Unguaranteed Remedies: A Material History of Medicines in Seventeenth-Century England

Abstract

This article studies the medicines and medical community in a disease-ridden context by examining an array of sources from seventeenth century England. I chose the seventeenth century as the field of this research, particularly because plague eruptions frequently occurred in England throughout this period of time. The article is a material-culture history because it is built around medicines' materiality, distinct characters, manufacturing, and retailing. This article contends that seventeenth-century English medicines reflected the general stagnation in the development of medical ideas and serious divisions within the medical community. People’s preoccupation with scents indicated their reliance on ancient doctrines, and the lack of consensus regarding manufacturing methods showed rifts within the medical community. The disputes also extended to medicine-selling, as two prominent professions of the medical industry, the physicians and apothecaries, antagonized each other due to profit conflicts in the medical market. The unclear ideas, endless disputes, lack of consensus, and the poor effects of medicines reflect a stagnated and chaotic era during which medicines were a powerful source of controversy.

In the early modern period medicines have always been perceived as mysterious and occult this was especially true in early modern contexts lacking sufficient knowledge about the nature of medical ingredients and processing techniques, the effects of early modern medicines remained unstable and hardly predictable. As such, there were always debates and controversies about medicines

In her essay on the necessity of material culture research, Leora Auslander defines material culture as “extra-linguistic,” a form of expression with the unique ability to demonstrate the past.[[1]](#footnote-0) Early modern medicines perfectly fit into the category of material culture: their materiality not only tells us about them, but also encapsulates the beliefs of and relations between their producers, traders, and consumers. The tangibility, distinct character, manufacturing processes, and their nature as commodities make it particularly intriguing for us to approach medicines from a material-culture perspective, for popular understandings and social relations were built upon the materiality of medicines themselves.

I intentionally chose seventeenth-century England as plagues were rampaging through England during this period. Between the beginning of the seventeenth century until 1665, there were more than five waves of plague that occurred in England. The most severe were the eruptions in 1603, 1625, and 1665, with the plague of 1665 being the most deadly, wiping out almost one fifth of London’s total population. As Stephen Porter’s said , “living in the seventeenth century was ‘living with the plague.’”[[2]](#footnote-1) In such a disease-ridden environment, medicines retained an essential place in people’s life. Opinions, debates and speculations were developed regarding their nature and efficacy, and remained popular throughout the century.

The historiography of this topic is quite prolific, yet historians seldom approach plagues and medicines from the material-culture perspective. Raymond Stanley Roberts’ thesis might be one of the early analyses written in 1964, it provides important insights into the making and retailing of medicines and the social conflicts stemming from medicines in Tudor and Stuart England.[[3]](#footnote-2) It was not until recently that more historians began to address the plague history from a material-culture perspective, two historians who have researched this are Susan North and Patrick Wallis. In her 2020 monograph, Susan North analyzed materiality and hygiene in the context of early modern England. She argues that the early modern standard of hygiene was generally marked by two characteristics, a sweet odor and visible cleanliness. The pursuits of these two characteristics shaped early modern people’s material life;[[4]](#footnote-3) Patrick Wallis’ 2021 article primarily analyses the rich material features in apothecary shops and the purpose behind their installations, arguing that because early modern medicines were neither stable nor effective, the apothecaries intentionally invested in fancy tools and furniture to gain trust from customers.[[5]](#footnote-4)

By examining an array of seventeenth century sources ranging from medical pamphlets to satires, novels, and proclamations, this essay discusses medicines’ materiality and the medical community’s interactions in three sections. The first section deals with a common character of seventeenth century English medicines: distinct scents. I will attempt to trace the origin of this feature and argue that the preoccupation with scents indicates seventeenth century people’s reliance on ancient medical knowledge. The second part presents the two main branches of manufacturing techniques in seventeenth century England, compound methods and chemical methods, and how these two branches of thought created a long-lasting and polarized debate within the medical community. The last section explores the sale of medicines, with particular emphasis on the conflict of interests between the two largest groups of medical sellers in seventeenth century England: physicians and apothecaries. In general, this article contends that seventeenth century medicines reflect the stagnated development and deep fissures in the English medical community People’s preoccupation with scents indicates that ancient pharmacology consistently occupied an important place throughout the century, the growing popularity of chemical medicines triggered debates between conservative and progressive medical practitioners, and a consensus was never reached, and in the retail industry, conflicts were occurring between physicians and apothecaries. The two professions contested each other for the rights to medicine sales, which made the medical community more chaotic, and divided and possibly hindered the development of medical ideas.

**Preoccupation With Scents**

From spicing foods to perfuming clothes, scents constituted a major part of early modern people’s material life. As knowledge of hygiene and health remained scarce, scents were deemed to be the most effective indicators of cleanliness and freshness. This reliance upon scents was strongly reflected in the medicinal aspect: it was believed that pungent, sweet scents purify the environment, and bad scents signal illness. Since scents no longer occupy an equally important place in modern society, we tend to neglect their once dominant roles in the early modern material world. Mark Jenner argued that we are living in a world where smells matter less and where the cultural significance of tastes, scents and odors has declined dramatically compared to the early modern era.[[6]](#footnote-5) In this context, we need to actively pay more attention to the scents of seventeenth-century medicines to better appreciate the early modern people’s understanding of medicines.

In the British isles, scents were strongly emphasized during the disease-ridden seventeenth century. English novelist Daniel Defoe’s *A Journal of The Plague Year* offers a hilarious yet realistic depiction of people’s sensitivity to scents during the bubonic plague of 1665:

Once in a public day, whether a sabbath day or not I do not remember, in Aldgate Church in a pew full of people, on a sudden, one fancied she smelt an ill smell, immediately she fancies the plague was in the pew, whispers her notion or suspicion to the next, then rises and goes out of the pew. It immediately took with the next, and so to them all… This immediately filled everybody’s mouths with one preparation or other, such as the old woman directed, and some perhaps as physicians directed, in order to prevent infection by the breath of others… In a word, the whole church was like a smelling-bottle; in one corner it was all perfumes; in another, aromatics, balsamics, and variety of drugs and herbs…[[7]](#footnote-6)

Defoe’s narration epitomizes seventeenth century Londoners’ trust upon scents, as well as their belief in scents’ ability to expose disease and interrupt transmission. Cures with strong scents can be frequently found in seventeenth century sources, and many of these are sweet. In Defoe’s eyewitness account, a nurse “snuffed vinegar up her nose” to prevent infection[[8]](#footnote-7) andsome butchers in markets “would not touch the money, but have it put into a pot full of vinegar”.[[9]](#footnote-8) Outside of Defoe’s novel, an array of sweet things could be discovered in seventeenth century medical books and prescriptions. When a bubonic plague outbreak occurred in 1603, King James I’s *Plague Order* suggested that people carry “some things of sweet savor” or “a sponge dipped in vinegar and rosewater” to purify the surrounding air.[[10]](#footnote-9) A pamphlet printed in 1665 instructed people to use “sweet smelling perfumes daily four or five times” to correct the air condition inside houses.[[11]](#footnote-10) Materials with sweet scents were applied for medicinal use, either as medicines or ingredients of medicines.

In her book on hygiene in early modern England, historian Susan North asserts that the English people saw sweetness as proof of the removal of filth.[[12]](#footnote-11) But sweetness is not the only scent they were fascinated with. Seventeenth century sources also indicate that people used pungent scents as cures for epidemics. For instance, onions were pervasively prescribed as medical ingredients or cures for diseases. A late 16th century pamphlet extravagantly claimed that by laying three peeled onions on the ground, the infection in the whole neighborhood would be absorbed.[[13]](#footnote-12) In Defoe’s account, a grave digger in London “[held] garlic and rue in his mouth” to prevent being infected during the plague of 1665.[[14]](#footnote-13) Some Londoners also attempted to burn things with sulfurous articles, as they believed that the pungent smells emanating from burning would help purify the air inside patients’ houses.[[15]](#footnote-14)

Why were scents so emphasized in seventeenth century England? The answer might be related to their reliance on ancient medical knowledge. In England, and arguably all of Europe, the Greek medical theories still influenced the seventeenth century medical sphere, most notably through the Hippocratic and Galenic theories. Greek physician Hippocrates attributed unhealthy conditions of human bodies to the imbalance of four humours: blood, phlegm, yellow bile and black bile.[[16]](#footnote-15) Galen elaborated on this theory, combining the four humours with four seasonal stages.[[17]](#footnote-16) Seventeenth-century English sources indicate that Hippocrates and Galen were well respected by many medical practitioners at that time. In many medical pamphlets, sections would be dedicated to explaining their theories and prescriptions, and the authors would cite the Greek medical pioneers as their source of inspiration. Medical practitioners’ general respect for Hippocrates and Galen’s theories largely led to the pervasive reliance upon scent-based and taste-based medicine. A 1687 pamphlet directly cited Hippocrates, Galen, and the theory of body humours as the root of taste-based medicines:

The design of this essay, is, to vindicate the art of curing diseases… by describing the tastes and odors of medicines, and also of animal humours, for by these, medicines were first discovered… and by the observation of the agreement and contraries betwixt the taste of humour in body, and the medicine, it was easy for physicians to infer that by the medicine of the same taste, the humours of the body are preserved; and by the contrary taste in medicine, they are altered and corrected. These are the true fundamental rules of physics, built on the testimony of our senses…[[18]](#footnote-17)

North drew the same conclusion. She suggests that the belief in sweetness as a sign of cleanliness was deeply rooted in Hippocrates’ works: Hippocrates recognized the contaminated air as the cause of infection and advised physicians to perfume themselves with a sweet odor.[[19]](#footnote-18) While North’s research emphasized the significance of “sweetness” in the early modern concept of hygiene, what is indicated by the seventeenth-century English medicines is a general character of strong scents, ranging from sweetness and pungency to other distinct odors. It is difficult to pinpoint the exact origin of scent-based medical practices, but the sources indicate that Hippocrates and Galen had immense and consistent impacts on the medical practices and beliefs in seventeenth-century England.

As an invisible character, scents and odors had been quite overlooked in the 20th century historiography of material culture. Historians’ attention to scents has been absent, as Jenner argues since the urban environments in Europe have been profoundly modified over the last few hundred years.[[20]](#footnote-19) In our deodorized and hygienic environment, historians have turned their attention away from scents despite them constituting an essential part of seventeenth-century contemporaries’ medical understanding and practices. These attributes could help us better appreciate the early modern people’s understanding of medicines — an understanding firmly based on humoral theory. Although the ancient instructions about scents were still accepted and followed universally by the English medical community in the seventeenth century, the growing popularity of new manufacturing methods would drag them into a century-long debate, as I shall discuss in the next section: while conservative practitioners stood their ground, some reformers steered away from archaic doctrines, approaching medicine-making from a new angle.

**The Manufacture of Medicines**

The methods of drug-making were a highly debated topic in seventeenth-century England. It triggered century-long quarrels within the medical community, the members of which found it increasingly difficult to resolve their differences in manufacturing methods.[[21]](#footnote-20) At the beginning of that century, compound medicines were England's most common and traditional medicines. Their manufacture involves the mixture of single medical materials into compositions. Medicine makers refer to the ingredients as “simples”, and the products as “compounds”. It was believed that by mixing ingredients into compounds, the medicine would have better effects in treating patients. In a 1657 medical pamphlet, the author praised the necessity and benefits of compound methods straightforwardly:

If simples onely could preternaturally cure all affections, there would be no need of Compounds; but this no simple can do. The use of composition in medicine is necessary, especially for such diseases as require at once contrary faculties in medicaments, which can not be in simples.[[22]](#footnote-21)

The compound methods were also known as the Gallenic methods since Greek physician Galen was regarded as the chief contributor of the compound methods. Specifically, compound methods include techniques such as mortaring, grinding, decocting, conditing, mixing and more, by which multiple ingredients, or “simples”, could be disposed of and mixed physically into a compound product. Compiled by English apothecary Nicholas Culpeper in 1649, the following instructions on the making of a sort of cordial water might give us a glimpse of the compound medicine’s manufacturing process:

Take Angelica leaves half a pound, Carduus leaves six ounces, balm, and sage, of each four ounces, Angelica seeds six ounces, let the herbs be dry and the seeds be bruised grossly, to which added the powders of Aromatieum Rosatum, and Diamosen Dulce, of each an ounce and an half, infuse these two in 32 pints of Spanish wine…[[23]](#footnote-22)

Compound medicines would be challenged by a different set of methods. With the application of chemical concepts, the manufacturing methods of medicines began to proliferate in the late sixteenth century.[[24]](#footnote-23) By the mid-seventeenth century, chemical medicines had gained substantial ground and supporters in England. While compound methods involve physical techniques, such as battering or grinding, chemical methods were developed from alchemical practices. Swiss alchemist Paracelsus was presumed to be an originator of chemical medicines, Paracelsus rejected the classical theory of four humours which compound medicines were based upon and instead proposed a theory of three chemical elements.[[25]](#footnote-24) Consequently, metal and mineral materials played important roles in making chemical medicines, processed by high-temperature techniques such as heating and distillation. Once again, we can find an example of chemical medicine manufacturing in Culpeper’s pamphlet. He introduced the following steps for the production of “Turbith Mineral,” which was used as a sort of medicinal precipitate:

Take of crude mercury, oil of vitriol separated from the flegm of each equal part, put them into a phial, which being placed first of all in hot ashes, then fire being added by degrees… a white mass remaining in the bottom which being separated from that portion of crude mercury, let it be put into rain water or else distilled water, and forth with it will come yellow… then dried and kept.[[26]](#footnote-25)

As the above instruction shows, chemical methods were signaled by the utilization of mercury, salt and sulfur, which were deemed by alchemists to be the three essential elements. The processing techniques, often involving the use of fire or heat, also differentiate chemical manufacture from compound manufacture, which was highlighted by physical techniques such as mixing and battering.

The increasing popularity of chemical methods in seventeenth century England caused long-lasting antagonism between conservatives and reformers within the medical industry. On one hand, many physicians maintained a conservative attitude in regards to chemical methods. They did not believe in the effectiveness of chemical medicines and stood firmly behind Gallenic doctrines. As a firm supporter of compound methods, physician John Floyer expressed his contempt to chemical methods and medicines in 1687: “The true fundamental rules of physicks [are] built on the testimony of our senses, and not on the whims of chemists.”[[27]](#footnote-26)

Conversely, some progressive practitioners were quite open to chemical methods. They constantly criticized Gallenic physicians’ conservatism and backwardness. Nicholas Culpeper, once a member of the Society of Apothecaries, wrote in his pamphlet that England was manipulated by some domineering physicians, “whose wits were born above five hundred years before themselves,” and some physicians’ specialties were “in prints before he (they) were born,” criticizing physicians for their unwillingness to step away from Galenic theories and compound methods.[[28]](#footnote-27) George Acton, an advocate of chemical medicines, published a letter in 1670 in response to Galenist physicians’ critiques, claiming that the theory of four humours “are but remote principles,” which continuously showed their backwardness in comparison to the chemical theory of three elements. He asserted that “by the help of fire, we [chemist physicians] make medicines easily curing those obstinate diseases you [Galenist physicians] esteem incurable”.[[29]](#footnote-28) Acton even went far to assert that if Galen himself was alive, he would recognize chemical medicines as cures of greater efficacy.[[30]](#footnote-29)

The two sets of medicine-manufacture methods, compound methods and chemical methods dominated the medicine industry of England during the 1700s. Established upon different theories, the manufacture of compound medicines and chemical medicines showed different processing techniques and preferences for materials. They represent separate ideologies in coping with hygienic problems and diseases and reflect the tensions within the medical industry in a disease-ridden century, which were enduring without a consensus.

**The Retailing and Consumption of Medicines**

At the beginning of the seventeenth century, various occupations were involved in distributing and selling medicines. While the physicians were considered to be the most legitimate prescribers, grocers and apothecaries also took part in the distribution of medicinals. Grocers were quite active in selling medicinals in the first decade of the seventeenth century, as they routinely sold a range of item, from food to simple medicinal ingredients.[[31]](#footnote-30) Their ability to sell was halted in 1619, as an official settlement ruled that apart from physicians, only apothecaries would be the retailers of all medical products and a few dangerous substances.[[32]](#footnote-31) From this point onward, physicians and apothecaries would dominate the stage of medicine retailing in seventeenth century England.

Instead of vending products mobily in the streets, the seventeenth century apothecaries’ business activities were firmly based in their apothecary shopsWallis has well explored the early modern apothecary shops and medicine consumption in his research. He stressed that the seventeenth-century apothecaries tended to cluster in certain areas, building their shops close to each other. A famous example would be the parishes of St. Benet and St. Stephen Walbrook in London, where in 1666, twenty-two percent of the residents were apothecaries.[[33]](#footnote-32)

Seventeenth-century apothecary shops had standard equipment. Containers such as cans and drug jars were neatly placed on the shelves, and the shops possessed a variety of medicine-making tools such as pestles and distillers. The rich amount of standard equipment and the neat designs of the apothecary shop could be understood in different ways, as Wallis puts it: “its richness assured credit and respectability; its permanence was a signifier of quality, and the ordered jars and selected exotica emphasized skill and knowledge, rebuffed accusations of bad drugs and hidden contamination.”[[34]](#footnote-33)

It is noteworthy that as a major group of vendors of medicines in seventeenth century England, the apothecaries had been stigmatized by physicians, their business competitors, as profit-seeking quacks. Not only were apothecaries frequently criticized by some conservative physicians for their acceptance of chemical medicines, but they were also attacked by physicians due to conflicts in financial interest. The physicians, who often had obtained university degrees and came from a richer social milieu, saw apothecaries as their subordinates and sometimes even considered them illegal practitioners. Although apothecaries had gained substantial rights by the late 1610s, their dependency upon physicians was still required in official documents. On August 4th 1620, James I issued a royal proclamation to set up the Company of Apothecaries of London, separating English apothecaries’ business from that of the grocers. The proclamation stipulated that the apothecaries have exclusive rights to sell medicines within seven miles of London, yet the Company of Apothecaries “should have a special relation and dependency upon the College of Physicians”, and prescribe medicines strictly based on a book compiled by the College of Physicians.[[35]](#footnote-34) The rights in retail granted to apothecaries buried the seeds for future conflicts, as physicians and apothecaries increasingly found their business spheres overlapping. The fissures between these two professions are reflected in various seventeenth-century sources.

Thomas Coxe, a renowned physician and member of the College of Physicians, was a tough critic of apothecaries’ practices in the late seventeenth century. His 1669 pamphlet encapsulated some contemporary physicians’ antagonism against apothecaries:

*Now there are many things whereof most apothecaries are highly guilty, as carelessness, unskillfulness, unfaithfulness on the one hand, and intrusion into the physicians’ employment on the other*.[[36]](#footnote-35)

Negative portraits of apothecaries could also be seen in popular literature. 1697 satire by Thomas Brown entitled *Apothecary Turned Doctor — A Comedy Acted Every Day In Most Apothecaries Shops In London* revealed this contemptuous sentiment. The satire begins with a physician, named Dr. Galen, complaining to his friend about apothecaries invading his business:

Every ignorant apothecary assumes the cure, and pretends to know more than the learnedest physician of us all.[[37]](#footnote-36)

Then four apothecaries entered the scene: Tom Gallypot, who practices as a physician and an apothecary; Lancet Pestle, who claims that he can be a physician and a surgeon; Retorto Spatula, who pretends to be capable of being a physician, a surgeon and a chemist; Jack Comprehensive, who undertakes seven medical professions all at once. The satire continues by portraying apothecaries as arrogant profiteers who mock physicians for being poor:

College of Physicians! What of them? By your leave, Doctor, I think the Company of Apothecaries very substantial men, and are able to buy twice your college*.[[38]](#footnote-37)*

Written with a strong bias in favour of physicians, Brown’s satire exhibits some common stereotypes of apothecaries in the retailing business; they were considered to be secondary to and less educated in medical knowledge than physicians. In regards to professional practices, they were constantly accused of undertaking treatment they were incapable of completing and profiteering from fooling innocent patients. On the other hand, apothecaries had their own pleas and narratives. An anonymous scribbler, very possibly an apothecary, wrote the following lines in 1676 to defend their rights in earning profits:

Why should this Momus envy Artists gains?

Rewards are due to learned and their pains;

Returns are flow, and many drugs are lost,

Good gains are to be allowed for charge and cost.

Forbear, O Momus, learned to abuse,

And the apothecaries falsely to accuse.[[39]](#footnote-38)

By comparing physicians to Momus, the god of satire and mockery in Greek mythology, the author protested against physicians’ acerbic and jealous attitudes. The apothecaries also fired back by accusing physicians of being domineering and monopolizing. In response to physician Christopher Merret’s controversial pamphlet, an apothecary accused physicians of bullying apothecaries in the medicine-retailing business:

*Now do but serious weigh how the doctors generally abuse apothecaries, persuading away, or taking from them their friends and acquaintance, employing and sending their bills to whom they please… and you will never blame some of them for practicing in physick, being necessitated thereto for a livelihood.[[40]](#footnote-39)*

The contest between apothecaries and physicians was a landmark in the medicine retail industry. Different from the quarrels in medicine manufacture, this conflict seems to be centred around profits. The physicians saw apothecaries and other medical practitioners as competitors who had invaded their preserve, and when the physicians were attempting to regulate the selling of medicines based on their own interests, apothecaries saw themselves as citizens with rights to practice free trade.[[41]](#footnote-40) Together with the conflicts regarding different manufacturing methods, these contests created severe divisions within the medical industry. Added to this chaos and division is the low efficacy of medicines. As Wallis argued, the effects of early modern medications could be random and were largely out of prescribers’ control. The medical practitioners, no matter apothecaries or physicians, had slight confidence in their products.[[42]](#footnote-41) Pressured by the uncertain effects of the drugs they made and sold on one hand and the quarrels with colleagues on the other, the medical community exhibited a stagnated and chaotic condition in seventeenth-century England.

**Conclusion**

The seventeenth century English society was a crucial landscape for medical development. Under the constant threats of plagues, medicines became an important part of material culture. Despite the fierce competition between compound and chemical drugs, people’s preoccupation with odours remained consistent throughout the century. This general fascination with tastes and smells could be understood as a legacy of classic medical theories, which indicate proper odours as the key to the balance of body humours. It also indicates stagnation, as people’s reliance on ancient physicians’ doctrines of scents remained steady throughout the century. The manufacturing of medicines in this century was marked by no-consensus quarrels between supporters of two branches of methods: the traditional Galenic practitioners and those who were willing to accept chemical methods. Disputes were also lasting in the drug-vending business, where apothecaries’ status in medicine trades was frequently despised by the physicians. The lack of confidence in medicines’ effects made some medical practitioners invest in the decoration and furnishing of their shops in hopes that a neat and professional-looking environment would leave customers good impressions, help build up their credibility, and possibly cover up the unstable, unfunctional or even harmful effects of the early modern medicines. I would like to argue that seventeenth century English medicines reflected general stagnations and heated conflicts in the development of medical ideologies. The preoccupation with strong odours indicated that the people were still confined by the theories of Hippocrates and Galen despite the growing popularity of chemical methods in medicine manufacturing. The debates between compoundists and chemists even contributed to this stagnation, as until the end of the century, their continuous debates on medicine-making methods did not bring any significant consensus. With divided interests and beliefs, the medical practitioners belonging to different factions continued antagonizing each other, and the divisions within the medical community arguably hindered the effective development of theories and practices. The English medicines reflect not only the history of medicinal materials but also a broader history of the seventeenth century English medical community. Floundering in the morass of diseases, different medical practitioners strived for their own truths.

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24. Roberts, “London,” 93. [↑](#footnote-ref-23)
25. Roberts, “London,” 105. Paracelsus’ three elements are salt, mercury and sulfur. [↑](#footnote-ref-24)
26. Culpeper, *Physical*, 332. “Flegm” refers to a sort of liquor. [↑](#footnote-ref-25)
27. Floyer, *Pharmako-basanos*, 5. [↑](#footnote-ref-26)
28. Culpeper, *Physical*, A2. [↑](#footnote-ref-27)
29. George Acton, *A Letter In Answer to certain Queries and Objections Made by a Learned Galenist, against the Theorie and Practice of Chymical Ph ysick* (London: printed by William Godbid for Walter Kettleby, 1670), 2. [↑](#footnote-ref-28)
30. Acton, *Letter*, 1. [↑](#footnote-ref-29)
31. Roberts, “London,” 175. [↑](#footnote-ref-30)
32. Roberts, “London”, 228. [↑](#footnote-ref-31)
33. Wallis, “Consumption, Retailing, and Medicine in Early-Modern London,” 31. [↑](#footnote-ref-32)
34. Wallis, “Consumption, Retailing, and Medicine in Early-Modern London,” 45. [↑](#footnote-ref-33)
35. James I, Royal Proclamation, 1620. [↑](#footnote-ref-34)
36. Thomas Coxe, *A Discourse, wherein the interest of the patient in reference to physick and physicians is soberly debated, many abuses of the apothecaries in the preparing their medicines are detected, and their unfitness for practice discovered. Together with the reasons and advantages of physicians preparing their own medicines* (London: printed for Richard Chiswel at the two Angels and Crown in Little-Britain, 1669), 9. [↑](#footnote-ref-35)
37. Thomas Brown, *Physick Lies a Bleeding, or apothecary turned doctor — a comedy acted every day in most apothecaries shops in London* (London: printed for E. Whitlock, 1697), 11. [↑](#footnote-ref-36)
38. Brown, *Physick*, 20. [↑](#footnote-ref-37)
39. *The Apothecaries Vindication In Answer to an Abusive Book Entitled The Family Physician and House Apothecary* (London: self-pub, 1676). [↑](#footnote-ref-38)
40. *Lex talionis; sive, Vindiciæ pharmacoporum: or A short reply to Dr. Merrett's book; and others, written against the apothecaries* (London: printed and to be sold by Moses Pitt at the White Hart in Little Britain, 1670), 6. [↑](#footnote-ref-39)
41. Roberts, “London,” 2. [↑](#footnote-ref-40)
42. Wallis, “Consumption, Retailing, and Medicine in Early-Modern London,” 36. [↑](#footnote-ref-41)