The story of the condom

Fahd Khan, Saheel Mukhtar, Ian K. Dickinson, Seshadri Sriprasad
Department of Urology, Darent Valley Hospital, Darenth Wood Road, Dartford, Kent DA2 8DA, UK

ABSTRACT

Condoms have been a subject of curiosity throughout history. The idea of safer sex has been explored in ancient and modern history, and has been used to prevent venereal diseases. We conducted a historical and medical review of condoms using primary and secondary sources as well as using the RSM library and the internet. These resources show that the first use of a condom was that of King Minos of Crete. Pasiphae, his wife, employed a goat’s bladder in the vagina so that King Minos would not be able to harm her as his semen was said to contain “scorpions and serpents” that killed his mistresses. To Egyptians, condom-like glans caps were dyed in different colours to distinguish between different classes of people and to protect themselves against bilharzia. The Ancient Romans used the bladders of animals to protect the woman; they were worn not to prevent pregnancy but to prevent contraction of venereal diseases. Charles Goodyear, the inventor, utilized vulcanization, the process of transforming rubber into malleable structures, to produce latex condoms. The greater use of condoms all over the world in the 20th and 21st centuries has been related to HIV. This account of the use of condoms demonstrates how a primitive idea turned into an object that is used globally with a forecast estimated at 18 billion condoms to be used in 2015 alone.

Key words: Bilharzia, condom, Fromm, Kabuta-Gata, Minos, vulcanization

INTRODUCTION

The condom has been known as the wetsuit, the rubber, the jimmy, and even the nightcap. The utilization of condoms for various purposes has led to its dynamic development into the conventional latex type that is widely used today. Condoms have been a subject of curiosity throughout history. The idea of safer sex has been explored in ancient and modern history, and has been used to prevent venereal diseases. From Ancient Greeks to wartime procedures, condoms have been deployed in pursuit of contraceptive measures as well as presentation of an individual in public hierarchy. Exploring the humble and primitive beginnings of this object and its evolution with time allows us to observe and appreciate the medical knowledge of the civilizations that have preceded the modern world today.

EARLY CIVILIZATIONS

The first known documentation of the “condom” was that of King Minos of Crete\(^1\) in about 3000 B.C. King Minos, who ruled Knossos, was a figure of history from the Bronze Age. He was referenced in various manuscripts including the famous *Iliad* by Homer. Minos, the father of the Minotaur, was said to have “serpents and scorpions” in his semen. His mistresses died after having intercourse with him. In order to protect himself and his partners, which included his wife Pasiphae, the bladder of a goat was introduced into the woman’s vagina which protected the woman from disease. Prokris, King Minos’ subject, understood the sadness for Minos not being able to produce an heir; upon introduction of the sheath, significant results were shown.\(^2\) It is said that Pasiphae had given birth to eight children after the use of the goat’s bladder. It is a subject of controversy that the bladder was inserted into the woman. Another argument brought about is that the goat’s bladder was worn by Minos himself and not Pasiphae.

The Ancient Egyptians were one of the first civilizations to use sheaths. Egyptians were known to have a very ritualistic culture which used symbols and calligraphy.
to denote objective and subjective communication. For protection during intercourse, evidence from about 1000 C.E. states that linen sheaths were used, specifically to prevent tropical diseases like bilharzia. Furthermore, Egyptian men wore colored sheaths to distinguish social status within their complex hierarchy.[3]

The Ancient Roman civilization influenced the modern world in many ways, including architecture, government, philosophy, language, and even condoms. Romans were very keen on the development of public health, since diseases were prevalent as the empire spread throughout the Mediterranean world and beyond. Health was attributed by the people to the goddess Hygieia, who was the daughter of the god of medicine, Asclepius. The Romans[3] did not acknowledge the contraceptive perspective of the use of bladders of animals, but they took keen interest in its effects in public health and prevention of venereal diseases such as syphilis. Little did they know that employment of the sheaths made of bladder would also be contraception; this can be seen as something that stands out or is even contradictory of the Romans due to their evident appearance as a very wise and learned empire. The condoms used in Ancient Rome were made of linen and animal (sheep and goat) intestine or bladder. It is possible that they used muscle tissue from dead combatants but no hard evidence for this exists.

The archaic Djukas[1] tribe that inhabited New Guinea developed its own idea of the condom. They designed a distinct type of female condom that contrasts deeply with other examples in history whether it may be the Egyptians, Romans, or Greeks. A female sheath made from a specific plant was introduced into the vagina prior to intercourse to prevent conception. The sheath was described as six inches long, chalice shaped[1] so that one end was open and the other closed. The pressure exerted by the vagina helped to keep the sheath in a fixed position.

In a more oriental perspective, the Chinese civilization, with their expertise in silk, fashioned sheaths from silk paper that were applied with an oil lubrication. Sheaths became more prevalent as disease and plague spread through the East from Central Europe.[4] The Japanese civilization utilized the Kabuta-Gata, which was a shell that was used to cover the glans. It was made of tortoise shell but occasionally with leather. The Kabuta-Gata could also be used as a supplement to those who suffered from erectile dysfunction.

THE RENAISSANCE PERIOD

The Renaissance brought about significant changes in medicine. From the 15th century to the 18th century, European scientists built upon foundations that were set by the Romans and Greeks. Essential academic figures like Leonardo Da Vinci began formulating detailed anatomical drawings based on dissections. The Protestant Reformation challenged the policy of conservatism of the Roman Catholic Church. The latter had been known to have performed corrupt practices such as the selling of indulgences, colonialism, and slavery. Europe started to acknowledge significant progression with the rise of the difference between religion and the state; however, the Church still did have control on medical and scientific advancements. Gabriele Falloppio, the prominent Italian anatomist accredited with describing the Fallopian tube, made contributions to the condom. In the book De Morbo Gallico,[1] literally “The French Disease,” he describes a sheath of linen used for protection against syphilis. The sheath which covered the glans was fastened with a ribbon; it was also lubricated with saliva. His experiments on 1100 men showed that the sheath protected all from contracting the disease. The sheaths from this time period were also made of lamb and goat intestines. They were crafted by butchers, who understood the high tensile strength associated with the respective intestines. During the 17th century, the use of condoms as a contraceptive was well documented. The fertility rate in England has significantly reduced due to employment of sheaths made of intestines and bladder. The Jesuit, Leonardus Lessius[5] stated that the use of sheaths was a sin, and was unethical. The Jesuits were known to be members of the Counter Reformation which was set out to re-establish the Church’s influence on personal, cultural, and scientific matters in Christian Europe.[6]

Evidence discovered in Dudley Castle[7] near Birmingham, England, suggests the use of sheaths made of fish and animal intestine dating to about 1640. During the English Civil War, the forces of King Charles I contracted syphilis from the periodic use of prostitutes. Condoms of fish, cattle, and sheep intestine were deployed to the army to reduce transmission of syphilis, since the disease was a common cause of soldier fatality at the time. King Charles II became troubled by the number of illegitimate children belonging or associated with him.[7,8] To stop these illegitimate conceptions, his doctor prescribed a sheath made of lamb intestine. The doctor, known as Colonel Condom,[1] prescribed this with prior knowledge that sheaths were used to prevent venereal disease transmission. The etymology of the word condom is said to have been named after this doctor. Other theories include the Latin word “condus,” which means receptacle or vessel, and the Persian word “kemdu,”[1] which refers to a long piece of intestine used for storage. The theory of the origin of the condom being from England and France is in dispute between both countries. The French associate it with the English, referring to the device as Redingote Anglaise or English raincoat, whereas the English refer to it as the “French Letter.”[1] The word “Condom,” first took appearance in the diary of a physician, Daniel Turner, and
The veneration of the word "Condom" was responsible for its subsequent popularity starting from the 18th century. Brothels sold them to customers before they had relations with their prostitutes. Giacomo Casanova, an Italian traveler from a prominent Venetian family, has his own story of his experience with the condom, which can be found in his memoir, "Histoire de ma vie."

In his younger years, Casanova was not too open to using the condom, which he referred to as a "dead animal skin." Condoms in the 18th century commonly underwent the administration of sulfur or lye to help smoothen the sheath of intestine. Casanova, at a later point in his life, started using condoms after he understood their ability of protection from disease. He used to inflate them prior to use in order to test for any leaks; this was seen as an original example of monitoring whether the condom was fit for use. Condoms started to be sold wholesale in the late 18th century, and businesses such as those of a certain Mrs. Phillips became prominent in London, where she opened a warehouse in the Strand.

By the 19th century, linen condoms were out of touch, due to them being less comfortable than the animal sheaths, and their development stopped. Condoms prior to the 19th century were used by the more affluent population because the lower classes were not well acquainted with the knowledge of venereal diseases, and condoms themselves could be seen as quite expense for low incoming personnel and harlots.

**MODERN DEVELOPMENTS**

Charles Goodyear, the American inventor, significantly changed the face of the condom, with the advent of rubber vulcanization during the Industrial Revolution. This is the process where sulfur and natural rubber are heated together to form a more malleable and durable material with a higher elasticity and tensile strength. By 1860, condoms were produced on a large scale; the major benefit was that they could be reused and could be afforded at a cheaper price. Skin condoms made from intestines or bladder provided more comfort, but became outdated at the end of the 19th century. Rubber condoms were made to size originally.

The Cornstock laws which were passed in 1873 in the United States prohibited the vending of condoms via post, and the laws prevented the public advertising of contraception. Venereal diseases were a growing concern after 1865 which saw the end of the American Civil War, and a new era in history. Sexual education was more widespread at this time in order to increase awareness amongst the lower working class in America.

World War I saw the deployment of condoms, along with weapons and ammunition for the German army. The American and British armies did not use condoms, even having known their ability to help prevent venereal diseases. As a result, during the campaign, it was found that the American army had a mass amount of soldiers with syphilis and gonorrhea. Julius Fromm, a German inventor, invented the cement dipping method for condoms, creating them to be more thin with no visible lines. Germany saw their first brand of condoms called Fromm’s Act. The American army finally deployed condoms for their soldiers in World War II, but success in decreasing the number of cases of syphilis and gonorrhea was not achieved. This was due to the advent of penicillin, and the serene behavior shown by the public toward the development of venereal diseases.

In the 1920s, latex was invented. Latex is formed when rubber is dispersed in water. Latex was the revelation that transformed condoms into what they are today. They now have a very high tensile strength and can now be stretched up to eight times before they fail. In more modern conditions, rubber latex condoms can be produced at a swift rate of 3000 per hour and can be lubricated with spermicide and even flavored. America and European nations became open to contraception after World War II, in the late 1940s. The discovery of AIDS as a sexually transmitted disease in the 1980s brought about the popularity of condoms as a contraceptive and as a use of prevention of sexually transmitted diseases. They now could be found in most stores in Europe and America and are increasingly more common in developing countries. The modern world gained an improved understanding of venereal diseases as it was incorporated in health education in schools, in social magazines, and government programs promoting safe sex.

The transformation of the condom, from a piece of bladder to a small, simple latex kind with high flexibility, is one that can be looked at from a medical, scientific, and social viewpoint. The medical knowledge of time periods before ours can be looked at from the analysis of their methods of contraception and venereal disease prevention. An essential conclusion that can be drawn from this medical history is that civilization has always had a way to deal with its problems in birth control and sexually transmitted diseases, as it has affected people of all race, color, creed, and religion. This progressive device has gained such popularity that a forecast of 18 billion condoms is predicted to be used in the year 2015 alone.

**REFERENCES**

1. Finch BE, Green H. Contraception through the Ages. Charles C. Thomas Publishers, London; 1964.
2. Condoms in the prevention of sexually transmitted diseases. Atlanta, Georgia: American Social Health Association; 1987.
3. Coller A. The humble little condom: A history. Prometheus Books, New York; 2007.
4. Anijar K, DaoJensen T. Culture and the condom. Peter Lang Publishing Inc.; 2005. p. 93-103.
5. Lessius L. De Justitia et Jure, Ceterisque Virtutibus Cardinalibus Libri Quatuor; 1632.
6. Gotz A, Sontheimer M, Frisch S. Fromms: How Julius Fromm’s condom empire fell to the Nazis. Other Press, New York; 2009.
7. Life-Cycle Studies: Condoms; webpage; world watch institute. Available from: http://www.worldwatch.org/node/6462. [Last cited in 2011].
8. Schmaefsky B. Syphilis. 2nd ed. Chelsea House Publishing, New York; 2010.
9. Jutte R. Contraception: A history. Polity Press, Cambridge; 2008.

How to cite this article: Khan F, Mukhtar S, Dickinson IK, Sriprasad S. The story of the condom. Indian J Urol 2013;29:12-5.

Source of Support: Nil, Conflict of Interest: None declared.