
Gendering the History of Women's Healthcare

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The earliest second-wave historical studies on women in/and medicine, at least in the United States, grew directly out of the women's health movement of the 1960s and 1970s when concerns about birth control and female autonomy in the birth process were high on the political agenda.¹ These, in turn, grew out of earlier work on the history of women's roles in medicine that had been written by participants in the nineteenth- and early twentieth-century fight for women's rights to join the medical professions in North America and Europe. Western historians, both specialists in the history of medicine and historians of women generally, are heirs to this double inheritance. The purpose of the present essay is to suggest that we have not yet sufficiently examined how the agendas of these two very different groups have affected the questions we ask or, as I will argue here, do not ask. The result is that the central questions of feminist medical history are still dictated, even if only subtly, by the political and intellectual contexts in which that history was born, contexts that no longer define our current objectives as historians. Neither first-wave nor early second-wave feminism articulated the concept of 'gender' – one of several axes along which power is distributed and contested in historical societies, with its implied premise that it is possible to view women's and men's actions as dictated by something beyond their sexed biological being. As this anniversary issue of *Gender & History* attests, the concept of gender has made enormously productive contributions to historical studies over the past two decades. However, although gender has been incorporated into many aspects of medical history – in the sense, for example, of the creation of gendered identities of individual medical practitioners or gender differentials in the provision of healthcare – certain narratives within the field have remained surprisingly immune to a reconceptualisation that, one would think, should have come from looking at women *and men* in constant interplay over how knowledge of the female body was generated, disseminated and used.²

My particular suggestion of 'gendering' the history of the female body and the systems of ideas and practices connected to its medical care might seem at first pointless, or at the very least redundant. Is the female body not, by definition, already feminine? Yet I am proposing no idle semantic games. Rather, I wish to explore how the epistemologies and technologies of the female body are created: who knew what about the female body? And when did they know it? As such, this analysis involves both medicine *for* women and medicine as practised *by* women. My own training is in

the traditions of western European medical thought and practice, and it is out of that experience that many of the following questions arise. But, precisely because several years ago I began to read widely in historical and anthropological studies outside the western tradition, I have recognised some limitations of the second-wave framework that I myself grew up with. Chiefly, the central narrative of an eighteenth-century shift to male control of women's healthcare seemed to have its chronology wrong. Attempts to unseat the common assumption that in pre-modern western Europe 'women's health was women's business' have been going on for twenty years, with more and more evidence being brought forward of men's regular involvement in gynaecology, indeed their dominance of the field as it was reflected in learned medicine, from the Middle Ages onwards. Likewise, men's involvement in obstetrics was significant enough to make them, not women, the authoritative figures in certain obstetrical procedures and kinds of knowledge as early as the fourteenth century. Yet, aside from a few specialists in pre-modern medical history, most historians still assume that men were not involved in such aspects of gynaecological care as menstrual dysfunctions or infertility, least of all obstetrical conditions, until the eighteenth century. The tendency to universalise discourse about women's health has, in turn, caused these presumptions about the western tradition to be considered the norm against which claims about the history of women's healthcare in other times and places are then made.

I am proposing more than a simple fine-tuning of chronology, however. If it were merely a question of establishing, for example, that English male practitioners began to involve themselves in obstetrics in the fifteenth century rather than the eighteenth, then all we are doing is pushing a major cultural shift (itself still unquestioned) into an earlier period. This does little to alter our perspective, for surely the eighteenth-century controversies about male midwives' use of forceps or the education of female midwives were no less real for having had precedents in an earlier period. My point is rather to stress the ways the first-wave and second-wave agendas have occluded our peripheral vision by nudging us to think in absolutes that themselves render the historian's pursuit of change over time null and void. In what follows, I propose that it might be worth exploring a *gendered* history of women's healthcare and fertility control, one based on the premise that knowledge about anatomy, physiology or therapeutics does not arise fundamentally out of one's biological nature but from the *experience* of living in a social world where all forms of knowledge are gendered, both in their genesis and in their dissemination. As such, medical knowledge, and the practices that arise out of it, proves to be very much a part of history, continually in flux and contested.

I focus on two topics that have been central to feminist studies of medical history – the history of midwifery and women's knowledge and use of contraceptive devices and abortifacients – and examine more closely where the emphases and oversights in the history of women's medicine have fallen.³ I argue for the need to set the history of women's healthcare into a larger nexus of analyses: the history of midwifery needs to be part of the history of both medical professionalisation and women's healthcare generally, not treated as an isolated topic, while the history of contraceptives and abortifacients needs to be set into larger questions of demographic history – whatever emotions or motives we would like to see at play in any individual woman's decision to limit or disrupt her fertility, her decisions also had an impact on society as a whole. Precisely because this essay argues against making universalising claims about women, I will explore how attention to non-western historical narratives and anthropological studies

can broaden our awareness of where the western narrative that has thus far dominated medical history has led to historiographical and cultural blind spots. Particularly useful is medical anthropology's focus on ethnographic description – observer participation of, and structured interviews with, members of the society under examination – which allows access not simply to the methods, but to the *motives* behind medical practices that are all too often invisible to the historian relying primarily on written records. By gendering the history of women's healthcare and contraception – questioning our *assumption* that women, and only women, possess some 'natural' knowledge about the female body – we open up conceptual spaces for exploring how that knowledge might have been contested across gender boundaries. My objective is not to 'add men and stir', but rather to call for a fuller, richer history of women's healthcare that shows medical epistemologies as various kinds of situated knowledge.⁴ Such a history is of importance not simply to historians of medicine, but to all who hope to explore how persons inhabiting female bodies have navigated their way through history.

The monopoly of midwives: origins of the Ehrenreich–English thesis

Let me begin *in medias res*, with second-wave feminism. Two works by the non-historians Barbara Ehrenreich and Deidre English – *Witches, Midwives, and Nurses* (1971) and *Complaints and Disorders: The Sexual Politics of Sickness* (1973) – heavily influenced the early articulations of a history of women's medicine among English-speaking scholars (and scholars working in other languages as well).⁵ I emphasise that neither Ehrenreich nor English were historians, not to invoke some professional exclusionism (feminist studies would be nothing without its inherent interdisciplinarity), but rather to stress that their theses about the history of women's healthcare were based on uncritical readings of secondary and a limited number of published primary sources and not on the in-depth researches into primary documentation that most of us would consider the gold standard of historical research.⁶ The central arguments of the latter book – that women were largely the victims of male medical control and even misogyny in the nineteenth and early twentieth centuries – have effectively been set aside by subsequent, more nuanced work that has shown first, women's agency as patients and (often) their willingness to accept or even seek out the therapies of men; and second, the fact that, when women did become formal medical practitioners, they did not uniformly adopt different perspectives on the practice of women's medicine.⁷ In this sense, then, Ehrenreich and English's work on nineteenth-century medicine followed a fairly normal trajectory for the development of a historical question: it put forward a bold thesis that was then tested, questioned and challenged by subsequent study. *Complaints and Disorders* quickly made itself obsolete and it is neither cited by scholars nor does it direct current historiographical agendas.

The influence of their earlier book, however, has been quite different. Put simply, it argued for a 'golden age' in which women practised medicine and shared knowledge about their bodies freely with each other.⁸ This non-hierarchical empiricism came to an end when the 'medieval' witch-hunts started targeting learned women for extermination and reduced other forms of women's medical practice to the subordinate and non-authoritative stature of 'nurse'. The reasons for the initial success of this small pamphlet (a mere forty-five pages in its original English edition) in the 1970s should be obvious. It articulated a historical past that conformed to the political present that the women's

health movement was attempting to create: one where women could ‘once again’ control their reproductive processes and be authorities in their own right on matters of their health.

More surprising than the initial success of this book, which did not attempt to hide its polemical intent, is its *continued* popularity. It is still in print in English and has been translated into at least four different languages; only recently it was among the top ten sellers in the category ‘Socio-Cultural Anthropology – General & Miscellaneous’ at a major online bookseller.⁹ It is continually quoted ad infinitum in popular discourse on witchcraft and in historical narratives that female medical practitioners tell themselves and, twenty, thirty years after its initial publication, it was, and still is, cited by professional scholars as ‘background’ for statements about the history of European midwives and women’s other roles in the medical professions.¹⁰

Moreover, the Ehrenreich and English thesis has maintained a hegemonic hold on the ‘grand narrative’ of European women’s medical history even when it is not directly cited. It posited three central tenets: first, that midwives had an unchallenged monopoly on birth; second, less explicitly (but no less influentially), that they had the same monopoly on *all* of women’s health concerns and were the authorities on contraception and abortion as well as other, unspecified aspects of women’s medical concerns; and third, that midwives’ knowledge and authority, all of which they exercised in the exclusive female realm of the birthing room, elicited the suspicion and then the wrath of male medical practitioners and churchmen, who targeted them for extermination in the witch-hunts.¹¹ The idea that midwives were the key target of the witch-hunters was soundly demolished by David Harley in 1990, who deconstructed the intertextuality of the *Malleus maleficarum* (*The Hammer of Witches*, a witch-hunter’s manual first published in 1496) and other such texts to show that the ‘witch-midwife’ was a narrow rhetorical trope among inquisitors who cited each other in their works, not a widespread phenomenon that played itself out in regular accusations against midwives. Harley’s survey of actual studies of local persecutions finds that midwives were no more of a percentage of the accused than their overall numbers in the population would make likely.¹² The first two tenets of the Ehrenreich and English thesis, however, have remained more or less unchallenged for the past thirty years. Here, I wish to show why these, too, bear rethinking.

Let us step outside historical studies for a moment and consider the following claim:

Childbirth was the undisputed domain of midwives for well over a thousand years. The midwives of [pre-modern] times were probably folk healers who not only attended births but generally ministered to the health needs of the common people . . . Birth was then clearly considered women’s business, a definition of the event that was shared, apparently, by all members of society.¹³

This statement comes from a medical anthropologist, Brigitte Jordan, who is regarded as the founder of the comparative study of the anthropology of birth. And as documentation for it, she cites, as her only authority, Ehrenreich and English. Now consider the following:

During the British eighteenth century, male experts, particularly men-midwives, replaced female midwives, who had enjoyed a *nearly exclusive control* over the world of birth and knowledge about sexuality and reproduction *for centuries*. The revolutionary nature of this shift cannot be overstated. Female midwives were – and continue to be – *the almost universal authorities* over

human reproduction *in every region of the world*. For millennia, midwives and other women were the only sex allowed access to a mother's childbearing body, with men invited into the birth room only in extreme medical emergencies.¹⁴

Lisa Forman Cody, the specialist in eighteenth-century British history who authored this statement, cites Brigitte Jordan's book as one of only two sources for the history of women's medical care in pre-modern *Europe*. As these examples show, Ehrenreich and English's narrative appears not only as the 'core' narrative for histories of midwifery in the west – a source of truisms that need not be interrogated – but it has then been extrapolated via anthropologists into a universal truth that is in turn imported back into European history. The Ehrenreich and English thesis maintains this power because even works on western history that do not cite it seem implicitly to support its position since they offer no direct response to it. In the second work cited by Cody, a superb collection of essays on early modern European midwives, there is no acknowledgement that, in looking at midwives, they are only addressing *part* of the cultural investment in women's health in their given time periods.¹⁵ Gynaecology, infertility, menstrual problems, not to mention any number of other conditions, make no appearance here. And nothing is said about the other health practitioners who provided care to female patients.

There are many ways of assessing who these other practitioners were and what they were doing, though the most obvious source for the historian are the texts on women's healthcare that proliferated in Europe throughout the medieval and early modern periods. In England, for example, traditions of writing on women's medicine go back to at least the thirteenth century. There is no evidence whatsoever that any texts there – whether in Latin, Anglo-Norman, or English – were meant specifically for midwives prior to the sixteenth century.¹⁶ Rather, the audiences of these works were professional male physicians and surgeons, literate laymen like lawyers, notaries and landed gentry, and (perhaps the smallest group) laywomen who may have had no particular medical responsibilities other than care of themselves and their neighbours and kin. At least ten texts in French circulated in manuscript from the thirteenth to the fifteenth centuries, while twenty-eight French works on women's medicine and generation were printed between 1536 and 1627, going through at least sixty-one different editions by 1670. These works likewise show a considerable range in audiences, including male surgeons and upper-class women.¹⁷ Europe-wide, in fact, the first text that explicitly addressed midwives since ancient times was not written until c.1460.¹⁸ As for authorship, of some 250 printed texts on women's medicine in all European languages published prior to 1700, only five were written by female midwives. Yet, as recently as 2007, Margaret King, in an overview of scholarship on the history of childhood and its attendant concerns, after citing a string of recent editions of fifteenth- and sixteenth-century midwifery texts, states flatly, 'These experts *wrote to advise midwives* . . . they did not presume to usurp the role of midwife, as at this juncture male manipulation of women's bodies in childbirth was inconceivable'.¹⁹ Even though King had already commended a 1990 study that traced the incursion of male practitioners into the birthing room to the fifteenth century, she does not acknowledge that such incursion occurred before the seventeenth century. By keeping the separate 'female monopoly' and 'male incursion' narratives in place – even if shifting the 'transition' to the seventeenth rather than the eighteenth century, as is more commonly posited – King forecloses any possibility of interrogating *why* male authors had so readily been able to produce texts on women's

medicine for centuries when their involvement was seemingly 'inconceivable'. King is not an expert on the history of women's medicine and should not bear the burden of having to unpack the problematic blind spots of the narratives she (and her sources) had inherited. But the fact is that the blind spots (and the incongruous analyses they enable) remain.²⁰ The narrative of midwives' supremacy has remained unchallenged because our paradigm has told us not to look for male involvement in women's medicine before a certain date.

In part, these blind spots are due to a long tradition in the history of medicine of looking from the top down: medical history was the history of practitioners (especially learned physicians who wrote the texts that have served as the primary documentation for such histories) and only secondarily of patients. Male physicians began documenting the genealogy of male expertise in gynaecology in the sixteenth century and, right from the beginning, female expertise was only acknowledged for the long-distant past of Graeco-Roman antiquity.²¹ Traditions of writing the history of gynaecology solely as a series of 'firsts' by elite male physicians continue to the present day, with not so much as a nod towards feminist historiography.²² Histories of midwifery, for their part, have largely been framed as histories of rivalry, either of male midwives against female ones, or one or the other group against male physicians. As Helen King has shown, midwives (both male and female) were debating the history of their discipline in England from at least the seventeenth century.²³ Ethnographic histories of midwifery were being written in Europe and North America from the late nineteenth century, and male physicians like James Hobson Aveling collected an impressive body of historical sources for their reconstructions both of obstetrics and of gynaecology.²⁴ A common rhetorical trope in histories not written by female midwives or their advocates is to portray female midwives as ignorant. For example, in 1962 the then leading American historian of pre-modern midwives, the Yale professor of anatomy, Thomas R. Forbes, claimed that, 'The midwife, at that time usually an ignorant and incompetent elderly woman, received meager fees, occupied the lowest level of society, and lived a long and probably unhappy life'. The arrival of medical men, with their anatomical knowledge and obstetrical tools, signalled the salvation of women who had for centuries suffered at the hands of 'ignorant and incompetent elderly wom[e]n'.²⁵ This battle over historical narratives seems to have been pitched most forcefully in the United States, which witnessed the most extreme suppression of midwives as independent practitioners. Little wonder that American feminists of the 1960s and 1970s reacted against the misogynist master narrative with a 'mistress narrative' that saw pre-modern midwives as learned in empirical wisdom, authoritative and independent. The impact of Ehrenreich and English can be seen most starkly in two works published on opposite sides of the Atlantic in 1978. In that year, Jean Donnison published a revision of her 1974 University of London thesis on the history of midwives in England; this still-valuable study makes no reference at all to allegations of midwives' involvement with fertility disruption and addresses the question of witchcraft as simply symptomatic of a widespread sixteenth-century concern with eliminating various 'superstitious' habits in this time of violent religious reform. In contrast, the American Jane B. Donegan readily incorporated the Ehrenreich and English narrative into her parallel study of American midwives.²⁶

The influence of the Ehrenreich and English thesis in feminist histories of medicine is due, then, to the cultural moment in which it appeared. The early second wave women's health movement (especially in the United States) was fighting an uphill

battle against the medicalisation of childbirth, the essential outlawing of midwives and the criminalisation of abortion.²⁷ My critique is not to suggest that the history of midwives or midwifery is without value. Rather, it is to challenge the assumption that, if we have documented the history of midwives, then we have documented the totality of the history of medicine *as experienced by women*. In fact, I would argue that an ironic effect of the Ehrenreich and English thesis has been to obstruct substantive research on the history of midwives in Europe, or at least its early history. There is an important story to be told about women's healthcare and medical practice in Europe up to c.1600. But it is neither a story of women's unfettered control over knowledge of their bodies nor of deliberate male attempts to eradicate that control.

Before professionalisation: medieval narratives and male obstetrics

Ehrenreich and English did not make up the myth of medieval women's medical omnipotence out of whole cloth. They were building on work that itself had distilled narratives assembled by first-wave feminist writers of the nineteenth and early twentieth centuries. For these first-wave historians, the European Middle Ages was a golden age for women's medical practice. The female midwife writers of the early modern period – women such as Louise Bourgeois (1563–1636) and Marguerite Du Tertre de La Marche (1638–1706) in France, Jane Sharp (*fl.*1641–1671) and Elizabeth Cellier (*fl.*1668–1688) in England and Justine Siegemund (1636–1705) in Germany – had looked back not to the Middle Ages, but to the biblical or classical past for models of female practitioners. The two women who are now the most famous examples of medieval women's involvement in medicine – Trota of Salerno and Hildegard of Bingen (both of the twelfth century) – had very variable fates in the post-medieval period and were not retrieved for the purposes of a feminist history of medicine until the nineteenth century.²⁸ At that point, an argument that women of the European past had had extensive responsibilities and options in medical care and practice became an element of a multi-pronged attempt to open up medical schools to women. Assembling random snippets about female practitioners that had been collected by humanists and other scholars since the sixteenth century, the German physician Johann C. F. Harless compiled his *The Service of Women in Science, Health and Healing . . . from Earliest Times to the Present Day* in 1830, nearly twenty years before Elizabeth Blackwell was to take the first MD formally awarded to a woman in 1849.²⁹ Although rather perfunctory, Harless did include some information on medieval women healers. In subsequent years, a sense that the medieval period was a crucial time in European women's history coalesced. At the third National Women's Rights convention in Syracuse, New York, in 1852, Paulina Wright Davis argued that, among the things that had been taken away from American women 'that were ours in the old world', was the practice of surgery, medicine and obstetrics. In the Middle Ages, 'the healing art was ours by prescription. Restore it to us'.³⁰ The English medical activist Sophia Jex-Blake (1840–1912), made use of medieval evidence in her reconstruction of medical women's history in 1872.³¹ By the time the Polish physician Melina Lipinska wrote her still impressive *History of Women Physicians from Antiquity up to Our Own Day* in 1900, a narrative of the range of medieval women's medical practices was solidly in place. Lipinska took advantage of a considerable body of nineteenth-century scholarship on both medieval history and medical history. She employed without question the fiction of women's status as

'professors' at the medical school of Salerno that had originated in the seventeenth century as a local Salernitan tradition and then given more documentary substance by the mid-nineteenth century Salernitan historian, Salvatore De Renzi. Similarly, she made much of the trials of several female practitioners in fourteenth-century Paris that had been published just a few years before her own work appeared.³²

The narrative of women's medical practice that Jex-Blake and Lipinska put in place, like that repeated in 1938 by their American imitator, Kate Campbell Hurd-Mead (1867–1941), an obstetrician and gynaecologist, was not so much wrong as subject to misinterpretation.³³ For Lipinska and other advocates of women's 'right' to practise medicine, *any* examples from the past that showed women practising medicine were sufficient to make their point: if women had proven their capability to practise medicine before, this automatically invalidated universal claims that women were incapable of doing similar work in the present. No attempts were made to assess quantitatively how significant women's presence was in what historians now call the 'medical marketplace'. Nor was documenting the work of midwives the main objective for nineteenth-century historians or their early twentieth-century followers. They were most concerned to document *learned* female practitioners, such as they themselves wished to be.

The second-wave feminist writers Ehrenreich and English, intriguingly, shifted the focus of the narrative of women in medicine in a subtle but important way. Whereas it had been crucial to the nineteenth- and early twentieth-century advocates of women's right to practise medicine to document the existence of women *doctors*, Ehrenreich and English were intent on rejecting the elitism of the medical profession and focused instead on popular healers. Thus, using a 1940s American elaborator of Lipinska and Hurd-Mead's work as their main source, they omitted any mention of Trota (or 'Trotula' as her name would have been understood then) or of the noble German nun Hildegard of Bingen, who wrote a major piece on natural philosophy and medicine, or of any of the eye doctors or surgeons that Lipinska and Hurd-Mead had documented. Rather, they celebrated Jacoba Felicie, a fourteenth-century Parisian empirical practitioner tried for illicit medical practice, touting her as a veritable martyr to the cause of medical populism.³⁴ Most importantly, drawing on a thesis originally proposed in the 1920s by Margaret Murray, they latched mightily onto the brief references to 'witch-midwives' in *The Hammer of Witches* and blew these passing references into a whole characterisation of the 'medieval' witch-hunts as persecutions of 'wise women' and their knowledge of medicine and birth control ('midwives' (*obstetrics*) are mentioned explicitly only nine times in a work of several hundred pages, half the number of times as 'archer-sorcerers'). As mentioned earlier, David Harley has pulled apart the whole edifice of these claims, but he raises important questions about why this myth has been so attractive to historians, even when the primary sources contradict it. His focus is on how this mythology had inhibited any real histories of early modern midwives.³⁵ I suggest that the negative impact on the history of *medieval* women's medicine has been even more profound.

What I and several other researchers have found about the history of women's healthcare in medieval western Europe over the past twenty years is this:³⁶ the body of documentation for women's involvement in medical practice in medieval western Europe assembled by first-wave feminist historians was sketchy but more or less reliable. This body of data has continued to grow and it supports the general sense that women did practise in a broader range of medical fields and with greater acceptance (or

at least less formal obstruction) than they would in the early modern period. However, it has never been documented that women ever constituted a moiety of the medical profession; on the contrary, their numbers have consistently been shown to be minuscule, just 1 or 2 per cent of documentable practitioners. This finding, in turn, fits with growing evidence that medicine was becoming both professionalised and masculinised in the later medieval centuries. Female medical practitioners can be shown to exist, but they were almost always practising alongside or in competition with males. Nunneries can be found employing male practitioners as well as in-house female phlebotomists; queens can be found using female healers to treat themselves or their children, but also having full-time male physicians on their staffs; urban women, even some of quite modest means, can be found calling on male practitioners for any variety of ailments, even (in some emergency situations) childbirth.³⁷ Midwives made up part of this medical schema but were nowhere near as important a part as the 'second-wave' feminist historians *manquées*, Ehrenreich and English, assumed. To be sure, there is ample evidence that birth assistance was provided in medieval Europe and that it was, by and large, provided by women. It is simply that midwifery does not seem to have been *professionalised* in medieval western Europe prior to the thirteenth century, and even then only sporadically. In most situations, it was a general body of knowledge shared more or less equally among women. This point has been articulated with particular elegance and clarity by the Catalan scholar, Montserrat Cabré, who demonstrates the broad array of medical services performed by women – in their capacities as mothers, neighbours and kin – that never fell under the social categories of 'professional' medical practice.³⁸

There was a major contest over medicine in the high Middle Ages, but it was not one between men and women per se but rather between empiricism and book learning. To the extent that this process was gendered, it was because book learning itself was a highly gendered practice, women being excluded not simply from the universities but from the grammar and notarial schools where basic Latin literacy was obtained by men ranging across backgrounds and classes. Women's vernacular literacy increased in this period, but it was not used for *medical* reading with any regularity until after the medieval period had passed. Men (or rather *literate* men) 'took over' many aspects of women's medicine – especially fertility concerns, which very often broadened into concerns with all aspects of the functioning of the reproductive organs – not out of designs to suppress witchcraft or women's contraceptive knowledge, but because they were taking over nearly all aspects of the increasingly professionalised field of medicine. At the same time, male surgeons expanded their involvement in women's particular conditions from treatment of breast disorders to certain aspects of gynaecological surgery and, possibly as early as the late thirteenth century, occasional involvement with difficult births. Women's routine attendance at normal childbirth was not threatened because this was not normally seen as a 'medical' condition that demanded the physician's or surgeon's intervention. Even the one female medical author we have from the Middle Ages who wrote specifically on women's medicine, Trotta of Salerno, did not provide detailed instructions on the handling of normal births. Thus, it is in no way surprising to find that, with the exception of Trotta, every known author of a medieval text on women's medicine (and there are over 150 such works) was male; that even while some vernacular texts on women's medicine were ostensibly addressed to female audiences, not a single nameable female owner can be found prior to the sixteenth century; or that when gynaecology finally emerged as its own rationally

distinct field in the sixteenth century, male writers looked to other male authorities, never to women, to inform and justify their work.³⁹

For most readers, my assertion that men were involved in obstetrics will probably come as the biggest surprise. Yet I suspect they were 'hiding in plain sight' more often than we suspect. Let me go back to Brigitte Jordan's anthropological classic, *Birth in Four Cultures*. Jordan devotes her first ethnographic study to a close analysis of the birth practices of a Yucatan midwife. She describes her equipment, explains her methods, analyses the conversations she carries on with the birthing mother, et cetera – all the while insisting, as noted above, that this is a woman's event. But, if we cast our gaze to the periphery of these scenes, we find men: it is the husband who usually goes to call the midwife, the husband who is in fact expected to be present at the birth, taking turns supporting the mother as she bears down. It is a male physician to whom the midwife would refer the repair of any perineal tears and a male physician who would be turned to should other complications arise.⁴⁰ If women's health (or rather, women's birthing experiences) were *fully* women's business, then men would not appear even in these peripheral roles.

More work has been done on these questions for the periods bracketing the Middle Ages than for the Middle Ages themselves. Over the last two decades, Ann Hanson, Helen King and Rebecca Flemming, for example, have assembled an extraordinary body of evidence for the gendering of women's medicine in Graeco-Roman antiquity. Hanson studied men's roles in childbirth, finding them functioning as messengers, assistants, emergency surgeons and all around orchestrators of the event. Similarly, King and Flemming have examined the medical writings of the Hippocratics and various Roman writers – nearly all male – to examine the ways males took responsibility to theorise and dictate therapies for women's conditions.⁴¹ For the end of the medieval period, the Renaissance art historian Jacqueline Musacchio has presented a remarkable body of evidence for how childbirth and attendant concerns for fertility directed the sizable material investments of patrician males in northern Italy. Among her findings is that, even though female midwives were clearly employed to attend uncomplicated births, they essentially disappeared once the birth was over. Nearly all other medical concerns were handled by male practitioners, some of whom were clearly stepping beyond the threshold of the birthing room door.⁴² Likewise, Ulinka Rublack has shown for sixteenth- and seventeenth-century southern Germany the many ways in which pregnancy was a public concern for communities, but especially the husband, and not something that remained hidden within a closed female group.⁴³ Most recently, in an extraordinarily rich cultural study, Katharine Park has shown how the development of human anatomical investigations in northern Italy between the thirteenth and sixteenth centuries can be seen as an expanding process of searching for the 'secrets' of women's bodies and generation. That search involved women both as active searchers (one of the first 'autopsies' was the opening of a Benedictine nun by her sister inmates) and as willing participants in the search for anatomical knowledge. But, by establishing the act of anatomising as a masculine endeavour, and by increasing the scope of their gynaecological and obstetrical practice, male medical practitioners could arrogate considerable authority over women's reproduction, to the point of thinking themselves able to instruct the midwife.⁴⁴ All these examples of male involvement in obstetrics suggest that we have perhaps focused too much attention on obstetrics as a site of combat between professional rivals ('male control' vs 'female control') and too little

on obstetrics from the patient's point of view. What does the patient want in obstetrical care? What kinds of knowledge or authority or power does she look to her attendants for?

As a way of puzzling through the implications of male involvement in obstetrics, examination of a case where men were *not* involved in obstetrical change will be helpful. In her brilliant recent study of the influences of biomedicine on birthing practices in south-east India, the medical anthropologist Cecilia Van Hollen makes the following passing statement in the context of her analysis of European female doctors who established the first obstetrical hospitals (or obstetrical wards) in the late nineteenth and early twentieth centuries: 'Cross-cultural studies in many parts of the world suggest that women *prefer* to be attended by women doctors during childbirth due to *cultural* notions of modesty, regardless of whether or not women are secluded for religious purposes such as in *purdah*'.⁴⁵ In India, because of the role of *purdah* (the seclusion of women from direct interactions with men not of their immediate families), upper-caste Hindu and Muslim women refused treatment from male colonial physicians. This refusal was used by American and British female doctors, who were graduating in increasing numbers from medical schools in the United States and Europe with few outlets for professional practice, as an opportunity to establish female-dominated clinical practices in India. Hence, remarkably, there was no masculinisation of women's healthcare in nineteenth- and twentieth-century India.⁴⁶ Van Hollen therefore raises a fascinating question: if the problem with women's medicine was not men, what is it about highly technologised biomedicine that has produced such resistance among south-east Indian women in accepting its new paradigms of the body and regimes of bodily submission?

There is much in Van Hollen's analysis that merits discussion. Here I would like simply to focus on her claims about women doctors. Van Hollen locates a presumed nearly universal feminine gendering of obstetrical practice in *women's preference* for childbirth attendants of their own sex, adding only parenthetically (in an unreferenced footnote) that this scenario meets with their husbands' approval. Yet she also locates this preference in *cultural* notions of modesty. One could, conceivably, invoke biopsychological arguments to explain some affinities that women have with other women. Indeed, I do not rule out the possibility that there may be some biological (for example neurodynamic) foundation for women's alleged preference for medical attendants of their own sex. My main objective, however, is to take Van Hollen's emphasis on *the cultural* to heart and ask, if this 'preference' is indeed cultural rather than biological, how can we explain its near universality? Or indeed, *is* it really as universal as has generally been supposed in historical and anthropological studies of childbirth and women's medicine?

Let me first point out a simple – indeed, blindingly obvious – but all too often unarticulated fact: the reproductive organs are also the sexual organs. In a heteronormative context, for a man to engage in any direct physical contact (either ocular inspection or physical touch) of a female's genitalia runs the risk of being seen as a sexual act.⁴⁷ Historians of the Anglo-American obstetrical tradition have long honed in on cries of impropriety and sexual scandal in objections to male obstetrical practice in the eighteenth century and later.⁴⁸ Yet, perhaps due to the heteronormative biases under which historians have long functioned, it is rarely noted that a woman could feel shame about exposure of her genitalia to another woman or that gynaecological and obstetrical

attendance by a woman could also raise the prospect of healing acts veering into sexual acts. One of the duties assigned to European midwives in the pre-modern period was masturbating female patients as a therapy for a condition called 'uterine suffocation'.⁴⁹ But the sexual dynamics of cross-sex practice and their implications for social honour and shame could affect men, too. There is, from the Hippocratic Oath onwards, recognition that the male practitioner's reputation could be threatened if he gazed lasciviously on either the male or female servants of the household. As for his treatment of a female patient, any difficulties of communication that arose when the patient was female were attributed to her shame or modesty alone. Yet such a framing of the issues ignored the fact that male access to the sexual organs of 'other men's women' was as much if not more a problem *for men* as it was for women.

I suggest, therefore, that the gendering of obstetrics (and of women's healthcare in general) is, in fact, a *cultural* phenomenon and therefore a historically contingent one. The fact that the birthing body is, by definition, a female body should not blind us to the equally important fact that there is nothing *biological* that demands that the attendant assisting at that birth also be female. By examining the dynamics of how societies have and continue to gender birthing practices, we simultaneously open up space to examine how other historical contingencies (for example the influences of surgical technologies or politically driven population control programmes) contribute to women's level of comfort or discomfort with the range of obstetrical choices on offer to them. Histories of the impact (in some cases, imposition) of European obstetrical practices in colonial contexts are especially enlightening. The increasing masculinisation of obstetrics in the Anglo-American context in the course of the eighteenth to twentieth centuries is generally considered anomalous, never having been paralleled to the same degree in other European contexts.⁵⁰ Historical studies of British colonial medicine in fact show an interesting range of cases where the British medical system brought in a concomitant masculinisation of obstetrical practices (for example, Egypt and Jamaica) and where it did not (India, as we have seen, because of the coincidence of *purdah* practices locally combining with the availability of newly-trained female physicians coming from the metropole).⁵¹ Neither in late medieval northern Italy nor in modern America have women uniformly resisted male 'intrusion' into childbirth.⁵² By moving away from the universals of 'millennia' and 'throughout time', we can more insightfully examine the multiple factors that contribute to what should be a rich and variegated history of childbirth.

Contraception and abortion, or, what do women (and men) really want?

The other crucial prong of the Ehrenreich and English thesis – that midwives had been persecuted for their knowledge of mechanisms to control fertility and that a huge body of 'women's knowledge' about such matters was consequently lost in the early modern period – has been as much a driving force behind modern historiography of women's medicine as has their belief in midwives' pre-modern obstetrical and gynaecological monopoly. A particularly devoted adept of the Ehrenreich and English thesis is the historian of pharmacology, John Riddle. Riddle has put forward the thesis that knowledge of the contraceptive and abortifacient properties of various plants was widely available in antiquity and the Middle Ages. Such common plants as rue, Queen Anne's lace, savin and wild carrot, Riddle claims, were known to and used by women, who

could have simply added extra quantities of these substances to their daily salads to regulate when they would bear children. Particularly important for Riddle's thesis is his suggestion that substances said to 'provoke the menses' are really contraceptives and abortifacients in disguise, since causing the uterus to (in our modern terms) shed its endometrial lining would effectively terminate any pregnancy under way or prevent pregnancy from a recent act of sexual intercourse. Riddle adopts from Ehrenreich and English the thesis that such female traditions of knowledge transmission were deliberately disrupted by the early modern witch-hunts which, in the course of the nineteenth and twentieth centuries, took the form of legal regulations against the dissemination of contraceptive knowledge and the practice of abortion.⁵³

Riddle's books were not reviewed in any of the leading journals of feminist scholarship (including *Gender & History*) and the isolated criticisms by certain feminist scholars and demographers seem to have had little effect in dampening acceptance of his views.⁵⁴ Yet Riddle's claims demand engagement since if, as I and others have argued, there are serious methodological problems with them, this will have implications for how we understand the history of women's health and healthcare more broadly. There are three questions here, which need to be clearly distinguished. One is whether phytochemicals (the 'active ingredients' in plants used for medicinal purposes) have the power to disrupt or alter reproductive processes in humans. The second is whether such plants are indeed always *used* to disrupt reproductive processes rather than alter them in other ways; this includes determining whether we can infer the intent of others because of what *we* know about chemical properties. The third question is how knowledge of such properties is generated, preserved or disseminated, and used, and how gender figures in each of these processes. I will take these three questions in turn.

A quick survey of research published in the last twenty-five years on the topic of gynaecological and obstetrical uses of plants in the *Journal of Ethnopharmacology* shows that all the societies examined – from South America to the South Pacific – had substances in their local pharmacopeias said to affect fertility in some way: enhancing it, disrupting it, helping the menstrual or birth process, etc.⁵⁵ This is not the place for a synthetic account of these findings. But even a superficial survey provides persuasive evidence that knowledge of plants that can mimic or disrupt the hormonal and other chemical processes of reproduction has been sought (showing intent to develop a 'technology of the body') and found (showing traditions of empirical observation and maintenance of knowledge) in a variety of human cultures.⁵⁶ What these studies also show, however, is a variety of motives for such acquisition of knowledge, a variety of social agents who possess such knowledge and a variety of circumstances in which such knowledge is acquired. In her review of published accounts about native plants used for obstetrical and gynaecological conditions in South Africa, for example, Vanessa Steenkamp argued that, 'the majority of plants are used to *enhance* fertility' (my emphasis). In their study of a community of Mayan women in Guatemala, the medical anthropologists Joanna Michel et al. found both men and women in possession of knowledge about plants affecting reproduction.⁵⁷ And in their monographic study of anti-fertility plants used by various Pacific Islanders, R.C. Cambie and Alexandra A. Brewis (now Brewis Slade) found that the development of ethnobotanical knowledge on contraceptives and abortifacients could be pinpointed to the arrival of Christian missionaries in the nineteenth century.⁵⁸ Prior to that, Islanders relied primarily on infanticide to keep their population levels within bounds that could be supported by

their very limited land space even though, in most cases, the plants they would end up using had long been available to them. In other words, ethnobotanical knowledge itself is historical and its study, *ipso facto*, needs to be historicised.

In returning to look at the evidence for pre-modern Europe, therefore, Riddle's claims about regulation of fertility by phytochemical means are, on the surface, in no way implausible. Granted, there remain important questions about the *efficacy* of these substances, since (in biomedical terms) there are huge differentials depending on the potency of the plant itself (what soil it is grown in, when it is harvested, what part of the plant is used, how it is prepared) and its mode of administration (when in the reproductive cycle it is administered and at what dosages). Importantly, some of these substances are quite toxic; the very real risks of their use should be kept in mind when assessing their actual use historically.⁵⁹ Overall, however, it seems that demographers will ignore at their peril consideration of ethnobotanical means of fertility intervention in future studies of fertility patterns and population shifts. But can we comfortably assume that such chemicals – or, more to the point, the *knowledge* of such chemicals and their uses – was sufficiently widespread among communities of European women to justify assertions that women had 'control' over their fertility in the sense that they had the power to choose when and how often they would bear children? The question of intent in use – the second of the problems raised by Riddle's analysis – is crucial here. Alexandra Brewis Slade has suggested the concept of 'flipping technologies'. That is, if a society has developed a medical technology for one purpose, it can sometimes be 'flipped' to produce an opposite result when need arises. If, for example, a society has recognised that a certain substance can be used to bring on the menses in order to 'clean' the uterus so that it is capable of conception or to imitate oxytocic effects on the uterus to expel a dead foetus that will not otherwise be birthed, it can 'flip' that knowledge to create a different effect: to cleanse the womb not of materials that are impeding conception, but of the conceptus itself.⁶⁰ Promoting fertility and impeding it are often two sides of the same coin.

Consider, for example, the following passage, found in the section 'on retention of the menses' in a general medical textbook by a twelfth-century southern Italian male medical writer, Johannes Platearius:

Likewise, note that those things which are good for provoking the menses also bring out the afterbirth and the dead foetus and the 'brother of the Salernitans'. Note, too, that Salernitan women in the beginning of conception and especially when it begins to move, try to kill the above-mentioned 'little brother', drinking the juice of parsley and leeks.⁶¹

Here, it seems, is a blanket statement that emmenagogues, ecboolics (foetal expulsives) and expulsives for the afterbirth are all of a piece. Moreover, although Platearius was discussing only Salernitan women's attempts to kill the monstrous growth, the 'brother of the Salernitans', he is clearly identifying the combination of parsley and leeks as an abortifacient. This seems unambiguous evidence, then, that Salernitan women knew of phytochemical means to prevent or disrupt pregnancies.⁶² It is all the more significant, therefore, that there is a Salernitan woman's medical writing extant with which we can compare Platearius's statement.⁶³ In one of her works, Trota of Salerno (active in the early twelfth century) does indeed mention the combination of parsley and leeks as highly effective *for expelling the afterbirth*.⁶⁴ These two substances (as well as borage, which she lists as an alternative expulsive) are mentioned nowhere

else in her writings; hence, we can consider them 'specifics', drugs that have one particular property only.⁶⁵ Trotta also provides a recipe employing willow and rue as an emmenagogue, but she introduces this very explicitly as a means *to promote conception*.⁶⁶ In other words, in this extraordinarily important document for women's medical practices – important, for our purposes, because this was a moment both when female empiricism was still valued by male practitioners and when there was apparently no systematic suppression of contraceptive knowledge in medical writings – there is no evidence that either emmenagogues or foetal expulsives were used by women for the purpose of *disrupting* normal fertility.⁶⁷ On the contrary, Trotta's works seem decidedly pronatalist. While there are characteristics in her writings that demonstrate particularly nuanced understandings of the plight of women wishing to employ technologies of the body to enhance their ability to navigate the patriarchal structures in which they lived – 'faking' virginity, dealing with the pain caused by heterosexual intercourse, improving their appearance through cosmetics – disrupting fertility was not part of Trotta's agenda. There is, in fact, no substantive difference in perspective between her work and the major Salernitan (male-authored) writing on pharmaceuticals, which mentions many more emmenagogic and ecbolic substances – forty-four in all, more than half of the eighty-one said to have gynaecological or obstetrical properties, and fully 17 per cent of the total 258 substances listed.⁶⁸ Eight substances (balsam, borax, dittany, galbanum, rue, opoponax, serapinum and red and white bryony (*viticella*)) are said (as Johannes Platearius had noted) to have the triple function of provoking the menses, expelling the dead foetus and bringing out the afterbirth. Parsley is said to be 'harmful to pregnant women because by its power it dissolves the moorings holding the foetus'. Thus, we have evidence from all three of these writers – Johannes Platearius, Trotta and the author of this pharmaceutical text – that parsley is a specific 'abortifacient' in our definition. Yet, like Trotta, neither Platearius nor the pharmaceutical author shows any indication of eliding parsley with 'cleansing' substances (those that bring on the menstrual flow or rid the uterus of other waste matter – the dead foetus and the afterbirth). On the contrary, as with Trotta, the author of the pharmaceutical text believes that substances that 'clean' the womb often also 'aid the conceptus'.⁶⁹

How can we know, at a distance of close to 900 years, whether some aspect of Trotta's work was not suppressed or altered by hostile scribes or editors, or even suppressed by Trotta herself who preferred not to put certain aspects of her practices down in writing? In fact we can never *prove* that such suppressions did not happen. But we can acknowledge other corroborating evidence that emmenagogues were not always 'code' for abortifacients. In the fifteenth century, Jeanette Camus was put on trial in Dijon for practising medicine illegally. She recounted that, when she was herself suffering from infertility, she learned an effective remedy from a woman in a nearby town. She now gave the same remedy to other women, along with other *bons remèdes pour femmes qui ne peuvent avoir leurs fleurs* ('good remedies for women who cannot have their 'flowers' [menses]').⁷⁰ Interrogated by the medical faculty of Dijon, Jeannette was expelled from town, not for having trafficked in illicit contraceptives (which the medical faculty could have easily discerned), but simply for not having sufficient theoretical knowledge of medicine, the claim commonly used to run empirics (male and female) out of medical practice. As with Trotta, in traditional European concepts of humoral medicine, menstruation was vital both to women's health and their fertility. In the sixteenth century, we can find a German noblewoman saying that, 'for the past

two years my feminine obligation [that is, menstruation] has appeared only once in a quarter year and still not had a proper color', while Barbara Duden's classic work on the medical narratives of eighteenth-century women shows how important menstrual regularity remained for women's own perceptions of their health.⁷¹ Once again, anthropological work helps us buttress this interpretation since there is already a rich literature on the notion of 'regulating menstruation', which shows that other cultures likewise employ the notion of 'cleansing' the womb in order to regulate health and/or promote fertility.⁷² Most importantly, medical anthropological work shows the extreme lengths women in patriarchal contexts will go to seek fertility when their marriages, economic livelihoods and identities depend on being reproductively successful.⁷³ Pace Riddle, not every emmenagogue is *meant* to interrupt fertility and we must therefore be very careful in assuming that we can always infer intent on the basis of what modern western science tells us about chemicals or human physiology.

But surely, one might respond, women could have intuited that whatever 'brings on the menses' also terminates an established pregnancy, that they could 'flip' their knowledge of, say, willow or rue, whenever they wanted. Again, there is no way to *prove* that this did not happen, but it would be well to assess the notion of 'flipping technologies' by tempering it with another concept being developed by cultural anthropologists: the notion of 'persistence of knowledge', that is, how bodies of knowledge – especially in illiterate or marginally literate cultures – are tied to the continuation of *practices* with which the knowledge is linked. If the practice dies out (for example, certain types of hunting), then the knowledge associated with it (say, techniques of tracking) will die out, too.⁷⁴ The actual ability to *use* fertility-enhancing or -disrupting herbs depends on close knowledge of soils, harvesting times, preparation methods, administration doses, et cetera. For such knowledge to be sustained in an illiterate society would depend on uninterrupted continuation of the practices that generated the knowledge in the first place. Thus, even if (in raw chemical terms) an emmenagogue can be 'flipped' to become an abortifacient, *effective* use of such a substance in this way would entail the continuation of practices by communities that used the technology often enough to keep the knowledge alive.

Literate societies, on the other hand, can to a certain extent preserve knowledge 'out of context' and retrieve it at will, even when centuries separate the author and the recipient. Which brings us to our third question: whether we can see all this fertility-disrupting knowledge as the exclusive property (and indeed, the exclusive concern) of women, or whether we need to see men as active agents in both its creation and dissemination (as well as suppression). Here, differentials between men's and women's literacy is key. One of the ironic aspects of John Riddle's search for proof that medieval women knew of the contraceptive properties of herbs is his choice of a fourteenth-century French woman, Beatrice de Planisolles, as one of his main female 'witnesses'. In her testimony before the Inquisition, she described one particular contraceptive practice, stating clearly that it was her male lover who brought a contraceptive device to their sexual encounters, very greedily taking it away with him after each encounter lest she take on any other paramours. She made no claims to having contraceptive knowledge of her own.⁷⁵ Her lover, however (who never discussed these encounters in his own testimony), would as a priest have been literate to some degree and might have obtained his knowledge of this contraceptive amulet from written sources. Riddle himself relies on male-authored texts – knowledge as embodied *in books* – for his evidence about

contraceptive and abortifacient substances. My own research on women's patterns of engagement with medical books in medieval Europe showed that they only rarely possessed medical books, even when it was evident from other data that they owned Books of Hours and other works of devotion or literature.⁷⁶ This is equally true of texts on women's medicine which were only rarely addressed to women and which, even when they did have such audience claims, can be shown to have actually been in men's hands. There is, then, very little evidence that medieval women regularly had access to any of the written texts that Riddle cites.

So what did women in fact know about controlling their fertility in the Middle Ages? I do not pretend to have an answer to this question, but the following evidence (all, in this case, coming from England from the period after the mid-fourteenth century Black Death to the late sixteenth century) suggests that we should be looking beyond the midwives that Ehrenreich and English focused on and see knowledge of fertility-disrupting substances as circulating in dispersed loci which themselves may have been shifting historically. In the fourteenth century, scribes from London to York put passages describing abortifacients (and a few other topics) in cipher, though they would have been policing male uses of such information since it is highly unlikely that women ever came near these Latin texts.⁷⁷ A late fourteenth- or early fifteenth-century compiler of a Middle English gynaecological text that addressed a female audience refused to translate the description of abortifacients from one of his ancient Latin sources on the grounds that 'some cursed whore might use it'.⁷⁸ Emmenagogues, in contrast, were translated in full with no apparent concern about their (mis)use. In the fifteenth century, an English translator of Johannes Platearius's *Practica* altered the passage quoted from the Latin text above to imply that the women use parsley and leeks to perform abortion outright, not simply to eliminate the monstrous 'brother of the Salernitans'.⁷⁹ Also in the fifteenth century, another English medical writer, although including no recipes explicitly labelled contraceptives and abortifacients, nevertheless added to his text significant numbers of emmenagogues as well as mechanisms to expel the dead foetus, an obstetrical condition he clearly viewed as presenting grave dangers to the woman. He even stated that it was preferable to slay a living foetus when it will not come out than to let the mother die.⁸⁰ Claiming that he had composed his text so that women could use it themselves (in fact, he clearly meant it also for male practitioners like himself), he expressed no concern about the knowledge of emmenagogues or foetal expulsives being misused. An ecclesiastical court case from York in 1509 involved the alleged father seeking to procure an abortion, not the pregnant woman herself.⁸¹ In 1530, a case was brought before the ecclesiastical court in the diocese of Lincoln involving one Joan Schower, pregnant out of wedlock. By the time she was examined by midwives, she was found no longer to be pregnant. She told them that she had been pregnant but had taken an abortive potion, which was apparently effective. She had had two previous children out of wedlock, though it is unclear whether she had tried and failed to terminate those pregnancies or simply did not try at all.⁸² In the same year, also in Lincoln, one John Hunt was accused of persuading Joan Willys, his live-in domestic servant and now fiancée, to take 'certayn drynkes to distroy the childe that she is with'.⁸³ A licence for English midwives, which dates from 1588, listed as one of several injunctions that the midwife 'shall not give any counsel or minister any herb, medicine, potion or any other thing to any woman being with child whereby she should destroy or cast out that [which] she goes with [that is, the foetus she is carrying] before her time'.⁸⁴

As in twelfth-century Salerno, there seems to have been no particular concern about misuse of emmenagogic substances. There was information on abortifacients in circulation, though such knowledge (or fear of such knowledge) seems to have been widely dispersed among prostitutes, male clerics, unmarried women and unmarried men. Only the last item mentions midwives as a source of such information, and it is the sole proof cited by Riddle that midwives were a regular repository for such knowledge.⁸⁵ I suspect, however, that this concern arose out some particular historical circumstance rather than a long-standing suspicion. Licensing of midwives had started on the Continent in the fourteenth century in France and the fifteenth century in the Low Countries and German territories. Although we have yet to discover the text of any of the early French licences, they are readily available from the other areas that practised licensing. None that I have examined says a word about contraceptives or abortifacients prior to the later sixteenth century, and this despite the fact that moralistic concerns overwhelmingly guide the character of the oaths midwives had to take, first and foremost the requirement that the midwife treat all women in need, whether they be rich or poor.⁸⁶ In 1496, Kramer and Sprenger argued in *The Hammer of Witches* that the 'cure' for midwives' superstitious practices was rigorous enforcement of licensing, and David Harley has suggested that it was precisely the assurance of morals provided by licensing that kept midwives relatively immune from witchcraft accusations.⁸⁷ Licensing came later to England than elsewhere in northern Europe, being first documented in London near the beginning of the sixteenth century. The widely travelled medical writer Andrew Boorde in his 1547 *Breviary of Health* cites concerns about medical incompetence and immoral or superstitious practices in calling for more systematic emulation of the licensing practices of the Continent. Yet neither in Boorde nor any other evidence we have for licensing prior to 1588 (including the full text of the earliest known English midwife's license, which comes from the diocese of Canterbury in 1567) is there any mention of abortifacients.⁸⁸ Apparently, something had happened by 1588 to make provision of abortifacient knowledge by midwives a new concern.⁸⁹

If it is not midwives who were chiefly responsible for dissemination of abortifacient information, was it laymen and -women who were 'flipping' technologies they have encountered through various avenues, including books? I would be hesitant to say that this new concern was tied to women's (including midwives') increased literacy in this period. Women (particularly those of the upper classes) quite suddenly became major collectors of medical recipes in the late fifteenth and sixteenth centuries, though the few studies that have thus far been done on these widespread collections show no particular concern with mechanisms for disrupting fertility.⁹⁰ Laywomen may have also been reading newly published midwifery texts by this period, though these, too, did not include abortifacients so labelled.⁹¹ What might the circumstances be that cause shifts in the development and circulation of contraceptive knowledge? Narratives in the history of European and North American contraception have stressed moments of suppression of such knowledge, but I believe we should be looking more closely at where this knowledge on the workings of the female body came from in the first place. In a richly documented study, Cornelia Dayton Hughes showed some years ago how the increasing availability of commercially produced products facilitated Hannah Grosvenor's decision, in mid-eighteenth-century Connecticut, to 'take the trade', an otherwise undescribed commercial abortifacient that her lover pressed upon her. He had obtained this from a male practitioner, who later performed a manual abortion

when the product failed to do its work.⁹² As Dayton Hughes shows, these botched attempts at abortion (Grosvenor soon died because of the manual intervention) would probably not have happened in an earlier generation when social mores would have made marriage the normal resolution of such a situation. In this new period of social mobility, Grosvenor's lover saw medical technology as a way out.

Slavery is another context in which desperation seems to have led to creative (and perhaps dangerous) experimentation. Londa Schiebinger has studied use of the 'peacock flower' (*Poinciana pulcherimma*) as a contraceptive/abortifacient by enslaved women in the eighteenth-century Caribbean.⁹³ Equally intriguing is the work of Liese Perrin, who creatively reconstructs the contraceptive practices of slave women in the southern United States through evidence from the Works Progress Administration (WPA) narratives recorded in the 1930s. She found evidence for the use of cotton root as a contraceptive by slave women. Perrin's study is also particularly persuasive because she combines narrative testimony with demographic evidence that shows wider birth spacing than can be explained by documented lactation habits. She notes that men as well as women knew of the contraceptive properties of cotton root.⁹⁴ This is an important observation since, in modern ethnobotanical studies, cotton root is also used as a male contraceptive.⁹⁵ Perrin's evidence is not persuasive, however, that American slaves brought this contraceptive knowledge over with them from Africa and had been using it systematically for centuries rather than rediscovering it in the American context. Had they done so, one would have expected reduced fertility among slave women throughout the seventeenth to nineteenth centuries rather than just near the end of slavery.

As Perrin's work on American slavery shows, assessment of historical uses of fertility disrupters is best done in the context of demographic analysis, where we can move beyond individual anecdote to look for cumulative evidence for changes in fecundity and proof whether the causes of such changes are deliberate or accidental. My survey of the available literature for medieval Europe shows attempts to disrupt fertility, but undercuts Riddle's assumption that *biochemical* means were most relied on and that this knowledge was primarily the property of women. True, we do find occasional statements about 'womanly arts' of limiting fertility. A later thirteenth-century treatise on generation, for example, the pseudo-Albertus Magnus *Secrets of Women*, mentions that prostitutes and other women are 'learned in this wickedness' of inducing abortions.⁹⁶ But, to date, I have found no consistent evidence of the efficacy of herbal preparations. Indeed, infanticide and beatings of a pregnant woman deliberately intended to induce abortion would seem, on the current evidence, to be more common.⁹⁷ In the western Alps (modern-day south-east France and north-west Italy) in the fourteenth and fifteenth centuries, Pierre Dubuis counted a total of 2,523 fines levied by the chatelain of the Count (later, Duke) of Savoy, thirty-nine of which had to do with cases of some kind of 'refusal of the child'. Only one case concerned contraception: a woman from Aoste was fined for allowing another woman to 'put on her a certain bone, because of which no woman is able to conceive'. Whether we interpret this as a magical ritual or simply the wearing of some kind of amulet, in neither case does it prove effective knowledge of the chemical properties of plants. Nor is there much evidence for knowledge of abortifacients. In the fifteen cases found (three of which involve two different parties being fined), there was no mention of 'potions of sterility' and only one person was explicitly accused of 'procuring' an abortion. Besides one

curious case of a woman being fined for bathing in a certain fountain while pregnant, all the cases involved physical violence against the pregnant woman, usually beatings. Not surprisingly, most seem to have involved violence instigated by a man: a father beat his pregnant daughter, a husband beat his adulterous wife. But one, perhaps two, cases involved beatings by the mother of the pregnant woman. Although the likelihood is that most of these attacks were hostile (and so generated the attention of the court because they were deemed criminal acts by the woman herself), the possibility remains that some of them involved the woman's participation and therefore consent. One woman was fined twice for making what was apparently deemed a false accusation against a priest that he had made her 'take a dangerous jump and made [her] do evil [to her] child'.⁹⁸

In his study of medieval demographic attitudes, Peter Biller found that awareness of and debates about population size became increasingly common among learned (male) commentators from the mid-thirteenth century onwards. Contraceptive practices may have been employed with the deliberate intent of controlling overall population size. Importantly, he suggests not biochemical means of fertility disruption as the major driver in this process, but *coitus interruptus*, a necessarily male-controlled form of contraception.⁹⁹ Other evidence shows an increasing awareness of the growth in European populations and a curiosity (and after the Black Death, an anxiety) about generation and reproduction.¹⁰⁰ Nevertheless, the escalating population rates in high medieval Europe were clearly curtailed in the fourteenth century by famine and plague, not by contraception. As Judith Bennett has shown, prior to these Malthusian checks, communities in England had taken into their own hands the policing of sexual activity among poorer women whose offspring, should they be conceived out of wedlock, would add to already straitened communal burdens.¹⁰¹

I suspect, therefore, that knowledge of contraceptives and abortifacients, rather than being a readily transmitted body of knowledge among women, was instead a topic on which there was much lore in common circulation, but also much uncertainty, with the result that few people could consistently rely on effective knowledge when they needed it. Medical texts were full of remedies intended to function as emmenagogues or foetal expulsives. And medical men were sometimes consulted, if only surreptitiously, for information that would aid women in terminating unwanted pregnancies.¹⁰² Indeed, it was not unheard of for medical writers to recommend contraceptives – clearly labelled as such and Christian precepts notwithstanding – on the argument that some women, incapable (whether for social or economic reasons) of abstaining from sex, nevertheless should not bear children lest a pregnancy kill them.¹⁰³ Yet it is not at all clear how consistently effective such knowledge was. The most widely circulating medieval texts on women's medicine, the so-called *Trotula* ensemble, included contraceptives explicitly labelled as such, but these were amulets which, from our perspective, could have had no more than a placebo effect.

Methodological tools to explore the questions raised by Bennett and Biller are still lacking. But let me close with one particularly brilliant and subtly argued study of fertility interventions at the end of the medieval period by the French historian, Christiane Klapisch-Zuber: 'The Last Child: Fecundity and Aging among Florentine Women in the Fourteenth and Fifteenth Centuries'.¹⁰⁴ Using a sample of forty-four upper-class couples who lived at least until the woman reached the natural end to fertility (estimated for her purposes as age forty-five), Klapisch-Zuber found that these

women had, on average, eleven children each, a quite high fertility rate abetted both by early marriage (average age at first marriage for women was seventeen) and by use of wet-nurses. Klapisch-Zuber also discovered that most of these women *stopped* having children at least ten years before natural fertility would have ended. Medical conditions resulting from prior births may well have been a factor but, by analysing the sex of the last two children, Klapisch-Zuber found what seems to have been a deliberate tendency to stop childbearing after birth of a male. In other words, couples decided they had 'enough' children when they had a sufficient number of male heirs. Klapisch-Zuber's essay is powerful evidence for interests in alternately promoting or curtailing fertility and, apparently, the existence of effective knowledge of how to effect the latter. Yet frustratingly Klapisch-Zuber hesitates to propose *how* this marked falling off in fertility was achieved – was it by the use of contraceptives? or simply cessation of potentially reproductive heterosexual relations? This is where we need a gendered approach to the epistemology of women's healthcare: if we simply *assume* that it must have been women's knowledge of contraceptive botanicals that produced this effect, then we may be prematurely foreclosing exploration of the demographic effects of male homosexuality, which is now well-documented for Florence in this period, or the practice of coitus interruptus.¹⁰⁵

Perhaps instances of failed contraception and abortion, or those of women turning to men for contraceptive knowledge or even violent disruption of their pregnancies, are cases where individual women (often young and poor) were not sufficiently connected to female networks that would have given them the knowledge they needed.¹⁰⁶ Even in the context of modern westernised societies where contraceptive knowledge and materials are readily available, unintended pregnancies still occur. In other words, I do not pretend that my few examples questioning medieval women's knowledge of contraceptives or abortifacients constitute conclusive proof that no such knowledge was available prior to the modern period. But I am stressing that we need to weigh *all* pertinent evidence carefully, keeping in mind motives (of men as well as of women) as much as materials or methods. Comparison with the findings of medical anthropology will be crucial in this endeavour. Not only have medical anthropologists already theorised the concept of 'regulating menstruation' – deliberately interfering with menstrual function for both contraceptive and pronatalist ends – but they can also provide us with important data on how botanical substances with fertility-disruptive properties have been discovered in other times and places and how such knowledge is deployed in gendered frameworks.¹⁰⁷ They have also offered us acute analyses of the circumstances in which contraception or abortion is eschewed for infanticide, whether active or passive.¹⁰⁸ Thus, when we turn back to exploring contraceptive or abortifacient knowledge and practices in historical societies, we can do so with better awareness of the range of possible ways gender can inform reproductive possibilities and why, in some circumstances, it seems to be men who have (or are expected to have) greater expertise or responsibility in controlling fertility.¹⁰⁹

Conclusions

There has been much excellent work in the field of women's medical history – medicine of, for, and by women – in the past three decades, ranging from edited texts to biographies; from studies of the legal repression of abortion in nineteenth- and

twentieth-century America to the development (and collapse) of the 'estrogen paradigm' in women's healthcare.¹¹⁰ As rigorous and insightful as such work is (particularly for the modern period), there has been a surprising lack of coherence to the field. It has been my argument here that there are crucial elements of this history we have overlooked by focusing perhaps too exclusively on *women* and not seeing the ways in which the creation of epistemologies on the female body are not limited to those who inhabit female bodies. Even in such a historically female-dominant area as midwifery, we need to explore how midwives (male or female) contested epistemologies and standards of care among themselves. Already, in 1331 in Marseilles, female midwives on their own initiative called in a male barber-surgeon 'who was experienced in this' when a foetus needed to be extracted from its dead mother. A legal case in 1403, also from Marseilles, hinged on the disputed intervention for a case of retained placenta which escalated – not along a male–female divide, but one of religion – into a fierce accusation of murder.¹¹¹ Questions of how obstetrical knowledge is developed and then best transmitted are likewise of great import to the careers of the early modern female midwife-authors, Justine Siegemund in Prussia and Madame du Coudray in France. Contested epistemologies and scientific ways of knowing have animated scholarship in the history of science for many years, and it would be good to bring these same questions of empiricism, experimentation and social worlds of knowledge construction to bear on the development of obstetrical knowledge. Laurel Thatcher Ulrich's study of the Maine and Massachusetts midwife Martha Ballard showed with great nuance how a female practitioner in Revolutionary New England could carve out a medical practice in concert (and occasionally in rivalry) with male practitioners, recognising that she herself could learn from the anatomical skill of a male physician.¹¹² Just as Katharine Park recounts how the traditional perspective of the history of anatomy as a masculine project (males being both the presumed objects and the subjects of such investigations) blinded her to 'the ubiquity of women's bodies in [her] sources',¹¹³ so I would argue that the historiographical inclinations spawned by the Ehrenreich and English narrative about the history of women's medical practices have had profound effects in stymying a range of questions that, in my opinion, we should be asking. The roles, indeed the very existence, of medieval midwives, the involvement of men in childbirth and women's healthcare more generally, and the history of women's knowledge of, and control over, contraceptive and abortifacient knowledge, have all been neglected because we have been working with a mythology of a golden age that no data has supported.

In Kuhnian terms, are we trying to 'save the system' by ignoring anomalies in a failing paradigm? I would certainly not suggest that the evidence I have presented here proves that we are ready for a paradigm shift. But we are ready, I believe, to interrogate more systematically the creation and dissemination of medical knowledge and practice *as a cultural artefact* rather than a biologically based, and therefore static, set of instincts. In doing so, we can better see where historical change in healthcare lies. Gender then becomes the historical variable itself, one among several elements at play in the formation of technologies of the body. Gendering our analyses of women's healthcare in the west also opens up opportunities for a richer and more productive dialogue with the histories and anthropologies of other places of the world. The medical anthropologist Marcia Inhorn has produced a fruitful synthetic analysis of more than 150 different anthropological ethnographies of women's healthcare and what they can tell us about the varieties of women's experiences with bodily dysfunctions and the

range of desired interventions women are willing to pursue. Indeed, she argues that such observation- and interview-based assessment can tell us things about women that have largely been foreclosed by the success of the biomedical paradigm in the west.¹¹⁴ Even if many of those anthropological studies are grounded on areas that have already felt the imprint of colonialism (which often imposed European concepts of how medicine ought to be gendered), I believe we can still find enough variety in women's differing experiences to inform our historical understanding.

Ironically, then, it might be argued that gender has been *too much* a focus in the history of women's healthcare. There is an important debate beginning now in medical history about what might be called 'the obstetrical transition' – that is, how the radical reduction in maternal and neonatal mortality was achieved in western countries over the course of the nineteenth and twentieth centuries. The Ehrenreich and English thesis that the masculinisation of midwifery was uniformly a bad thing for women (primarily for women as practitioners, but also for women as patients who lost the emotional comfort of an all-female milieu of ritual and support and who were subjected to sometimes cruelly invasive procedures) is a red herring in two respects: it not only exaggerates the English case, as I have already explained, as if it were typical of European traditions generally (female midwives were nowhere else as disenfranchised or circumscribed as they were in England and the United States), but it also occludes attention to how the radical changes in obstetrical outcomes in the modern period have in fact occurred.¹¹⁵ Several historians have begun to address this question with great nuance and they are finding that much hangs precisely on these questions of education and professionalisation, with gender differentials being perhaps secondary.¹¹⁶

It matters that we get these stories right – or at least that we can say with conviction that we have brought all the historian's tools to bear on these questions. Of all the historical traditions, only China rivals the west in the richness and depth of its historical record in the field of women's health.¹¹⁷ But it is western medicine, in its various manifestations, that is being adopted now as global, intersecting with and sometimes overwhelming indigenous local practices of great age and complexity. Western historical narratives therefore need to be closely scrutinised not only for their own sake, but also for their implications in setting agendas for health policy in the future. The 'safe motherhood' programmes, which have been going on under World Health Organisation sponsorship since the 1980s, take modern western maternal mortality rates (which might well be the lowest rates ever achieved by human populations) as the goal towards which developing nations should strive. Reducing maternal mortality seems an unquestionably noble goal, but there are huge questions whether that goal is to be achieved through relatively straightforward educational programmes like teaching traditional birth attendants the principles of germ theory and asepsis or through massively intrusive and technologically complex surgical interventions that underlie the astronomical rates of Caesarean section seen now in many westernised countries.¹¹⁸ One could make similar arguments about the contemporary political and economic implications of issues like birth control, bioprospecting for botanicals for their potential clinical uses and other issues addressed in this essay. The example of HIV/AIDS alone is a chilling reminder of how a worldwide pandemic has developed under the nose of a health infrastructure fully capable, in terms of its science, of understanding and treating (even if not yet curing) the disease, only to lack enough of a basic understanding of gender relations to have foreseen the devastating consequences of the

disease for women.¹¹⁹ For all of these urgent concerns, history matters, gender matters and women's healthcare matters. We have much yet to do.

Notes

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1. To date, the only attempt at a synthetic history of this period in American women's history is the anthropological study: Sandra Morgen, *Into Our Own Hands: The Women's Health Movement in the United States, 1969–1990* (New Brunswick, NJ: Rutgers University Press, 2002). For references to key primary sources for this period, see the syllabus for the course 'The Women's Health Movement in the 1970s', taught at Yale University by Naomi Rogers, available online at <<http://www.nlm.nih.gov/hmd/collections/digital/syllabi/rogers2.pdf>> (accessed 19 June 2005).
2. A comprehensive list of such work would go on for pages. A representative sampling might include Regina Morantz-Sanchez, *'Conduct Unbecoming a Woman': Medicine on Trial in Turn-of-the-Century Brooklyn* (New York: Oxford University Press, 1999); Wendy D. Churchill, 'The Medical Practice of the Sexed Body: Women, Men, and Disease in Britain, circa 1600–1740', *Social History of Medicine* 18 (2005), pp. 3–22; Wendy D. Churchill, 'Bodily Differences? Gender, Race, and Class in Hans Sloane's Jamaican Medical Practice, 1687–1688', *Journal of the History of Medicine and Allied Sciences* 60 (2005), pp. 391–444; Diana Wales, 'Equally Safe for Both Sexes: A Gender Analysis of Medical Advertisements in English Newspapers, 1690–1750', *Vesalius* 11 (2005), pp. 26–32.
3. For the purposes of this essay, I will be construing 'women's medicine' as referring particularly to aspects of women's health relating to the reproductive organs and their functions. In fact, I and many others are now arguing that 'women's medicine' needs to be viewed as encompassing woman's entire organism, not simply reproductive functioning. My particular concern here, however, is to reunite the histories of obstetrics (attendance on pregnancy and childbirth) and gynaecology, since much has been lost in focusing solely on attendance at childbirth.
4. On the concept of 'situated knowledge', see most importantly Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies* 14 (1988), pp. 575–99.
5. Barbara Ehrenreich and Deidre English, *Witches, Midwives, and Nurses: A History of Women Healers* (Oyster Bay, NY: Glass Mountain Pamphlets, 1971–72); Barbara Ehrenreich and Deidre English, *Complaints and Disorders: The Sexual Politics of Sickness* (Old Westbury, NY: Feminist Press, 1973). On the internationalisation of the US women's health movement more generally, see Kathy Davis, *The Making of Our Bodies, Ourselves: How Feminism Travels across Borders* (Durham, NC: Duke University Press, 2007).
6. Ehrenreich took a PhD in biology in 1968. Just before she produced *Witches, Midwives and Nurses*, she published, with John Ehrenreich, *The American Health Empire: Power, Profits, and Politics* (New York: Random House, 1970) and since then has had a highly influential career as a 'public intellectual', publishing on issues of social justice, economics and healthcare. Deirdre English is a journalist.
7. The bibliography on these topics is extensive. Among the most direct challengers of the Ehrenreich and English position have been Regina Morantz-Sanchez, *Sympathy and Science: Women Physicians in American Medicine* (New York: Oxford University Press, 1985); and Nancy M. Theriot, 'Women's Voices in Nineteenth-Century Medical Discourse: A Step toward Deconstructing Science', *Signs* 19 (1993), pp. 1–31. These critiques developed amid transformations in how much history of medicine is done; see Susan M. Reverby and David Rosner, "'Beyond the Great Doctors" Revisited: A Generation of the "New" Social History of Medicine', in Frank Huisman and John Harley Warner (eds), *Locating Medical History: The Stories and Their Meanings* (Baltimore: Johns Hopkins University Press, 2004), pp. 167–93, which includes a useful summary of how women and gender have been addressed in the context of other analyses of difference.
8. Ehrenreich and English, *Witches, Midwives and Nurses*, p. 3.
9. I have identified the following translations: *Hexen, Hebammen und Krankenschwestern* (Munich: Frauenoffensive, 1975); *Le streghe siamo noi: Il ruolo della medicina nella repressione della donna* (Milan: CELUC, 1975); *Sorcières, sages femmes et infirmières: Une histoire des femmes et de la médecine*, tr. Lorraine Brown and Catherine Germain (1976; Montreal: Editions du Remue-Ménage, 1983);

- Brujas, comadronas y enfermeras: Historia de las sanadoras; Dolencias y trastornos: Política sexual de la enfermedad* (Barcelona: LaSal, 1981). These all still appear to be in print. For online sales of the American edition, I checked the website of Barnes and Noble on 29 July 2005 (<<http://search.barnesandnoble.com/bestsellers/bestsellers.asp?cat=394783&sort=S>>).
10. Although it is not surprising to find it used in such popularising works as Elisabeth Brooke's *Women Healers Through History* (London: Women's Press, 1993), it is stunning to see it cited as a reputable authority in scholarly works such as Renate Blumenfeld-Kosinski, *Not of Woman Born: Representations of Caesarean Birth in Medieval and Renaissance Culture* (Ithaca, NY: Cornell University Press, 1990); Caroline Bicks, *Midwiving Subjects in Shakespeare's England* (Aldershot: Ashgate, 2003); and Carmen Caballero-Navas (ed.), *The 'Book of Women's Love' and Jewish Medieval Medical Literature on Women 'Sefer Ahavat Nashim'*, Kegan Paul Library of Jewish Studies (London and New York: Kegan Paul, 2004). Even when it is not explicitly cited, its influence can be seen in works such as Myriam Greilsammer, 'The Midwife, the Priest, and the Physician: The Subjugation of Midwives in the Low Countries at the End of the Middle Ages', *Journal of Medieval and Renaissance Studies* 22 (1991), pp. 285–329, which argues precisely for a medieval 'golden age' when women had exclusive control over knowledge of reproduction, which was then suppressed by the combined forces of the Church and the male medical profession. Perhaps most famously, Ehrenreich and English's pamphlet gave rise in 1985 to Gunnar Heinsohn and Otto Steiger's grand thesis of the importance of the witch-hunts for the history of population control: *Die Vernichtung der weisen Frauen* (3rd edn, Erfstadt: Ein März Buch, 2005).
 11. Ehrenreich and English deliberately reduced all kinds of women's medical practice to a single plane, using the term 'midwives' in their title as a catch-all phrase rather than a specific referent to birth attendants. On the conceptual confusion this usage has spawned, see the discussion in Monica H. Green, 'Women's Medical Practice and Health Care in Medieval Europe', *Signs* 14 (1988–89), pp. 434–73.
 12. David Harley, 'Historians as Demonologists: The Myth of the Midwife-Witch', *Social History of Medicine* 3 (1990), pp. 1–26. It should be noted, too, that some of Ehrenreich and English's evidence was simply fabricated, such as the statement, 'If a woman dare to cure without having studied she is a witch and must die', *Witches, Midwives, and Nurses*, p. 19. They attribute this to the *Malleus maleficarum* but provide no citation. The same quote appears in countless popular regurgitations of *Witches, Midwives, and Nurses*, but also in John M. Riddle's 1997 study, *Eve's Herbs: A History of Contraception and Abortion in the West* (Cambridge: Harvard University Press, 1997), p. 134. The statement appears nowhere in Montague Summers's old translation of the *Malleus* (which elsewhere Ehrenreich and English relied on), and I have had confirmation from Dr Christopher Mackay of the University of Alberta that the citation is bogus (personal communication, 1 April 2008). For a definitive edition and translation, see Henricus Institoris and Jacobus Sprenger, *Malleus Maleficarum*, ed. and tr. Christopher S. Mackay, 2 vols (Cambridge: Cambridge University Press, 2006).
 13. Brigitte Jordan, *Birth in Four Cultures: A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden, and the United States* (1973; Long Grove, IL: Waveland Press, 1993), p. 50.
 14. Lisa Forman Cody, *Birthing the Nation: Sex, Science, and the Conception of Eighteenth-Century Britons* (New York: Oxford University Press, 2005), p. 3. my emphasis.
 15. Hilary Marland (ed.), *The Art of Midwifery: Early Modern Midwives in Europe* (London: Routledge, 1993). No essay there asserts what midwives were or were not doing over the course of 'millennia'; rather, all are very closely argued, empirically based studies that restrict their claims to the early modern period.
 16. See Monica H. Green, 'Obstetrical and Gynecological Texts in Middle English', *Studies in the Age of Chaucer* 14 (1992), pp. 53–88; Monica H. Green and Linne Mooney, 'The Sickness of Women', in M. Teresa Tavormina (ed.), *Sex, Aging, and Death in a Medieval Medical Compendium: Trinity College Cambridge MS R.14.52, Its Texts, Language, and Scribe*, Medieval & Renaissance Texts and Studies 292, 2 vols (Tempe: Arizona Center for Medieval and Renaissance Studies, 2006), vol. 2, pp. 455–568; Monica H. Green, *Making Women's Medicine Masculine: The Rise of Male Authority in Pre-Modern Gynaecology* (Oxford: Oxford University Press, 2008).
 17. Figures for French texts on women's medicine come, respectively, from Green, *Making Women's Medicine Masculine*; and Valérie Worth-Stylianou, *Les Traités d'obstétrique en langue française au seuil de la modernité. Bibliographie critique des 'Divers Travaux' d'Eucaire Rösslin (1536) à l' 'Apologie de Louyse Bourgeois sage femme' (1627)* (Geneva: Droz, 2006). On male authorship of texts both medieval and early modern, see Green, *Making Women's Medicine Masculine*; Helen King, *Midwifery, Obstetrics and the Rise of Gynaecology: The Uses of a Sixteenth-Century Compendium* (Aldershot: Ashgate, 2007); Lianne McTavish, *Childbirth and the Display of Authority in Early Modern France* (Aldershot: Ashgate, 2005).

18. Michele Savonarola, *Il trattato ginecologico-pediatrico in volgare 'Ad mulieres ferrarienses de regimine pregnantium et noviter natorum usque ad septennium'*, ed. Luigi Belloni (Milan: Società Italiana di ostetricia e ginecologia, 1952). Compare Green, *Making Women's Medicine Masculine*, ch. 3, esp. pp. 145–62, for the limited evidence that midwives were even an aural audience of literature on women's medicine.
19. Margaret L. King, 'Concepts of Childhood: What We Know and Where We Might Go', *Renaissance Quarterly* 60 (2007), pp. 371–407, here pp. 383–4, my emphasis.
20. For example, one of the central arguments of Mary Fissell, *Vernacular Bodies: The Politics of Reproduction in Early Modern England* (Oxford and New York: Oxford University Press, 2004), is that, with the advent of print, male readers for the first time became privy to what had previously been female knowledge. Similarly, the organising principle of Laura Gowing, *Common Bodies: Women, Touch and Power in Seventeenth-Century England* (New Haven: Yale University Press, 2003) is that the female body was governed most of all by other women.
21. Green, *Making Women's Medicine Masculine*, ch. 6, esp. pp. 273–84.
22. See e.g., the similarities in this regard between James V. Ricci, *The Genealogy of Gynaecology: History of the Development of Gynaecology throughout the Ages* (Philadelphia and Toronto: Blakiston, 1950); Michael J. O'Dowd and Elliot E. Philipp, *The History of Obstetrics and Gynaecology* (New York and London: Parthenon, 1994); and Harold Speert, *Obstetric and Gynecologic Milestones Illustrated* (New York and London: Parthenon, 1996).
23. King, *Midwifery, Obstetrics and the Rise of Gynaecology*.
24. James Hobson Aveling, an obstetric physician and founding member of both the Obstetrical Society of London (1859) and of the British Gynaecological Society (1884), wrote his *English Midwives: Their History and Prospects* (London: J. & J. Churchill, 1872) as part of his campaign to improve the education and regulation of midwifery. Anthropological works include George Julius Engelmann's first comparative ethnographic and historical study of childbirth, *Labor among Primitive Peoples, Showing the Development of the Obstetric Science of To-day, From the Natural and Instinctive Customs of all Races, Civilized and Savage, Past and Present* (St Louis, MO: J. H. Chambers, 1882); G.-J. Witkowski's equally ambitious *Histoire des accouchements chez tous les peuples* (Paris: G. Steinheil, 1887), which he followed with his *Accoucheurs et sages-femmes célèbres: Esquisses biographiques* (Paris: G. Steinheil, 1891). One of the few female contributors to these general surveys was Henriette Carrier, *Origines de La Maternité de Paris: Les maîtresses sages-femmes et l'office des accouchées de l'ancien Hôtel-Dieu (1378–1796)* (Paris: G. Steinheil, 1888).
25. Thomas R. Forbes, 'Perrette the Midwife: A Fifteenth-Century Witchcraft Case', *Bulletin of the History of Medicine* 36 (1962), pp. 124–9.
26. Jean Donnison, *Midwives and Medical Men: A History of Inter-Professional Rivalries and Women's Rights* (New York: Schocken, 1977); Jane B. Donegan, *Women and Men Midwives: Medicine, Morality and Misogyny in Early America* (New York: Greenwood, 1978), citing *Witches, Midwives, and Nurses* on pp. 7, 36, 190.
27. Judy Barrett Litoff, *The American Midwife Debate: A Sourcebook on its Modern Origins*, Contributions in Medical Studies 18 (New York: Greenwood Press, 1986).
28. Monica H. Green, 'In Search of an "Authentic" Women's Medicine: The Strange Fates of Trota of Salerno and Hildegard of Bingen', *Dynamis: Acta Hispanica ad Medicinam Scientiarumque Historiam Illustrandam* 19 (1999), pp. 25–54.
29. Johann Christian Friedrich Harless, *Die Verdienste der Frauen um Naturwissenschaft, Gesundheits- und Heilkunde, so wie auch um Länder- Völker- und Menschenjunde, von der ältesten Zeit bis auf die neueste: Ein Beitrag zur Geschichte geistiger Cultur, und der Natur- und Heilkunde, insbesondere* (Göttingen: Vanden-Hoeck-Ruprecht, 1830). On women who took medical degrees through 'irregular' medical study prior to Blackwell, see Gabriella Berti Logan, 'Women and the Practice and Teaching of Medicine in Bologna in the Eighteenth and Early Nineteenth Centuries', *Bulletin of the History of Medicine* 77 (2003), pp. 506–35.
30. Paulina Wright Davis, 'Remarks at the Conventions', *The Una* 1:9 (September 1853), pp. 136–78. I owe this reference to Susan Mosher Stuard, 'History, Medieval Women's', in Margaret Schaus (ed.), *Medieval Women and Gender: An Encyclopedia* (New York: Routledge, 2006), pp. 368–74.
31. Sophia Jex-Blake, *Medical Women: Two Essays* (Edinburgh: William Oliphant, 1872).
32. Melina Lipinska, *Histoire des femmes médecins depuis l'antiquité jusqu'à nos jours* (Paris: G. Jacques, 1900); and her later summary, *Les femmes et le progrès des sciences médicales* (Paris: Masson & Cie, 1930). Compare Henri Denifle (ed.), *Chartularium Universitatis Parisiensis* (Paris: Delalain, 1891–99), vol. 2, pp. 255–67.

33. Kate Campbell Hurd-Mead, *A History of Women in Medicine* (1938; New York: AMS Press, 1977). Hurd-Mead's work is riddled with scholarly errors of almost every kind and should not be relied on.
34. Their source for this material was Muriel Joy Hughes, *Women Healers in Medieval Life and Literature* (1943; Freeport, NY: Books for Libraries, 1968).
35. Harley, 'Historians as Demonologists'.
36. Work published up to the late 1980s is analysed in Monica H. Green, 'Women's Medical Practice' reprinted with corrigenda and addenda in Monica H. Green, *Women's Healthcare in the Medieval West: Texts and Contexts*, Variorum Collected Studies Series CS680 (Aldershot: Ashgate, 2000), Essay I. Subsequent work published until 2004 is summarised in Monica H. Green, 'Bodies, Gender, Health, Disease: Recent Work on Medieval Women's Medicine', *Studies in Medieval and Renaissance History*, 3rd series, 2 (2005), pp. 1–46, here p. 15.
37. Katharine Park, *Secrets of Women: Gender, Generation, and the Origins of Human Dissection* (New York: Zone, 2006); Green, *Making Women's Medicine Masculine*.
38. Montserrat Cabré, 'Women or Healers? Household Practices and the Categories of Health Care in Late Medieval Iberia', *Bulletin of the History of Medicine* 82 (2008), pp. 18–51. See also Green, *Making Women's Medicine Masculine*, ch. 3, pp. 118–62. On the range of women's medical practices in the sixteenth and seventeenth centuries, see the other essays in that same special issue of the *Bulletin*.
39. Green, *Making Women's Medicine Masculine*.
40. Jordan, *Birth in Four Cultures*, ch. 2, pp. 11–31.
41. Ann Ellis Hanson, 'A Division of Labor: Roles for Men in Greek and Roman Births', *Thamyris* 1 (1994), pp. 157–202; Helen King, *Hippocrates' Woman: Reading the Female Body in Ancient Greece* (London and New York: Routledge, 1998); Rebecca Flemming, *Medicine and the Making of Roman Women: Gender, Nature, and Authority from Celsus to Galen* (Oxford: Oxford University Press, 2001); Rebecca Flemming, 'Women, Writing and Medicine in the Classical World', *Classical Quarterly* 57 (2007), pp. 257–79.
42. Jacqueline Marie Musacchio, *The Art and Ritual of Childbirth in Renaissance Italy* (New Haven: Yale University Press, 1999).
43. Ulinka Rublack, 'Pregnancy, Childbirth and the Female Body in Early Modern Germany', *Past & Present* 150 (1996), pp. 84–100.
44. Park, *Secrets of Women*.
45. Cecilia Van Hollen, *Birth on the Threshold: Childbirth and Modernity in South India* (Berkeley: University of California Press, 2003), p. 43. The term *purdah* is italicised in the original; the other emphases are my own.
46. See Maneesha Lal, 'The Politics of Gender and Medicine in Colonial India: The Countess of Dufferin's Fund, 1885–1888', *Bulletin of the History of Medicine* 68 (1994), pp. 29–66; Maneesha Lal, 'Purdah as Pathology: Gender and the Circulation of Medical Knowledge in Late Colonial India', in Sarah Hodges (ed.), *Reproductive Health in India: History, Politics, Controversies* (New Delhi: Orient Longman, 2006), pp. 85–114; Van Hollen, *Birth on the Threshold*.
47. Terri Kapsalis, *Public Privates: Performing Gynecology from Both Ends of the Speculum* (Durham, NC: Duke University Press, 1997), examines the ways this ambiguity has been exploited as a type of pornography.
48. See e.g. Donnison, *Midwives and Medical Men*; Roy Porter, 'A Touch of Danger: The Man-Midwife as Sexual Predator', in George Sebastian Rousseau and Roy Porter (eds), *Sexual Underworlds of the Enlightenment* (Cambridge: Harvard University Press, 1995).
49. Monica H. Green (ed.), *The 'Trotula': A Medieval Compendium of Women's Medicine* (Philadelphia: University of Pennsylvania Press, 2001), pp. 22–34. In one of the *Trotula* texts, the original author explicitly said that midwives (*obstetrices*) ought not look the parturient in the face lest the latter be ashamed, p. 236, n. 48. Through a curious sequence of textual corruption, this reference became an injunction that the *men* assisting ought not look her in the face.
50. See Hilary Marland and Anne Marie Rafferty (eds), *Midwives, Society and Childbirth: Debates and Controversies in the Modern Period* (London and New York: Routledge, 1997).
51. On Egypt, see Hibba Abugideiri, 'The Scientisation of Culture: Colonial Medicine's Construction of Egyptian Womanhood, 1893–1929', *Gender & History* 16 (2004), pp. 83–98; on Jamaica, see Carolyn Sargent and Joan Rawlins, 'Transformations in Maternity Services in Jamaica', *Social Science and Medicine* 35 (1992), pp. 1,225–32. On India, see Lal, 'The Politics of Gender and Medicine'; Van Hollen, *Birth on the Threshold*.
52. Judith Walzer Leavitt, 'What Do Men Have to Do With It? Fathers and Mid-Twentieth-Century Childbirth', *Bulletin of the History of Medicine* 77 (2003), pp. 235–62, and the earlier literature cited therein.

53. John M. Riddle, *Contraception and Abortion from the Ancient World to the Renaissance* (Cambridge: Harvard University Press, 1992); John M. Riddle, *Eve's Herbs: A History of Contraception and Abortion in the West* (Cambridge: Harvard University Press, 1997).
54. Criticism from classical scholars includes Helen King, *Hippocrates' Woman*, ch. 7, pp. 132–56; Walter Scheidel, 'Progress and Problems in Roman Demography', in Walter Scheidel (ed.), *Debating Roman Demography* (Leiden: Brill, 2001), pp. 1–81, who calls Riddle's work 'an embarrassing travesty of scholarship' (p. 39). Critical reviews of *Eve's Herbs* include Lesley A. Hall, *American Historical Review* 103 (1998), pp. 1,211–12; Gigi Santow, *Population and Development Review* 24 (1998), pp. 869–75; Monica H. Green, *Bulletin of the History of Medicine* 73 (1999), pp. 308–11.
55. In all, I found some thirty-two articles published on the topics of gynaecological and obstetrical uses of botanical substances by human populations between 1982 and early 2008. There is also considerable work being done testing natural substances in animal studies.
56. On the concept of 'technologies of the body' as an umbrella term for medical as well as cosmetic interventions, see Green, 'Bodies, Gender, Health, Disease', pp. 3–6.
57. Vanessa Steenkamp, 'Traditional Herbal Remedies Used by South African Women for Gynaecological Complaints', *Journal of Ethnopharmacology* 86 (2003), pp. 97–108, here p. 98; Joanna Michel et al., 'Medical Potential of Plants Used by the Q'eqchi Maya of Livingston, Guatemala for the Treatment of Women's Health Complaints', *Journal of Ethnopharmacology* 114 (2007) pp. 92–101.
58. R. C. Cambie and Alexandra A. Brewis, *Anti-Fertility Plants of the Pacific* (Melbourne: CSIRO Press, 1997).
59. See e.g., Karin E. Netland and Jorge Martinez, 'Abortifacients: Toxidromes, Ancient to Modern – A Case Series and Review of the Literature', *Academic Emergency Medicine* 7 (2000), pp. 824–9.
60. Alexandra Brewis Slade, personal communication with the author, 31 March 2008.
61. Johannes Platearius, *Practica brevis*, my translation. The text has not yet received a modern edition; I cite here from one of the earliest extant copies, Cambridge University Library, Dd.III.51, s. xii.
62. On this idea of 'the brother of the Salernitans', see Mireille Ausécache, 'Une naissance monstrueuse au Moyen Age: Le 'frère de Salerne'', *Gesnerus* 64 (2007), pp. 5–23.
63. It is important to understand that the alleged female writer 'Trotula' that Riddle refers to (*Eve's Herbs*, pp. 31–2, 52 and 105), represents not one author but three, whose works were fused into a single ensemble in the late twelfth century. The passages that Riddle cites as evidence of this 'woman writer's' views in fact come from a text I have identified as male-authored. See Green, *Making Women's Medicine Masculine*, ch. 1, esp. pp. 48–53.
64. Trotta of Salerno, *De curis mulierum* (On Treatments for Women), paragraph 146 (Oxford, Bodleian Library, MS Digby 79, s. xiii in.): 'Item sunt quedam quibus remanet secundina post partum, quibus subuenimus ad illius expulsionem sic. Extrahimus succum petrosilini et porri, et distemperamus cum oleo pulegino et oleo nucis, et damus ad potandum. Vel succum borraginis, et cito educetur, tum quia fortassis ueniet et ex conatu uomendi educet, tum quia succus illas uisitat partes que sufficiunt ad expulsionem'. (Likewise there are some women in whom the afterbirth remains after birth; these we aid in the following manner. We extract the juice of parsley and leeks, and we mix them with pennyroyal oil and nut oil, and we give it to drink. Or the juice of borage. And immediately it will come out. Perhaps it comes out from the effort of vomiting, or perhaps because the juice goes to those organs which are needed for expulsion.) The passage reads somewhat differently in the later version of the *Trotula* ensemble, which can be found in Green, *The 'Trotula'*, 146, pp. 122–4.
65. In addition to the previous passage, borage is mentioned in Trotta's *Practica* as follows (paragraph 5, Madrid, Biblioteca de la Universidad Complutense, MS 119, c. 1200, fol. 140v): 'Ad mulierem que non potest post partum libere purgari, succum de foliis borraginis exprimas, et cum oleo misceas et bibat, et statim purgabitur'. (For a woman who is not able to be freely purged after birth, we express the juice from borage leaves and mix it with oil; let her drink it and immediately she will be purged). Neither borage nor leeks are mentioned as contraceptives or abortifacients by Riddle.
66. Trotta, *Practica*, paragraph 1 (Madrid, Complutense, MS 119, f. 140 r–v). 'Secundum Trotam ad menstua prouocanda, propter quorum retentiones mulier concipere non potest. Si ergo iuencula fuerit, accipe radicem salicis tenere fluuialis, et bene radas, deinde tritam facias in aqua uel uino bulliri, et accipe frondes rute, et teras, et de succo facias crispellas, et eas comedat, et liquorem in quo radices salicis decoqueris, bibat in mane cum ieiuna fuerit. Quo ter uel quater facto, redduntur eis menstua'. (According to Trotta, [a remedy] to provoke the menses, on account of whose retention *the woman is unable to conceive*. If she is young, take root of river willow and scrape it well. Then, having ground it, boil it in water or wine. And take the leaves of rue and grind them, and make little wafers from its juice. And let her eat them. And in the morning when she is fasting, give her to drink the liquid in which you have cooked the willow

- root. Done three or four times, the menses will return). A nearly identical recipe appears in Trota's *De curis mulierum* (paragraph 135), though here we find madder being used instead of rue. On the fertility disruptive properties of willow and rue, see Riddle, *Eve's Herbs*, pp. 60–1 and 48–50, respectively.
67. On the tolerance for contraceptive knowledge in medical writings of the period, see Monica H. Green, 'Constantinus Africanus and the Conflict Between Religion and Science', in G. R. Dunstan (ed.), *The Human Embryo: Aristotle and the Arabic and European Traditions* (Exeter: Exeter University Press, 1990), pp. 47–69.
 68. Hans Wölfel (ed.), *Das Arzneidrogenbuch 'Circa instans' in einer Fassung des XIII. Jahrhunderts aus der Universitätsbibliothek Erlangen. Text und Kommentar als Beitrag zur Pflanzen- und Drogenkunde des Mittelalters* (Berlin: A. Preilipper, 1939).
 69. E.g., under rosemary we find, 'For cleansing the womb and aiding the conceptus, make a fomentation around the pudenda with water decocted with it. The Salernitan women cook its leaves in musk oil and give themselves suppositories with this concoction', Wölfel (ed.), *Das Arzneidrogenbuch*, p. 104.
 70. Nicole Gonthier, 'Les médecins et la justice au XV^e siècle à travers l'exemple dijonnais', *Le Moyen Age: Revue d'histoire et de philologie* 101 (1995), pp. 277–95, here p. 288.
 71. Monica H. Green, 'Flowers, Poisons, and Men: Menstruation in Medieval Western Europe', in *Menstruation: A Cultural History*, ed. Andrew Shail and Gillian Howie (New York: Palgrave, 2005), pp. 51–64; Alisha Rankin, 'Duchess, Heal Thyself: Elisabeth of Rochlitz and the Patient's Perspective in Early Modern Germany', *Bulletin of the History of Medicine* 82 (2008), pp. 109–44, at p. 134, citing the detailed self-description of symptoms by Lady Anna of Waldeck; and Barbara Duden, *The Woman Beneath the Skin: A Doctor's Patients in Eighteenth-Century Germany*, tr. Thomas Dunlap (Cambridge: Harvard University Press, 1991).
 72. Etienne van de Walle and Elisha P. Renne (eds), *Regulating Menstruation: Beliefs, Practices, Interpretations* (Chicago: University of Chicago Press, 2001).
 73. Marcia Inhorn, *Quest for Conception: Gender, Infertility, and Egyptian Medical Traditions* (Philadelphia: University of Pennsylvania Press, 1994); Marcia Inhorn, *Infertility and Patriarchy: The Cultural Politics of Gender and Family Life in Egypt* (Philadelphia: University of Pennsylvania Press, 1996).
 74. My thanks to Alex Brewis Slade for bringing this concept to my attention, and to Colleen Marie O'Brien for providing a brief bibliography. In her book, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (Cambridge: Harvard University Press, 2004), Londa Schiebinger employs the concept of 'agnatology', the study of the loss of knowledge, which she sees as deliberate acts of suppression. I prefer 'persistence of knowledge' since it carries no presumption of moral fault, only historical change.
 75. Riddle, *Eve's Herbs*, pp. 10–13, 23–4. For a more accurate translation of major portions of this woman's testimony, where the reader can see the full context of her statements on contraception, see Patrick J. Geary, *Readings in Medieval History* (Lewiston, NY: Broadview Press, 1989), pp. 539–40.
 76. Monica H. Green, 'The Possibilities of Literacy and the Limits of Reading: Women and the Gendering of Medical Literacy', in Green, *Women's Healthcare in the Medieval West*, Essay VII, pp. 1–76; Monica H. Green, 'Books as a Source of Medical Education for Women in the Middle Ages', *Dynamis: Acta Hispanica ad Medicinam Scientiarumque Historiam Illustrandam* 20 (2000), pp. 331–69.
 77. Green, *Making Women's Medicine Masculine*, pp. 110, 159 n. 26.
 78. Alexandra Barratt (ed.), *The Knowing of Woman's Kind in Childing: A Middle English Version of Material Derived from the 'Trotula' and Other Sources*, *Medieval Women: Texts and Contexts* 4 (Turnhout: Brepols, 2001), p. 60, line 311.
 79. Cambridge, University Library, MS Dd.10.44, s. xv, fol. 91v.
 80. Green and Mooney, 'The Sickness of Women', vol. 2, pp. 455–568, lines 679–81.
 81. Donnison, *Midwives and Medical Men*, p. 203, n. 7.
 82. Alexander Hamilton Thompson (ed.), *Visitations in the Diocese of Lincoln 1517–1531*, 3 vols (Lincoln: Lincoln Record Society, 1944), vol. 2, p. 65, my translation.
 83. Thompson, *Visitations*, vol. 2, p. 14. The Middle English passage appears in the original, which is otherwise written in Latin.
 84. James Hitchcock, 'A Sixteenth Century Midwife's License', *Bulletin of the History of Medicine* 41 (1967), pp. 75–6, spelling and grammar modernised.
 85. Riddle, *Eve's Herbs*, p. 134.
 86. I have examined published oaths for the following cities: Brussels (1424), Regensburg (1452), Amberg (1456–64), Württemberg (c.1480), Bern (1540), Heilbronn (undated, but probably sixteenth century). Merry E. Wiesner, 'The Midwives of South Germany and the Public/Private Dichotomy', in Marland, *Art of Midwifery*, pp. 77–94, esp. pp. 87–8, finds new concerns about abortion in Southern Germany in the late sixteenth century. Miriam Greilsammer, 'The Midwife, the Priest, and the Physician: The Subjugation

- of Midwives in the Low Countries at the End of the Middle Ages', *Journal of Medieval and Renaissance Studies* 22 (1991), pp. 285–329, does not document any such concern in the Low Countries until 1697; see her comments on Bruges on p. 317. I believe she is mistaken to claim on p. 300 that concerns in Bruges in 1551 to prevent midwives from administering medications without physician supervision had anything to do with abortifacients; such prohibitions against administering medicines of any kind was central to later medieval physician control over barbers and midwives.
87. Kramer and Sprenger, *Malleus Maleficarum*, vol. 1, p. 704, vol. 2, pp. 596–7; Harley, 'Historians as Demonologists'.
 88. J. Harvey Bloom and R. Rutson James, *Medical Practitioners in the Diocese of London, Licensed under the Act of 3 Henry VIII, c. 11: An Annotated List, 1529–1725* (Cambridge: Cambridge University Press, 1935), pp. 84–85; Andrew Boorde, *The Breuiary of Helthe* (London: William Middleton, 1547), Extravagantes, fol. xvii; Walter Howard Frere (ed.), *Visitation Articles and Injunctions of the Period of the Reformation*, vol. 2: 1536–1558 (London: Longmans, Green, 1910), pp. 356–7; J. Strype, *Annals of the Reformation and Establishment of Religion, and other Various Occurrences in the Church of England, during the First Twelve Years of Queen Elizabeth's Happy Reign* (London: J. Wyat, 1708–09; Oxford, 1824), pp. 242–3.
 89. In her comprehensive study of midwifery legislation in Germany, Sibylla Flügge, *Hebammen und heilkundige Frauen: Recht und Rechtswirklichkeit im 15. und 16. Jahrhundert*, 2nd ed. (Frankfurt am Main: Stroenfeld, 2000), likewise did not find evidence that midwifery ordinances were concerned with abortifacients prior to 1577; see esp. pp. 210, 381, and 401–2. On widespread efforts to criminalise abortion in the sixteenth century, see Wolfgang P. Müller, *Die Abtreibung: Anfänge der Kriminalisierung, 1140–1650* (Cologne: Böhlau, 2000), who also has extensive evidence of abortifacient knowledge coming from a wide variety of actors, male and female.
 90. Green, 'Possibilities of Literacy'; Elaine Leong, 'Making Medicines in the Early Modern Household', *Bulletin of the History of Medicine* 82 (2008), pp. 45–168; Rankin, 'Duchess, Heal Thyself'.
 91. Green, *Making Women's Medicine Masculine*, ch. 6, pp. 67–71, 301–10.
 92. Cornelia Hughes Dayton, 'Taking the Trade: Abortion and Gender Relations in an Eighteenth-Century New England Village', *William and Mary Quarterly*, 3rd series, 48 (1991), pp. 19–49.
 93. Schiebinger, *Plants and Empire*.
 94. Liese M. Perrin, 'Resisting Reproduction: Reconsidering Slave Contraception in the Old South', *Journal of American Studies* 35 (2001), pp. 255–74. Perrin (p. 256) quotes Deborah Gray White as saying 'These matters were virtually exclusive to the female world of the quarters, and when they arose they were attended to in secret and were intended to remain secret'. My thanks to Calvin Schermerhorn for bringing Perrin's work to my attention and clarifying for me some of the historiographical issues involved.
 95. Cambie and Brewis, *Anti-Fertility Plants*, p. 105.
 96. See Green, *Making Women's Medicine Masculine*, p. 222.
 97. It is critical that in these and other similar cases we distinguish open assault (where miscarriage may have been an accidental result rather than a deliberate goal) from violence specifically meant to terminate a pregnancy. See Sara M. Butler, 'Abortion by Assault: Violence against Pregnant Women in Thirteenth- and Fourteenth-Century England', *Journal of Women's History* 17 (2005), pp. 9–31; Sara M. Butler, *The Language of Abuse: Marital Violence in Later Medieval England* (Leiden: Brill, 2007); and Wolfgang P. Müller, 'Canon Law Versus Common Law: The Case of Abortion in Late Medieval England', in Kenneth Pennington, Stanley Chodorow and Keith Kendall (eds), *Proceedings of the Tenth International Congress of Medieval Canon Law* (Vatican City: Biblioteca Apostolica Vaticana, 2001), pp. 929–41. See also Marianne Elsackers, 'Inflicting Serious Bodily Harm: the Visigothic *Antiquae* on Violence and Abortion', *Tijdschrift voor Rechtsgeschiedenis – The Legal History Review* 71 (2003), pp. 55–63.
 98. Pierre Dubuis, 'Enfants refusés dans les Alpes occidentales (XIV^e–XV^e siècles)', in Società Italiana di Demografia Storica (ed.), *Enfance abandonnée et société en Europe* (Rome: Ecole française de Rome Palais Farnèse, 1991), pp. 573–90. I discuss here only the cases of contraception and abortion; the remaining ones are either infanticides or abandonments of a child.
 99. Peter Biller, *The Measure of Multitude: Population in Medieval Thought* (Oxford: Oxford University Press, 2000).
 100. On the rather astounding levels of clerical and lay interest in generation in the later Middle Ages, see Green, *Making Women's Medicine Masculine*, esp. ch. 5, pp. 204–45.
 101. Judith Bennett, 'Writing Fornication: Medieval Leyrwrite and its Historians', *Transactions of the Royal Historical Society* 6th series, 13 (2003), pp. 131–62.
 102. The Bolognese physician, Albert de Zancariis, writing c.1325, warns fellow physicians to be wary of women who want to know if they're pregnant so that they can procure an abortion; see Albertus de Zancariis, *De cautelis medicorum habendis*, as cited in Manuel Morris, *Die Schrift des Albertus de Zancariis aus*

- Bologna: De cautelis medicorum habendis* (inaug.-diss., Leipzig, 1914), p. 13. On apothecaries as sources of information on abortifacients, see Flüge, *Hebammen und heilkundige Frauen*, pp. 210 and 280; for a barber, see Müller, *Die Abtreibung*, p. 279, n. 479.
103. E.g., the author (almost certainly male) of the twelfth-century Salernitan treatise called *Book on the Conditions of Women* recommended, on the advice of the Benedictine monk Constantine the African, that 'women who have narrow vaginas and constricted wombs ought not have sexual relations with men lest they conceive and die. But all such women are not able to abstain, and so they need our assistance'. See Green, *The Trotula*, paragraph 83, p. 96, and p. 235, n. 43. On the ways in which Muslim precepts about contraception and abortion made their way into Latin (Christian) medical texts, see Green, 'Constantinus Africanus'. See also Nancy G. Siraisi, *Taddeo Alderotti and His Pupils: Two Generations of Italian Medical Learning* (Princeton: Princeton University Press, 1981), pp. 282–3, regarding Mondino de' Liuzzi's (1275–1326) argument that since pregnancy (whether inside or outside marriage) can sometimes be dangerous for women, it is a lesser evil to prevent it than to terminate it once it has begun.
 104. Christiane Klapisch-Zuber, 'Le dernier enfant: Fécondité et vieillissement chez les Florentines XIV^e–XV^e siècles', in Jean-Pierre Barder, François Lebrun and René Le Mée (eds), *Mesurer et comprendre: Mélanges offerts à Jacques Dupaquier* (Paris: Presses Universitaires de France, 1993), pp. 277–90.
 105. Michael Rocke, *Forbidden Friendships: Homosexuality and Male Culture in Renaissance Florence* (New York: Oxford University Press, 1996). Rocke argues that, for most men, homosexual activity was never exclusive but rather a prelude or supplement to heterosexual relations within marriage.
 106. Gowing, *Common Bodies*.
 107. On menstruation, see van de Walle and Renne (eds), *Regulating Menstruation*.
 108. Cambie and Brewis, *Anti-Fertility Plants*; David Kertzer, *Sacrificed for Honor: Italian Infant Abandonment and the Politics of Reproductive Control* (Boston: Beacon, 1993).
 109. Kate Fisher, "'She Was Quite Satisfied with the Arrangements I Made": Gender and Birth Control in Britain 1920–1950', *Past & Present* 169 (2000), pp. 161–93; Kate Fisher, *Birth Control, Sex and Marriage in Britain, 1918–1960* (Oxford and New York: Oxford University Press, 2006); the essays in the special issue of *Journal of Interdisciplinary History* 34:2 (2003), 'Before the Pill: Preventing Fertility in Western Europe and Quebec'.
 110. Out of the dozens of examples that could be cited, several that I have found most useful in my own teaching are Justine Siegemund, *The Court Midwife*, ed. and tr. Lynne Tatlock (Chicago: University of Chicago Press, 2005); Nina Rattner Gelbart, *The King's Midwife: A History and Mystery of Madame du Coudray* (Berkeley: University of California Press, 1998); Leslie J. Reagan, *When Abortion Was a Crime: Women, Medicine, and Law in the United States, 1867–1973* (Berkeley: University of California Press, 1997); Elizabeth Watkins, *The Estrogen Elixir: A History of Hormone Replacement Therapy in America* (Baltimore: Johns Hopkins University Press, 2007).
 111. Monica H. Green and Daniel Lord Smail, 'The Trial of Floreta d'Ays (1403): Jews, Christians, and Obstetrics in Later Medieval Marseille', *Journal of Medieval History* 34 (2008), pp. 185–211.
 112. Laurel Thatcher Ulrich, *A Midwife's Tale: The Life of Martha Ballard, Based on Her Diary, 1785–1812* (New York: Knopf, 1990).
 113. Park, *Secrets of Women*, p. 9.
 114. Marcia C. Inhorn, 'Defining Women's Health: A Dozen Messages from More than 150 Ethnographies', *Medical Anthropology Quarterly* 20 (2006), pp. 345–78.
 115. For arguments that medicalisation does not always equal masculinisation (or vice versa), see the acute comments of Martin Dinges, 'Social History of Medicine in Germany and France in the Late Twentieth Century: From the History of Medicine toward a History of Health', in Frank Huisman and John Harley Warner (eds), *Locating Medical History: The Stories and Their Meanings* (Baltimore: Johns Hopkins University Press, 2004), pp. 209–36, esp. pp. 222–3.
 116. Ilana Löwy, 'The Social History of Medicine: Beyond the Local', *Social History of Medicine* 20 (2007), pp. 465–81; Robert Woods, 'Medical and Demographic History: Inseparable?', *Social History of Medicine* 20 (2007), pp. 483–503; Robert Woods, 'Lying-In and Laying-Out: Fetal Health and the Contribution of Midwifery', *Bulletin of the History of Medicine* 81 (2007), pp. 730–59; Vincent De Brouwere, 'The Comparative Study of Maternal Mortality over Time: The Role of the Professionalisation of Childbirth', *Social History of Medicine* 20 (2007), pp. 541–62. See also Daphne A. Christie and E. M. Tansey (eds), *Maternal Care: A Witness Seminar held at the Wellcome Institute for the History of Medicine, London, on 6 June 2000*, Wellcome Witnesses to Twentieth Century Medicine 12 (London: Wellcome Trust, 2001).
 117. Charlotte Furth, *A Flourishing Yin: Gender in China's Medical History 960–1665* (Berkeley: University of California Press, 1999); Yi-Li Wu, 'The Bamboo Grove Monastery and Popular Gynecology in Qing

- China', *Late Imperial China* 21 (2000), pp. 41–76; Angela Ki Che Leung (ed.), *Medicine for Women in Imperial China* (Leiden: Brill, 2006).
118. United Nations, *The Millennium Development Goals Report, 2007* (United Nations Department of Economic and Social Affairs (DESA), June 2007), downloaded 3 June 2008 from <http://www.un.org/millenniumgoals/docs/UNSD_MDG_Report_2007e.pdf>, recognises that 'no single intervention can address the multiple causes of maternal deaths'.
119. Space does not permit addressing the field of feminist epidemiology; for an overview, see Marcia C. Inhorn and K. Lisa Whittle, 'Feminism Meets the "New" Epidemiologies: An Appraisal of Antifeminist Biases in Epidemiologic Research on Women's Health', *Social Science and Medicine* 53 (2001), pp. 553–67.