp. 39-59; Ghidetti E, Diana E (eds), La bellezza. come terapia. Arte e assistenza nell'ospedale di Santa Maria Nuova a Firenze. Atti del convegno internazionale (Firenze, 20-22 maggio 2004). Firenze: Polistampa; 2005; Horden P, A Non-natural Environment: Medicine without Doctors and the Medieval European Hospital. In: Bowers BS (ed.), The Medieval Hospital and Medical Practice. Aldershot-Burlington; Ashgate; 2007. pp. 133-45; Conejo da Pena A, "Lum, noblesa, ornament, laor, glòria e amplitude": los hospitales y la renovada imagen de la ciudad bajomedieval. In: Huguet-Termes T, Verdés-Pijoan P, Arrizabalaga J, Sánchez-Martínez M (eds), Ciudad y hospital en el Occidente europeo, 1300-1700. Lleida: Milenio; 2014. pp. 415-45; Il Pellegrinaio dell'ospedale di Santa Maria della Scala. Atti della giornata di studi (Siena, 26 novembre 2010). Arcidosso: Effigi; 2014; Nicoud M, Governing Health: The Doctor's Authority, the Patient's Agency, and the Reading of Regimina sanitatis Literature. Early Sci Med 2023;28:8-33.
25. For examples of medical personnel employed by hospitals in various European cities, either on a regular or occasional basis, during the Late Middle Ages, see: Banchi L (ed.), Statuti senesi scritti in volgare ne' secoli XIII e XIV e pubblicati secondo i testi del Regio Archivio di Stato in Siena. Vol. III, Statuto dello Spedale di Santa Maria di Siena, 1318-1387. Bologna: Gaetano Romagnoli; 1877. p. 71; Bullough V, A Note on Medical Care in Medieval English Hospitals, Bull Hist Med 1961;35(1):74-7; Grmek MD, ref. 1. pp. 48-58; Park K, Doctors and Medicine in Early Renaissance Florence. Princeton: Princeton University Press; 1985. pp. 93-4, 101-6; Prescott E, The English Medieval Hospital, c. 1050-1640. London: Seaby; 1992. pp. 2-3, 71; McVaugh MR, Medicine before the Plague: Practitioners and their Patients in the Crown of Aragon, 1285-1345. Cambridge: Cambridge University Press; 1993. pp. 76, 199, 218-35; Brodman JW, Charity and Welfare: Hospitals and the Poor in Medieval Catalonia. Philadelphia: University of Pennsylvania Press; 1998. especially pp. 93-9; Darricau-Lugat C, ref. 19. § 39, 45; Le Blévec D, La part du pauvre. L'assistance dans les pays du Bas-Rhône du XIIe siècle au milieu du XVe siècle. Vol. II. Rome: École française de Rome; 2000. pp. 799-805; Henderson J, ref. 6. especially pp. 225-50, 286-335; Jankrift KP, Herren Kranke, arme Siechen. Medizin im spätmittelalterlichen Hospitalwesen. In: Bulst N, Spiess K-H (eds), Sozialgeschihte mittelalterlicher Hospitäler. Ostfildern: Jan Thorbecke; 2007. pp. 149-67; Cosmacini G, ref. 3. pp. 205-6; Ferragud C, La introducción de los practicantes de la medicina en los hospitales del Reino de Valencia durante la Baja Edad Media. In: Huguet-Termes T, Verdés-Pijoan P, Arrizabalaga J, Sánchez-Martínez M (eds.), Ciudad y hospital en el Occidente europeo, 1300-1700. Lleida: Milenio; 2014. pp. 305-24.
26. Henderson J, ref. 6. pp. 25-8 (quote from p. 28).
27. Grmek MD, ref. 1, pp. 43-6; Naso I, Medici e strutture sanitarie nella società tardo-medievale. Il Piemonte dei secoli XIV e XV. Milano: FrancoAngeli; 1982. pp. 32-3; Siraisi NG, ref. 1. p. 38.

28. Bianchi F, Archivi e fonti per la storia degli ospedali urbani della terraferma veneta (secc. XIII-XV). In: Marino S, Colesanti GT (eds), Memorie dell'assistenza. Istituzioni e fonti ospedaliere in Italia e in Europa (secoli XIII-XVI). Ospedaletto: Pacini; 2019. p. 89. For the case of Milan (the Brolo Hospital) at the end of the 13th century, see Albini G, Città e ospedali nella Lombardia medievale. Bologna: Clueb; 1993. p. 72; for the case of Lille (the Comtesse Hospital) in the 15th century, see Saunier A, ref. 23. p. 237.
29. McVaugh MR, ref. 25. p. 199.
30. Bianchi F, La carità come impresa nell'Italia tardomedievale. In: Vilar-Rodríguez M, Pons-Pons J (eds), Los hospitales y las pandemias en España e Italia desde una perspectiva histórica. San Vicente del Raspeig: Publicacions de la Universitat d'Alacant; 2022. pp. 57-90.
31. Late medieval documents related to healthcare and produced by Tuscan hospitals are discussed in: Sandri L, Ospedali e utenti dell'assistenza nella Firenze del Quattrocento. In: Pinto G (ed.), La società del bisogno. Povertà e assistenza nella Toscana medievale. Firenze: Salimbeni; 1989. pp. 61-100; Henderson J, ref. 6. pp. 162-5, 251-85.
32. Bianchi F, La Repubblica di Venezia di fronte alla peste e la nascita dei primi lazzaretti. In: Basso P, Bruno D, Varanini GM, Annibaletto M (eds), Il Lazzaretto di Verona. Storia di un monumento cittadino. Milano: Skira; 2021. pp. 210-7.
33. Bianchi F, Słoń M, Le riforme ospedaliere del Quattrocento in Italia e nell'Europa Centrale. Ric st soc rel 2006;69:7-45.
34. Sironi VA, Ospedali e medicamenti. Storia del farmacista ospedaliero. Roma-Bari: Laterza; 2007. pp. 21-30.
35. Cosmacini G, Storia della medicina e della sanità in Italia. Dalla peste europea alla guerra mondiale. 1348-1918. Bari-Roma: Laterza; 1998 (1st ed. 1987). p. 60.
36. Crotti R, Il sistema caritativo-assistenziale nella Lombardia medievale. Il caso pavese. Pavia: Cardano; 2002. pp. 180-3 (quotes from pp. 180, 183).
37. Silvano G (ed.), L'arte medica. La Scuola padovana e la medicina in Europa e nel mondo. Roma: Donzelli; 2022.
38. Bianchi F, La Ca' di Dio di Padova nel Quattrocento. Riforma e governo di un ospedale per l'infanzia abbandonata. Venezia: Istituto veneto di scienze, lettere ed arti; 2005. pp. 94-5; Bianchi F, Il governo della carità. L'ospedale di San Francesco e il patriziato di Padova nel XV secolo. In: Maddalena C, Rippa Bonati M, Silvano G, Sanità, amministrazione e cura. La ricerca della salute a Padova tra pubblico e privato (sec. XV-XX). Milano: FrancoAngeli; 2013. pp. 37-8; Stolberg M, Bedside Teaching and the Acquisition of Practical Skills in Mid-Sixteenth-Century Padua. J Hist Med Allied Sci 2014;69(4):633-61.
39. Bylebyl JJ, The School of Padua: Humanistic Medicine in the Sixteenth Century. In: Webster C (ed.), Health, Medicine and Mortality in the Sixteenth Century. Cambridge: Cambridge University Press; 1979. p. 348.
40. Palmer R, L'assistenza medica nella Venezia cinquecentesca. In: Aikema B, Meijers D (eds), Nel regno dei poveri. Arte e storia dei grandi ospedali veneziani in età moderna, 1474-1797. Venezia: Arsenale; 1989. p. 41.
41. Wallis F (ed), ref. 13. pp. 466-71. The manuscript is available for online consultation: https://www.calameo.com/read/0040218272001b4dbfc02.
42. French R, The Medical Ethics of Gabriele de' Zerbi. In: Wear A, Geyer-Kordesch J, French R (eds), Doctors and Ethics: The Earlier Historical Setting of Professional Ethics. Amsterdam-Atlanta: Rodopi; 1993. p. 83.

43. Gargan L, Studenti trevigiani a Padova fra Tre e Quattrocento: il lascito di Tommaso Salinguerra. Q St UniPd 1980;13:1-35; D'Andrea DM, Civic Christianity in Renaissance Italy: The Hospital of Treviso, 1400-1530. Rochester: University of Rochester Press; 2007. pp. 87-9, 119-27.
44. Sordini B, Il cibo e la cura. In: Belli M, Grassi F, Sordini B, La cucina di un ospedale del Trecento. Gli spazi, gli oggetti, il cibo nel Santa Maria della Scala di Siena. Ospedaletto: Pacini; 2004. note 23 on pp. 13-4.
45. Henderson J, ref. 6. p. 225.