

## **Vasectomy: An underused contraceptive technique**

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### **ABSTRACT**

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Despite access to an array of different contraceptive measures, overpopulation persists in being a major public health concern. Vasectomy is a safe, simple, cost-effective outpatient technique for male sterilization performed under local anesthesia. Irrespective of the multiple benefits associated with vasectomy, acceptance rates among clients have been extremely poor in different settings. To counter this lack, the following have been advocated by program managers: 1) the implementation of multiple measures, such as using mass media to undo the myths and misconceptions associated with vasectomy; 2) the active involvement of men in decision-making pertaining to matters of reproductive

health and family planning; 3) the engagement of both spouses in assisting the couple to take an informed decision; 4) the provision of manpower with adequate training regarding procedure and men's reproductive health needs; 5) the involvement of different stakeholders; and 6) the integration of all reproductive health and family planning services under one roof. To conclude, vasectomy is the most dependable and cost-effective approach of contraception for couples who have completed their family.

**Key words:** Vasectomy, contraception, men, permanent sterilization

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Despite the cafeteria approach offered for choosing different contraceptive measures, overpopulation continues to contribute significantly to environmental degradation and human suffering worldwide. As per recent estimates of the World Health Organization, the global crude birthrate for the year 2010 was 23.7 births per 1,000 people; the highest rates were observed in the regions of Africa (38.3 births per 1,000 people) and the eastern Mediterranean (28.5 births per 1,000 people) [1]. One study has revealed that nearly 50% of all conceptions are unintended, and an equal percentage of the resultant pregnancies are unwanted [2]. In developing nations and low-resource settings, access to contraceptives is further limited due to cultural barriers and economic constraints. Studies have identified that more than 20% of pregnancies resulting from the dearth of contraceptives are terminated via fetal abortion [3,4]. There is thus a great need for better access and education regarding existing contraceptive options.

In a survey performed in nine countries spanning four continents and involving more than 9,000 males aged 18 to 50 years, the majority of respondents expressed a willingness to adopt contraceptive methods should they be available [5,6]. Another survey conducted among women attending family planning clinics in Scotland, China, and South Africa has revealed that 98% of women would be inclined to rely on their male partners to adopt male contraception [7]. Vasectomy is the first surgical method of male contraception and the only widely available and effective method of family planning for men. Vasectomy possesses a few substantial advantages that are not offered by any other birth control method. It is a safe, simple, cost-effective outpatient technique for male sterilization performed under local anesthesia. It is an extremely effective method that does not require continuous motivation, as well as has a minimum recovery time, a failure rate of less than 1%, and a comparably low incidence of complications [8]. The Pearl Index for this method is 0.15 (perfect use = 0.1), making it the most effective method of contraception available [8].

Irrespective of the multiple benefits associated with vasectomy, acceptance rates among clients have been extremely poor in different settings [9, 10]. Multiple sociodemographic and health care delivery-associated factors have been attributed to the poor acceptance rate of vasectomy among the general population, including lack of awareness [10]; ignorance among men [11]; fear of possible loss of children due to death or divorce [10]; adoption of other contraceptive measure by spouse [12]; myths and misconceptions related to vasectomy; fear of

irreversibility, pain, and/or inability to indulge in future sexual intercourse; risk of postoperative complications, loss of efficiency at work, and/or its perceived synonymy with castration [11,13]; poor educational and socioeconomic status [11,12,14]; psychological constraints and religious hurdles [11]; variable acceptance rates among gynecologists [11]; physicians' perception that male patients will never adopt the surgical procedure [11]; spousal influence [15]; and accessibility and availability of trained doctors [9,16].

To augment the uptake of vasectomy by male patients, implementing the following measures should be advocated by both program managers and policymakers: organizing mass media campaigns involving doctors, local leaders, and satisfied clients to counter the myths and misconceptions associated with vasectomy [13]; addressing the psychosocial concerns and barriers patients face [13]; ensuring men's active involvement in decision-making regarding matters of reproductive health and family planning; pre- and postoperative counseling the husband and wife together to assist their an informed decision-making [15]; providing staff with adequate training about the vasectomy procedure and men's reproductive health needs [16]; adopting no-scalpel vasectomy procedures and other modern techniques at all healthcare institutes [2]; decentralizing services to trained private practitioners and doctors from nongovernmental organizations [8]; involving different stakeholders and international health organizations [8]; providing monetary incentives; integrating all reproductive health and family planning services under one roof [11]; fostering community outreach and mobilization activities to maximize the reach of services [15]; and clients' maintaining compliance with postoperative surgical instructions [16].

Altogether, vasectomy is the most dependable and cost-effective approach to contraception for couples who have completed their family. Ensuring sustained political commitment, community participation, and the active involvement of all stakeholders can significantly improve the future uptake of vasectomy among men.

### **Conflicts of interest**

The author declares no conflict of interest.

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## REFERENCES

1. World Health Organization. Demographic and socioeconomic statistics: Crude birth and death rate by WHO region. [Internet]. 2013 [Cited 2013 July 22]. Available from: <http://apps.who.int/gho/data/view.main.CBDR2020?lang=en>
2. Page ST, Amory JK, Bremner WJ. Advances in male contraception. *Endocr Rev.* 2008 Jun; 29(4):465-93.
3. Finer LB, Henshaw SK. Abortion incidence and services in the United States in 2000. *Perspect Sex Reprod Health.* 2003Jan-Feb; 35(1):6-15.
4. Jones RK, Darroch JE, Henshaw SK. Contraceptive use among U.S. women having abortions in 2000-2001. *Perspect Sex Reprod Health.* 2002 Nov-Dec;34(6):294-303.
5. Heinemann K, Saad F, Wiesemes M, White S, Heinemann L. Attitudes toward male fertility control: results of a multinational survey on four continents. *Hum Reprod.* 2005 Feb;20(2):549-56.
6. Heinemann K, Saad F, Wiesemes M, Heinemann LA. Expectations toward a novel male fertility control method and potential user types: results of a multinational survey. *J Androl.* 2005 Mar-Apr; 26(2):155-62.
7. Glasier AF, Anakwe R, Everington D, Martin CW, van der Spuy Z, Cheng L, et al. Would women trust their partners to use a male pill? *Hum Reprod.* 2000 Mar; 15(3):646-9.
8. Jamieson DJ, Costello C, Trussell J, Hillis SD, Marchbanks PA, Peterson HB; US collaborative review of sterilization working group. The risk of pregnancy after vasectomy. *Obstet Gynecol.* 2004 May;103(5 Pt 1):848-50.
9. Owusu-Asubonteng G, Dassah ET, Odoi AT, Frimpong P, Ankobea FK. Trend, client profile and surgical features of vasectomy in Ghana. *Eur J Contracept Reprod Health Care.* 2012 Jun; 17(3):229-36.
10. Dibaba A. Rural men and their attitude towards vasectomy as means of contraception in Ethiopia. *Trop Doct.* 2001 Apr;31(2):100-2.
11. Ebeigbe PN, Igberase GO, Eigbefoh J. Vasectomy: A survey of attitudes, counseling patterns and acceptance among Nigerian resident gynecologists. *Ghana Med J.* 2011 Sep; 45(3):101-4.
12. Marchi NM, de Alvarenga AT, Osis MJ, de Aguiar Godoy HM, Simoes E Silva Domeni MF, Bahamondes L. Vasectomy within the public health services in Campinas, Sao Paulo, Brazil. *Int Nurs Rev.* 2010 Jun;57(2):254-9.
13. Sharma RP. No scalpel vasectomy advocacy and community mobilization--a personal experience. *J Indian Med Assoc.* 2006 Mar;104(3):134-7.
14. Surmach M. The teenager as a medical patient: The influence of social factors on the health care activity of teenagers in the field of reproductive health. *Prog Health Sci.* 2012; 2(2):43-51.
15. Bunce A, Guest G, Searing H, Frajzyngier V, Riwa P, Kanama J, et al. Factors affecting vasectomy acceptability in Tanzania. *Int Fam Plan Perspect.* 2007 Mar; 33(1):13-21.
16. Valsangkar S, Sai SK, Bele SD, Bodhare TN. Predictors of no-scalpel vasectomy acceptance in Karimnagar district, Andhra Pradesh. *Indian J Urol.* 2012 Jul; 28(3):292-6.