Controlling their Bodies: Ancient Roman Women and Contraceptives

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Abstract:

For women in ancient Rome, pregnancy related deaths were one of the leading causes of death because of a higher likelihood of infection or complications during the birth, compared to women in contemporary Italy, such as uterine hemorrhage. Ancient Roman women, in particular women who were not as wealthy and women who worked as prostitutes, had even more of an urgent need to prevent pregnancy than wealthier women who could afford more than one child. Therefore, they had an incentive to obtain to get birth control either because they would not have been able to afford more children or because getting pregnant would have hurt their livelihood as a prostitute. However, the most common categories of birth control were quite different in antiquity. The most common categories of birth control included herbal options, pessaries, and folk remedies. I will be investigating what the ancient Roman women used as contraceptives, citing various sources, including Soranus' *Gynecology* and Dioscorides' *De Materia Medica*.

Roman Contraceptives and Their Effects

For women in ancient Rome, pregnancy-related deaths were one of the leading causes of mortality because of a higher likelihood of infection or complications during the birth (such as uterine hemorrhage¹), compared to women in contemporary Italy². Ancient Roman women, in particular women who were not as wealthy and women who worked as prostitutes, had even more of an urgent need to prevent pregnancy than wealthier women, who could afford more than one child. Therefore, they had an incentive to obtain birth control either because they would not have been able to afford more children or because getting pregnant would have hurt their livelihood as a prostitute. However, the most common categories of birth control were quite different in antiquity. The most common categories of birth control included herbal options, pessaries, and folk remedies. This paper investigates what the ancient Roman women used as contraceptives, and relies upon various sources from antiquity, including Soranus's *Gynecology* and Dioscorides's *De Materia Medica*.

¹ Todman, Donald. "Childbirth in Ancient Rome: From Traditional Folklore to Obstetrics." *Australian and New Zealand Journal of Obstetrics and Gynaecology*, vol. 47, no. 2, 2007, pp. 82-85.

² The CIA World Factbook gives the Maternal Mortality Rate of modern Italy. Out of 100,000 births, only four result in the mother's death. While we do not have a specific number for how many mothers died in childbirth in Antiquity, it is fair to say that it was more than 4 out of 100,000.

https://www.cia.gov/library/publications/the-world-factbook/fields/2223.html

Silphium was one of the most common herbs used to prevent pregnancy by ancient Roman women. It grew in Cyrene, North Africa, and became so popular that the Cyrenian colonists who found it became extremely wealthy and famous.³ Cyrene became extremely well known for exporting silphium that many of their coins held pictures of the plant, even depicting a woman next to the plant. (Figure 1) One coin even had a seated woman touching the plant and pointing to her reproductive area.⁴ According to Soranus of Ephesus, a Greek physician from 1st or 2nd century CE, if a woman were to drink "Cyrenaic balm", it



Figure 1 Silphium Coin https://damn-8791.kxcdn.com/wpcontent/uploads/2007/05/Silphium_coin.jpg

would induce menstruation. He advised drinking the amount of a "chick-pea in two cyaths of water". Though sources are not specific as to the application, based on other herbs, it seems plausible that the *silphium* flower was crushed and mixed with wine or water and ingested. However, Soranus warned that this would not only prevent contraception, but also "destroy any [fetus] already existing". Soranus in his book, *Gynecology*, is clearly anti-abortion and therefore deemed that *silphium* was not worth using because it terminates the pregnancy rather than preventing it. Soranus also references side effects that *silphium* caused, including damaging and upsetting the stomach and "congestion of the head".

³ Riddle, John M. *Eve's Herbs: A History of Contraception and Abortion in the West*. Harvard University Press, Cambridge, Mass, 1997. p 44. Hereafter "*Eve's Herbs*".

⁴ Riddle, *Eve's Herbs*, p 45.

⁵ Soranus, of Ephesus. *Soranus' Gynecology*. Baltimore, Johns Hopkins University Press, 1991 Book I.XIX.63. Hereafter "Soranus".

⁶ Soranus, I.XIX.63

⁷ Soranus, I.XIX.63

However, Soranus was not the only writer to mention *silphium* as a contraceptive and abortifacient. Pedanius Dioscorides, a Greek physician and botanist from the 1st century CE, also wrote about *silphium*. Dioscorides also described *silphium* as both an abortifacient and contraceptive in his 5-volume Greek encyclopedia about herbal medicine, *De Materia Medica*. He recommends a "decoction, taken as a drink with pepper and myrrh" to induce menstrual flow. Pliny the Elder, a Roman naturalist and natural philosopher, was against using abortifacients like Soranus, listed *silphium* as only as a contraceptive. Despite multiple writers' recommendations to limit the use of *silphium*, its popularity as a contraceptive was apparently unaffected. *Silphium* became so popular that thirty pounds of it were imported to Rome in 93 BCE. According to Pliny, however, around 54 CE, there was supposedly only a single stalk of *silphium* left, "and that was sent as a curiosity to the Emperor Nero" 12.

Knowledge of *silphium* and its functions continued into late antiquity. A work on gynecology written during late antiquity, around 200-400 CE, called *On the Diseases and Cures of Women*, mentions it. This book was written by a woman who pretended¹³ either to be the famous Cleopatra VII Philopator¹⁴, or a female physician in her service at the time known as Theodote¹⁵. The author, who is today known as Metrodora, wrote multiple recipes to terminate a pregnancy and one of them involved *silphium* which guaranteed an immediate abortion. The

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⁸ Osbaldeston, Tess Anne. *Dioscorides' De Materia Medica*. Ibidis Press, Johannesburg, 2000. 3.94 Hereafter,

[&]quot;Dioscorides' De Materia Medica".

9 Dioscorides' De Materia Medica, 3-94.

¹⁰ Pliny, Natural History, 22.48

¹¹ Riddle, Eve's Herbs, p 45.

¹² Pliny, Natural History, 19.15.

¹³ John M. Riddle, *Contraception and Abortion from the Ancient World to the Renaissance*. Cambridge, MA: Harvard University Press, 1992 p 101. Hereafter "Riddle".

¹⁴ Cleopatra VII Philopator is the most famous Cleopatra from Egypt and was the subject of movies including *Cleopatra* starring Elizabeth Taylor which came out in 1963.

¹⁵ GREEN, M. H. (1985). The Transmission of Ancient Theories of Female Physiology and Disease Through the Early Middle Ages (gynecology, Medicine, Galen, Soranus, Hippocrates). P. 158.

recipe calls for bull bile, pepper, rue, asphaltum, and *silphium* to be crushed into a powder and drunk.¹⁶ It is possible that since there was little to no *silphium* left in the world by the time this book was written, the author may have been copying it from another source or she could be writing down the recipe with the extinct plant if she knew the plant had been used by Cleopatra or Egyptians. Another possibility is that it may be a Latin translation of either Theodote's or Cleopatra's lost writings since Cleopatra was famously known for her medical proficiency.¹⁷

Pennyroyal (or "Glechium" as it was known in antiquity) was an extremely dangerous herb used as a contraceptive. According to Dioscorides, if taken as a drink then it would "expel menstrual flow". ¹⁸ Most likely, the flowers from the plant were used to make a drink, much like *silphium* was. Galen, a famous Greek physician and surgeon of 129-200 CE, also that penny royal was an emmenagogue, a plant that increases or stimulates menstrual flow. ¹⁹ In *On the Diseases and Cures of Women* the author suggested that pennyroyal and wine ought to be taken orally in order to work as an abortifacient. ²⁰ In addition to medical texts, the plant was even popular enough to have been written about by Aristophanes in his play, *Peace*. ²¹ When worried that Trigaius' new female companion could become pregnant, Hermes says that it will not happen if "you add a dose of pennyroyal". ²² In another play, Aristophanes also makes a joke about pennyroyal in the *Lysistrata*. ²³ The joke is made about a skinny woman who is described

¹⁶ Riddle, 101.

¹⁷ Green, 158, 186-7. [186-7 is citations to many associations with Cleopatra and medicine]

¹⁸ Dioscorides' De Materia Medica, 3-36

¹⁹ Galen, Ian Johnston, and G. H. R. Horsley. *Method of Medicine*. vol. 516-518, Harvard University Press, Cambridge, Mass, 2011. 6.3.7 [through Riddle, 85]

²⁰ Riddle, 101.

²¹ Aristophanes and Menander: *Three Comedies*, edited by Timothy J. Moore, Hackett Publishing Company, Incorporated, 2014. p. 42.

²² This translation uses the term "mint" instead of penny-royal since it is a member of the mint family. However, the literal translation is penny-royal, rather than the mint we know today.

²³ Aristophanes, *Lysistrata*, 87-89

as "spruced with pennyroyal" to show that she was not pregnant, as compared to Calonice. Making this joke implies that Aristophanes' audience would have been extremely familiar with the plant, despite the audience being predominantly, or all, men. It seems that pennyroyal was frequently used in antiquity and was a well-known way to prevent pregnancy, otherwise Aristophanes' joke would not have made sense. Despite its apparent popularity, the herb pennyroyal is extremely toxic and can cause severe liver and kidney damage as well as nervous system damage and other severe side effects.²⁴ It is possible that the ancient Romans did not realize the side effects pennyroyal caused because no author mentions any kind of problem with using the herb.

Balm of Gilead, named for the fact that it was found in the region of Gilead²⁵, was another herbal remedy written about by ancient physicians. Dioscorides wrote the most about this herb and calls it 'balsamum', writing that the herb "expels the menstrual flow and the afterbirth, is an abortifacient". Soranus wrote that the plant helps to prevent conception when the woman smears, "the orifice of the uterus all over with juice of the balsam tree". In *Natural History*, Pliny does not mention it is contraceptive properties, or what the plant was used for, but mentions that when it "was sold it was [worth] double its weight in silver".

Sage, or *Helelisphacum*, is a name of an herb that is well known today and used for cooking. However, the sage used in ancient Rome does not appear to be the same sage used

²⁴ https://www.webmd.com/vitamins-supplements/ingredientmono-480-pennyroyal.aspx?activeingredientid=480&activeingredientname=pennyroyal

²⁵ The plant was actually mentioned in the bible as a medicinal remedy, though never stated that it was used as a contraceptive or abortifacient.

²⁶ Dioscorides' De Materia Medica, 1-18.

²⁷ Soranus, I.XIX.61

²⁸ Pliny, *Natural History*, 12.54.

today. In Natural History, Pliny writes that it is a "species of wild lentil... and acts as an emmenagogue" and that when "applied externally, it expels the dead fetus"²⁹. Dioscorides writes that "a decoction of the leaves and branches (taken as a drink) is able to induce...menstrual flow and is an abortifacient."³⁰ Unlike with other herbs we have talked about, this is the first time Dioscorides gives his opinion on abortifacients. He writes that the herb "is available for all cleansing for a woman, but the most wicked women (making a pessary of it) apply it and use it as an abortifacient"³¹.

The squirting cucumber, or Elaterium, is another abortifacient and its name, *Ecballium elaterium*, quite literally means "abortion drug". The physician, Dioscorides, wrote that when used "in a pessary, it induces the menstrual flow and is an abortifacient" Pliny writes that the herb "promotes the menstrual discharge" but specifically warns that it causes abortion if taken by a woman who is pregnant. *De mulierum affectibus*, a book by the famous Greek physician, Hippocrates who lived from 460 to 370 BCE also mentioned the squirting cucumber. He wrote that the squirting cucumber was good as "an abortive pessary for the uterus" and that "there is nothing that is better". He is one of the only ancient medical authors that actually talks about which drug is best for an abortifacient, rather than just simply saying that it could be used as such.

²⁹ Pliny, Natural History, 22.71.

³⁰ Dioscorides' De Materia Medica, 3-40.

³¹ This appears to be either the first or the only time that Dioscorides seems to judge women for using abortifacients. There does not seem to be any reason that he brings it up now. Perhaps this particular herb is painful for the fetus or he just really hates it?

³² Riddle, Eve's Herbs, p. 53.

³³ Dioscorides' De Materia Medica, 4-155.

³⁴ Pliny, Natural History, 20.4

³⁵ Hippocrates, *De mulierum affectibus*, 1.78.

³⁶ Riddle, *Eve's Herbs*, p. 53.

Daucus carota is one herb that seemed to be so successful that it was used even into the Medieval age. Dioscorides writes that the "seed induces the menstrual flow, taken as a drink or inserted as a pessary". ³⁷ Pliny also writes about it, but only briefly mentions it's abortive properties. He writes that "quadrupeds [animals] will touch none of these plants, either in winter or in summer" except after a miscarriage ³⁸. The more common name for this herb is Queen Anne's Lace and was continued to be used as an abortifacient more than a thousand years after Dioscorides. In the 11th or 12th century CE, a Latin book known as the Antidotarium Nicolai was written and held about 150 medicinal recipes. At least one of these recipes was an abortifacient and held around thirty-one ingredients including pennyroyal, Aristolochia clematitis, and Queen Anne's Lace. ³⁹ The recipe calls for the woman to drink the draught with wine or honey water. Interestingly, the book prefers to not outright say the recipes are for abortions. The previous recipe was specifically to help women who had difficulty with menstruation and one other claims to "expel a dead fetus" rather than to explicitly terminate the fetus. ⁴⁰ The latter recipe also calls for Queen Anne's Lace, as well as two species of Ferula. ⁴¹

Aristolochia clematitis, an herb more commonly known today as birthwort or apple of the earth, proves herbs from the same family could be used for completely opposite purposes. In *De Materia Medica*, Dioscorides writes that if "taken in a drink with pepper and myrrh, it puts out…menstrual flow and is an abortifacient" and can also be used as a pessary to terminate

³⁷ Dioscorides' De Materia Medica, 3-59.

³⁸ Pliny, Natural History, 25.64.

³⁹ Riddle, *Eve's Herbs*, p. 106.

⁴⁰ Nicholaus of Salerno, *Antidotarium*; reproduced in facsimile in Dietlinde Goltz, *Mittelalterliche Pharmazie und Medizin* (Stuttgart, 1976), pp. 145-147.

⁴¹ As I do not have the primary source of the *Antidotarium*, it is unknown if one of the *Ferula* are possibly Silphium or *Ferula tingitana*, a plant thought to be extremely similar and in the same family as Silphium.

pregnancy and is poisonous⁴². However, Pliny brings up a completely separate herb called *aristolochia plistolochia* that is used to aid pregnancy. He agrees that it should be used as a pessary but writes that it should be "applied to the uterus with raw beef immediately after conception"⁴³. The pessary is not for a contraception, but because the plant will ensure the birth of male. He also writes that the herb derived its name from females in a state of pregnancy, ἀρίστη λοχούσαιχ, meaning "most excellent for pregnancy"⁴⁴. While Pliny does write that there are different kinds of *aristolochia*, he calls all of them 'apple of the earth', while Dioscorides clarifies that only the herb *that does not* aid childbirth is called that. Pliny also does not actually specify which *aristolochia* is the one that should be used as a pessary to aid conception, which seems important since *aristolochia clematitis*, which he also mentions, does the exact opposite.

In addition to herbal approaches, ancient doctors also wrote about pessaries, items that could be inserted into the woman's vagina to function as a block to prevent pregnancy. One such option was written about by Soranus. He wrote that old olive oil or honey was to be rubbed on the entrance of the uterus, the cervix and was said to "cause the entrance of the uterus to close" before the man and woman had sex. Wool could also be added to the mixture to aid clotting since the honey and oil were meant to clog the uterus so that the sperm was unable to pass through. While there seems to be no evidence to support Soranus' claims about olive oil being a successful contraceptive, there has been some modern research on honey and whether it could

⁴² Dioscorides' De Materia Medica, 3-6.

⁴³ Pliny, Natural History, 25.54.

⁴⁴ Translation comes from the footnotes of *The Natural History*. *Pliny the Elder. John Bostock, M.D., F.R.S. H.T. Riley, Esg., B.A. London. Taylor and Francis, Red Lion Court, Fleet Street. 1855.*

⁴⁵ Soranus, I.XIX.61

⁴⁶ Soranus, I.XIX.61.

be used as an aid in contraception.⁴⁷ However the results have proven that honey could not prevent nor help prevent pregnancy.⁴⁸

Lead was another option for preventing pregnancy written by Soranus. Soranus advised the woman who did not want to become pregnant to mix white lead with cedar or balsam sap and add a clump of "fine wool" before inserting it into the entrance to the uterus. ⁴⁹ Much like the honey or olive oil, this was meant to cause the entrance of the cervix to close before sex and not allow the sperm to pass through. ⁵⁰ Modern medical professionals have seen the effects of lead and if a Roman woman used lead as a contraceptive and *did not* become pregnant, it was not because the sperm was blocked, but because of the poisonous effects of lead poisoning. Lead is known to cause miscarriage and infertility. ⁵¹ The ancient women who used lead were most likely afflicted with lead poisoning, thus it was misconstrued that the lead was working as a contraceptive, rather than a poison or an abortifacient.

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⁴⁷ Though the sources are not reputable blogs from the United Kingdom and websites that are advocating a modern contraceptive device called a "honey cap". (http://www.bio-hormone-health.com/2012/05/25/contraception-%E2%80%93-a-non-chemical-alternative/) This device is a type of diaphragm that is coated with spermicide, a normal diaphragm has been noted to work as a contraceptive, however a honey cap seems to be a normal diaphragm that is coated or soaked in honey with spermicide as a more natural and less chemical way to keep from getting pregnant. It should be noted that during research into this modern take on Soranus' contraceptive, there were absolutely no reputable websites or journals that gave evidence to it actually working! The one medical book, a book from 1985, that even mentioned it, highly discouraged using it and said that one in four women who used it became pregnant. (Guillebaud, John. *Contraception: Your Questions Answered.* London, Pittman, 1985. p 96) However, it did lead me to research into whether honey could be harmful if inserted into the vagina and spread on the cervix and the surprising conclusion was no!

⁴⁸ While nothing showed that honey could be a contraceptive, a Canadian Medical Journal investigated mixing honey with yogurt and Vaginal Cream and the results were that the mixture was better than just the use of clotrimazole vaginal cream. At least enough that according to the journal, the "product can be suggested as an herbal remedy for candida infection treatment". (Darvishi, Maryam, Fereshteh Jahdi, Zeinab Hamzegardeshi, Saied Goodarzi and Mohsen Vahedi. "The Comparison of Vaginal Cream of Mixing Yogurt, Honey and Clotrimazole on Symptoms of Vaginal Candidiasis". *Global Journal of Health Science*, Vol 7, No 6, 2015.) While this proves absolutely nothing about whether honey could be used as a contraceptive, it does prove that it was most likely not *harmful* to the women who used it.

⁴⁹ Soranus, I.XIX.61.

⁵⁰ Soranus, I.XIX.61

⁵¹ https://www.cdc.gov/niosh/topics/lead/health.html

Herbs and pessaries were not the only means to prevent conception. The Romans had different folk theories on how women could avoid pregnancy while still engaging in sex. Soranus advises that right before the man ejaculates into a woman during intercourse, the woman is supposed to hold her breath and pull away, so the sperm does not get too deep inside her.⁵² Afterwards, the woman is meant to induce sneezing and squat down while wiping the vagina thoroughly.⁵³ This is essentially an attempt to clean the sperm out of the uterus, which may not be thorough enough to prevent pregnancy.

Another folk remedy comes from Soranus, who advises drinking something cold right before sex. He explains that "cooling causes the orifice of the uterus to shut before the time of coitus" and not allow the sperm to pass through. ⁵⁴ Soranus' reasoning is that the sperm is "hot and irritating" and the uterus will therefore not allow the man's seed inside.

The last folk remedy is suggested by Pliny the Elder in *Natural History* was for a woman to take a hairy spider and cut open its head, then take the two little worms out of inside it. Then they were to tie those to themselves with a strip of deer hide, to not conceive. This form of birth control was supposed to be effective for a year. One difficulty is understanding exactly what kind of spider Pliny is referring. However, he does describe that it is hairy with a very large head and has the name *phalangium* This cure seems to be more of a folk remedy rather than based on actual scientific evidence. There would be absolutely no way for the contraceptive to be

⁵² Soranus, I.XIX.61

⁵³ Soranus, I.XIX.61

⁵⁴ Soranus, I.XIX.61

⁵⁵ Pliny, *Natural History*, 29.27

⁵⁶ There are over 35 spiders with the genus *Phalangium*, which makes it difficult to distinguish the spider to which Pliny refers. He could be referencing *Phalangium opilio*, the most common species of *Harvestmen*, (also commonly called, "Daddy Long Legs" in America). They are native to Europe, however they don't appear to be hairy, so it's difficult to know for sure if that spider is what Pliny was writing about to use.

effective because the worms are put on the outside of the body rather than ingested or inserted into the woman.

There were many ways Roman women could either prevent conception or terminate pregnancy. Some of these contraceptives or abortifacients were herbal remedies that were consumed as a drink, like *silphium* or pennyroyal, made into a mixture and used as a pessary, like honey, oil, and lead. Folk remedies were also used including tying a worm to the woman or simply drinking something cold. All these remedies were written by ancient physicians, such as Soranus, Dioscorides, Pliny the Elder, Galen, and Metrodora which gave the Roman women who used them confidence that the contraceptives and abortifacients they used were safe.

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