

Male Contraception

by Ajay K. Nangia, M.D.

Ajay K. Nangia MBBS FACS. Associate Professor of Urology, University of Kansas Medical Center

The world population has passed seven billion this year. It is growing at 75 million per year. It is a startling fact that in the United States, one in two pregnancies are unplanned/unintended*. Half these pregnancies are due to the failure to use contraception and the other half is because of difficulties with contraception use or failure of the method. Most options for family planning are focused on the female partner. The options for male contraception at the present time are abstinence, withdrawal methods, and condoms as reversible options, and vasectomy for permanent sterility. In this article we review the issue of male contraception and the options for men to participate in the prevention of unplanned pregnancies.

The National Survey of Family Growth (NSFG) has shown that most women (99%) ages 15-44 have used some for contraception at some time: either the pill or condoms. The type of contraception a couple or person uses is very much dependent on the stage of their relationship. In early sexually active life, the main objective is reversible contraception, and prevention of sexually transmitted infections (STIs). To achieve this, options include the use of condoms or a female method of birth control, e.g. the pill, diaphragm, or intrauterine device. As a couple becomes more stable in a relationship, prevention of STIs becomes less of a concern, but maintaining the ability to prevent pregnancy may still be a priority. This results in the use of a reversible form of contraception that can include the condom or female methods as outlined. The next stage of life is when a couple in a stable relationship, having completed their family building, can consider a more permanent contraception option. At this time, these options are vasectomy for the man and tubal ligation for the women (having her "tubes tied"). Such choices are very individual for men and women and include issues of trust, usually related to concerns about promiscuity. The prevailing theory in the community is that contraception is more important to women because they are primarily involved with the pregnancy. It is because of this mindset that female contraception provides many more advanced choices. (The female birth control pill had its 50th anniversary in the last year.)

A number of studies have shown that men have both an interest in, and feel a responsibility for, contraception. However, the current contraceptive choices for men are still limited. These options include abstinence, the withdrawal technique, condoms, or vasectomy. Condoms have been around for centuries with advances in the 20th century with the creation of latex rubber. The failure rate of condoms is quoted as one in fifty for "perfect use," 15 percent for "typical use", and 2 to 9 percent for breakage or slippage. The percentage of high school

students, who used a condom during their last sexual intercourse in the United States, has gone from 4 in 10 (40%) in 1991 to just over 6 in 10 (60%) in 2007. Although this is an improvement, it is not good enough and we need to continue to educate teenagers on prevention of teen pregnancies. Condoms also remain the most effective method to prevent STIs, including HIV.

Vasectomy practice in the United States reveals that approximately 527,000 vasectomies were performed in 2002. Vasectomy use has leveled out since the 1980s; approximately 10 out of 1,000 men aged 25-49. Vasectomy is a minimally invasive procedure that causes minimal discomfort and has a very high success rate. It is a great option for couples who have completed their family building. This must be considered a permanent option, although a small percentage of men (6 out of 100 or 6%) may consider fertility after vasectomy usually related to a new relationship and new partner. Men who have a vasectomy are not cleared of the risk of sexually transmitted diseases. A recent study has shown that men who have had a vasectomy are less likely to wear a condom for STI prevention.

The American Urological Association recently came out with guidelines on vasectomy. A post vasectomy sperm check is essential. This is important at 15-20 ejaculations and 8-12 weeks from the time of vasectomy. Early or late reconnection of vasectomies does occur, which is why waiting to check the sperm count until after approximately three months is recommended. The failure rate from a vasectomy is either measured in terms of sperm still being present in the semen after a vasectomy or pregnancy risk. The pregnancy risk after a vasectomy is 1 in 2,000, which is less than the risk of pregnancy for a woman who has her "tubes tied".

In the future, a number of issues need to be addressed for contraception for men (and women):

- Better education on compliance for contraception along with increased personal responsibility
- Better public awareness of options for contraception
- Better access to options for contraceptions
- Development of a reversible male contraceptive other than condoms. However, this option does not prevent STI's.
- Male and female opinions on compliance and trust

With the female pill being over 50 years old, development of a reversible "male pill" is ongoing, with extensive research being sponsored by several organizations. Overall, contraception is an important choice, and patients and health care providers need to be aware of the options.

* <http://www.cdc.gov/reproductivehealth/unintendedpregnancy/>