



Received on 05 December, 2012; received in revised form, 21 January, 2013; accepted, 22 March, 2013

FACTORS AFFECTING VASECTOMY ACCEPTABILITY IN ETHIOPIA

Edmealem Admasu¹, Negalign chekol², Temesegen Chekol³, Zewdneh Shewamene*⁴, Zelalem Eteffa⁵

Amhara Regional Health Bureau¹, Ethiopia

Amhara Region, Awi Zone Health Department², Ethiopia

Amhara Region, Bure Saint George Hospital³, Ethiopia

Department of Pharmacology and Therapeutics, University of Gondar⁴, P.O.Box: 196, Gondar, Ethiopia

Department of Pharmacy, Universal University Colleg⁵, Addis Ababa, Ethiopia

Keywords:

Vasectomy, Male contraception,
Knowledge, Attitude, Practice,
Ethiopia

Correspondence to Author:

Zewdneh Shewamene

Department of Pharmacology and
Therapeutics, University of Gondar 4,
P.O.Box: 196, Gondar, Ethiopia

E-mail: zeedshow@gmail.com

ABSTRACT: Vasectomy is one of the most effective but less utilized types of contraception method which could addresses the involvement of males to the family planning. The aim of the study was therefore to investigate the awareness about and practice of men towards vasectomy among workers in Dashen brewery, Ethiopia. Descriptive cross sectional study was conducted using pre tested self-administered questioner to assess the Knowledge, attitude and factors associated with low utilization of vasectomy. A total of 187 study participants were included to this study using single population proportion formula and random sampling technique. Majority of the participants 155 (82.9%) never heard about vasectomy as a contraception method. Their knowledge about vasectomy is generally very poor as large proportion of respondents didn't know how it works, its effectiveness and its effect on their sexual performance. None of the respondents have ever used vasectomy as a modern male contraception method. Misleading information towards its impact on sexual performance/desire was reported as a main reason not to use this method. Among others need of more children, unavailability of services, lack of information, spouse refusal and religious concerns were mentioned as a potential reasons for their negative perception towards vasectomy. Lack of awareness, myths and rumors, limited access to services, and indifference and bias on the part of providers about vasectomy limit its popularity in Ethiopia. Therefore, it is vital to introduce appropriate educational plan to increase awareness and usage of vasectomy in Ethiopia.

INTRODUCTION: International family indicatives worked towards decreasing the overall fertility rates through the developed & developing world in the decades following WWII.

During this time, the development of modern contraception, family programs, and fertility survey were mainly focused on female population^{1,2,3}.

Although there has been a modest decline in verticality rates over the last decades in most countries in most Sub-Sahara Africa, the average growth rate during this period was above 2.5% the highest among developing countries.



High population growth puts pressure already meager resources and poses a serious challenge in the provision of food, housing, health & educational service and employment opportunities to the general population³.

Vasectomy is a procedure which involves the division or occlusion of the vas deference to prevent the passage of sperm⁴. Only part of the vas deference is excised during procedure. It is difficult to find another surgical procedure as simple as vasectomy that has sparked so much medical and social controversies for more than a century. It is not surprising that the history of this procedure combines not only a constant quest for ideal technique and better results but also misconceptions, false beliefs, and erroneous indicator^{2,3}.

Ethiopia is one of the countries affected by a fast population growth and pregnancy related complications such as abortion and consequent high material mortality as a result of unintended pregnancies⁵. Most family planning programs give little attention to the understanding of men's role in effective and consistent utilization of contraceptive methods that require male involvement such as vasectomy³.

Given the need for raising the priority and resources of family planning; vasectomy services in particular, need more attention and support⁴. Family planning has always been considered as the intervention of choice for slowing population growth. However, the programs are seen to give relatively little attention to the role that could be played by men regarding fertility. Therefore, this study is primarily intended to assess the knowledge, attitudes and factors that limit the use of vasectomy among male workers greater than 18 years of age in Dashen Brewery, Ethiopia.

Methods: The sample size was determined to be 187 based on the total number of employees in the Factory by using the single population proportion formula; employing Z-score of 1.96 (at 95% confidence interval); assuming prevalence of vasectomy use to be 50% and allowing 5% sampling error. Random sampling method was implied to select participants from the total population. Descriptive cross sectional study was done by using self administered questionnaires among male workers greater than 18 years of age during the period December 1 to January 10, 2010.

Pre-tested questionnaires were used for data collection by the investigator. The questionnaires were originally prepared in English and its final version was translated in to local language (Amharic) and then back to English to check consistency. The data was collected by the investigator to assist the study group in understanding questionnaires which might be vague or differently perceived.

Knowledge about vasectomy was determined using four yes/no questions. Each correct question corresponded to 1 point, and so there was a total of 4 points for the four questions. Respondents were considered to have adequate knowledge if they scored 3 or 4 out of 4. They were considered to have inadequate knowledge if they scored between 0, 1 and 2 out of 4. Their attitudes were measured using seven items rated on a three-point Likert scale as¹ agree, ² neutral and disagree³.

Using this three-point scale for five questions, we arbitrarily set the maximum score for each respondent at 15 and the minimum at 5. A high score was indicative of positive attitude while a low score would be indicative of a negative attitude. The respondents practice were measured whether used vasectomy or not. Then the data were entered and analyzed using SPSS for windows version 16.0.

Ethical clearance was gained from university of Gondar, school of pharmacy. All the study subjects were asked for their willingness to participate in the study.

The reason why the research is to be done was explained to the study participants with administered questionnaires. Additionally, confidentiality of all the data to be gained was seriously respected.

RESULT: Of 187 respondents, majority of them were within age range of eighteen and twenty nine 116 (62%) and single (56.7%). The maximum literacy level attended was Secondary School 81(43.3%) followed by first degree 75(40.1%) whereas 5 (2.7%) respondents didn't read or write at all. Only 4 (2.2%) of the respondents earn monthly income of grater than three thousand birr and 74(39.6) have monthly income of less than 500 birr. A total of 76 (40.6%) participants had one or more child (**table 1**).

TABLE 1: CHARACTERISTICS RESPONDENTS

Characteristics	Number (n = 187)	Percentage (%)
Age		
18-29	116	62
30-40	50	26.7
>40	21	11.3
Marital status		
Married	65	34.8
Single	106	56.7
Divorce	14	7.4
died	2	1.1
Educational Status		
Cannot read and write	5	2.7
Elementary	26	13.9
Secondary	81	43.3
Higher	75	40.1
Monthly Income		
<500	74	39.6
500-1000	45	24
1001-2000	42	22.4
2001-3000	22	11.8
>3000	4	2.2
Have one or more child		
yes	76	40.6
No	111	59.3

As it can be seen from **Table 2**, majority of the participants 155 (82.9%) never heard about vasectomy as a contraception method. Their knowledge about vasectomy is generally very poor

TABLE 2: PARTICIPANTS' KNOWLEDGE ABOUT VASECTOMY

Knowledge component	Number (n=187)	Percentage (%)
I have heard about vasectomy		
Yes	32	17.1
No	155	82.9
I know how vasectomy works		
Yes	20	10.7
No	167	89.3
I know vasectomy is reputable method of contraception		
Yes	20	10.7
No	167	89.3
I know vasectomy doesn't affect sexual performance		
Yes	16	8.6
No	171	91.4

TABLE 3: RESPONDENTS' PERCEPTION TOWARDS VASECTOMY (N=32)

Perception	Agree (n, %)	Neutral (n, %)	Disagree (n, %)
Vasectomy negatively affect sexual performance/desire	17 (53.1)	4 (12.5)	11 (34.4)
Vasectomy has side effects	25 (78.1)	1(3.1)	6 (18.8)
Vasectomy is not acceptable in my religion	13 (40.6)	11(34.4)	8 (25)
I am uncertain for about the future	9 (28.1)	1 (3.1)	22 (68.8)
Vasectomy is similar with castration	15 (46.8)	3 (9.4)	14 (43.8)

as large proportion of respondents didn't know how it works, its effectiveness and its effect on their sexual performance. Many of the respondents reported that their concerns regarding sexual weakness were assuaged by service providers.

Table 3 illustrates their attitudes towards vasectomy based on five major components. Majority of respondents have expressed their concern about side effects associated with vasectomy. The second most negative attitude was their fear towards sexual competence after vasectomy. For example, 17 out of 32 respondents who have heard about vasectomy believed that vasectomy result impotence. Others are not sure about this consequence despite rumors that vasectomy causes impotence. Religious acceptability, future uncertainty and equating vasectomy with castration were other negative attitudes reported by significant number of participants.

None of the respondents have ever used vasectomy as a modern male contraception method. Misleading information including its impact on sexual intercourse was reported as a main reason not to use this method. Among others need of more children, unavailability of services, lack of information, spouse refusal and religious concerns were mentioned as a potential reasons not to use vasectomy (**table 4**).

TABLE 4: REASONS FOR LIMITED UTILIZATION OF VASECTOMY AMONG PARTICIPANTS WHO HAVE HEARD OF IT

Factors	Number	Percentage (%)
Have you ever used vasectomy (n = 32)		
Yes	0	0
No	32	100
Possible reasons for not using vasectomy as a means of family planning		
Lack of information	4	12.5
Service is not available	4	12.5
Need more children	17	53.1
It imposes a negative impact on sexual act	23	71.9
Not allowed religiously	8	25
Refusal of the spouse	1	3.1

DISCUSSION: Most of the participants in this study had not heard of vasectomy which could be as a result of low level its advocacy in Ethiopia. Limited knowledge and use of contraception is a problem in Africa even though these countries are seriously affected by high prevalence of unwanted pregnancies⁶. Within the sphere of family planning, vasectomy is very often ignored, despite being one of the safest, simplest, and highly effective and least expensive contraceptive methods. For example, in sub Saharan Africa, except Ghana, Kenya, Malawi and Uganda, the majority of men had not heard of vasectomy⁷.

The present finding is similar with previous studies in Africa in which Lack of information, misunderstandings and rumors about the vasectomy process contributed to many people's reluctance to choose vasectomy^{7,8}.

Vasectomy is the least known method of modern family planning but could be the most feared. According to information made available from an interagency workshop organized by Family Health International, EngenderHealth and the ACQUIRE Project December 3-5, 2003, in Africa, fewer than one of every four women know about it. Even when men and women are aware of vasectomy, their understanding is often incomplete or incorrect. Many men believe that vasectomy is akin to castration. They fear that if they are vasectomized, they will not be able to ejaculate; will become impotent^{9,10}.

The present finding is in contrast with studies in Ghana where three in five men have heard of vasectomy⁹. This could be ascribed to lack of efforts which promote family planning in general and

vasectomy in particular in Ethiopia. Even when men and women are aware of vasectomy; their information is frequently incomplete or incorrect¹¹.

In conclusion, higher rates of vasectomy nonuse as a means of modern contraceptive option could be attributed to four key factors: lack of awareness of vasectomy as a contraceptive option, myths and rumors about vasectomy, a lack of access to services, and indifference and bias on the part of providers. Therefore, it is vital to introduce appropriate educational plan to increase awareness and usage of vasectomy in Ethiopia.

REFERENCES:

- Jacobson JL. The status of Family planning in developing countries. In: Wallace H.M and Giri. K.editors. Health care of women and children in developing countries. Third party publishing company, California 1990; 191-203.
- Jessica levy. Male involvement in family planning. 2000; www.pubmedcentral.nich.gov
- Tuloro Tsedese, Deressa Wakgari, Ali Ahemed, Davey Gail. The role of male in contraception use and fetibity preference in Hossana town. Ethiopian Journal of health development 2006; 20 (3): 1-3.
- Stubble field PG. Family Planning. In: Berake IS, Adashi Ey and Tillard PA (Eds). Novak's Gynecology. Hongkong: Williams and Wilkins, 1996:227.
- Skibiak Sp. Mekbebe T and Getahun H. Expanding contraceptive choice in Ethiopia. Sexual health exchange information sheet 2002.
- Eni Gustina, som-ach Wongkhom thong, Amara soonthorndhadr, Kanittha Chamroonsawdsi. Male participation on family planning practice. Journal of public health & development 2004; 2(1):71-72
- Arwen Bunce, Greg Guest, Hannah Searing, Veronica Frajzyngier, Peter Riwa, Joseph Kanama and IsaacAchwa. International Family Planning Perspectives, 2007; 33(1):13-21.
- Sembony 2010. Vasectomy becoming popular. <http://www.thecitizen.co.tz/news/3-features/3535-vasectomy-becoming-popular-discussion.html>
- GSS, Noguchi Memorial Institute for Medical Research (NMIMR), and ORC Macro. 2004. Ghana Demographic and Health Survey 2003. Calverton, MD: GSS, NMIMR, and ORC Macro.
- The ACQUIRE Project. Vasectomy in the new millennium. New York: 2005. EngenderHealth/The ACQUIRE Project.
- EngenderHealth. Contraceptive sterilization: Global issues and trends. 2002. New York.

How to cite this article:

Admasu E, Chekol N, Chekol T, Shewamene Z, Eteffa Z: Factors affecting Vasectomy acceptability in Ethiopia. *Int J Pharm Sci Res* 2013; 4(4); 1561-1564.