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Analyzing the Role of Phlebotomy in Medieval Europe

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The majority of Medieval medical knowledge was based on information which scholars and medical practitioners learned from historical Greek and Latin texts. The humoural traditions of scholars such as Hippocrates, Galen, and Avicenna were particularly influential and formed the basis for understanding not only illness and the human body, but emotions, moods, and more psychological aspects of health. In order for an individual to be healthy, the humours must be in balance, a state commonly maintained or achieved by bloodletting, or phlebotomy. In the context of Medieval society and the prevalent Classical understandings of the body and soul, phlebotomy, though not without its risks, was the most common and most logical solution to physical and psychological illnesses.

Bloodletting, unlike other types of surgery, such as cautery, was a common practice across all strata of society, and was one of the "most frequently used forms of general therapy" (Siraisi 1990, 139). In fact, by 1450, "bloodletting was applied to just about every kind of medical problem, from toothaches and melancholy to fevers" (Gottfried 1986, 236). Phlebotomy was such a part of the public consciousness that, as Nancy Siraisi (1990, 121) claims, the "entire population was sensitive as to when bloodletting should be performed." Monks, kings, and peasants all considered regular bloodletting necessary to good health, and most trusted barbers, not physicians or surgeons, to safely remove blood. Physicians and surgeons generally considered it below their position to perform such a common practice (Gil-Sotres 1994, 120). Bloodletting was common during foreign travels, including during pilgrimages and the Crusades. Stations were set up along major travel routes and in occupied cities. In St. John's hospital in Jerusalem, patients, as well as the knights, sergeants, and clergy of the Order of St. John, underwent regular bloodletting to maintain good health and cure diseases (Mitchell 2004, 195-196). Another example of this can be seen in an incident that took place on 7 November
An emissary arrived that day to discuss a truce between Sultan Saladin and King Richard. Although there is no mention that the King was ill, he still refused an audience because he had just been bled. The bloodletting, therefore, may have been preventive (Mitchell 2004, 196). Bloodletting was also used to cleanse after a long trip, as in 1241 when Emperor Frederick of Germany ordered that his ally be "gently and mildly treated with blood letting, baths, and divers medicinal formentations to restore his strength" (Mitchell 2004, 196). Bloodletting, then, was a common practice and, indeed, must have flourished, as inventories of barbers from the 14th century record an abundance and diversity of surgical instruments (Gil-Sotres 1994, 148).

Bloodletting was conducted based on the idea that humours existed in the body, a theory that reflected the important role of bodily fluids in Classical and Medieval physiology, diagnosis, and therapy (Siraisi 1990, 97). Galen was particularly important in how Medieval practices and ideas developed, though his theories had themselves been affected by the corpus of Hippocratic texts present at the time (Brain 1986, 6). The primary motivator in his health practices involved maintaining a balance between the four humours—yellow bile, black bile, blood, and phlegm. Each humour was intimately connected to one of the four elements, which Aristotle believed existed and formed the basis of life (air, water, fire and earth). Galen and others, including Hippocrates, constructed their understanding of the body in relation to this idea about the four elements, as well as in relation to other dominant conceptions and values of the time (Brain 1986, 6). In order for the humours to make logical sense within the Classical understanding of reality, they had to match the number of elements and qualities to which they were ascribed (Siraisi 1990, 105). This is why it was believed that there were four humours. In addition, each of the humours was believed to share the qualities of the elements: yellow bile was hot and dry, black bile was cold and dry, blood was hot and damp, and phlegm was cold and damp (Brain 1986, 7).
Bloodletting, then, was meant to make sure that the humours were balanced. As practiced in Medieval Europe, it was a result of a combination of Classical knowledge, as suggested above, as well as ignorance and perceived logic. Medieval Europeans based much of their medical philosophy on historical tracts. Little of their medical knowledge was developed in western Europe; rather, it was drawn from Classical sources and Arabic investigations (Siraisi 1990, 1). During the early Middle Ages, some simple phlebotomy tracts were distributed; however, it was not until the middle-to-late Middle Ages that texts became relatively common (Siraisi 1990, 140). By the fifth century, Greek medical tracts and compilations, including some Hippocratic and Galenic texts, were being translated into Latin and were reprinted in subsequent centuries (Brain 1986, 6). The respect for previous texts is clear, for example, in Gyer's 1592 pamphlet, *The English Pamphlet*. Throughout the work, Gyer (1592, 123) consistently refers to Galen and other Classical and Arabic authors, borrowing their authority to support his own credibility. The growing number of translations over the next centuries, particularly in the latter part of the Middle Ages and primarily originating in the south of Italy and Toledo, greatly enhanced the amount of knowledge and systemization surrounding the Galenic tradition (Gil-Sotres 1994, 112). The works of Haly Abbas, Avicenna, Albucasis, Galen, and the Hippocratic corpus provided practical information about bloodletting, and were often translated into vernacular languages so that barbers, who were literate but not as well educated as professionally trained physicians, could understand them (McVaugh and Voigts 1984, 16). Judging by the number of manuscripts, which still exist, instructional phlebotomy texts were quite common in Medieval times (Gil-Sotres 1994, 112). The role of the medical practitioner, thus, was not to revolutionize medicine; rather, they were responsible for "understanding, interpreting, and passing on an existing tradition of learning" (Siraisi 1990, 97).

Ignorance and logic also contributed to Medieval medical knowledge and the practice of bloodletting. There was no way of accurately seeing and measuring bacteria or viruses; indeed, the very idea that such things existed was entirely absent. As a result, medical knowledge was limited to fitting
what could be observed about bodily fluids and the body into understandings of other parts of the natural and spiritual world. Aristotle's idea of the four elements, therefore, was transferred onto the body, as seen above (Siraisi 1990, 97).

Thus, drawing heavily on previous knowledge, illness in Medieval Europe was understood to be caused by an excess or shortage of one of more humours. These illnesses could be either physical or mental; even emotions were not exempt. This can be seen, for example, in the varied emotional troubles bloodletting was believed to solve, as described in Gyer's 1592 pamphlet, *The English Phlebotomy*. Bloodletting

maketh glad those that are pensive. Secondly, it appeaseth such as are angrie. Anger is especially caused through mixture of much yellow choler with bloud. And sadnesse, by commixture of much Melancoly with blood...Thirdly, it preserveth love-sicke persons, from madnesse, by drawing humors from the head to the lower partes, and so expelling the same. (Gyer 1592, 36)

The removal of blood, which contained all four humours, could, therefore, prevent emotional distress or physical illness from befalling the patient, or return the patient to good health.

Bloodletting was also used to diagnose health. By examining the evacuated blood—how it flowed from the vein, its color, odor, and substance, and the manner in which it clotted—the physician could draw conclusions about the patient's health (McVaugh and Voigts 1984, 6). The way the blood separated into layers was evidence of illness as well, and bloodletters recommended paying close attention to "an unearthly and filthy substance" appearing once the blood had settled. Based on their observations, the practitioner could estimate the nature and amount of the humour that was mixed with the blood (Gyre 1592, 256). Even taste might have indicated that the blood contained an illness.

Gyer (1592, 257) noted that "No man doth willingly tast detracted bloud, but if by chaunce it come into the mouth, and doo tast sweet, it is according to nature, good, and of perfect concoction." On the other hand, "If it bee bitter in tast, it sheweth abundance of choller: if it be sowre, sharpe, and restringent, it denotateth abundance of melancholy: if unsavery, abundance of flegme" (Gyer 1592, 257). Medieval
medical practitioners used whatever observational powers they had at their disposal to determine the
presence of an illness.

Bloodletting, however, was not something to be done haphazardly. Many guidelines governed
the practice of bloodletting. Children under a certain age, the elderly, pregnant women, the critically ill,
and those suffering from certain specific ailments were advised against being bled (McVaugh and
Voigts 1984, 6). The time of day, seasons, and moon phases were important as well, and were thought
to have a significant impact on the success of the bloodletting. If, for example, it was cold, the blood
would be viscous and the thick blood, or good blood, would be more likely to be removed than the thin,
bad blood (McVaugh and Voigts 1984, 57). As well, by the late Middle Ages, the role of astrology in
determining appropriate times to let blood had increased dramatically (Carey 2004, 346). The
importance of timing in bloodletting can be seen in the fact that, if barbers or other medical
practitioners killed someone through bloodletting, their guilt was exacerbated by whether or not blood
had been let at what were considered dangerous times of the year. If found guilty, and if the victim
were a servant, the practitioner would have to repay the servant's owner. If the victim had been a free
person, the practitioner would be hung (Mitchell 2004, 197). Medical, astronomical, and astrological
information were often in the same text. Alternatively, such texts were contained in the same
manuscript collection, pointing to "the way in which the disciplines supported each other, at least in the
minds of some compilers" (Carey 2004, 346).

The parts of the body that blood should be let from was also important. Phlebotomy fell into two
major categories: derivation, where blood was let at a point close to the affected area, and revulsion,
where the blood was let at the most remote point possible (Gil-Sotres 1994, 110). As well, most
illnesses and organs had corresponding veins; for "disorders of the spleen," for example, "bleeding is
advocated from salvatilla of the left arm"(McVaugh and Voigts 1984, 60). These understandings of the
human body reflect the belief of both Galen and his Medieval followers that the practice and success of
bloodletting was not as reliant on an understanding of the anatomical structure of the network of veins itself, as it was on the process of blood moving through the veins (Gil-Sotres 1994, 134). Therefore, the question of the intrinsic relationship of various venesection points to specific organs was of primary importance when deciding where to let blood.

To Medieval Europeans, bloodletting was not only a logical practice, but necessary to good health. The balance of black bile, yellow bile, phlegm, and blood was thought to dictate one’s physical and psychological health; therefore, keeping these humours in proper balance was a matter of life or death. This Classical understanding of the world, elements, and the body, originally developed by Galen and others, was transmitted to Medieval medical practitioners through Latin and Arabic translations. In western Europe, bloodletting gained a foothold as the primary therapeutic treatment. Although the practice may seem barbaric and nonsensical to the light of later scientific discoveries, bloodletting was, for the population of Europe during the Middle Ages, a purely logical and normal method of maintaining good health.
References


