



Use of Contraceptive Methods Down Through The History: An Overview

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ABSTRACT

Ever since the dawn of history, women and men have wanted to be able to decide when and whether to have a child, thus contraceptives were used in one form or another for thousands of years throughout human history and even prehistory. In fact, family planning has always been widely practiced intentionally or unintentionally, even in societies dominated by social, political or religious codes that require people to 'be fruitful and multiply.' Although, the concept of family planning emerges in early 8th decade of 20th century (1971) when the world's gross population surpass 3 billion with accelerating growth rate, but the use of contraception dated back to almost 4000 years. Here in this article authors try their best to collect the literature in the support of use of contraceptive methods and agents throughout the history.

Keywords: Barrier Method; Herbal Contraceptive; IUDs; *Unani* Medicine.

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INTRODUCTION

Of course the methods used before the 20th century were not always as safe or effective as those available today. Centuries ago, Chinese women drank lead and mercury to control fertility, which often resulted in sterility or death. During the Middle Ages in Europe, magicians advised women to wear the testicles of a weasel on their thighs or hang its amputated foot around their necks. It was also believed that a woman could avoid pregnancy by walking three times around the spot where a pregnant wolf had urinated. In more recent New Brunswick, Canada, women drank a potion of dried beaver testicles brewed in a strong alcohol solution. Perhaps more surprising than such often bizarre and totally ineffective methods is that modern science has revealed many other ancient methods, especially certain herbal treatments, to be actually somewhat effective though not always safe or practical. Many of the earliest methods of family planning were based on sexual behavior and are still in use by millions of women and men around the world. People who have few other alternatives most often use these methods. But some people who have access to the latest advances in contraceptive technology also prefer many of these ancient methods. For thousands of years, abstinence, mutual pleasuring without intercourse, outcourse, withdrawal, predicting fertility, and breast-feeding were used by our ancestors to prevent unintended pregnancy. They still play important roles in family planning today.^{1,2}

Contraceptive Used In Unani Medicine

Contraceptive methods were widely in practice and have been discussed by many ancient physicians of *Unani* system of medicine in detail. Egyptian Papyrus (1850 B.C.) named “Kahun Papyrus” and Ebers Papyrus (1550 B.C.) are probably the earliest written and authentic evidence of use of number of contraceptive drugs. Also the Ebrus Papyrus (1550 B.C.) contains a special section of gynaecology including contraception. It recommends a mixture of acacia tips, bitter apple and dates bound together with honey and placed in the vulva as spermicidal. The famous Greek philosopher Aristotle (384-322 B.C) proposed the idea of family planning and prescribed several remedies like local application of oil of cedar, ointment of lead etc. which formed a barrier or had a spermicidal effect.^{3,4,5} The next documented reference of contraceptive (coitus interruptus), appeared in Bible, The Book of Genesis. Dioscorides (40-90A.D.) recommended vaginal suppositories i.e. pessaries of peppermint or sicklewort mixed with honey and mentioned several other drugs for contraception. His book, *De Materia Medica*, was a standard resource for contraceptive information until the 16th century.^{1,2,6} The concept of abstinence during fertile

period, to avoid conception, was given by Soranos of Ephesus, a famous Roman physician during second century. Galen (130-200 A.D.) mentioned several drugs having direct bearing upon procreation in *Kitab ul Advia al Mufradah*.⁷ Contraception was thought to be worthy of discussion in middle ages (era of Arabic medicine-925 to 1248 A.D.), thus extensive information about the indication, methods, prescriptions, contraindications and even their mechanism of action was put in by legendary personalities of the era like Razi, Majoosi, Ibn Sina and Ibn Baitar.⁸

Kitabul Hawi by Zakariya Razi, *Kitabul Maliki* by Ali Abbas Majusi, *Al Qanoon fit tib* by Ibn Sina, *Zakheera Khwarzam Shahi* by Ismail bin Hussain Jurjani and *Al Jameul Mufredatul Advia wal Aghzia* by Ibn Baitar are a few exemplary treaties in this subject during different era between 925 and 1248 A.D. which, includes the knowledge of drugs, attitude towards contraception and various practices. In the 12th century, an excellent medical compendium *Zakheera Khwarzam Shahi* was written by Sharfuddin Ismail Jurjani (1110 A.D.) where he first described the method of wrapping the penis with a soft cloth before coitus to avoid conception which led to think of modern day condom.⁸ Several natural and barrier methods were invented since then.^{2,4,9,10}

The quest for the agent that can control human fertility is as old as recorded history. Let us describe the historical milestone of various contraceptive methods step by step.

Withdrawal

There are two types of withdrawal. Coitus interruptus is the Latin name for withdrawal with ejaculation taking place afterwards. Coitus reservatus is the Latin name for withdrawal without ejaculation. Both have been used since ancient times for contraception and for other reasons. Sin or no sin, by the early 19th century *coitus interruptus* was one of the most popular methods of birth control in the world. It was advocated in the U.S. by Utopian socialist Robert Dale Owen in his *Moral Physiology*, which was published in 1831 and remained in print for more than 40 years.¹

Outercourse

Augustine of Hippo (350–430 C.E.), an influential bishop of the early Christian church, taught that masturbation and other alternatives to penile-vaginal intercourse - outercourse - were worse sins than fornication, rape, incest, and adultery. In colonial New England, outercourse was encouraged by the custom of “bundling.” Because of the long distances travelled for courtship and the lack of central heating and bedroom space, unmarried couples were “bundled.” They slept together in the same bed, either fully clothed or with a “bundling board” placed in the bed

between them. Outercourse had a major revival in America during the 1940s and '50s. During those years, virginity was considered very important for unmarried women. Outercourse in the back seat of her boyfriend's sedan at the drive-in movies – they were called “passion pits” by the teenagers of the '50s -allowed a young woman to have sex while remaining “technically” a virgin. Outercourse took a back seat to vaginal intercourse when the Pill became available during the sexual revolution of the '60s. By the time the '80s rolled around, vaginal intercourse was a pretty matter-of-fact event in the heterosexual “dating game”. But as the sexual revolution began to lose some of its charm with the spread of AIDS in the early '80s, many women and men began to wonder if they weren't missing something by passing up the other pleasures of sex play. Yearning for romance, and aware of the significant risks of HIV and other sexually transmitted infections, women and men of the 21st century are rediscovering the pleasures of courtship, seduction, and outercourse.¹

Fertility Awareness-Based Methods

People have tried very hard to understand women's fertility and human reproduction since the first families were formed. It's not entirely surprising that only a few figured out what exactly sex had to do with pregnancy-scientists didn't identify sperm until 1678. It took another 100 years to figure out what it did! Mammal eggs weren't identified until 1827. No one was able to predict the timing of ovulation in women until the 1930s, and it wasn't until 1995 that physiologists could demonstrate when fertilization of the egg was most likely.

Africans and Native American women of the 17th and 18th centuries were among the first to actually understand their fertility cycles well enough to plan their families. They observed that monitoring the quality of their cervical mucus could help them decide to avoid or plan a pregnancy.^{1,2,9}

It wasn't until the 1960s that western science caught up, when Australian Drs. John and Evelyn Billings provided the research to promote the cervical mucus method as an improvement on the calendar method. It is now a key element of the sympto-thermal method, which combines the use of the mucus method, the basal body temperature method, and the calendar method.^{1,2,9}

Lactational Amenorrhoea Method

Complete breast-feeding can postpone ovulation and menstruation (lactational amenorrhea). Women around the world, especially the poor, have used extended breastfeeding to space their pregnancies since the beginning of history. From ancient Athens and Rome to the 15th century and on into the end of the 19th century, however, middle-class and aristocratic urban women in Europe did not breast-feed or bottle-feed their children-they hired other women or depended on

slaves as wet nurses, which explains why more affluent women at various times in history bore more children than poor women.^{1,2,9}

Barrier Methods- The Condom (Male & Female) and Sponges

One artificial method of contraception, the condom, has a surprisingly long history. Penile sheaths were described in Egypt in 1350 B.C. originally made from animal intestines, and later from linen or silk, they were used mainly for protection from venereal disease.¹¹ In *Zakheera Khwarzam Shahi, Jurjani* firstly described the method of wrapping the penis with a soft cloth before coitus to avoid conception which led to think of modern day condom.⁸ Not surprisingly, given the place of women in society, female barrier methods arrived much later on the contraceptive scene. The first ‘womb veil’ is attributed to an American working in the early 1800s and it took more than 150 years before the female condom came on to the market in 1993.^{1,2,9,11}

The oldest condoms were found in the foundations of Dudley Castle in England. They were made of animal gut and dated back to 1640. Female condom developed by the Wisconsin Pharmacal Company- became available in drugstores in the U.S. in 1994, but it was not the first vaginal contraceptive designed to catch semen to prevent it from causing pregnancy.^{1,2,9}

Sponges were perhaps the most commonly used substances to block and absorb semen. The oldest reference to using sponges for contraception is from the Talmud. During the 17th century, the French used the method of wetting a sponge with brandy to weaken the sperm. In the early 20th century, British birth control crusader Marie Stopes prescribed sponges moistened with olive oil for 2,000 of her indigent patient’s. She recorded no unintended pregnancies in the follow-up visits (London, 1998). A contraceptive sponge was introduced to the American market in 1983 and quickly became one of the most popular over-the-counter barrier methods.^{1,2,9}

Contraceptive Foams, Creams, Jellies, Film, and Suppositories

As far back as 1850 B.C.E., in ancient Egypt, they advised “spermicides” included honey, sodium carbonate, and crocodile dung. By 1550 B.C., Egyptian women used cotton-lint tampons soaked in the fermented juice of acacia plants to prevent pregnancy. In the first half of the sixth century, the Greek physician Aetios suggested that women smear their cervixes with cedar resin combined with myrtle, lead, alum, or wine. He also suggested that their partners coat their penises with alum, pomegranate, gall nut, or vinegar. Aristotle suggested lavaging the vagina with oil of cedar, ointment of lead, or frankincense mixed with olive oil. In the first century C.E., Dioscorides recommended vaginal suppositories-“pessaries”-of peppermint or sicklewort mixed with honey. His book, *De Materia Medica*, was a standard resource for contraceptive information

until the 16th century.^{1,2,9}

In first century, Indian women used rock salt soaked in oil for birth control. During the first century C.E., Indian women used honey, ghee (clarified butter), and palasha tree seeds. They also used elephant dung and water. Arab women in the 10th and 11th century sweetened the mixture with honey. Cocoa butter suppositories were sold in London from 1885 to 1960. In the 1970s, some women in England inserted vitamin C tablets into their vaginas as contraceptive suppositories-but some experienced severe burning of the cervix.^{1,2,9}

Diaphragms and Cervical Caps

Giovanni Giacomo Casanova takes credit in his autobiography for inventing a primitive version of the diaphragm/cervical cap. He placed the partly squeezed halves of lemons over his lovers' cervices. Casanova was exaggerating his own inventiveness. Similar devices had been used for centuries around the world. Asian sex workers applied oiled paper discs to their cervices. The women of Easter Island used algae and seaweed. Sponge, tissue paper, beeswax, rubber, wool, pepper, seeds, silver, tree roots, rock salt, fruits, vegetables, and even balls of opium have all been used since centuries to cover the cervix in an attempt to prevent unintended pregnancy. The first cervical cap was produced in Germany around 1830.^{1,2,9,11}

Oral Contraceptive Pills

The Pill

According to ancient Greek myth, Persephone, the goddess of spring, refused to eat anything but pomegranate seeds after she was stolen from her mother, Demeter, the goddess of agriculture; raped by the god of death; and kidnapped to the underworld. Medical historians now know why she only ate pomegranate seeds - pomegranate was one of the first oral contraceptives. Women all over the world used herbs for family planning. Surprisingly, one of the most comprehensive recipe books for pre- and post-coital contraception was written by a man who became pope. Peter of Spain, who offered advice on birth control and how to provoke menstruation in his immensely popular *Thesaurus Pauperam (Treasure of the Poor)*, was elected Pope John XXI in 1276. Many of Peter's recipes have been found surprisingly effective by contemporary research, and it is believed that women in antiquity had more control over their reproduction than previously believed. Hundreds of generations of women in Africa, Asia, and the Americas used various fruits and plants for family planning. Researchers are often surprised to discover how efficacious many folk contraceptives are at protecting against unintended pregnancy. Women in tropical India and Sri Lanka, for example, eat a papaya a day when they want to prevent pregnancy. It sounded improbable to scientists in the West, but in 1993, an English research team

was astonished to find that an enzyme, papain, in the fruit interacts with the hormone progesterone to prevent pregnancy. In the 1940s and 1950s, Margaret Sanger closely followed scientific research on birth control and personally funded some of it, while Planned Parenthood Federation of America made support for new birth control technology a major focus of its advocacy efforts. The turning point came, though, when a remarkable woman named Katharine Dexter McCormick (1875–1967) threw her financial support behind research to produce an oral contraceptive.¹

The first pill was far from perfect - but its effectiveness, simplicity, and ease of use extended to millions of women an unheard-of control over reproduction, for the first time allowing them to truly separate vaginal intercourse from procreation. Margaret Sanger's pill made the sexual liberation movement of the '60s a lot less risky than the one that occurred after World War I. More than 15 years ago, the FDA proclaimed that more studies have been done on the Pill to look for serious side effects than have been done on any other medicine in history". That scientific scrutiny has continued to this day. The Pill of today, as well as other more recent combined hormone methods - the Patch, the Ring, and the Shot - offer safety and effectiveness with greatly decreased doses of hormone.¹

Pincus, Carl and Rock showed that fertility control in women can be achieved by suppression of ovulation with norethynodrel and resulted in development of combined oral contraceptives which later in 1960, got approved by the Food and Drug Administration of United States. During 1960, progesterone only pills, Depo-Provera and emergency contraceptives were introduced.^{4,9,10}

The Implant

During the 1950s, in the early days of hormonal contraceptive research, pellets of progesterone were inserted under the skin of rabbits to prevent them from conceiving. Forty years later, a variation on those experiments became an approved form of birth control in the U.S. - Norplant.¹

Emergency Contraception

Using contraception after vaginal intercourse is an ancient tradition. There have been two basic postcoital methods — one has proven much less effective than the other. Birth control pills were first prescribed for emergency contraception in the early 1970s by Dr. Albert Yuzpe, a Canadian obstetrician/gynecologist. Yuzpe's adaptation of the Pill for post-coital contraception has been used by millions of women throughout the world to avoid unintended pregnancy. In September 1998, the FDA approved the marketing of America's first dedicated emergency contraception (EC) product, The Preven[®] Emergency Contraception Kit. On July 28, 1999, the FDA approved the first dedicated progestin-only EC in the U.S. - Plan B[®]. Like other EC, Plan B works by

delaying ovulation or by preventing fertilization.^{1,12,13}

The IUDs (Intrauterine Devices)

Legend has it that Arab camel drivers inspired the modern IUD. According to the story, tiny stones were inserted into the uterus of each female camel to prevent pregnancy during long caravan journeys across the desert. During the ninth century, a Persian physician recommended inserting into the cervix paper wound tightly into the shape of a probe, tied with a string and smeared with ginger water. Also, during certain rituals, the Maori people of New Zealand put small pebbles into women's vaginas to make them "sterile as stones." Similarly, Casanova, who claimed to have invented almost everything that has to do with sex, soaked a small gold ball in an alkaline solution and inserted it in his lover's vagina. It was only in 1894, when first vasectomy was performed on man as permanent method of contraception. In 1909 devices made of silkworm gut to be inserted into the uterus for contraception were invented by Dr. Richter in Germany. The IUD is now safer than ever before, and it has excellent credentials. Both the World Health Organization and the American Medical Association name it among the safest, most effective, and least expensive reversible methods of birth control available to women. The newest IUD on the market in the U.S. is the Mirena, approved by the FDA in December 2000; it delivers a small dose of the progestin, levonorgestrel, directly into the uterus and reduces heavy bleeding sometimes associated with earlier IUDs. The Mirena intrauterine "system", as it is called is effective for up to 5 years.¹

Permanent Methods

Vasectomy

Throughout the greater part of history, the sterilization of men was usually anything but voluntary. It was performed violently by castration -the removal of the testicles, and often the penis as well. The first vasectomy was performed in 1894, in Britain, to relieve the patient's swollen, hardened prostate gland. In the early 20th century, many men were involuntarily sterilized to prevent them from passing on hereditary diseases. In the beginning of the century, vasectomy for birth control was usually punitive or eugenic. The imprisoned, mentally ill, retarded and men with hereditary diseases were sterilized throughout the first half of the century, ostensibly to keep them from committing sex crimes or to prevent the genetic transmission of diseases and conditions. Currently, more than four million American men choose vasectomy each year. But the anti-family planning movement fanatically opposes voluntary vasectomy. In 1985, for example, Tek Kor, a 41-year-old meat vendor in Thailand and father of 22 children, planned to have a vasectomy because he could not afford to have any more children. He also said

that vasectomy was cheaper and safer than providing his seven wives with contraceptives.¹

Tubal Sterilization

The first tubal ligation in the U.S. was performed in Toledo, Ohio, in 1880. The doctor did it during a caesarean section to spare his patient any future high-risk pregnancies. Despite the clamoring of racial purists of all colours and religious leaders of all stripes, contraception became increasingly acceptable as the 20th century wore on. But of all the methods available, tubal sterilization, now the most popular method in the U.S., was the last to gain social acceptance. Events in the early 1970s and '80s combined to make tubal sterilization attractive, accessible, and acceptable. Until the mid-1970s, sterilization for women usually involved major abdominal surgery. It required general anaesthesia, a long stay in the hospital, and a painful, extended recovery. Fiberoptic technology, invented in the early '70s, allowed surgery to be performed with local anaesthesia by using a laparoscope inserted through a very small incision. The risks associated with general anaesthesia were eliminated, and the pain and recovery time for tubal sterilization were reduced dramatically. By the time the first mini-laparotomy was performed in 1975, many women were looking for alternatives to the Pill. Scares about the side effects of the early high-dose pills and about the IUDs of the 1970s encouraged more and more women to consider sterilization, especially if they had completed their families. During the 1990s, tubal sterilization became the most popular method of contraception in the U.S.¹

METHODS

Authors visited Library of National Institute of Unani Medicine (NIUM), Bangalore; for the search of literature and claims in support of this article. The databases utilized for obtaining information from indexed journals are Google, Google Scholar, Scopus, PubMed and Science Direct. The key words neck pain, cervical pain, massage therapy, management of neck pain by massage, were used for the search of literature.

CONCLUSION

The sexual revolution of the 1960's and '70s had set the stage for a sea change in cultural attitudes about sex and contraception. Women were encouraged to enjoy their sexuality. The advent of the Pill and IUD made it possible for women to explore their erotic lives with a self assurance that was undreamed of only a generation before. There was also a technological advance in the surgical procedures that enabled women to choose tubal sterilization. The advent of the oral contraceptive pill heralded a revolution in contraception and arguably laid the foundations for women's liberation. Perhaps the most widely researched drug in the history of

therapeutics, the pill has been repeatedly shown to be safe and effective. It has been, and remains, a favourite subject of media hype, and despite its safety record, the majority of women still perceive the pill as potentially dangerous. It is of course statistically much safer than pregnancy. Now history completes its circle and medical experts relooking for the safer, efficacious and natural contraceptive methods; because women's health is on utmost priority mode in the community and large part of public wealth are being consumed for the betterment and restoration of women health. The above brief histories illustrate only a few of the many ways that women and men throughout history and across cultures attempted intentionally and unintentionally to enjoy their sexual relationships with one another while planning their families responsibilities and limiting the family size

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