

Birth prevention before the era of modern contraception

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Only in the last two centuries have human beings started to practice effective family limitation. Methods of contraception and abortion have existed for much longer, but were not a part of everyday life. Etienne van de Walle examines those mentioned in three texts dating from different periods – a classical medical treatise, a libertine French document of the eighteenth century and a nineteenth century American marriage guide – to shed light on past methods and practices.

Contraception is now a normal part of life for couples in the industrialized world, though the contraceptive revolution is relatively recent in the history of humanity. Family limitation first spread across France from the end of the eighteenth century, and to other parts of Europe almost a century later. Today, the main contraceptive methods used in France are the pill (61% of female users) and the intra-uterine device (23%), while the techniques most widely used before their introduction in the mid 1960s – withdrawal and periodic abstinence – are now used by only 2 and 3% of women respectively. However, in the event of contraceptive failure, one woman in two resorts to induced abortion [1].

A concern to avoid unwanted pregnancies appears to have existed throughout history and among practically all populations, though in various contexts (extra-marital relations, incest, prostitution, marriage) and for various reasons (to avoid the shame of an illegitimate child for unmarried women, to maintain a regular income for prostitutes, to space births for married women, or even to preserve feminine health and beauty). In general, demand for contraception far outstripped supply, and few reliable techniques were available. As we shall see, contraceptive and abortive practices of the past were based on a mistaken under-

standing of anatomy and physiology which often rendered them ineffective.

Without attempting to cover every aspect of this subject, we will examine the history of birth control through a selection of three reference texts, written at very different periods in history and targeting very different audiences, but which give a general picture of the methods of contraception and abortion available at their time. The first is the *Gynaecology of Soranus of Ephesus*, a medical work of the Greco-Roman world written in the second century AD [2]. The second is a libertine text, *L'École des filles*, written under Louis XIV [3] and the third is a nineteenth century manual written for the American public: *The Marriage Guide* by Frederick Hollick [4].

◆ Contraception in antiquity

It is generally agreed that the *Gynaecology of Soranus* is the most rational medical treatise on birth control in the classical literature. Soranus stipulates that birth control must be reserved strictly for cases where the wife is sexually immature or where pregnancy would endanger the life of a woman who is physically unable to bear a child. He recommends contraception rather than abortion and, if abortion is unavoidable, he favours termination in early pregnancy by expulsion of the product of conception, rather than at a later stage by

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destruction of the foetus. He is sceptical about the magical powers of amulets and warns against violent chemical potions or suppositories which may threaten the woman's health.

For contraception, Soranus begins by listing a series of methods aiming to prevent male semen from entering the woman's womb. They include partial withdrawal or movements designed to expel the semen, such as sneezing, standing up or walking around immediately after the sexual act. Soranus also mentions a range of astringent substances introduced by means of suppositories or pessaries (originally pieces of wool or linen impregnated with medicine) whose role was to tighten the cervix to prevent sperm from entering the womb. For optimal efficacy, women were advised to combine these various techniques. Used together, they might indeed have offered a certain degree of protection, had the text not recommended their use for sexual relations immediately after the menses. This timing error conformed to the teaching of Aristotle, who likened menstruation to the oestrus of mammals. Greek science thus wrongly believed that by the middle of the menstrual cycle women were no longer fecund.

To expel the seed that has started developing in the months following fertilization, Soranus recommended jumping, sudden movements or a jolting chariot ride. But the main method for inducing an early abortion was bloodletting. While contraceptive pessaries acted by closing the womb, mollifying pessaries or douches were intended to produce the opposite effect, namely relax the tissues in order to ease the passage of the embryo. Other types of medicine, partly contraceptive and partly abortive, could also be used for the purpose of restoring the menses. As a final resort, if other methods failed, Soranus reluctantly suggested that suppositories or potions might be employed to terminate the pregnancy, though he proscribed the use of sharp instruments to kill the foetus by rupturing the amniotic sac.

How effective were these methods? We cannot be sure, since this is an area where testing on humans is impossible. There is good reason for scepticism, however. Classical gynaecology favoured vaginal suppositories because they followed the most direct route to the uterus. But the foetus is well protected against this type of chemical invasion. Based as they were on a mistaken understanding of reproductive physiology, it is unlikely that the recommended methods had much effect. In any case, Greek medicine tended to encourage childbearing rather than birth control and gave priority to therapeutic applications for married couples. Certain later followers of Soranus, such as Aetius of Amida (502-575), extended birth control to courtesans and women wishing to avoid pregnancy in order to preserve their beauty. Recourse to "simples" (herbal remedies administered in the form of suppositories or "sterility potions" condemned by theologians since the early days of Christianity) continued throughout the

Middle Ages and the Renaissance, thanks to the transmission of works such as *De Materia Medica* by Dioscorides, the father of pharmacology (first century AD). But the efficacy of these products has never been empirically confirmed. Thus it would be wrong to imagine that the ancient Greeks and Romans possessed the means to control their fertility. They resorted more commonly to infanticide or exposure of children, as in *Daphnis and Chloe* (1), the Greek novel by Longus written in the second or third century AD [5].

Note that Soranus does not refer to withdrawal, which appears to have been introduced at a later date from the Middle East (it is mentioned in the Bible, the Talmud and the Muslim tradition). Though one might assume that withdrawal is an obvious method, instantly available if needed, it has no cultural existence nor even any direct or figurative designation in the western world before the sixteenth century. Birth control was generally an esoteric field of learning, passed on in the form of "secrets" to a selected few.

◆ Libertine inventions of the Grand Siècle

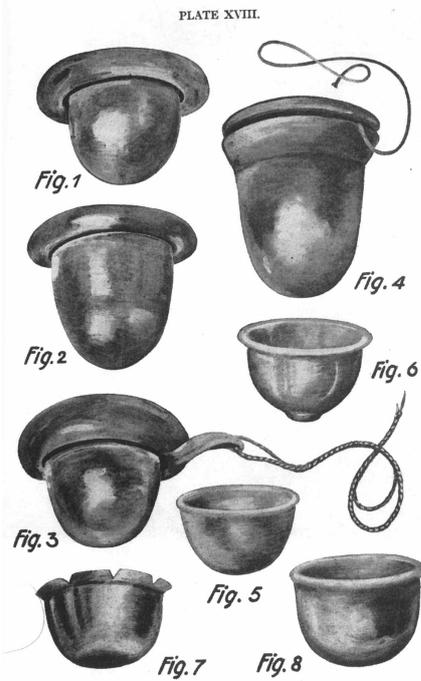
Our second text pays little attention to simples and potions. It is taken from *L'École des filles*, a libertine work of 1655 that combines eroticism and sex education. It takes the form of a dialogue between a young girl and an older woman who initiates her into the vocabulary, the techniques and the pleasures of premarital sex. She explains how to avoid becoming pregnant or, in the event of such a mishap (judged unlikely), how to conceal the pregnancy and to give birth in secret. This was apparently the preferred solution among the wealthier classes. Chemical methods are mentioned only cursorily, in the form of unspecified "remedies" for emergency abortion. Contraceptive techniques consist of avoiding penetration, ejecting the male partner by means of a timely shove when ejaculation is imminent (withdrawal is presented as a female method), or covering the male organ with a small piece of cloth. Another solution is to avoid reaching orgasm at the same time as one's partner since "it is a truth known and attested by all physicians that the two discharges must occur together for conception and pregnancy to take place"

L'École des filles was probably written in the literary circle of the poet Scarron, husband of the future Madame de Maintenon, for a court nobility that was starting to practice contraception, both in their extramarital affairs and within marriage. The withdrawal method, deemed the most effective, was the preferred choice, and was frequently alluded to in libertine literature. The "small piece of cloth" was a precursor of the condom, mentioned for the first time in England in around 1700, and whose initial purpose was to protect

(1) *Daphnis*, unwanted by his father, is abandoned at birth and left to die, while *Chloe* is exposed in a sanctuary in the hope that a stranger will find and adopt her. *Daphnis* is suckled by a ewe and *Chloe* by a goat, and they are raised by peasants...

Figure 1 – Pessaries

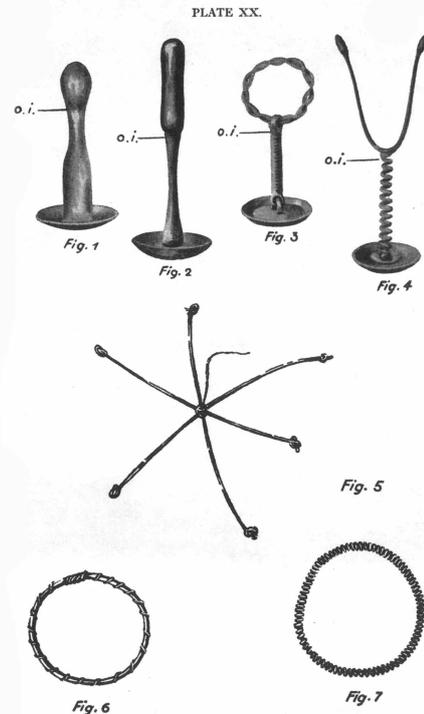
Pessaries made of rubber, celluloid or metal designed to cover the cervix in the upper vagina. They were prescribed after examination by a physician. Family planning clinics promoted their use. The “pro race” model (Fig. 2) was the one recommended by the English birth control pioneer Marie Stopes. The use of pessaries was very limited. Modern diaphragms are derived from the occlusive pessary invented by Mensinga (not shown here); they cover and isolate a much larger area of the vagina.



Source: drawings taken from TH.H. VAN DE VELD. *Fertility and Sterility in Marriage*. NewYork: Covici Friede. 1931.

Figure 2 – Intra-uterine devices

Figures 1 to 4 show models with an occlusive cap that remained in the vagina and a stem that was lodged in the uterus. They had to be put in place by a physician, and were kept for extended periods. Considered to be a source of infection, their use was discouraged by specialists. The German gynaecologist Gräfenberg invented a device made of silk or silver introduced completely inside the uterus (Figs. 5 to 7) and which is the ancestor of the modern IUD.



Source: see Figure 1.

against syphilis. Made from sheep gut or fish bladder, condoms were used mainly in brothels. Casanova, who procured one in a Marseilles whorehouse, called it a “redingote d’Angleterre” (English riding coat) [6]. They were too expensive for widespread use, however.

The other technical innovation of the eighteenth century was the vaginal sponge mentioned for the first time in an English erotic work of 1740. *Le Rideau Levé*, a libertine text of 1788 attributed to Mirabeau, recommends a wet sponge with a few drops of brandy, and attached to a ribbon [7]. Erotic literature is a major source of information on contraception, and withdrawal is the most frequently mentioned method. Few French books for the general public address the topic of contraception and when they do so, the references are disguised, preferably in Latin, for fear of censorship. This was the case for the treatise by Sénacour (1838), entitled *De l’Amour*, which advocates withdrawal in non-marital relations [8].

◆ America 1850: contraception versus abortion

After a series of spectacular court cases ending in acquittal, the American writers of the mid-nineteenth

century had won their battle with the censors. They proclaimed the right to inform the public and defended the idea that contraception within marriage might be justified on social or economic grounds. Among other arguments, they maintained that contraception was a lesser evil compared with the prevailing practices of abortion. They presented the different birth control methods in frank detail, either to point out their risks or to recommend their use.

For example, in 1850 Frederick Hollick published a *Marriage Guide* which was continuously reprinted until 1902. Hollick quoted the Biblical withdrawal method practiced by Onan, along with condoms, sponges and the syringe injection of a liquid intended to kill the “animalcules” contained in semen. This method had been advocated in 1832 by Charles Knowlton, a New England physician. (His *Fruits of Philosophy*, republished by two social reformers, Bradlaugh and Besant, became famous in 1878 as the result of a sensational court case in England [9]). The condom, also known as “the French secret” appears to have been imported from France. With the invention of the vulcanization process by Goodyear in 1839, rubber condoms could be produced quite cheaply and a series of contraceptive devices for both sexes were developed.

Hollick's *Marriage Guide* lists the dire consequences of these various methods. Hollick refutes the old myth, shared by *L'École des filles*, that women cannot conceive unless they experience orgasm. He opts for an abstinence method based on the discoveries of a French doctor and zoologist, Félix Pouchet, who established the link between menstruation and ovulation in 1842, while making the same mistake as the ancient Greeks about the timing of the cycle. Like them, he believed that a woman's period of maximum fecundity occurred immediately after the menses and that the middle of the cycle was sterile. Despite a passing interest on the part of Malthusian economists and timid approval by the Holy See in 1853, this first version of the periodic abstinence method went practically unnoticed in France, though it was mentioned by all American works on the subject, from domestic health manuals to learned essays on reproduction. Indeed, although totally ineffective and even maximizing the risk of pregnancy, this method became the main contraceptive measure in the USA, on paper at least. It was not until 1930 that a correct interpretation of the cycle led to the introduction of the so-called Ogino-Knaus method, used for a time by Catholics couples on both sides of the Atlantic as their primary method of birth control.

In practice, the most popular contraceptive method in the USA, until the mid-twentieth century at least – and a relatively effective one – was spermicidal douching. By 1920, several hundred varieties of spermicidal douches and suppositories were available on the market. In Europe, withdrawal was by far the most widely used method, though new techniques were emerging, diaphragms in particular (Figure 1). In 1882, the German gynaecologist Wilhelm Mensinga developed an “occlusive pessary” that was enthusiastically adopted by birth control agencies, along with other vaginal barriers. Other inventions included partially intra-uterine pessaries, where only a stem penetrated in the uterus; the first completely intra-uterine device or IUD was the Gräfenberg ring that was placed inside the uterus. These devices were considered dangerous by the medical profession (Figure 2).

For Hollick, like most of his contemporaries, sex was to be practiced with moderation. Over-frequent sexual relations were the source of numerous ills; sexual activity ought to be for reproductive purposes only. Given the inefficacy of contraceptive methods, couples probably also practiced abstinence as a further precautionary measure, and this contributed to the start of a downward trend in fertility in America and Europe in the nineteenth century.

Hollick, like other authors, condemns abortion while acknowledging that doctors tend to choose this solution in early pregnancy when the life of the woman would be endangered. Among abortion techniques, he mentions the use of products such as ergot of rye. “I am confident also that the horrible practice of procuring Abortion, now so prevalent among married people, is caused by the want of simple and reliable means of

prevention”, he writes, though it is not clear whether he is referring to the “disgusting pills” advertised widely in the press or to surgical techniques such as dilation and curettage, or the use of metal probes. Dangerous, reviled by the medical profession and prohibited by law, abortion was nevertheless a reality, and specialized abortionists were available to meet demand. It is difficult to measure the true scale of the abortion market however, either in the USA or in Europe.

◆ Imperfect methods for controlling fertility

Many written sources thus provide valuable insight into the history of contraception. They say little about actual contraceptive incidence, but reveal a constant demand for techniques to prevent unwanted births and offer precious clues about the social background and marital status of potential users. The descriptions they contain reveal that the methods used were generally ineffective, though they were constantly being improved. It is likely that from early modern times, certain couples had a degree of control over their fertility. Historical demographers have shown that family limitation advanced in step with technical progress. By 1650, when *L'École des filles* was published, the total fertility of members of the higher French nobility was just above two children per woman [10]. In the early twentieth century, this level was reached by the French population as a whole, using rudimentary contraceptive methods. It was not until the 1960s, with the arrival of the pill and other modern techniques that couples were able to control their fertility more effectively and, in particular, to delay the birth of the first child. 

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