

**MEN'S KNOWLEDGE AND ATTITUDE TOWARDS VASECTOMY IN EAST
WOLLEGA ZONE OF OROMIA REGION, ETHIOPIA**

by

BELAY EJETA AWIE

submitted in accordance with the requirements

for the degree of

MASTER OF PUBLIC HEALTH

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF TR MAVUNDLA

JUNE 2014

Student number: 4647-70-47

DECLARATION

I declare that the study on **MEN'S KNOWLEDGE AND ATTITUDE TOWARDS VASECTOMY IN EAST WOLLEGA ZONE OF OROMIA REGION, ETHIOPIA**, is my own work and that all the sources consulted, used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.



2 June 2014

SIGNATURE

BELAY EJETA AWIE

DATE

MEN'S KNOWLEDGE AND ATTITUDES TOWARD VASECTOMY IN EAST WOLLEGA ZONE OF OROMIA REGION, ETHIOPIA

STUDENT NUMBER: 4647-70-47
STUDENT: BELAY EJETA AWIE
DEGREE: MASTER OF PUBLIC HEALTH
DEPARTMENT: HEALTH STUDIES, UNIVERISTY OF SOUTH AFRICA
SUPERVISOR: PROF TR MAVUNDLA

ABSTRACT

The purpose of this study was to assess men's knowledge and attitude towards vasectomy as a family planning method options available to men in East Wollega zone of Oromia Region. Male sterilisation in sub-Saharan countries including Ethiopia is very much limited due to lots of reasons despite its many advantages than other family planning methods. Quantitative, descriptive cross-sectional research was used to describe level of knowledge and attitude towards vasectomy. Data were collected using structured questionnaire in which a total of 150 respondents, who were selected using non-random purposive sampling technique participated in the study. The data were analysed using SPSS version 20. Hence the findings revealed the lack of knowledge and low interest on vasectomy among respondents. The concerted effort from all stakeholders and use of multiple strategies to educate the community will raise awareness which in turn improves vasectomy service uptake.

KEY TERMS

Family planning, voluntary surgical contraception, knowledge of vasectomy, attitude, vasectomy, reproductive health and factors influencing vasectomy uptake.

ACKNOWLEDGEMENTS

I thank the never changing God, my creator for granting me the strength and the divine health during the period of this study and courage to complete this limited scope of dissertation.

I would also like to thank Prof TR Mavundla, for the tireless and immeasurable support and valuable guidance provided by him is forever registered in my mind and my hear, for the knowledge he passed throughout this course as well as throughout the development of the research study.

In addition, I would like to acknowledge with gratitude the contributions of the following personalities and organisations:

- The Ministry of Health (MOH) for the initiative taken in terms of enabling a masters' degree in public health in Ethiopia
- The University of South Africa (UNISA) for consenting and authorising the study
- All data collectors (family planning providers at selected five health facilities namely: Nekmete Health Center, Nekemete Hospital, Jima Arjo, Gudetu Arjo and Uke Health Centers)

At this moment in time, I lack the appropriate words to express my sincere thanks to:

- All my colleagues who directly or indirectly contributed to making this work a reality and their encouragement during difficult times
- All men of reproductive age groups who were willing to partake in this study and without whom this would not have been possible
- My wife, Agegnehush, for her unconditional love, constant support, forbearance and patience and my loving children for their encouragement and support

Dedication

I dedicate this work

*To my father, mother, wife, children, brothers and sisters,
For their tolerance throughout this long years of study, with whom I
learnt to share doubts not to loose the capability to dream.*

CHAPTER 1**ORIENTATIOIN TO THE STUDY**

1.1	INTRODUCTION	1
1.2	BACKGROUND INFORMATION ABOUT THE RESEARCH PROBLEM	1
1.2.1	Problem statement.....	4
1.2.2	Research questions	5
1.3	PURPOSE OF THE STUDY	5
1.3.1	Research objectives.....	5
1.4	DEFNITIONS OF KEY CONCEPTS	5
1.4.1	Voluntary surgical contraception.....	5
1.4.2	Vasectomy	6
1.4.3	Attitude.....	6
1.4.4	Knowledge	6
1.4.5	Family planning.....	6
1.4.7	Fertility	7
1.4.8	Woreda	7
1.4.9	Kebele.....	7
1.5	RESEARCH DESIGN AND METHODS.....	7
1.5.1	Research design.....	7
1.5.2	Research methods.....	8
1.5.2.1	Study population	8
1.5.2.2	Sampling and sampling techniques	8
1.5.2.3	Study site	9
1.5.2.4	Data collection tools.....	10
1.5.2.5	Data analysis	11
1.6	SCOPE OF THE STUDY	11
1.7	STRUCTURE OF THE STUDY/DISSERTATION	11
1.8	CONCLUSION	12

CHAPTER 2**LITERATURE REVIEW**

2.1	INTRODUCTION	13
2.2	PURPOSE OF THE LITERATURE REVIEW.....	13

2.3	FAMILY PLANNING GLOBALLY	14
2.4	FAMILY PLANNING.....	15
2.5	VOLUNTARY SURGICAL CONTRACEPTION.....	16
2.5.1	Tubal ligation.....	17
2.5.2	Vasectomy	18
2.5.2.1	Description of vasectomy operation	18
2.5.2.2	Types of vasectomy	18
2.5.2.3	Uptake of vasectomy in men.....	20
2.5.2.4	Advantages and disadvantages (complications) of vasectomy.....	20
2.6	KNOWLEDGE OF MEN ON VASECTOMY	23
2.7	ATTITUDE OF MEN TOWARDS VASECTOMY	26
2.8	FACTORS INFLUENCING UPTAKE OF VASECTOMY	27
2.8.1	Negative factors	29
2.8.2	Positive factors.....	31
2.9	BENEFITS OF FAMILY PLANNING	33
2.10	SERVICES NEEDED FOR MEN OF REPRODUCTIVE AGE GROUPS.....	36
2.11	CONCLUSION	37

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1	INTRODUCTION	38
3.2.	RESEARCH DESIGNS	38
3.2.1	Quantitative aspect of the design.....	39
3.2.2	Descriptive aspect of the design	39
3.2.3	Cross-sectional aspect of the design	39
3.3	RESEACRH METHODS	41
3.3.1	Study sites	41
3.3.2	Population.....	41
3.3.3	Sampling technique	42
3.3.3.1	Samples and sampling.....	42
3.3.3.2	Eligibility criteria or inclusion criteria	43
3.3.4	Data collection	44
3.3.4.1	Data collection approach and methods.....	44
3.3.4.2	Characteristics of the data collection instrument.....	45
3.3.4.3	Validity of data collection instrument.....	46
3.3.4.4	Reliability of data collection instrument	47

3.3.4.5	Data collection process	47
3.3.4.6	Data analysis techniques	47
3.4	ETHICAL CONSIDERTAION	48
3.4.1	Permission to conduct the study	49
3.4.2	Confidentiality	49
3.4.3	Beneficence	50
3.4.4	Respect for human dignity	50
3.4.5	Justice.....	51
3.4.6	Autonomy – respect for persons	51
3.4.7	The scientific integrity of the researcher	52
3.5	CONCLUSION	53

CHAPTER 4

RESEARCH FINDINGS

4.1	INTRODUCTION	54
4.2	DEMOGRAPHIC DATA	54
4.2.1	Age of respondents.....	54
4.2.2	Marital status.....	55
4.2.3	Education	55
4.2.4	Religious affiliation	56
4.2.5	Residence.....	57
4.3	SECTION B: REPRODUCTIVE HEALTH ISSUES	57
4.4	SECTION C: RESPONDENTS' / MEN'S KNOWLEDGE ABOUT VASECTOMY	58
4.4.1	Knowledge of family planning	59
4.4.2	Types of family planning methods the respondents know or heard about	60
4.4.3	Men who knew about female sterilisation or permanent methods	60
4.4.4	Source of information regarding voluntary surgical contraception	61
4.4.5.	Adequacy of information provided by health care providers	62
4.4.6	Heard about vasectomy	62
4.4.7	Knew about vasectomy through education	63
4.4.8	Knowledge about where vasectomy service is available	64
4.4.9	If yes, where vasectomy service is available	64
4.4.10	Realise that vasectomy is permanent and irreversible.....	65
4.4.11	Knowledge about who could have vasectomy	66
4.4.12	Types of men who can have vasectomy.....	66
4.5	SECTION D: PARTCIPANTS' ATTITUDE TOWARDS VASECTOY AND ITS UTILISATION	67
4.5.1	Discussion of family planning with a partner	67
4.5.2	Family planning benefits self and the family	67
4.5.3	Type of family planning method(s) self or partner ever used	68
4.5.4	Believe that men can play significant role in family planning	69
4.5.5	Want to share responsibility for using family planning with partner.....	70
4.5.6	Are you or your partner finished having more children.....	70

4.5.7	What type of family planning method yourself are interested if you no longer want to have more children?	70
4.5.8	Are you or your partner interested in the possibility of vasectomy?	71
4.5.9	Interest in vasectomy by education	72
4.5.10	Relationship between heard about vasectomy and interest in undergoing vasectomy	73
4.5.11	Know or heard about individuals who undergone vasectomy	74
4.5.12	What did you heard about individuals who undergone vasectomy?	74
4.5.13	Do you think that vasectomy is frustrating procedure?	75
4.5.14	Why you or the community are not using vasectomy	76
4.4.15	What do you recommend to improve vasectomy service uptake?	76
4.6	CONCLUSION	77

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1	INTRODUCTION	78
5.2	DISCUSSION OF THE FINDINGS	78
5.3	LIMITATIONS	81
5.4	RECOMMENDATIONS	82
5.4.1	Recommendations with regard to education	82
5.4.2	Recommendations with regard to practice	83
5.4.3	Recommendations with regard to future research	83
5.5	CONCLUSIONS	84
	LIST OF REFERENCES	85

List of tables		Page
Table 2.1	Knowledge of contraceptive	24
Table 4.1	Respondents' age (N=150)	55
Table 4.2	Religious affiliation of respondents (N=150)	56
Table 4.3	Reproductive health related issues (number of children and number of pregnancies regrouped)	58
Table 4.4	Cross-tabulation: Respondent's residence to ever heard or knew about family planning	59
Table 4.5	Chi-square tests: Respondent's residence to ever heard/know about family planning	60
Table 4.6	Types of FP methods respondents knew/had heard about	60
Table 4.7.	Source of information for voluntary surgical contraception.....	61
Table 4.8	Relationship between respondents' educational level and heard or know about vasectomy	63
Table 4.9	One way analysis of variance (ANOVA) on heard about vasectomy and educational level.....	64
Table 4.10	Respondents' knowledge about where vasectomy service is available	64
Table 4.11	Respondents indicated where vasectomy service is available.....	65
Table 4.12	Respondents' response to who can have vasectomy	66
Table 4.13	In which family planning methods you are interested.....	70
Table 4.14	Cross-tabulation: Respondents' interest in possibility of having vasectomy to educational background	72
Table 4.15	Chi-square tests: Respondents' interest in possibility of having vasectomy to educational background	73
Table 4.16	Relationship between respondents who had heard about individuals underwent vasectomy and interest impossibility of having vasectomy	73
Table 4.17	Chi-square tests: Relationship between respondents who heard about individuals who undergone vasectomy and interest in possibility of vasectomy.....	74
Table 4.18	Know or heard about individuals who had underwent vasectomy.....	74
Table 4.19	Respondents' response about what they heard about individuals who undergone vasectomy.....	75
Table 4.20	Reasons why you or the community does not use vasectomy.....	76

List of figures		Page
Figure 1.1	Map of East Wollega zone	9
Figure 2.1	Dissecting forceps and Ringed clamp	19
Figure 4.1	Marital status of respondents (N=150)	55
Figure 4.2	Educational level of respondents (N=150)	56
Figure 4.3	Residential areas of respondents (N=150).....	57
Figure 4.4	Have you heard about permanent FP method? (N=150)	61
Figure 4.5	Adequacy of information on FP methods received from health care providers (N=150)	62
Figure 4.6	Do you know or heard about vasectomy? (N=150)	63
Figure 4.7	Do you realise that vasectomy is permanent and irreversible? (N=150).....	65
Figure 4.8	Respondents' responses on who can have vasectomy (N=150).....	66
Figure 4.9	Discuss family planning methods with partner (N=150)	67
Figure 4.10	Benefit of family planning to self and family (N=150)	68
Figure 4.11	Which FP methods yourself or your partner used? (N=150)	69
Figure 4.12	Belief that men could play a significant role in FP (N=150).....	69
Figure 4.13	Are you or your partner interested in the possibility of vasectomy? (N=150)	71
Figure 4.14	Thought of respondents that vasectomy is frustrating procedure (N=150).....	75
Figure 4.15	Respondents' recommendations to improve vasectomy service uptake (N=150).....	77

List of annexures

- | | |
|------------|--|
| Annexure 1 | Ethical clearance from University of South Africa (UNISA) |
| Annexure 2 | Letter Seeking consent from Oromia Regional Health Bureau and approval from Regional Health Bureau and Zonal Health Office |
| Annexure 3 | Approval of request by concerned parties (Oromia Regional Health Bureau and East Wollega Zonal Health Department) |
| Annexure 4 | Consent form |
| Annexure 5 | Questionnaire |

List of abbreviations

ARHP – Association of reproductive health professionals
CIOMs- council for international Organization of Medical science
CPR – contraceptive prevalence rate
CSA – Central statistical agency
EPHTI – Ethiopian public health training institute
FDRE – Federal democratic republic of Ethiopia
FP – Family planning
JHU – John Hopkins University
MCH – Maternal and child health
MDGs- Millennium development goals
MOE – Ministry of education
MOH – Ministry of health
MSI – Marie stopes international
NSV –No scalpel vasectomy
PRB – Population reference Bureau
SA – South Africa
SPSS- Statistical packages for social sciences
UNISA – university of South Africa
UNPF- United nations population fund
USAID – United states agency for international development
WHO – world health organization

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Male sterilisation in sub-Saharan countries including Ethiopia is very much limited due to lots of reasons despite its many advantages than other family planning method options (USAID & Engenderhealth 2007:10). Male sterilisation is achieved through undergoing a vasectomy. A vasectomy is permanent contraception for men who do not want more children.

Recent research in developing countries has revealed that men can play an important role in deciding whether or not women use family planning method. Although vasectomy is an important alternative to female sterilisation for couples who want a permanent method of contraception, barriers to its wider use exist in many places (Landry & Ward 1995:58).

In this study, the researcher utilises a cross-sectional study design, which is quantitative and descriptive. This is done in order to describe the level of awareness and attitudes held by men with regard to vasectomy as a family planning method options available to them.

The overall purpose of the study was to contribute to the knowledge of health care providers, and the community on vasectomy and improving its service up take in Oromia Region as well as the country at large.

1.2 BACKGROUND INFORMATION ABOUT THE RESEARCH PROBLEM

Sterilisation is currently the world's most widely used contraceptive method, in developing and developed countries alike or comparable, and it is projected to remain so over the next two decades. Sterilisation accounts for nearly half of all contraceptive use. Today, one out of four couples worldwide use sterilisation as their family planning methods (USAID & Engenderhealth 2007:10)

Vasectomy is unique among the array of modern contraception as it enables the male partner to take primary responsibility for fertility control. Besides its availability broadens the choice of methods for family planning users and contributes to promoting male involvement in family planning as stated in (Ross & Frankenberg 1993 cited in Muhondwa & Rutenberg 1997:2). Male's attitudes are often blamed for the underutilisation of this method. Frequently cited examples of attitudes which discourage the use of vasectomy include men's lack of interest in or responsibility for reducing pregnancies, the association with castration, and fear of procedure (Muhondwa & Rutenberg 1997:2).

As stated in USAID and Engenderhealth (2007:10), vasectomy is permanent contraception for men who will not want more children. Vasectomy is safer, simpler, less expensive or cost-effective, just as effective as female sterilisation, yet the number of female sterilisation users exceeds the number of vasectomy users by five to one.

There is no currently available contraceptive that has higher success rate than vasectomy (Turek from <http://www.theturekclinic.com/vasectomy-contraceptives.himl>). A 1989 survey of attitudes towards and knowledge of vasectomy among a sample of approximately 400 men in Nairobi revealed that only 37% had heard of vasectomy (Lynam, Dwyer, Wilkinson & Landry 1993:3).

Despite being a safe, simple and effective family planning method for men who want a permanent solution to their contraceptive needs, low awareness and attitudes towards vasectomy still surround vasectomy, deterring men from considering the procedure. It is less expensive and equally as effective as female sterilisation; however, vasectomies are one of the least used and known methods of contraception throughout the world (Karamat, Zarel & Arabi 2005-2007:1).

Recent research in developing countries has revealed that men can play an important role in deciding whether or not women use family planning method. Although vasectomy is an important alternative to female sterilisation for couples who want a permanent method of contraception, barriers to its wider use exist in many places (Landry & Ward 1995:58).

As stated in USAID and Health Policy Initiative (2009:1), the brief based on a multi-country study titled "Achieving the Millennium Development Goals (MDGs); the contribution of family planning "is one strategy to reduce population growth by meeting needs for family planning and make achieving the MDGs more affordable in Ethiopia, in addition to directly contributing to the goals of reducing child mortality and improving maternal health.

The MDGs are a set of eight important, time bound goals ranging from reducing poverty by half to providing universal primary education – represent a blueprint for global development agreed to by member states of the United Nations and international development institutions. However, achieving these will be a major challenge for Ethiopia and many other developing countries that are not "on track "to meet the goals by the target date of 2015 (USAID and Health Policy Initiative 2009:1).

In Ethiopia and other African countries, one major factor contributing to this challenge is the continued rapid growth of the population. The number of people in need of health, education, economic, and other services are large and increasing, which, in turn, implies that the amount of resources, personnel, and infrastructure required to meet the MDGs are also increasing (USAID and Health Policy Initiative 2009:1).

For many years, the blame for the underutilisation of vasectomy has been placed on men since they did not want to take responsibility for reducing pregnancies, the association of vasectomy with castration, and fear of the procedure (Muhondwa & Rutenberg 1997:2).

Research Conducted in the previous decades has revealed that men do care about reducing pregnancies and want to share the responsibility for family planning with their partners as stated in Grady et al (1996); Landry and Ward (1997) cited in USAID and Engenderhealth (2007:10).

As stated in Marie Stops International (MSI) (2003:1), promoting and educating men about the basic facts and benefits of vasectomy will result in higher use of the method and break down the common myths about the procedure.

1.2.1 Problem statement

A problem statement articulates the problem to be addressed and indicates the need for a study through the development of an argument (Polit & Beck 2008:81).

There is a substantial differential in fertility among regions ranging from 1.4 children per women in Addis Ababa to high of 6.2 children per women in Oromia. With the exception of Oromia, Somali, and South Nations Nationalities Regions, fertility levels in the other 6 Regions are less than the national average which is 5.4 (Central Statistical Agency [CSA] 2006:48).

Male sterilisation (in the form of vasectomy) is unique among the array of modern contraception as it enables the male partner to promote their involvement in family planning and takes primary responsibility for fertility control. Male knowledge and attitude are often blamed for the underutilisation of this method. In addition to low awareness of men on vasectomy there are examples of attitudes that discourage the use of vasectomy which includes men's lack of interest in or responsibility for reducing pregnancies, the association of vasectomy with castration, and fear of the procedure (Muhondwa & Rutenberg 1997:2).

Study conducted in Dar es salaam showed that, the majority of respondents (60%), maintain that , it is the man who decides on the number of children a couple should have. And also, once the man has agreed with his partner to space or stop having more children, the responsibility for using family planning in order to implement the decision is given to the wife (Muhondwa & Rutenberg 1997:15).

The Oromia region is one of bigger regions in Ethiopia where vasectomy is almost non-existent despite the presence of rapid population growth. As stated above, male knowledge and attitudes are often blamed for the underutilisation of the method and this problem leads to the following research questions.

1.2.2 Research questions

In order to address the above mentioned research problem, the researcher tried to answer the following research questions:

- What is the level of knowledge that men possess about vasectomy as a family planning method options?
- What does men's attitude towards vasectomy in East Wollega zone of Oromia region look like?

1.3 PURPOSE OF THE STUDY

The main purpose of the study was to assess the knowledge and attitude of men of reproductive age groups towards vasectomy in East Wollega zone of Oromia region, Ethiopia. This aim was attained in the following manner:

1.3.1 Research objectives

The following specific objectives were formulated in the study:

- To describe the level of knowledge that men possess on vasectomy as a family planning method option.
- To describe the attitudes of men towards vasectomy in East Wollega zone of Oromia region.

1.4 DEFINITIONS OF KEY CONCEPTS

In this section the researcher provides definitions of key terms that are used continuously or repeatedly in this study in the following manner:

1.4.1 Voluntary surgical contraception

Voluntary surgical contraception is a permanent contraceptive method for women (tubal occlusion) and men (vasectomy). It is intended to be irreversible method.

Therefore repeated and thorough counselling is essential to minimize regression in the future (Bekele, Fentahun, Gutema, Getachew, Lambiyo & Yitayal: 2003:48).

1.4.2 Vasectomy

Vasectomy is a permanent method of contraception for men. It involves blocking both vas-deferens preventing passage of sperm to male urethra (Bekele et al 2003:48). It is also called male sterilisation and male surgical contraception (WHO, World Health Organization (WHO), John Hopkins University (JHU) and United States Agency for International Development (USAID) 2007:183).

1.4.3 Attitude

Attitude is a hypothetical construct that represents an individual's degree of like or dislike for something. Attitudes are generally positive or negative views of a person. It is also defined as a manner, disposition/character, or feeling about something. ([http://en.wikipedia.org/wiki/attitude_\(psychology\)](http://en.wikipedia.org/wiki/attitude_(psychology))).

1.4.4 Knowledge

Knowledge is familiarity with someone or something that can include information, facts, and skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject. It can be implicit (as with practical skill or expertise) or explicit (as with the theoretical understanding of a subject (<http://en.wikipedia.org/wiki/knowledge>)).

1.4.5 Family planning

Family planning is the ability of an individual or couple to decide when to have children they desire in a family and how to space their children (Bekele et al 2003:12). Family planning refers to conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods (Central Statistical Agency (CSA) 2011:9).

1.4.6 Fertility

Is the state of being fertile, specifically, the ability to produce young (Federal Democratic Republic of Ethiopia (FDRE), Ministry of Education (MOE), Ministry of Health (MOH) and in collaboration with Carter Centre (EPHTI) 2003:258). Fertility is one of the three principal components of population dynamics that determine the size and structure of the population of a country (CSA 2006:46).

1.4.7 Reproductive age group

Reproductive age group is those individuals (men) whose age is above 15 years old.

1.4.8 Woreda

Woreda is an administrative division of Ethiopia, which is equivalent to district. It is composed of a number of Kebeles.

1.4.9 Kebele

Kebele (Amharic “neighbourhood”) is the smallest administrative unit of Ethiopia similar to ward, a neighbourhood or a localised and delimited groups of people.

1.5 RESEARCH DESIGN AND METHODS

This sub-section of the chapter serves to orientate the readers to the research design and methods used in this study to provide answers to the basic research questions raised by the researcher in the planning of this study.

1.5.1 Research design

The study design refers to the structured approach followed by researcher to answer a particular research question (Joubert & Ehrlich 2009:77). The researcher used non experimental, descriptive, cross-sectional study design aimed at answering the aforementioned research questions. Data were collected on the knowledge and attitude

of men of reproductive age groups by interviewing respondents using an already prepared structure questions.

1.5.2 Research methods

Research methods are techniques that the researchers use to structure a study and to gather and analyse information relevant to the research question(s) (Polit & Beck 2008:15). This part will be discussed in detail in Chapter 3. In this study, the researcher will use the following research procedures and methods:

1.5.2.1 Study population

The term population refers to the entire aggregation of people in which a researcher is interested. Research studies mostly rely on a sample of subjects, who are a subset of the population, whereas sampling is the process of selecting a portion of the population to represent the entire population so that inferences about population can be made (Polit & Beck 2008:337-339).

In this study, the researcher used men of reproductive age group who visit FP unit with their partners or maternal and child health department at selected health facilities, in selected woredas (Nekemete town, Diga, Guto Gida, Sibu-sire, & Jima Arjo) of East Wollega zone of Oromia in Ethiopia.

1.5.2.2 Sampling and sampling technique

A sample is a subset of the population that is selected for the study (Polit & Beck 2008:339). The sample in this study consists of a total of 150 respondents of the study in both urban and rural settings at five selected health facilities of East Wollega zone of Oromia region. Here, the researcher used a non-probability sampling approach. Non-probability sampling is a technique in which not every element of the population has an opportunity for selection in the sample. However it is economical, simple and requires less time to obtain the desired sample size (Polit & Beck 2008:340). In this study, the sampling technique used was non randomized purposive sampling since men of reproductive age groups who visit family planning or maternal and child health unit are selected to participate in the study deliberately.

1.5.2.3 Study site

Generally speaking, Ethiopia is administratively subdivided into nine regional states and two city administrations. According to the 2007 population and housing census, the largest proportion of the country's population was found in Oromia Region, followed by Amhara and South Nations Nationalities peoples region (Population and Housing Census 2007:9).

This study was carried out in East Wollega zone of Oromia Regional state with a total inhabitants of 1,398,890 of which 698,046 were male and 700,844 were females projected for 2012 based on CSA 2007 of Ethiopia (FDRE population census commission 2008:12).

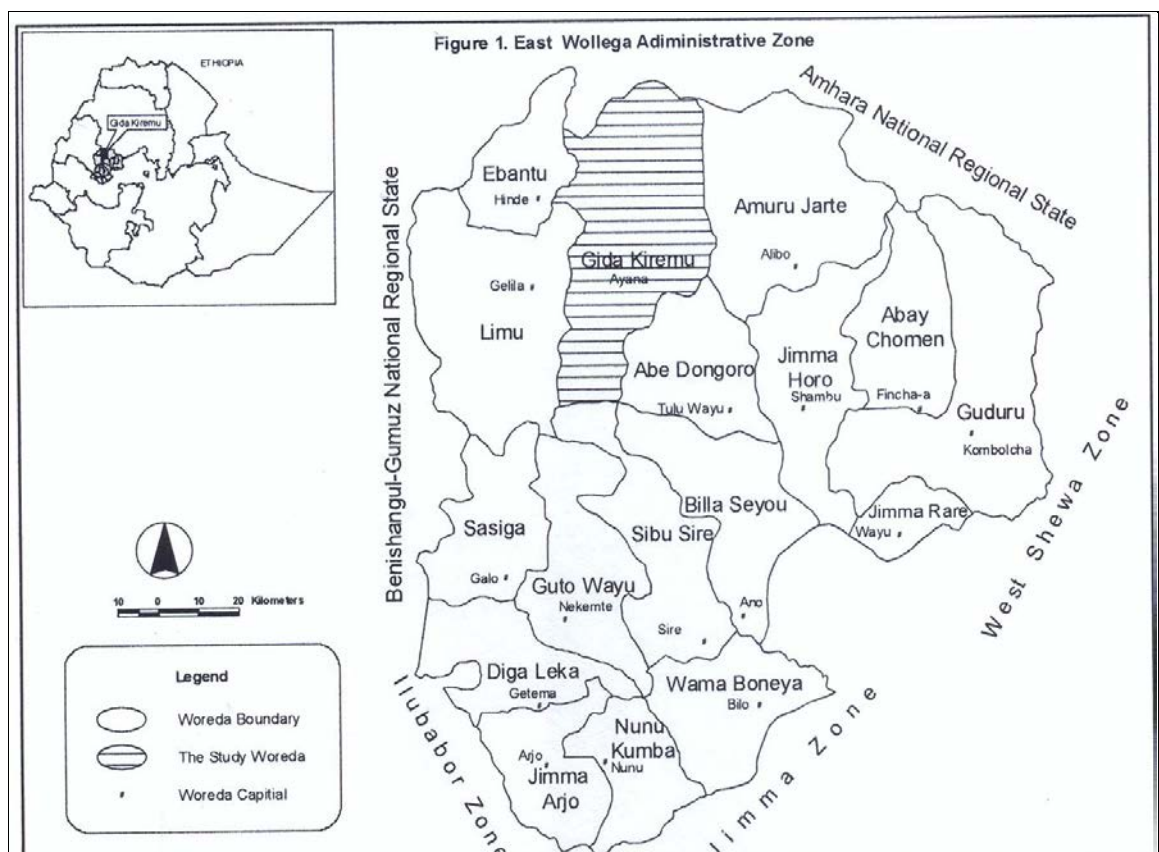


Figure 1.1 East Wollega zone of Oromia Regional state

(Tesfaye Tafese 2007:854)

The study site was found in East Wollega zone at both rural and urban settings were chosen because the researcher thinks that this sample is enough to generalise to a larger population and also there are two different settings (rural and urban) to maximize external validity. The sample is large enough to combat statistical conclusion validity.

Non random sample of 150 men of reproductive age group who attended or accompanied their female partners to a family planning unit were recruited to participate in this study. The woredas and health facilities had been selected by researcher and the zonal health office using purposive sampling method. The sample was believed to be the representative of the study population.

1.5.2.4 Data collection tools

The researcher used a structured interview question items. Men of reproductive age groups who visit maternal and child health unit were interviewed. As data are collected in a highly structured fashion, the researcher must develop (or borrow) what is referred to as the data collection instrument, which is formal written document used to collect and record information, such as questionnaire (Polit & Beck 2008:371-372). Since the study was quantitative, the actual collection of data had proceeded according to the pre-established plan.

Thus, data were collected using specifically prepared questionnaire, which was developed from the health belief model constructs and the attitude measurement concept. Five health facilities from both urban and rural settings were chosen because of their similar population statistics. Men of reproductive age groups who visits family Planning or maternal and child health units were interviewed using specifically prepared questionnaires. Questions were asked by interviewers using structured interview questions. The data was collected by family planning providers following service provision and data collection process was supervised by the researcher.

The quality of the information collected should be secured. The first way for checking the data quality of the data was reviewing issues concerning data collection process and the respondents. The second, the more final evaluation of measurement error. In this case, the measurement instruments are usually evaluated for reliability and validity.

1.5.2.5 Data analysis

The main analysis of the study centres on what proportion of men's who know about vasectomy and how the attitudes of men towards vasectomy hinder uptake of the service as a family planning method option.

First, data were cleaned before entry and then analysed using Statistical Package for Social Sciences (SPSS) version 20. The descriptive and inferential statistics were used for analysis of the data. This study represents a comprehensive effort to improve the knowledge and attitudes through raising awareness of community and health care providers on vasectomy. The result of the study helps to provide recommendations for implementing family planning program that would increase knowledge, attitude of the community and service up take on male sterilisation at large.

1.6 SCOPE OF THE STUDY

The scope of the study is limited mainly on the factors influencing vasectomy uptake as family planning method options among men of reproductive age groups in East Wollega zone of Oromia region.

Even though it is difficult to identify possible limitations before conducting the actual research, there might be possible limitations such as support from partners like regional health bureaus, zonal health offices and health facilities, distant health facilities, and also time constraint due to work load since the researcher is expected to handle other businesses as an employee. The other thing is, it might be difficult to get enough sample with in specified time frame due to its voluntary base as some respondents may not be voluntary to be interviewed to provide necessary data.

1.7 STRUCTURE OF THE STUDY/DISSERTATION

The structure of this study is arranged in five chapters in the following manner:

Chapter 1: Study outline

Chapter 2: Literature review

Chapter 3: Research design and methods

Chapter 4: Research findings

Chapter 5: Conclusion, limitations and recommendation

1.8 CONCLUSION

This chapter provided an overview and introduction to the study. It presented a general background about the study, the aims of the study, research questions, research objectives and research design. In addition it introduces the reader about the data collection and analysis process. Hereafter we will see chapter by chapter discussing the literature review undertaken for the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter discusses the literature reviewed by the researcher on the knowledge, attitude and practices of male sterilisation/vasectomy among men of reproductive age groups. The review of literature is the process of taking stock of existing knowledge on the topic in order to make informed choices about policy, practice, research direction and resource allocation (Chalmers 2003 cited in Joubert & Ehrlich 2009:66).

A literature review is a 're-view' or 'further look' at what has previously been written on a particular subject. Ideally, it should not be merely a summary of previous findings but should involve a critical examination and synthesis of existing reports. It is therefore intended to convey to the reader the current state of knowledge on a given subject along with strengths and limitations of the underlying research title as stated in Joubert and Ehrlich (2009:66).

The researcher used the following key words to search for relevant literature: family planning (FP), voluntary surgical contraception, vasectomy, male of reproductive age groups, knowledge and attitude towards vasectomy, factors influencing FP and benefits of contraception, and male involvement in FP.

2.2 PURPOSE OF THE LITERATURE REVIEW

The overall purpose of a literature review is "to develop a strong knowledge base for the conduct of research and evidence based practice". The major reason to review the literature on a given topic is to uncover knowledge for use in education and practice (LoBiondo-Wood & Haber 2002:79).

As stated in Chalmers (2003) and Egger et al (2001) cited in Joubert and Ehrlich (2009:66-67), a literature review can serve a number of different functions, such as:

justification of future research, putting new findings in to context, making sense of research, coping with information overload, and facilitating access to relevant research.

LoBiondo-Wood and Haber (2002:78-79) state that literature review are of the opinion that a critical review of the literature will (1) uncover conceptual and data-based knowledge related to a particular subject, concept, or clinical problem and is used in all aspects of the research process; (2) provides new knowledge that can lead to the development, validation, or refinement of theories; (3) reveals research questions for the discipline; (4) provides the latest knowledge for education; and (5) uncovers research findings that support evidence based practice.

2.3 FAMILY PLANNING GLOBALLY

In nearly all developing countries, the number of women of reproductive age (ages 15-49) grows between 2005 and 2015 because of the large number of young people in these countries. In addition, the demand for contraceptives is projected to grow due to couples' desire for smaller families. As a result, the total cost of contraceptive supplies to meet couples' needs is projected to rise by nearly 50% in countries such as Tanzania and Nepal (Population Reference Bureau [PRB] 2008:2)

Family planning saves lives. Economic development, human rights and global health all have deep but often overlooked roots in family planning. More than half a billion people will use family planning in developing countries (excluding China) by year 2015, an increase of 100 million people (Jacobstein & Pile 2007:2).

Globally, unintended pregnancy rates have been decreased because contraceptive use has increased but 215 million women in the developing world have an unmet need for modern contraception. Asia and Latin America are reaching levels of contraceptive use comparable to those in the developed world, but use is still extremely low in Africa (Guttmacher Institute and United Nations Population Fund (UNPF) 2009:7).

As stated in PRB (2008:4), female sterilisation is the most common contraceptive methods used by one-fifth of the married women worldwide. Male sterilisation, in contrast, is far less common in most countries. Among developing regions, contraceptive use is highest in Latin America and the Caribbean, followed by Asia. In

sub-Saharan Africa, more than three-fourths of the married women do not use any contraceptive.

Globally, Married women using any family planning method in the world comprises 63% while 4% and 21% are for male sterilisation and female sterilisation respectively. When it comes to Africa, especially sub-Saharan Africa, use of any family planning method is 23% and 2% for female and male sterilisation respectively. Burundi, Mauritius and Uganda are east African countries with 0.1% vasectomy cases, while there is no male sterilisation and 0.5% female sterilisation for Ethiopia (PRB 2008:7).

Akafuah and Sossou (2008:116) state that the least known and less popular family planning devices were spermicidal substances, vasectomy and tubal ligation. The use of family planning methods, such as vasectomy for men and tubal ligation for women, were very limited.

2.4 FAMILY PLANNING

Family planning is *“the ability of an individual or couple to decide when to have children they desire in a family and how to space their children”* (Bekele et al 2003:12). Family planning refers to a conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods (CSA 2011:9)

In another way, family planning is defined as the ability of individuals and couples to anticipate and attain their desired number of children, space and limit their births. It is achieved through the use of contraceptive methods and the treatment of involuntary infertility. Family planning (FP) is also a means of promoting the health of women and families and is part of a strategy to reduce the high levels of maternal, infant, and child mortality (Federal Democratic Republic of Ethiopia (FDRE) and Ministry of Health (MOH) 2011:26).

Apart from the definition of FP, it is the opportunity to utilize FP methods. People should be offered the opportunity to determine the number and spacing of their own children. As a result, Information on FP methods should be made available and accessible (FDRE and MOH 2011:26).

One of the targets of the ministry of health, with respect to improving maternal and child health, is to increase the contraceptive prevalence rate (CPR) from the current 28.6% to 66% by 2015 (CSA 2012:93). Generally, 25% of currently married women have an unmet need for family planning (16% for spacing and 9% for limiting). An unmet need is highest among women aged 15-19 (33%) and lowest among women aged 45-49 (15%), (CSA 2012:101; CS, 2011:11). Use of any contraceptive method varies notably by Region, ranging from 63% in Addis Ababa to 4% in the Somali region. The current contraceptive use for Oromia region (CPR) is 26.2% (CSA 2012:97).

The contraceptive mix in Ethiopia consists of natural family planning methods, like abstinence, fertility awareness, lactational amenorrhea method, withdrawal, and modern family planning methods like condoms, diaphragm, emergency contraceptive, pills, injectables, implant, intrauterine contraceptive device, bilateral tubal ligation and vasectomy (FDRE and MOH 2011:27).

2.5 VOLUNTARY SURGICAL CONTRACEPTION

Sterilisation is currently the world's most widely used contraceptive method, in developing and developed countries alike, and it is projected to remain so over the next two decades and it accounts for nearly half of all contraceptive use. Today, one out of four couples worldwide use sterilisation as their family planning method (Engenderhealth 2007:10).

As stated in the World Health Organization (WHO) (1994:1), most couples who have all the children that they want long before the end of their fertility (men are fertile throughout life, women until about age 50 years), will need effective protection against unwanted pregnancy for many years. Sterilisation is one of the options available to couples who have decided to end childbearing.

A study conducted in Kathmandu of Nepal by Mahat, Pacheun and Taechaboonsermsak (2010:9) indicated that, about 45 million couples worldwide rely on vasectomy for contraception, compared to 150 million who rely on female sterilisation in spite of the fact that male sterilisation is safer and easier to perform.

In Kumar's (2007:61) study conducted in Rural Kerala of India, indicated that there has been a reversal of trend from female sterilisation to male sterilisation. There are more men opting for sterilisation than women. Sikkim is the first state in India to have more of non-scalpel vasectomies than female sterilisations.

A study by Ebeigbe, Igberase and Eigbefoh (2011:103) indicated that the analysis of the pattern of counselling for permanent contraception showed that 89.4% of the doctors (93) stated that they counselled for bilateral tubal ligation (BTL), often 9.6% (10) rarely while only 1.0% had never counselled for BTL. In contrast, only 5.8% counselled often for vasectomy while 47.1% did so rarely and 47.1% had never counselled any patient for vasectomy. None of the doctors or their partners had had vasectomy and almost three fifth of the doctors would not use vasectomy when they decide not to have more children. Voluntary surgical contraception is categorised in to two as tubal ligation and vasectomy.

2.5.1 Tubal ligation

Female sterilisation is a permanent contraception for women who will not want more children. The two surgical approaches most often used are minilaparotomy which involves making a small incision in the abdomen, and the fallopian tubes brought to the incision to be cut or blocked and the second one is laparoscopy which involves inserting a long thin tube with a lens in to the abdomen through a small incision (WHO, JHU and USAID 2011:165).

Minilaparotomy, generally referred to as "minilap" is an abdominal surgical approach to the fallopian tubes by means of an incision less than 5 cm in length. As sterilisation procedure for permanently occluding the fallopian tubes, minilaparotomy has been performed safely and frequently in a wide range of countries for more than 30 years (Engenderhealth 2003b:1).

As stated in WHO (1994:1), female sterilisations are performed four times as vasectomies in the world as a whole. Surgical sterilisation of women is the most widely used contraception in the world and accounts for the most of the 202 million couples currently benefiting from sterilisation.

2.5.2 Vasectomy

Vasectomy is a permanent contraception for men who will not want more children. It is one of the most effective methods but carries a small risk of failure-where men cannot have their semen examined 3 months after the procedure to see if it still contains sperm. Pregnancy rates are about 2-3 per 100 of women over the first year after their partners have had vasectomy. Vasectomy is not fully effective for the first three months after the procedure. Some pregnancies occur within the first year because the couple doesn't use condoms or another effective method consistently and correctly in the first three months, before the vasectomy is fully effective (WHO, JHA and USAID 2011:183-184). Vasectomy remains the family planning method that is least known, understood or used, a fact confirmed in Demographic and health survey (DHS) studies conducted in 21 countries over the past five years (Jacobstein & Pile 2007:2).

2.5.2.1 Description of vasectomy operation

Vasectomy is a simple operation that makes it impossible for a man to make his partner pregnant. During a vasectomy, a man's two tubes or sperm ducts are cut and blocked so that no sperm will be in his semen. It is already a popular choice for couples seeking permanent contraception in the United States, Europe, and Asia. A new focus on the male role in reproductive health has spurred efforts to include men in family planning services which traditionally have been geared towards women (WHO 1994:1). The operation is usually performed as an outpatient procedure under local anaesthesia (Weiske 2001:126).

2.5.2.2 Types of vasectomy

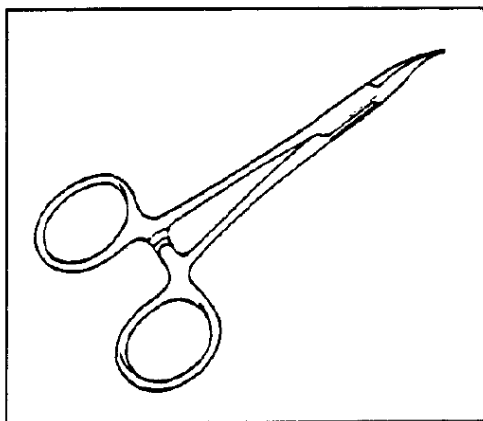
Hereunder are the two techniques are used to perform vasectomies: no-scalpel vasectomy (NSV) and no needle (NNV) or conventional vasectomy or incisional vasectomy.

- ***No-scalpel vasectomy***

NSV is a minor surgical procedure that requires aseptic procedures to prevent infection (Engenderhealth 2003a:13) and the NSV does not use a scalpel. After anaesthesia is

injected, the doctor pierces the skin of the scrotum with a sharp instrument, and then gently stretches the opening so that the tubes can be reached and blocked. There is a little blood, and fewer complications than when the scalpel is used (Kumar 2007:61). NSV is considered the standard of care. When it comes to the effectiveness of this method, it is extremely effective, with a failure rate of 0.10 to 0.15 percent (Association of Reproductive Health Professionals 2011:68). No-scalpel vasectomy (NSV) was developed and first performed in China in 1974 by Dr Lishunqiang of the Chongqing Family Planning Scientific Research Institute (Engenderhealth 2003a:2). It is being used increasingly throughout the world. This no-scalpel technique, widely believed to reduce men's anxieties about vasectomy, attract more clients and providers to the method (WHO 1994:1). As stated in WHO (1994:6), no-scalpel vasectomy differs from conventional vasectomy in the way the doctor reaches the tubes because of two instruments developed especially for the technique, a ringed clamp and a sharp tipped dissecting forceps.

Dissecting forceps



Ringed clamp

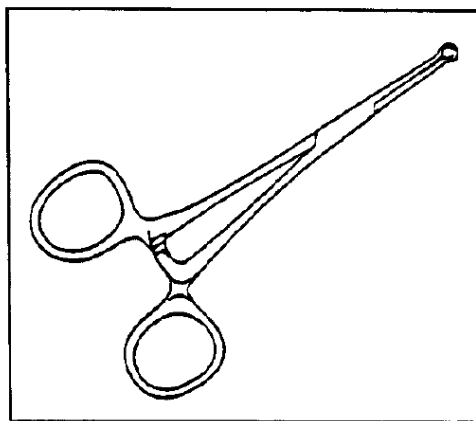


Figure 2.1 Introduction of no-scalpel vasectomy

WHO (1994:6)

- ***Conventional Vasectomy or incisional vasectomy***

Scalpel allis or towel clamp are used for incising scrotum using localised anaesthesia. Incisional vasectomy has skin sutures, while no closure is needed in no-scalpel vasectomy (Engenderhealth 2007:12). As stated in WHO (1994:7-8), two small cuts on

the scrotum will be performed, stitched and then closed. The procedure had short term pain, swelling and slightly more discomfort during the procedure and afterwards. Men may be fearful of incision in the scrotum.

2.5.2.3 Uptake of vasectomy in men

Vasectomy is very common operation and has been accepted as a method of family planning by about 42 million couples worldwide (Tandon & Sabanegh 2008:166-168). According to PRB (2008:9-10), vasectomy is widely used by countries like Canada (where vasectomy covers 22% of modern methods), New Zealand (19.3%), United Kingdom (17%), Bhutan (13.6%) and South Korea (12.7%).

In South Africa, it appears that acceptability of vasectomy is increasing but follows cultural lines. An average of 100 vasectomies is performed annually by the contraception service unit in Durban. In comparison, the number of female tubal sterilisation is in the region of 3000 annually. Men's involvement in family planning has largely been ignored by programme planners and service providers in developing countries. Religion was not a barrier to the acceptance of vasectomy (Dunmoye, Moodley & Popis 2001:295).

Bunce, Guest, Searing, Frajzyngier, Riwa, Kanama and Achwal (2007:13) state that one way to foster male involvement in family planning is to give couples more contraceptive choices through the promotion of male oriented family planning methods such as vasectomy. The number of vasectomy users seem to have reached a plateau in recent years; the estimated number of couples using vasectomy was 33 million in 1982 and increased to 42 million in the following decade, however, from the early 1990s to 2001, the number of couples using vasectomy increased by only one million, to estimated 43 million couples.

2.5.2.4 Advantages and disadvantages (complications) of vasectomy

Vasectomy has got both advantages and disadvantages (complications) as discussed in the sub-headings below.

- **Advantages of vasectomy**

The advantages of vasectomy includes; it's being long-term method, discreet (unnoticeable), low risk of side effects, after up-front cost, no on-going cost to maintain method, no effect on hormonal milieu, very effective and quick recovery (Association of Reproductive Health Professionals 2011:68).

Vasectomy technique also provides maximum safety as regards sterility (azoospermia, a medical condition of a man not having any measurable level of sperm in his semen) and minimal postoperative complications (Weisk 2001:126).

As stated in Karamat et al (2005-2007:1), the vasectomy procedure is a safe, simple, and permanent method of contraception and has a failure rate of less than 1%. It is less expensive and equally as effective as female sterilisation; however, vasectomies are one of the least used and least known methods of contraception throughout the world. Worldwide, approximately 3.6% of couples are using vasectomy as a method of contraception.

Vasectomy is one of the few methods that allow men to take personal responsibility for contraception. It is simpler and safer procedure than female sterilisation and performing it requires minimal extra training for those performing female sterilisations. It is highly effective and doesn't affect sexual performance or masculinity (WHO 1994:2).

Without sperm in his semen, a man can no longer make his partner pregnant. Sperm travels from the testes (where they are made) through two tubes (vas deferens) in the scrotum and mix with seminal fluid before coming out of penises. During vasectomy, the tubes in the scrotum are blocked (tied and sealed) so that the sperm cannot reach the semen. It is a minor operation that usually takes 15 minutes in a clinic or doctor's office (WHO 1994:3).

Even though vasectomy is less expensive, less invasive and has fewer complications than tubal ligation, tubal sterilisation is the more popular method. In 1995, the proportion of women using a method who relied on female sterilisation was nearly three times the proportion who relied on male sterilisation (28% vs 11%). After increasing steadily during 1960s and 1970s, the rate of vasectomy levelled off during the 1980s and has remained stable ever since (Barone, Johnson, Luick, Teutonico & Magnani 2004:27).

- ***Disadvantages (Complications) of vasectomy***

According to Tandon and Sabanegh (2008:166-168) while vasectomy is usually a well-tolerated and highly effective form of birth control, which has a risk of significant morbidity in approximately 1% of clients. One particularly troubling complication after vasectomy is chronic testicular pain, which has been defined as intermittent or constant, unilateral or bilateral testicular pain for up to three months. Various modifications in vasectomy technique was proposed to prevent the subsequent development of post vasectomy pain syndrome (PVPS). The first is pre-emptive analgesia; infiltration of the vas deferens with a local anaesthetic such as bupivacaine before its division or ligation might reduce both immediate and long term pain (Tandon & Sabanegh 2008:166-168).

The study in Tandon and Sabanegh (2008:68) concluded that post vasectomy pain syndrome is a rare but serious complication of vasectomy. It remains a challenging and frustrating both for clients and urologists. Patients should be informed of this possible complication from vasectomy before selecting the method.

The most frequent cause of undesired pregnancy after vasectomy is unprotected sexual intercourse prior to demonstration of azoospermia. In this case, Spontaneous recanalisation is considered a rare event; distinction should be made between early recanalisation in the first three months, that is before postoperative azoospermia is achieved, and late recanalization after demonstration of azoospermia. In individual cases, recanalization was observed 5-8 years after vasectomy as stated in (Alderma, 1989) cited in Weiske (2001:129) and Dohle, Diemer, Kopa, Krausz, Gimwercmen and Jungwirth (2012:160). Vasectomy failure can also be caused by a so called identification error, which means that it was not the vas deferens but another structure was operated, in which case post-operative clearance of sperm cells will never occur (Weiske 2001:130).

2.6 KNOWLEDGE OF MEN ON VASECTOMY

Knowledge is dynamic and flexible if the learning process produced growth in the level of knowing (Quarless [Sa]:129). As stated in Donald (2002) cited in Quarless ([Sa]:129), knowledge occurs in two stages; an initial declarative (information) stage and a subsequent procedural (application) stage. There is; however, a growing body of evidence that suggests that there are both declarative and procedural stages in all of the forms of knowledge that ultimately facilitate knowledge construction.

Furthermore, knowledge is a familiarity with someone or something, which include facts, information, descriptions, or skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject and implicit (as with practical skill or expertise) or explicit (as with the theoretical understanding of a subject (<http://en.wikipedia.org/wiki/Knowledge>)).

Several theories of learning and cognition posit or suggest that our behaviour is shaped by at least two different kinds of knowledge; one providing an abstract understanding of the principles and relations between pieces of knowledge in a certain domain (known as conceptual), and another one enabling us to quickly and efficiently solve problems (named as procedural knowledge) as stated in Baroody (2003) cited in Schneider and Stern [Sa]). Concept is a mental representation of a category that is a class of objects that we believe belongs together. Concepts of social objects such as traits, stereotypes, and interpersonal situations allow us to classify behaviours, people, and events, to interpret our social world and make inferences about it that go beyond the information we have observed directly and to communicate with one another (Kunda 1999:51).

Specially, knowledge of family planning is a prerequisite to obtaining access to and using a suitable contraceptive method in a timely and effective manner. The survey showed that more than nine women in every ten have heard about pills and injectables. More than nine men in every ten knew about the male condom as well as about the pills and injectables. Moreover, 42.5% of all men and 38.7% of all women know about female sterilisation and 18% of all men and 11.2% of all women heard about male sterilisation (CSA 2012:93-94). Table 2.1 illustrates contraceptive knowledge in detail.

Table 2.1 Contraceptive knowledge

Method	Women			Men		
	All women	Currently married women	Sexually active unmarried women ¹	All men	Currently married men	Sexually active unmarried men ¹
Any method	97.2	97.6	99.8	98.4	99.2	99.9
Any modern method	97.1	97.4	99.7	98.4	99.1	99.9
Female sterilisation	38.7	39.8	50.8	42.5	46.8	51.9
Male sterilisation	11.2	10.8	21.4	18.0	17.6	37.7
Pill	91.3	92.6	96.4	91.1	94.1	96.2
IUD	26.3	26.4	36.7	27.8	27.5	45.4
Injectables	94.9	96.1	98.3	91.8	95.2	97.3
Implants	67.8	69.2	81.9	59.2	63.5	69.7
Male condom	80.4	78.1	92.3	95.8	96.8	99.9
Female condom	31.9	27.3	54.9	39.8	36.4	73.4
Lactational amenorrhoea (LAM)	2.9	2.6	3.5	2.8	2.5	8.3
Emergency contraception	19.0	16.0	41.0	27.4	26.2	53.6
Standard days method	11.6	10.8	14.3	19.8	20.5	30.1
Any traditional method	49.6	47.4	77.3	64.0	67.1	84.8
Rhythm	43.3	41.0	70.3	57.4	60.6	76.5
Withdrawal	26.8	24.5	47.5	42.4	42.0	69.4
Other	0.9	0.9	1.6	1.1	1.1	2.9
Mean number of methods known by respondents age 15-49	5.5	5.4	7.1	6.2	6.3	8.1
Weighted number of respondents	16,515	10,287	197	12,834	6,872	222
Unweighted number of respondents	16,515	10,204	268	12,868	6,775	366
Mean number of methods known by respondents 15-59	na	na	na	6.1	6.2	8.1
Weighted number of respondents	na	na	na	14,110	8,089	224
Unweighted number of respondents	na	na	na	14,110	7,930	373

na = Not applicable
¹ Had last sexual intercourse within the 30 days preceding the survey

(CSA 2012:94)

The study conducted in the rural Kerala of India indicated that family planning was widespread and that all married men were aware of at least one method of contraception. Among various methods, female sterilisation was the most well-known (97.1%). The next best known was male sterilisation (90.1%). Knowledge of a NSV was 10.6% among them as stated in Kumar (2007:61-63).

Overall, vasectomy receipts were more educated than the United States males population. About 16% of men aged 20-74 in the general population in 1998 had received less than a high school education, whereas all of the vasectomy clients had completed high school, and most (81%) had received some formal education beyond this level (Barone et al 2004:29).

Study conducted in Bangladesh (USAID and the ACQUIRE Project 2008:7) showed that eighty percent of the respondents heard information about vasectomy through television, and virtually all (99%) reported liking the television commercial because it was informative and clear. Only 25% of the respondents who heard information on vasectomy reported posters as their source of information.

Accordingly, lack of information, misunderstanding and rumours (gossips/chats) about the vasectomy process contribute to many people's reluctance to choose vasectomy. Vasectomy clients and their wives frequently recounted that prior to undergoing the procedure; they had been concerned by rumours of decreased sexual desire or performance. Additional rumours included equating vasectomy with castration, believing it causes cancer, believing that sperm will accumulate in the body and have negative effects, and fears that vasectomy causes weight gain and physical weakness (Bunce et al 2007:18).

As described in Dunmoye et al (2001:296), most of the clients heard about the availability of vasectomy procedure through health personnel either in or outside of a family planning clinic (37%); 29.5% through their friends; 24.4% (n=75) through their wives and only 4.9% (n=15) from the media. Besides, sexual activity remained unchanged in 95.1% and actually improved in 3.2% of the men following vasectomy. Here, One percent (n=3) regretted having had the procedure, while only two (0.7%) desired reversal and 99% stated that they would recommend vasectomy and 51.5% had actually recommended the procedure to friends or family members.

In fact, the ejaculate consists of a mixture of secretions from the seminal vesicles (60%), the prostate (30%), and cowper's and litre's glands (5%), as well as the testis and epididymis (5%). The frequent patient concern of reduced volume or even absence of ejaculate after vasectomy is therefore unfounded. A significant post-operative reduction in ejaculate volume is virtually / almost never found, as shown by examination of pre and post vasectomy semen analysis in 204 men undergoing vasectomy (Weisk 2001:130).

The WHO (1994:22) indicates that the man's genital tract should be clear of the sperm (already stored in the man's reproductive tract before the procedure) after 12 weeks or 15-20 ejaculations so that the man cannot make his partner pregnant.

2.7 ATTITUDE OF MEN TOWARDS VASECTOMY

An attitude is a hypothetical construct that represents an individual's degree of like or dislike for something. Attitudes are generally positive or negative views of a person. It is also defined as a manner, disposition/character, or feeling about something. ([http://en.wikipedia.org/wiki/attitude_\(psychology\)](http://en.wikipedia.org/wiki/attitude_(psychology))). Attitudes are fundamental components of all living systems. They orient the organism towards or away from people, things, and events in the world (Stanley, Phelps & Banaji 2008:164).

As stated in Jowel (2005:1), an attitude can be defined as “a psychological tendency to view a particular object or behaviour with a degree of favour or disfavour”. They are generally understood to be formed through a process of individual subjective evaluation (involving a rational assessment of costs and benefits), but also influenced by affective and emotional responses and related beliefs.

Attitude researchers the field infer that a person's attitude is “stable” when the person provides similar attitude reports at different times and / or in different contexts. From the perspective of construal models, dispositional assumptions are not needed and the conditions of “stability” (i.e., similar judgements across time and contexts) and “change” (i.e. dissimilar judgments across time and contexts) can be derived from general judgement models (Schwarz 2007:642).

Its structure can be described in terms of three components namely affective, behavioural and cognitive which is termed as ABC model of attitudes. First, affective component involves a person's feelings/emotions about the attitude object while behavioural component describes the way the attitude we have influences how we act or behave. Cognitive component involves a person's belief/knowledge about an attitude object (Attitude and Behaviour from <http://www.simplypsychology.org/attitudes.html>).

In quantitative studies, attitudes are typically measured using two main types of scales; either likert scales, where there are five response categories ranging between two extreme positions, example strongly agree and strongly disagree., or using semantic differential questions, which contains set of opposites, for example, easy-difficult and the space between opposites is graded from 0 expressing the lowest evaluation to 6

representing the highest evaluation, example how would you rate the role of your teacher, difficult (6), easy (0), irritable (6), calm (0), active (6), passive (0). Attitudinal data can help us understand attitudes and behavioural intentions which influence the relevant behaviours, identify social influences, and actors in the groups targeted for behaviour change; as well as highlight key differences within target groups (Jowel 2005). In this study, the researcher used the likert scales to assess men's attitude towards vasectomy.

The common perception that men do not want to take responsibility for family planning and that of vasectomy, therefore is a nonstarter is contradicted by the evidence: men do care about avoiding pregnancy and want to share the responsibility for FP with their partners (Jacobstein & Pile 2007:10). Research in the past decades has further confirmed that men do care about avoiding pregnancy and want to share the responsibility for family planning with their partners (Grady et al 1996; Landry & Ward 1997 cited in Engenderhealth 2007:10).

Still, Kumar (2007:63) stated that the vast majority (95.2% of 271 respondents) of married men and their wives who had never used temporary methods of contraception were not in favour of vasectomy. The main reason given were related to health such as "no trouble if women undergo sterilisation after last pregnancy, easier, less side effects, and no social embarrassment" (74.5%).

As stated in the WHO (1994:20), the most important thing for any man planning on having a vasectomy should be asked again if he is sure that he wants no more children. The permanence of the procedure should be emphasized as should the fact that he can change his mind at any time before the procedure.

2.8 FACTORS INFLUENCING UPTAKE OF VASECTOMY

The use of any family planning method depends on the person's knowledge of the family planning methods available and the willingness of both spouses to participate in the family planning program (Akafuah & Sossou 2008:116). The findings in Akafuah and Sossou (2008:109) indicated that demographic factors such as education, religion, types of marital relationship and exposure to mass media education have significant

effects on the respondents increased knowledge, changing attitudes and practices of family planning and reproductive decision making.

Bunce et al (2007:15) also identified six themes surfaced as overarching factors contributing to actual and potential vasectomy clients and their partner's decision to have a vasectomy: economic hardship, spousal influence, religion, provider availability and reputation, future uncertainty, and vasectomy knowledge and understanding.

Cultural patterns and inaccurate information as well as legal, political, and religious considerations influence the acceptance of vasectomy. Despite barriers to male contraception, efforts to introduce vasectomy services elsewhere around the world have been successful. Research suggests that the low prevalence of vasectomy may not be an indication of resistance by men as much as it is a result of the limited focus on men and male methods by family planning programmes (WHO 1994:2).

Vasectomy programmes in most countries are constrained by barriers at the service delivery level, with in the culture and community and at the level of government and donor policies and priorities (Jacobstein & Pile 2007:3).

As stated in Kumar (2007:63), the study findings revealed that over 36% of married men reported that they or their wives had used a contraceptive method during their married life. Among those who reported ever use of contraceptives, female sterilisation was the most accepted method. Although vasectomy was known, its rate in the study area was poor; 11% of married men who knew about no-scalpel vasectomy, no one had accepted it. Among the 70 married men who had knowledge of no-scalpel vasectomy, 18 of them (25.7%) were using temporary methods and the others are not using any methods.

As stated in WHO (1994:13), when vasectomy is performed using the standard surgical approach or the no-scalpel method, it is 99% effective. There is a very small chance that a man's partner will become pregnant after he has had vasectomy. Generally, Factors influencing uptake of vasectomy can be categorized in to two; that are negative factors and positive factors.

2.8.1 Negative factors

Negative factors are those hindering use of vasectomy service as family planning method options available to men. For many years, the blame for the underutilisation of vasectomy has been placed on men since they did not want to take responsibility for avoiding pregnancy, the association of vasectomy with castration, and fear of the procedure (Muhondwa & Rutenberg 1997:2).

Both men and women reported negative attitudes towards vasectomy, sharing many stories of times when the procedure had not worked or had resulted in physical weakness, thus limiting a man's ability to provide for his family. Fears about weakness resulting from the procedure were common among both men and women and served as one of the main barriers to acceptance of vasectomy as stated in USAID and the Respond Project (2011:11).

Worry about the impact of NSV (no scalpel vasectomy) on men's sexual performance served as another barrier to use of the method and was more frequently expressed by women. Most respondents did not know that sexual performance would not be affected and feared the procedure believing that only a courageous man would go for no-scalpel vasectomy. While some positive stories about vasectomy were shared, it was also noted that men would not tell other people if they had been sterilised, fearing being shamed and taunted by community members, who might refer to them using such words as *namard* (meaning infertile). Women also worried that a sterilised man would be thought of as a "slave to his wife" (USAID and the Respond Project 2011:11).

The study result in Sahin (2008:394-395) showed that, a total of 19.5% of students had negative attitudes towards condoms and 34% of them were against vasectomy though taking shared responsibility for contraception among students was high which is 79.3%. Among male oriented family planning methods, 95.8% of students knew of condoms, 73.7% knew of withdrawal, and 33.3% knew of vasectomy.

As stated in Kumar (2007:63), out of 271 married men and their wives who had never used temporary methods of contraception, the vast majority (95.2%) were not in favour of vasectomy. The main reason given by them were related to health such as 'no trouble if female undergo sterilisation after last pregnancy', 'easier', 'less side effects',

'no social embarrassment' (74.5%). Among the 70 married men who had knowledge on no-scalpel vasectomy, all of them were not in favour of no-scalpel vasectomy. The major reasons given by male were 'did not have more details about NSV', and 'tubectomy (tubal ligation) is better' (74.3%), 11% of them reported that no-scalpel vasectomy would cause weakness and reduce work output.

As stated in Ebeigbe et al (2011:101), the study indicated that previous studies in Nigerian men have identified ignorance among males as the major reason for the low acceptance of vasectomy in Nigeria. Ignorance is reflected in widespread misconceptions about vasectomy. These include the belief that it causes impotence, ejaculatory failure, weight gain, and its equation with castration.

Evidence suggests that a principal reason for the low(or declining) use of vasectomy is not men's resistance to the method or unwillingness to take the responsibility , but rather the failure of health professionals to make information and services available and accessible to men. This failure has often been a result of health professional's lack of knowledge, misinformation, personal dislike of vasectomy or untested presumptions about what men thought and wanted (stated in Jezowski et al 1995 cited in Engenderhealth 2007:10).

Vasectomy is the least known of all modern family planning methods. In addition to lack of knowledge, even when men and women are aware of vasectomy, the information they have frequently is incomplete or incorrect. Vasectomy is more difficult to obtain than other family planning methods; overall, in only one out of four countries in the developing countries world do at least half of men have access to vasectomy services (Engenderhealth 2007:10-11).

As stated in the FDRE and MOH (2011:28) one of the reasons for low utilisation of long acting and permanent family planning methods is difficulty geographic access or unavailability of the service at a nearby health service outlet.

Akafuah and Sossou (2008:109-116) stated that the study identified sociocultural misconceptions resulting from lack of knowledge and education as the main deterrents or constraints for the use of different family planning devices including vasectomy. Paucity of knowledge about the use of vasectomy as family planning method could be

due to lack of adequate education about the procedure and the unavailability of the service at the main government hospitals in the study area. As stated in Bunce et al (2007:18) lack of information, misunderstanding and rumours about the vasectomy process contribute to many peoples reluctance to choose vasectomy. Vasectomy clients and their partners frequently recounted that prior to undergoing the procedure; they had been concerned by rumours of decreased sexual desire or decreased sexual performance.

The reluctance to use permanent family planning methods implies that contraception among men is motivated more by the desire to space births or to avoid contracting a sexually transmitted disease rather than discontinuing childbearing. The study also revealed that most respondents of the study were not very familiar with or misinformed about modern family planning services such as vasectomy and tubal ligation (Akafuah & Sossou 2008:117-119).

Uncertainty about the future and about the ultimate effect the vasectomy will have on familial interactions was repeatedly mentioned as a barrier to vasectomy uptake. The study conducted in Bunce et al (2007:17) stated that the respondents were worried that a man might regret being permanently sterilised if all of his living children died or if his current wife died and he could not remarry because he could not father any children.

2.8.2 Positive factors

Positive factors are those fostering the use or uptake of vasectomy services as family planning method options available to men. Economic hardship was the most frequently mentioned reason for vasectomy acceptance. Respondents commented on the general economic benefits of a smaller family, and anticipated problems covering the basic needs of many children, including adequate food, health care, and education. Both men and women indicated that wives play an important role in the vasectomy decision. Concern for one's wife was commonly mentioned theme; it encompassed a desire to stop the cycle of problem of pregnancies and births, to free her from family planning methods perceived to be potentially harmful and to "rescue" her from undergoing tubal ligation surgery (Bunce et al 2007:15).

Vasectomy programs have used variety of strategies to make men feel comfortable and to tailor services to meet their needs that are to create programs that are “friendly” and inviting to men (Jacobstein & Pile 2007:5).

The WHO (1994:10) states that good counselling is vital in order to minimise the possibility of future regret. Vasectomy should be offered as only one of several family planning methods. Typical vasectomy clients are married men who already have children.

The study conducted in Tanzania showed that, the seventh day Adventist church is strong advocate of contraception; for example vasectomy services are provided at Heri Seventh Day Adventist hospital and contraception is discussed and promoted in Sermons. Furthermore, the denomination organizes educational seminars and advertises the availability of family planning providers (Bunce et al 2007:16). Conversely, respondents said the Roman Catholic Church in Tanzania actively discourages the use of modern methods.

The WHO (1994:11) stated that testimony of friends or relative may have the most influence on men who decide to have vasectomy, but men who are interested in vasectomy may have varying levels of knowledge, understanding, and motivation. Counselling helps to ensure that men make decisions based on correct and complete information about vasectomy and its effects.

Lack of satisfaction with other methods, was a reason for some couples in each of countries gave for choosing vasectomy. It is interesting that this was important issue for couples who had previously used contraception, as had most of the Mexican and US couples (Landry & Ward 1995:62).

Where stories were shared about men having undergone vasectomy more recently, the key driver appeared to be that the man’s wife was seen as being too weak or sick to undergo sterilisation herself. In such cases, men commonly decided to go for no-scalpel vasectomy without discussing the matter with their wife or mothers, as they feared that the women would try to dissuade them from going for the procedure (USAID and the Respond Project 2011:11).

Study conducted in Nigeria (Ebeigbe et al 2011:101) showed that spread of accurate information in a population has been shown to improve the perception and acceptability of vasectomy.

Study conducted on attitudes towards and use of knowledge about family planning among Ghanaian men (Akafuah & Sossou 2008:113) indicated that the educational background of the respondents determines the willingness of men to use family planning method in the future.

As stated in Barone et al (2004:30) the most common reason respondents gave for choosing vasectomy over reversible methods of contraception (cited by 50%) was that they considered it as the most secure method to avoid having more children. More than one fifth (22%) of respondents said that the main reason was their or their partner dislike of other family planning methods.

Research suggests that the great majority of vasectomised men report no regrets and would recommend the method to others. Men usually report no change in sexual desire or sexual performance. Marital relations and sexual gratification sometimes improve, possibly because fears of pregnancy are reduced (WHO 1994:17).

The WHO (1994:24) indicated that experiences had shown that when a well-run vasectomy service is offered, vasectomy can become a prominent contraceptive method. Despite predictions that men would not accept vasectomy due to fear of “castration” or lost masculinity, reports indicate that when presented with adequate information , men from a broad range cultural backgrounds are receptive to the idea of vasectomy. The number of men choosing vasectomy is growing significantly as more emphasis is placed on including men in family planning services and with the expansion of the no-scalpel method throughout the world.

2.9 BENEFITS OF FAMILY PLANNING

The National Reproductive Health Strategy of the Federal Ministry of Health gives due emphasis to family planning. The national guidelines for family planning states that the goal of FP is to reduce unwanted pregnancies and enable individuals to achieve their desired family size (FDRE and MOH 2011:18).

Family planning saves the lives of women and children and improves the quality of life for all. It is the best investments that can be made to help ensure the health and wellbeing of women, children and the communities as stated in the WHO (1995) cited in FDRE and MOH (2011:18).

In many developing countries, continued rapid population growth is a major challenge to meeting the MDGS. At social level, rapid population growth adds to the number of people in need of health care, education, liveable wages, and other social services – in turn, requires additional human, financial, material , and natural resources. At household level, high fertility affects the health of women, their children, and families, thereby increasing the risks of maternal, child and infant mortality (USAID and Health Policy Initiative 2009). So that, reducing population growth through use of contraception will result in reduction of maternal, child and infant mortality at household level. At social level, it prevents burden of rapid population growth on health care, education, and other social services.

In addition to the cost savings incurred by addressing unmet need, greater use of family planning services can contribute to the MDG goals to reduce child mortality and improve maternal health; family planning helps reduce the number of high-risk pregnancies that results in high levels of maternal and child illnesses and death. The study shows that addressing unmet need in Ethiopia could be expected to avert 12,782 maternal deaths and more than 1.1 million child deaths by the target date of 2015 (USAID and Health Policy Initiative 2009).

While more people spoke about the negatives of male sterilisation, a significant minority talked about times when men would decide to become sterilised and in this manner provided insights in to the potential benefits of an /or drivers for NSV (USAID and Respond Project 2011:36).

As stated in USAID and the Respond Project (2011:36-38), study finding showed the following benefits of and drivers for male sterilisation:

- Complete families and the desire for permanent methods-while male sterilisation is not a commonly adopted method, a significant proportion of

respondents, male and female, signalled that a permanent method of contraception, it could be desirable when the family was thought to be complete and no more children were desired.

- Weak women: perhaps the most common trigger for the adoption of vasectomy was when a couple had completed their family and wanted a permanent family planning method, but men felt their wives were too weak (often as a result of undergoing a caesarean) to undergo sterilisation themselves.
- Financial reimbursements for transportation costs and wages lost; overall, most respondents, particularly men, felt that the current reimbursement amount of Rs.1100 (US\$25) was insufficient to motivate men to undergo male sterilisation. Only a few respondents felt that this amount would motivate some poor men to undergo male sterilisation. However, later, the provision of a Rs 1100 payment certainly encourages men to go to government rather than private hospitals for NSV.
- Simple and painless procedure: of all of the content about NSV that was shared with respondents at the end of their discussion about male sterilisation, the idea of simple and painless procedure was the most appealing to men and to some women.
- Awareness of positive case examples: awareness of cases of male sterilisation that had been successful was, although unfortunately rare, one of the most powerful drivers of improving attitudes towards and even increasing uptake of vasectomy.

As stated in Guttmacher Institute and UNPF (2009:14), addressing all unmet need for modern family planning would result in fewer unintended pregnancies, abortions, unplanned births, and deaths among women and new-borns. Fully meeting the unmet need for family planning services would have dramatic impact-unintended pregnancies would drop by 71%, from 75 million to 22 million, the number of abortions would decline by 25 million, and there would be 680,000 fewer maternal and new-born deaths.

The health benefits of contraceptive use are substantial. Contraceptives prevent unintended pregnancies, reduce the number of abortions, and lower the incidence of death and disability related to complications of pregnancy and child birth. The long term benefits range from increased education for women and better child health to greater

family savings and stronger national economies (Guttmacher Institute and UNPF 2012:1).

Generally, increased contraceptive use and reduced unmet need for contraception are centre to achieving three of the United Nations Millennium Development Goals. Improving maternal health, reducing child mortality and combating HIV/AIDS and contribute directly or indirectly to achieving all eight goals (Guttmacher Institute and UNPF 2012:1).

2.10 SERVICES NEEDED FOR MEN OF REPRODUCTIVE AGE GROUPS

Population control is key element in a country's ability to maintain and improve its economic and social welfare. Limited knowledge of sexual physiology, early marriage, limited use of contraceptives, limited access to reproductive health information contribute to high rate of unwanted pregnancy stated in National Adolescent and youth Reproductive health strategy (FMOH 2000 cited in FDRE and MOH 2011:39).

FP services need to be youth friendly – providers should be competent, with good communication skills, motivated and supportive, informative, and responsive to questions and concerns. Good counselling and support particularly is essential. Ensuring privacy and confidentiality is particularly important in addressing the FP needs of adolescents and youth (FDRE and MOH 2011:39).

There are numerous and plausible reasons to involve men in Family planning activities and services. The family system is patriarchal (male-controlled). Men are the breadwinners in most families and are the decision makers at all levels. Men remains fertile for a longer period of life, are more involved in polygamous relationships, are more mobile, and are risk takers. Besides, men have better access to information and are more knowledgeable about FP methods. Nevertheless, the burden of FP is on women (FDRE and MOH 2011:46).

Men should be addressed in FP programmes and services as users, promoters, and decision-makers. Therefore, the following should be considered to ensure male involvement:

- Improve couples communication regarding fertility and FP, so that decisions reflect the needs and desires of both men and women.
- Ensure that FP services address the specific needs of men and are made male-friendly.
- Encourage men to accompany their partners during FP visits.
- Involve men in the design and implementation of FP and RH services and allow them to express the ways in which they can be encouraged to take more responsibility (FDRE and MOH 2011:46).

As indicated in the WHO (1994:20), no one should ever be forced to undergo sterilisation. A client who has chosen to have a vasectomy must decide freely and only after understanding the relevant facts about vasectomy and other options. Vasectomy should be performed only when a man makes his choice free of pressure, based on clear, complete and accurate knowledge about the procedure, and after careful thought about his own circumstances.

2.11 CONCLUSION

This chapter discussed the concept of family planning, voluntary surgical contraception, factors influencing vasectomy and benefits of FP and literature review undertaken by the researcher. The literature review provided insight in to the men's knowledge and attitudes towards vasectomy as family planning method options. Chapter 3 deals with the research methodology used in the study.

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

The previous chapter dealt with the literature review undertaken to identify studies and literatures that have been conducted and written on the vasectomy as a family planning strategy available to men. This chapter discusses the research design and methods that are briefly described in chapter 1 and are discussed in detail in this chapter. As indicated in the previous chapter, a cross-sectional design is used by the researcher in the form of a questionnaire that measures both attitudes and the level of awareness held by men with regard to vasectomy as a family planning method option in East Wollega zone of Oromia region in Ethiopia.

3.2 RESEARCH DESIGN

As Indicated in the previous chapter, a research design is the overall plan for obtaining answers to the basic research questions being studied and for handling some of the difficulties encountered during the research process (Polit & Beck 2008:66).

A study design refers to the structured approach followed by the researchers to answer a particular research question. The choice of study design is determined largely by the research question being posed. Epidemiological study designs can be fitted in to two broad categories; that are observational and experimental. Observational studies can also be further classified as descriptive or analytical (Joubert & Ehrlich 2009:77).

The purpose of the research design is to provide the plan for answering research questions. In this study a cross-sectional study which is quantitative and descriptive in nature was conducted. Aspects related to the research design used in this study were discussed in detail in the following subsections.

3.2.1 Quantitative aspect of the design

This study is quantitative in design whose investigation of phenomena that lend themselves to precise measurements and quantification (Polit & Beck 2008:763). The design in quantitative research then becomes the vehicle for hypothesis testing, or answering research question (LoBiondo-Wood & Haber 2002:188).

In this study, the researcher assigned numbers to the study variables and collected quantifiable data from all the respondents. The data were aggregated together using different statistical principles to provide meaning. The researcher applied statistical principles and used SPSS version 20 to analyse data.

3.2.2 Descriptive aspect of the design

The study also got a descriptive character. Descriptive research is a research that has as its main objective as the accurate portrayal of the characteristics of persons, situations, or groups and/or the frequency with which certain phenomena occur (Polit & Beck 2008:752). A descriptive study is limited to the description of the phenomenon in a population (Joubert & Ehrlich 2009:78). Looking to the purpose of the study, here the researcher merely documents the knowledge and attitude of men of reproductive age groups. Although this study cannot ascertain causal agents, it can lead to the generation of hypotheses for further study to answer the question why men didn't use vasectomy as family planning method option.

3.2.3 Cross-sectional aspect of the design

Apart from being quantitative and descriptive in design, the study was also cross-sectional which describes the health of populations as stated in (Bowling & Ebrahim 2006:102). Cross-sectional studies examine data at one point in a time, that is , the data collected on only one occasion with the same subjects rather than on the same subjects at several time points (LoBiondo-Wood & Haber 2002:226; Polit & Beck 2008:206-208). Accordingly, Bowling and Ebrahim (2006:120) explains that, a cross-sectional study describes the frequency (or level) of a particular attribute, such as a specific exposure, disease or other health related event in a defined population or a sample of a population

at a given point in time. In a cross-sectional study, the respondents are contacted at a fixed point in time and the relevant information is obtained from them.

Thus, cross-sectional studies can be descriptive or may include an analytical component. Data collections on an outcome and exposure are done at one point in time (Joubert & Ehrlich 2009:77-86). The ideal cross-sectional study is a geographically defined representative sample of the population of an interest (Bowling & Ebrahim 2006:122).

In this study, the researcher utilised a cross-sectional study design, which is quantitative and descriptive in nature. This is done in order to describe the level of knowledge and attitudes held by men with regard to vasectomy as a family planning method option. The goal of descriptive cross-sectional studies is to describe the knowledge and attitude about vasectomy and utilization of vasectomy as family planning method options.

Joubert and Ehrlich (2009:77-87) and Bowling and Ebrahim (2006:124-125) described the strengths of cross-sectional analytical study saying that they are relatively easy and economical to conduct. They are also useful for evaluating the relationship between exposures that are relatively fixed characteristics of individuals (such as sex and ethnicity) and outcomes. Besides, they are useful for assessing the health care needs of populations, are often an important first step in assessing the possibility of a relationship between an exposure and a disease. Here, the costs are small and loss to follow up is not a problem since both exposure and outcome are identified at one time.

As the limitations, cross-sectional studies have a number of limitations. Firstly, since both exposure and outcome are measured simultaneously it may be difficult to determine whether exposures changed as a result of the outcome or the outcome resulted in the subject being exposed or caused the suggested exposure. Secondly, cross-sectional studies consider prevalent rather than incident cases. Since prevalence is a measurement of all individuals or combination of incidence (only new cases) and duration with the disease (old cases), cross-sectional studies have difficulty distinguishing between factors that cause the disease and those which prolong the period with the disease. The other limitation is the difficulty of establishing the correct temporal relationship between exposure and disease and it provides weaker evidence

about causation of disease when compared to cohort and case control studies (Bowling & Ebrahim 2006:124-125; Joubert & Ehrlich 2009:87).

3.3 RESEARCH METHODS

Generally, research methods are techniques that the researcher uses to structure a study and to gather and analyse information in a systematic fashion that is relevant to the research question (Polit & Beck 2008:15). In this section, the researcher discusses the different methods used to collect data in the study.

3.3.1 Study site

The study site was five selected public health facilities in East Wollega zone of Oromia region, Ethiopia. The researcher is convinced that the selected health facilities are good sites to study their knowledge and attitudes of men towards vasectomy in both rural and urban settings.

3.3.2 Population

A population is the entire aggregation of cases in which a researcher is interested (Polit & Beck 2008: 337). In addition to this, LoBiondo-Wood and Haber (2002:240) define a population as a well-defined set that has certain specified properties. As a result, a population can be composed of people, animals, objects or events.

In research, it is impractical to talk about the population without addressing the meaning of accessible population. Here, Polit and Beck (2008:338) define an accessible population or source population as “the aggregate of cases that conform to the designated criteria, and are accessible to the researcher as a pool of subjects for the study”. The target population is the aggregate of cases about which the researcher would like to generalize (Bowling & Ebrahim 2006:122). In this study, the accessible population comprised men of reproductive age group visiting or accompanying their partners to family planning or maternal and child health units at selected health facilities, who were present during the data collection period, which was between 15 September to 30 October 2012.

3.3.3 Sampling technique

Once the accessible population has been identified, it is mandatory to conduct sampling. Sampling is a critical part of the design of the quantitative research. Researchers can often not study whole populations due to time and cost constraint. Thus, a portion of sample of that population is subjected to research (Polit & Beck 2008:337-340).

Sampling can be grouped in to two categories, namely probability and non-probability sampling. Firstly, probability sampling is that involves random selection of elements and is characterised by an equal chance of inclusion of each element in the sample and secondly, in the case of non-probability sampling, elements are selected by non-random methods. Non-probability sampling is less likely than probability sampling to produce accurate and representative samples. Despite this fact, most research samples in nursing and other disciplines are nonprobability samples (Polit & Beck 2008:340-341) due to its convenience and simplicity to undertake. During the present study, men of reproductive age group were selected by non-probability sampling, more specifically purposive sampling since the researcher decided purposely to select subjects who are judged to be typical of the population or particularly knowledgeable about the issue under study (LoBiondo-Wood & Haber 2002:246).

The sampling technique used in this study was non randomised purposive sampling because men of reproductive age group had to be those who are visiting or accompanying their partners to family planning or maternal and child health unit are selected to participate. In Ethiopia, it is common that husbands accompany their wives due to long distance from Health facilities which require money for transportation and service fee, most rural women are afraid of visiting health facilities and majority of women did not know the process and procedures to follow in order to get the health service they seek.

3.3.3.1 Sample and sampling

Sampling refers to the process of selecting a portion from a population in order to gather data in a way that represents the population of interest. This means that a sample is a portion or subset that is selected to represent the population of interest in a study as

explained (Polit & Beck 2008:339; LoBiondo-Wood & Haber 2002:242). The purpose of sampling is to increase the efficiency of a research study (LoBiondo-Wood & Haber 2002:242).

In this study, purposive sampling was used to ensure that men of reproductive age group were included in the sample. Purposive sampling is an increasingly common strategy in which the researcher's knowledge of the population and its elements is used to hand picks the cases to be included in the sample.

Accordingly, any person who happens to visit family planning or maternal and child health unit at selected health facilities and who meets inclusion criteria set for the study, was chosen to participate as part of purposive sampling. The researcher finds that it is easy to obtain participants, but the risk of bias is greater than in random sampling, because each member of the population does not have an equal chance of being included in the sample. Therefore, the findings obtained from study using purposive sampling should be regarded with caution. As with any non-probability sample, the ability to be generalized is limited (LoBiondo-Wood & Haber 2002:247).

According to LoBiondo-Wood and Haber (2002:247), purposive sampling is appropriate for collection of descriptive data that seek to describe lived experiences of particular phenomenon, such as contraceptive issues among men of reproductive age groups.

3.3.3.2 Eligibility criteria or inclusion criteria

Polit and Beck (2008:338) emphasise that researchers must specify the criteria that define who is included in the population. The criteria that specifies population characteristics are referred to as eligibility criteria or inclusion criteria (Polit & Beck 2008:338). In the present study, only men of reproductive age groups who visit or accompany their partners to family planning or MCH unit were selected as the respondents. To be included, the respondents of the study had to be:

- Men of reproductive age group
- Those that are visiting or accompanying their partners to FP/MCH unit
- Who are situated in East Wollega zone
- present at a particular health facility during the data collection

- had to give informed consent and participate voluntarily

3.3.4 Data Collection

Research data are the pieces of information obtained during a study as stated in Polit and Beck (2008:60). The collection of information for a study is called Measurement (Joubert & Ehrlich 2009:106). In this study, the researcher utilised a structured method of data collection.

Polit and Beck (2008:414) explain that structured data collection involves having a fixed, rather than flexible, approach to collecting or gathering information from study subjects. Both the people collecting the data and the people providing the information are constrained during the collection of structured data. In this study, data were collected of questionnaires comprising closed and open-ended items, which were “a type of composite measure of awareness, attitudes as well as practices of contraceptive’s that involves summation of responses to a set of items (statements) to which respondents are asked to indicate their agreement or disagreement”.

3.3.4.1 Data collection approach and method

Polit and Beck (2008:60) also define data as “information obtained during the course of study”. Data were collected from all eligible respondents in exactly the same way, using a questionnaire. Here, a questionnaire is a list of questions which are answered by the respondents and which give indirect measures of the variables under investigation (Joubert & Ehrlich 2009:107). The researcher applied a structured data collection approach and data were collected by the researcher as well as family planning service providers at selected health facilities.

In general, data collection methods can be divided in to five types namely physiological, observational, interviews, questions and records or available data (LoBiondo-Wood & Haber 2002:292).

Polit and Beck (2008:368-369) state that if existing data are not available for the research question, the researcher must collect new data. Three approaches have been used most frequently: self-reports observation and bio-physiologic measures. The

researcher decided to use self-reports by which a good deal of information can be gathered by the fieldworkers.

The purpose of this study was to assess the awareness of and attitude of men of reproductive age groups about vasectomy in East Wollega zone of Oromia region, Ethiopia. Data collection process took between 15 September and 30 October 2012.

In this study, data were collected by using structured questionnaire completed by data collectors or interviewers and data were collected from purposively selected men of reproductive age groups at selected health facilities in East Wollega zone of Oromia region.

3.3.4.2 *Characteristics of the data collection instrument*

Bowling and Ebrahim (2006:395) state that questionnaires are printed or electronic documents used to collect information. They can be designed as structured or semi-structured (as opposed to the un-structured, in-depth interview formats used in qualitative research). Structured questionnaires involve the use of fixed questions, batteries of questions and /or measurement scales which are presented to respondents in the same way to each respondent.

The items in the questionnaire were developed by the researcher from the reviewed literature. According to Polit and Beck (2008:414), when data are collected in a highly structured fashion, the researcher must develop a data-collection instrument, which is a formal written document used to collect and record information, such as a questionnaire. Structured data collection involves having a fixed, rather than flexible, approach to gathering information. Both the people collecting the data and the people providing the information are constrained during the collection of structured data (Polit & Beck 2008:414).

The researcher used both categorical and numerical variables. According to Joubert and Ehrlich (2009:127), categorical variables are variables that cannot be quantified in a meaningful way and numerical variables are variables for which numbers have intrinsic quantitative meaning. The questionnaire is divided in to the following four sections:

Section A: Socio demographic data

Age, residence, religion, marital status and educational background,

Section B: Fertility/reproductive health-related issues

This section includes number of pregnancies, number of children and intention to have more children

Section C: Knowledge of men about vasectomy

This section assesses the knowledge of men about vasectomy as family planning method option available to them in East Wollega zone of Oromia region, Ethiopia.

Section D: Men's attitudes towards vasectomy

This section assesses Men's attitudes towards vasectomy

3.3.4.3 *Validity of the data collection instrument*

Validity is the degree to which an instrument measures what it is supposed to measure (Polit & Beck 2008:457; Joubert & Ehrlich 2009:117). In designing a study, a constructive approach is to think in advance about all of the possible factors that could undermine the validity of inferences made. When researchers can anticipate potential threats to validity and introduce design features to eliminate these threats, the validity of the inferences is strengthened (Polit & Beck 2008:286). In this study, the validity of the data collection instrument was tested based on face validity and content validity as seen follow:

Face validity refers to the extent to which the measure or question makes sense to those knowledgeable about the subject or to interviewers familiar with the language and culture of participants (Joubert & Ehrlich 2009:120). Therefore, two experts from field of nursing (colleagues) and the researcher's supervisor were given the questionnaire to comment on the appearance, clarity, and sequence and their overall comments were incorporated in the final questionnaire.

Content validity requires that the measure accounts for all the elements of the variable of concept being investigated (Joubert & Ehrlich 2009:120). As stated in Polit and Beck (2008:458), content validity concerns the degree to which an instrument has an

appropriate sample of items for the construct being measured and adequately covers the construct domain. In this study, the researcher included most of the relevant items from reviewed literature in the questionnaire, in order to broaden the data collection tool.

3.3.4.4 Reliability of data collection instrument

The reliability of a quantitative instrument is a major criterion for assessing its quality and adequacy before data collection in which its instrument's reliability is the consistency with which it measures the target attribute (Polit & Beck 2008:452). As explained in Joubert and Ehrlich (2009:117), reliability of precision refers to the degree of similarity of the results obtained when the measurement is repeated on the same value arrived at every time the measurement is taken.

Generally, Variation between measures (poor reliability) had been decreased by addressing the source of the variation particularly observer variation by doing appropriate selection of interviewers, providing training for all interviewers, and conducting supervision and periodic checks on the work of interviewers (Joubert & Ehrlich 2009:119).

3.3.4.5 Data collection process

The actual collection of data in a quantitative study often proceeds according to a pre-established plan as stated in Polit and Beck (2008:67). Before data collection, appropriate forms had been developed like questionnaire, consent forms, and then orientation of data collectors had been organised after selection of appropriate data collectors (who are experienced, available during the data collection period, who have social skills). In this case, the data collectors are family planning service providers and/or health workers working in the maternal and child health units in the selected health facilities. Data were collected during routine working hours. During the period of data collection, supervision had been undertaken in the field by the researcher.

3.3.4.6 Data analysis technique

Quantitative information is analysed through statistical procedures as stated in Polit and Beck (2008:68). Collected data were analysed using computer software. The researcher

used the SPSS version 20 software to analyse the internal consistency of the items in the questionnaire with support from statistician from Wollega University.

Prior to analysis, various clerical and administrative tasks like reviewing data for completeness and legibility, retrieving pieces of missing information, and assigning identification numbers had been undertaken (Polit & Beck 2008:642). Before any analysis is done, the data set must be carefully checked to identify any strange values and errors which might have occurred in the original source document during data entry (Joubert & Ehrlich 2009:127).

Bowling and Ebrahim (2006:497) states that, the purpose of statistical reasoning is to use the data collected in a sample to make inferences about the population from which the sample came which is done by using the data to estimate quantities of interest in the population.

3.4 ETHICAL CONSIDERATIONS

In doing research, health researchers work under an increasingly wide range of laws, regulations, and professional codes of practice, all designed to protect the rights and interests of the human subjects of their research (Bowling & Ebrahim 2006:555).

When humans are used as study participants, care must be exercised in ensuring that the rights of those humans are protected (Polit & Beck 2008:167) It is important to get permission (informed consent) from potential respondents whom researchers want to interview or do measurements on, after the study and methods have been explained to them. Ethically, researchers are required to protect the identity of study participants. Ideally information should remain anonymous, that is, names should not be recorded at all on the questionnaire or data capturing form (Joubert & Ehrlich 2009:120-121).

Human rights of research subjects, as well as of health professionals as researchers in a variety of socio-cultural contexts, and the contribution that international human rights instruments can make in the application of the general principles of ethics to research involving human subjects will be considered (Council for International Organization of Medical Science (CIOMs) and in collaboration with World Health Organization (WHO) 2002:17-18).

In 1978, a report that served as the basis for regulations affecting research commonly known as Belmont report was produced by the federal government of America. Specifically, the report pointed out three ethical principles, these are: beneficence, respect for human dignity and justice (Polit & Beck 2008:170). Ethical issues considered during this study included obtaining permission from relevant authorities and prospective respondents respectively to conduct the research, confidentiality, beneficence, respect for human dignity, justice, and autonomy.

3.4.1 Permission to conduct the study

The researcher obtained permission to conduct the study from:

- The Research and Ethics Committee of the Department of Health Studies, UNISA (see Annexure 1).
- The relevant authorities from Oromia Regional Health Bureau to the Zonal Health Department and then to health facilities (see Annexure 2).
- Each respondent (men of reproductive age group visiting family planning or maternal and child health unit) was informed about the purpose, significance and benefits of the study. In order to maintain confidentiality and anonymity, the respondents were ensured that their names were not written on the questionnaire.

3.4.2 Confidentiality

The respondents of the study have the right to expect that any data they provide will be kept in the strictest confidence (Polit & Beck 2008:180).

In this study, confidentiality was maintained and confirmed verbally, and by the following:

- A coding system was used to ensure anonymity of the respondents.
- Nobody could gain access to the raw data of the research, upon receipt of data from data collector; the questionnaires were placed into sealed boxes, which were handled by the researcher.

- The respondents were informed that they had the right to withhold information or to discontinue completing the interview at any stage without incurring any negative consequences.
- No specific person would be mentioned in the research report.
- The completed questionnaires would be kept under lock and key. Only the researcher had access to the completed interview questionnaires. The researcher would destroy them once the research report had been accepted.

3.4.3 Beneficence

As stated in Polit and Beck (2008:170-171) beneficence is one of the central ethical principles in research which imposes a duty on researcher to minimize harm and to maximise benefits. It contains multiple dimensions like freedom from harm, freedom from exploitation, and benefits from research. In this study, the researcher will comply with these dimensions to maximize benefits and pre informs any potential benefits to respondents during data collection. Beneficence: persons are treated in an ethical manner not only by respecting their decisions and protecting them from harm, but also by making efforts to secure their well-being as stated in Bowling and Ebrahim (2006:565).

With regard to the freedom to be protected from harm, the study inflicted or imposed no physical harm by participating in the study. The individual's right to refuse to participate in the study and the fact that their participation or refusal to do so would not jeopardize the actual or potential care provided to them in any way was carefully explained to respondents.

3.4.4 Respect for human dignity

This principle includes the right to self-determination and the right to full disclosure in the Belmont report. Human should be treated as autonomous agents, capable of controlling their own activities (Polit & Beck 2008:171). The respondents would have the right to decide voluntarily whether to participate in the study without risking any penalty. The researcher had described the nature of the study, the person's right to refuse participation, the researcher's responsibility, and the benefits of the study. The

respondents have the right to participate or not participate in the study and privacy and confidentiality had been ensured throughout the study.

As stated in Bowling and Ebrahim (2006:565), respect for persons incorporates at least two ethical convictions. First, those individuals should be treated as autonomous agents, and second, those persons with diminished authority are entitled to protection. The researcher respected the principle of self-determination which meant that each respondent had the right to decide voluntarily whether or not to participate the research (Polit & Beck 2008:171-172).

3.4.5 Justice

Justice is the third principle articulated in the Belmont report which includes participant's right to fair treatment and their right to privacy (Polit & Beck 2008:173). Of course, the principle of justice includes the respondents' right to fair selection and privacy who ought to receive the benefits and share its burden. For example, the selection of research subjects need to be scrutinized in order to determine, whether some classes are being systematically selected simply because of their easy availability rather than for reasons directly related to the problem being studied (Bowling & Ebrahim 2006:565). In this study, the selection of sample was conducted according to the eligibility criteria where the researcher had ensured that, the respondents have the right to fair treatment before, during and after their participation in the study. The researcher also ensured that the respondents' privacy had been maintained throughout the study.

Generally speaking, the right to privacy was respected because the family planning providers (data collectors) prepared a private space for the respondents to be interviewed. Then after, the completed questionnaires were only accessible to the researcher. The respondents were treated equally irrespective of the nature of contraceptive knowledge acquired and the reproductive information already comprehended.

3.4.6 Autonomy: Respect for persons

Bowling and Ebrahim (2006:565) and Joubert and Ehrlich (2009:32) state that respect for persons incorporate two ethical principles which are: individuals should be treated as

autonomous agents; and persons with diminished autonomy are entitled to protection. Therefore in this study, autonomy had been maintained by, treating each participant with respect and obtaining informed consent by explaining the objectives of the study.

The research was conducted in accordance with basic ethical principles in which the proposal had been submitted for review of their scientific merit and ethical acceptability to scientific and ethical review committees. The ethical committee had conducted further review as necessary in the course of the research. The respondents have the right to participate or not to participate in the study. And also, the privacy and confidentiality of the respondents of the study had been ensured.

3.4.7 The scientific integrity of the researcher

Basically, the guiding value for researchers is integrity which is expressed in a commitment to the search for knowledge, to recognise principles of research conduct and in the honest and ethical conduct of research and dissemination and communication of results (Bowling & Ebrahim 2006:565).

In addition to what has been said above, Polit and Beck (2008:185) state that researcher need to give careful thought to ethical requirements during the planning of a research project and should ask them continually whether planned safeguards for protecting humans are sufficient.

The results and findings form the basis of policy decisions at all levels of the government. The researcher maintained professional ethics and scientific conduct throughout the study by properly referencing any ideas, quotations, words, and statements made by other authors.

Interviewers are knowledgeable about the subject as well as familiar with the language and culture of study participant and the editor was hired to keep the standards of the professional language. Information bias had been prevented by ensuring that variables are measured in the same way on all respondents.

3.5 CONCLUSION

This chapter devoted to the research methodology of the study undertaken by the researcher, including the research design, research methods, the population, sampling, data collection instruments and methods and approaches, and, ethical considerations. The characteristics of data collection tool as well as the validity and reliability of the instrument were also the focus of this chapter. Chapter 4 presents the data analysis and interpretation, with special reference to the literature reviewed as presented below.

CHAPTER 4

RESEARCH FINDINGS

4.1 INTRODUCTION

This chapter presents the research findings identified through data analysis on the respondents' knowledge of and attitude towards vasectomy. The findings were derived from a sample of 150 respondents who had been interviewed by the researcher using structured questions and the data were collected between 15 September to 30 October 2012. The data is presented in the form of percentages and frequencies which was done as a function of the SPSS Version 20 program.

4.2 SECTION A: DEMOGRAPHIC DATA

In this study, the demographic data included the age, educational background, religious affiliation, marital status, and residential areas of the respondents. This information is presented below.

4.2.1 Age of respondents

The minimum age of the respondents was 21 years while the maximum age was found to be 53. Of the respondents, 14.7% (n=22) were 30 years old who were identified to be more likely to visit or accompany their opposite partners or spouses to family planning or MCH unit followed by 8.7% (n=15) who were 28 years old. The study showed that majority of the respondents was between ages 21 to 30 years (45.3%) of all respondents.

Table 4.1 Respondents' age (N=150)

Recorded age	Frequency	Percentage
21 to 30 years	68	45.3
31 to 40 years	56	37.3
41 to 50 years	24	16.0
51 to 60 years	2	1.3
Total	150	100.0

4.2.2 Marital status

In addition to age, the respondents were requested to indicate their marital status. Accordingly, the majority, 98% (n=148) of respondents were married and only two respondents reported that they were not married.

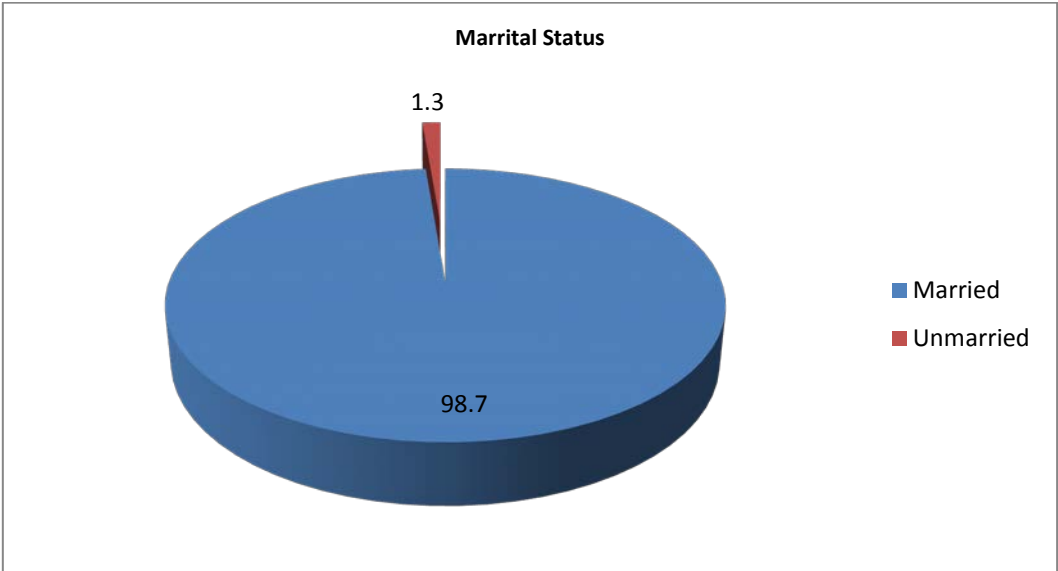


Figure 4.1 Marital status of respondents (N=150)

4.2.3 Education

A total of 150 male respondents participated in the study, of which 31.33% (n=47) stated that they had attended primary school education, 30% (n=45) attended secondary education, 14.67% (n=22) were able to read and write, 12% (n=18) had completed tertiary school education and the rest 12% (n=18) were unable to read and write. Figure 4.2 depicts the distribution of respondents according to educational background.

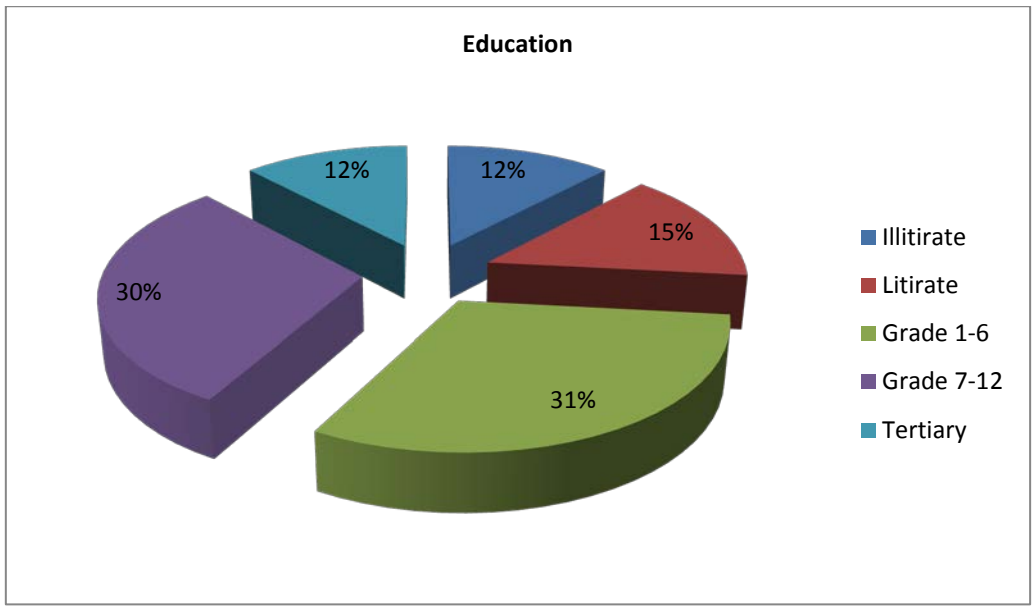


Figure 4.2 Educational level of respondents (N=150)

4.2.4 Religious affiliation

Besides to educational level, the researcher also explored the respondent’s religious affiliation. The following table shows the religious denominations to which respondents belonged.

Table 4.2 Religious affiliation of respondents (N=150)

Religion	Frequency	Percentage
Orthodox	46	30.7
Muslim	19	12.7
Catholic	2	1.3
Protestant	81	54.0
Others	2	1.3
Total	150	100.0

The table reveals that more than half of the respondents were from Protestant, which is about 54% (n=81). Of the respondent’s, 30.7% (n=46) were affiliated to Orthodox, 12.7% (n=19) belonged to Muslim, 1.3% (n=2) claimed to be Catholic and 1.3% (n=2) were from others (specified by respondents as Mekane Eyesus).

4.2.5 Residence

In this study, two residential areas were distinguished, where the respondents lived as demonstrated in the Figure 4.3. Out of 150 respondents who were interviewed, 54.7% (n=82) reported residing in rural area compared to 45.3% (n=68) residing in an urban areas. Most of the respondents were from rural areas. This finding is not in line with the national statistics pertaining to residence. According to CSA (2011:3) report, 84% of Ethiopian population lives in rural areas.

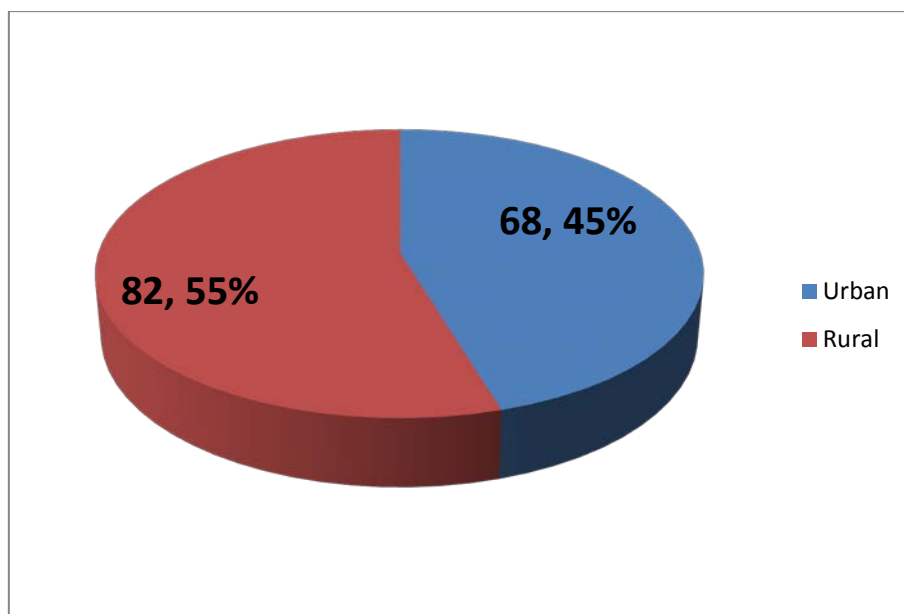


Figure 4.3 Residential areas of respondents (N=150)

4.3 SECTION B: REPRODUCTIVE HEALTH ISSUES

Having described the respondents in terms of their demographic characteristics, the researcher now present the findings concerning the respondent's reproductive health issues.

From the table below, it can be noted that, the highest number of pregnancies as well as the number of children identified during the study was 16 while the lowest to be zero (partner didn't get pregnant/no children). The majority of the respondents, 60% (n=90) indicated that their partner had 1 to 3 pregnancies. Table 4.3 illustrates the detail about number of pregnancies reported by respondents.

Table 4.3 Reproductive health related issues (number of children and number of pregnancies regrouped)

Reproductive health-related variables		Frequency	Percentage
Number of pregnancies (N=150)	Had never been pregnant	4	2.7
	1-3 pregnancies	90	60.0
	4-6 pregnancies	45	30.8
	7-10 pregnancies	9	6.0
	14-16 pregnancies	2	1.3
No of children (N=150)	Never gave birth	12	8.0
	1-3 children	91	60.7
	4-6 children	38	25.3
	7-10 children	7	4.7
	11-13 children	0	0
	14-16 children	2	1.3
Want to have any more children (N=150)	Yes	93	62.0
	No	57	38.0
Number of children planned for the future (N=93)	One	32	34.4
	Two	12	12.9
	Three	20	21.5
	Four	22	23.7
	Five	7	7.5
Total		93	100.0

The majority, 60.7% (n=91) of study respondents reported having one to three children. In this study, the number of children is more than the number of pregnancies since some respondents reported having twins. Not only the number of children but also the researcher explored about the respondents intention to have any more children. Of 150 respondents, 62% (n=93) expressed that they want to have any more children while only 38% (n=57) of respondents reported that they do not want to have any more children as illustrated in the table 4.3.

4.4 SECTION C: RESPONDENTS/MEN'S KNOWLEDGE ABOUT VASECTOMY

In this section of the study, the researcher explored men's knowledge of vasectomy as family planning method options available to them. The knowledge of men with regard to vasectomy is outlined below.

4.4.1 Knowledge of family planning

The study respondents were asked to indicate or express whether they know or had ever heard about any family planning method. Of the respondents, 97.3% (n=146) knew or had heard about family planning methods; 2.7% (n=4) indicated that they had never heard about contraception or family planning methods. The researcher had tried to do analysis to establish the relationship between respondents residential area and know or ever heard about family planning (see the table 4.4).

Table 4.4: Cross-tabulation: Respondents residence to ever heard or know about family planning

		Have you ever heard or know about FP		Total	
		Yes	No		
Residence	Urban	Count	66	2	68
		Expected count	66.2%	1.8	68.0
		% of total	44.0%	1.3%	45.3%
	Rural	Count	80	2	82
		Expected count	79.8	2.2	82.0
		% of total	53.3%	1.3%	54.7%
	Total	Count	146	4	150
		Expected count	146.0	4.0	150.0
		% of total	97.3%	2.7%	100.0%

The researcher then performed a chi-square test to establish the relationship between respondents residence and respondents knowledge or heard about family planning (see table 4.5). The Pearson chi-square was calculated to be 0.036 at 1df, p=0.849. This value is very small compared to the tabulated value of 3.84 at 1df, $\alpha = 0.05$. Hence, it can be concluded that there is no a significant relationship or difference between the two variables (residential area with knowledge/heard about FP).

Table 4.5: Chi-square tests

	Value	Degree of freedom (df)	Asymptotic Sig. (2 sided)
Pearson chi-square	0.036	1	0.849
Likelihood ratio	0.036	1	0.850
No of valid cases	150		

- a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.81.
b. Computed only for a 2x2 table

4.4.2 Types of family planning methods the respondents know or heard about

The respondents were asked to indicate the types of family planning methods they knew or had heard about. Accordingly, 36% (n=54) of respondents knew about contraceptive pills, injectables, condom, intrauterine contraceptive devices (IUCD) and implants; 25.3% (n=38) of respondents knew or heard about contraceptive pills, injectables and condom, about 16.7% (n=25) know contraceptive pills, injectables, condom, male sterilisation, female sterilisation, IUCD and implants (see Table 4.6).

Table 4.6: Types of FP methods respondents know/ had heard about (n=146)

Which types of FP methods do you know	Frequency	Percentage
Contraceptive pills only	5	3.4
Injectables only	14	9.6
Female sterilisation	1	.7
IUCD	9	6.2
Contraceptive pills, injectables and condom	38	26.0
Contraceptive pills, injectables, condoms, female and male sterilisation, IUCD and implants	25	17.1
Contraceptive pills, injectables, condoms, IUCD and implants	54	37.0
Total	146	100.0

4.4.3 Men who knew about female sterilisation or permanent methods

Regarding knowledge about female sterilisation or permanent family planning methods, 58.7% (n=88) of respondents reported that they had heard about permanent family planning methods; 41.3% (n=62) indicated that they did not know about permanent family planning method.

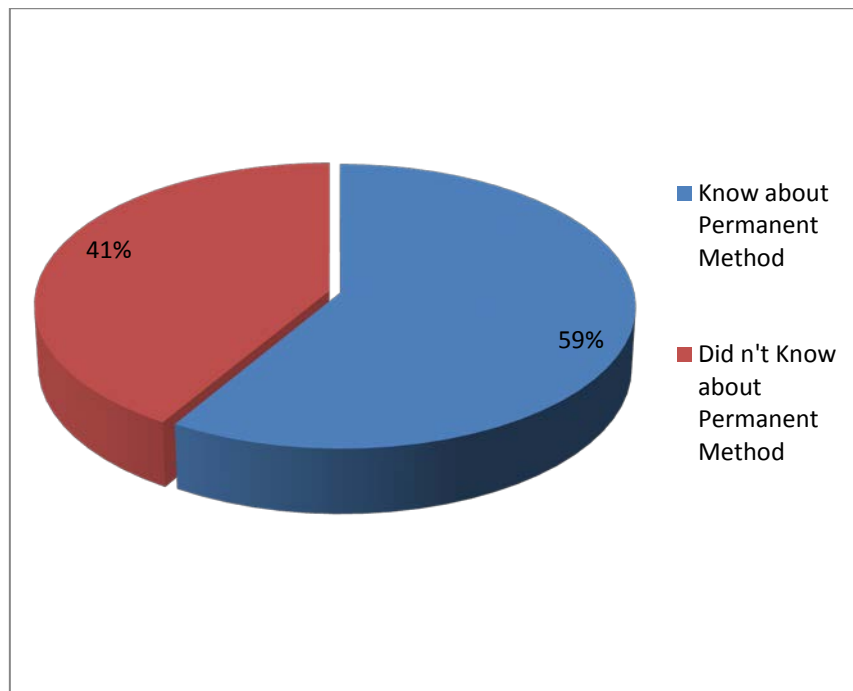


Figure 4.4 Have you heard about permanent FP method? (N=150)

4.4.4 Source of information regarding voluntary surgical contraception

Table 4.7 illustrates the source of information about permanent family planning method. Of 88 respondents who had reported that they know or had heard about permanent family planning methods, 44.3% (n=39) respondents stated that they heard from health care providers, 25% (n=22) reported that they heard from radio, television, and health care providers, 13.6% (n=12) explained that they heard from radio.

Table 4.7 Source of information for voluntary surgical contraception (n=88)

Source of information for permanent FP method	Frequency	Percentage
Radio	12	13.6
Television	2	2.3
Health care providers	39	44.3
Volunteers	2	2.3
Colleagues	6	6.8
Both from radio and television	3	3.4
Radio, television and health care providers	22	25.0
Radio, television, health care providers, volunteers and colleagues	2	2.3
Total	88	100.0

4.4.5 Adequacy of information provided by health care providers

The respondents were asked to state whether they had received adequate information from health care providers on family planning methods before choosing one of the methods. From answers to this item, it is evident that the respondents hadn't received adequate information. Of 150 respondents, majority, 66% (n=99) of respondents stated that they hadn't received adequate information, while 34% (n=51) reported that they had received adequate information about family planning methods.

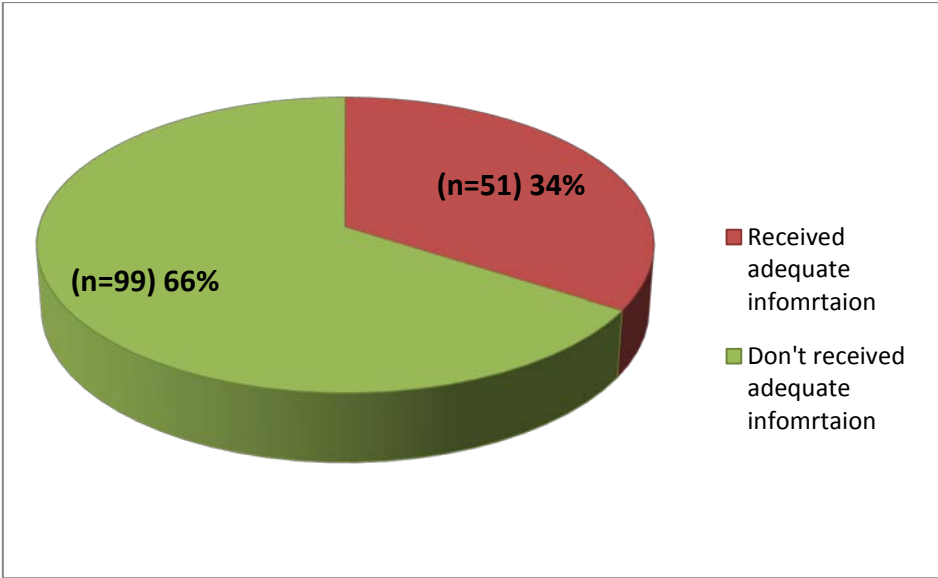


Figure 4.5 Adequacy of information on FP methods received from health care providers (N=150)

4.4.6 Heard about vasectomy

Respondent's knowledge of vasectomy was the main focus of this study. It is of great concern that the findings illustrated that the majority of respondents did not know about male sterilisation. Of 150 respondents, 64.7% (n=97) indicated that they hadn't heard or didn't know about male sterilisation and 35.3% (n=53) knew or had heard about male sterilisation. Figure 4.6 illustrates this.

According to CSA (2011:94), the knowledge of male sterilisation by all men was 18% of all respondents which showed that the vast majority of men did not know about vasectomy.

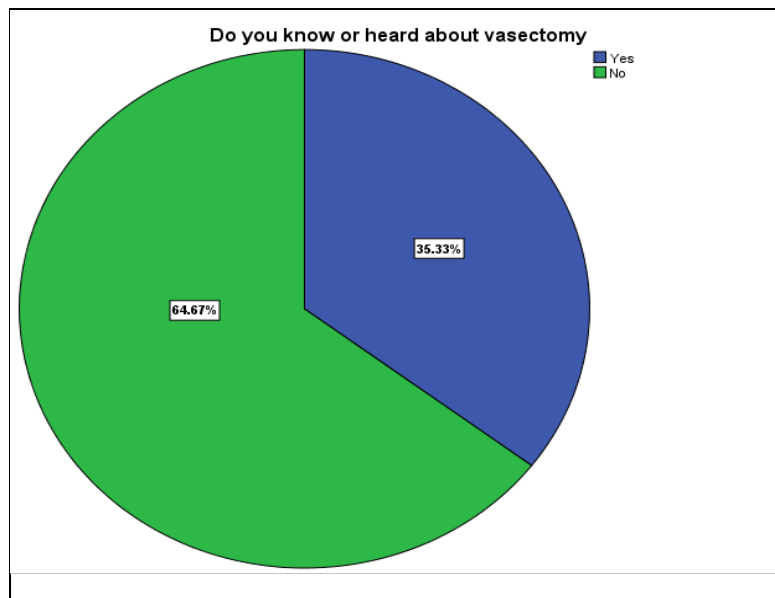


Figure 4.6 Have you heard or know about vasectomy? (N=150)

4.4.7 Knew about vasectomy through education

This data analysis revealed that the educational background does have effect on the level of knowledge of men with regard to vasectomy. The respondents with secondary school education had the highest level of knowledge compared to other groups of men.

Table 4.8 Relationship between respondents educational level and heard or know about vasectomy

Educational background		Heard/know about vasectomy
Not able to read and write	Mean	1.67
	N	18
	Std. deviation	.485
Able to read and write	Mean	1.36
	N	22
	Std. deviation	.492
Primary (Grade 1-6)	Mean	1.70
	N	47
	Std. deviation	.462
Secondary (Grade 7-12)	Mean	1.80
	N	45
	Std. deviation	.405
Tertiary	Mean	1.44
	N	18
	Std. deviation	.511
Total	Mean	1.65
	N	150
	Std. deviation	.480

Then the researcher performed one way analysis of variance (ANOVA) to determine if there is significant difference between the means of groups. Table 4.9 indicates that there is statistically significant difference in the means of educational level and knowledge about vasectomy since the P-value (0.002) is less than significance level alpha 0.05.

Table 4.9 One way analysis of variance (ANOVA) on heard about vasectomy and educational level

	Sum of squares	df	Mean square	F	Sig.
Between groups	3.708	4	.927	4.398	.002
Within groups	30.565	145	.211		
Total	34.273	149			

4.4.8 Knowledge about where vasectomy service is available

In line with knowledge about vasectomy, the respondents were asked whether they knew where vasectomy service is available or not. As a result, out of 53 respondents who had reported that they know or heard about vasectomy, 92.4% (n=49) stated that they knew where vasectomy service is available while only 7.5% (n=4) reported that they did not know where vasectomy service is available.

Table 4.10 Respondent’s knowledge about where vasectomy service is available (n=53)

Do you know where vasectomy service is available, (for those who reported that they know about vasectomy),	Frequency	Percent
Yes	49	92.5
No	4	7.5
Total	53	100.0

4.4.9 If yes, where vasectomy service is available?

Men who had indicated that they knew where vasectomy service is available were also asked to indicate specifically the sites where the service is available and the result

showed that majority of respondents (28 out of 49 respondents) stated that vasectomy service is available at specialised hospitals and only one of the respondents indicated that vasectomy service is available at all hospitals.

Table 4.11 Respondent’s indicated where vasectomy service is available (n=49)

If yes, where vasectomy service is available	Frequency	Percentage
Referral hospitals	20	40.8
Specialised hospitals	28	57.1
All hospitals	1	2.0
Total	49	100.0

4.4.10 Realise that vasectomy is permanent and Irreversible

During the study, the respondents were asked to respond on whether they knew that vasectomy is permanent and an irreversible family planning method or not. As a result, 35.33% (n=53) of respondents indicated that they knew that vasectomy is permanent and irreversible (all respondents who explained that they know or heard about vasectomy reported that they realise it) and 64.66% (n=97) stated that they didn’t realise that it is permanent and irreversible as illustrated in the pie chart below.

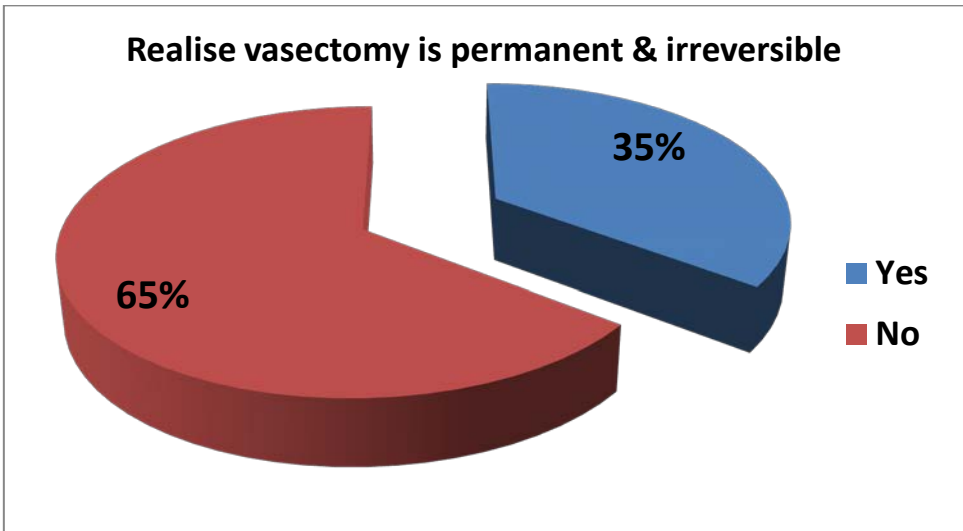


Figure 4.7 Do you realise that vasectomy is permanent and irreversible? (N=150)

4.4.11 Knowledge about who could have vasectomy

Of the respondents, 69.3% (n=104) indicated that they do not know who could have vasectomy, and 30.7% (n=46) of respondents reported that they knew who can have vasectomy service as a family planning method options available to men. Figure 4.8 illustrates these findings.

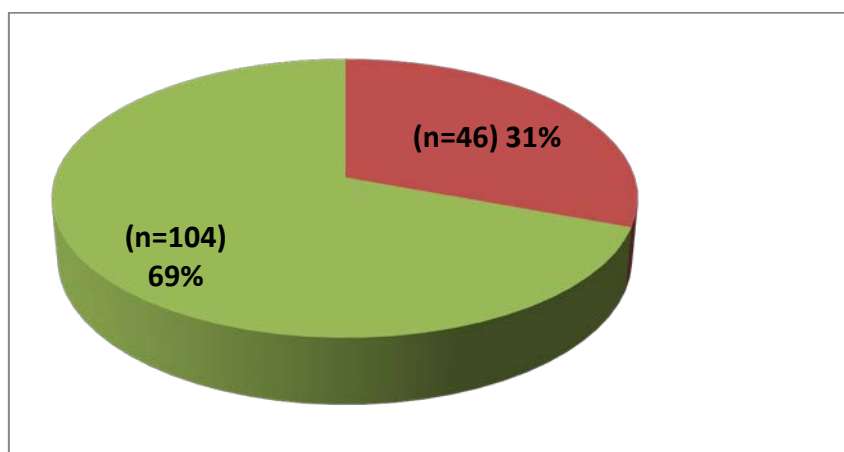


Figure 4.8 Respondents' response on who can have vasectomy (N=150)

4.4.12 Types of men who can have vasectomy

The respondents who had reported that they know who can have vasectomy were asked to further explain which men should have vasectomy performed on them. Out of 46 respondents who had reported that they knew who could have vasectomy, 71.7% (n=33) stated men who have many children, 15.2% (n=7) reported men who have no children, 8.7% (n=4) stated that men who didn't want to have any more children and 2.1%(n=1) reported that men of any age and only one respondent stated that men of age greater than 45 years which has been categorized under others.

Table 4.12 Respondent's response to who can have vasectomy (n=46)

Who can have vasectomy , responses by respondents	Frequency	Percentage
Men who have no children	7	15.2
Men who have many children	33	71.7
Men who didn't want to have any more children	4	8.7
Men of any age	1	2.2
Others	1	2.2
Total	46	100.0

4.5 SECTION D: PARTICIPANTS ATTITUDE TOWARDS VASECTOMY AND ITS UTILISATION

In this study, apart from knowledge men's attitudes towards vasectomy included whether men discuss about family planning methods with their partners, believe that family planning benefits the family, the family planning methods that the respondents or their partner ever used, role of men in family planning, willingness to share responsibility for using family planning and interest in possibility of having vasectomy service as fertility control option.

4.5.1 Discussion of family planning with a partner

In this item, the respondents were questioned whether they discuss about family planning methods with their partners. Of the respondents, 87.3% (n=131) discussed family planning methods or contraception with their partners and only 12.7% (n=19) did not discuss family planning with their partner.

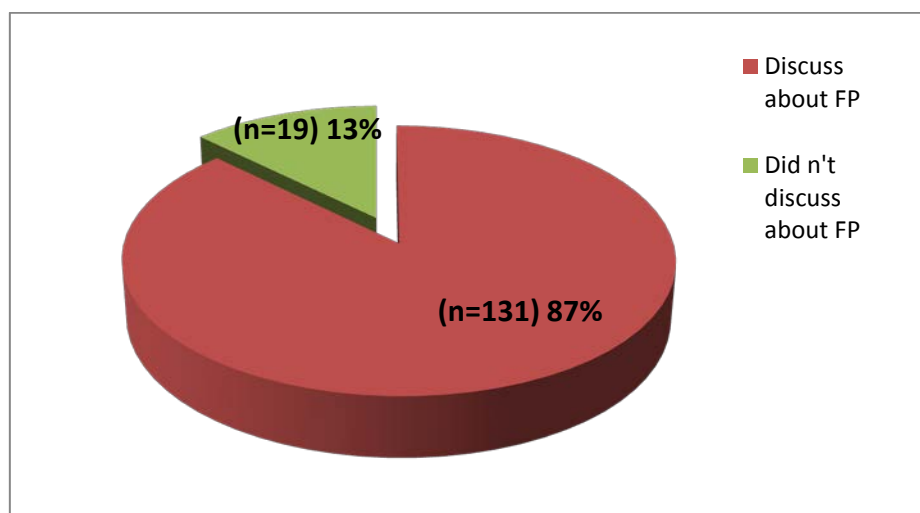


Figure 4.9 Discuss family planning methods with partner (N=150)

4.5.2 Family planning benefits self and family

In addition to discussion about FP, the respondents were requested to indicate whether they agreed that family planning benefits themselves and their families, 52% (n=78) agreed, 41.3% (n=62) strongly agreed, 4.7% (n=7) disagreed, and only 2% (n=3) of the respondents were unsure that family planning benefits family.

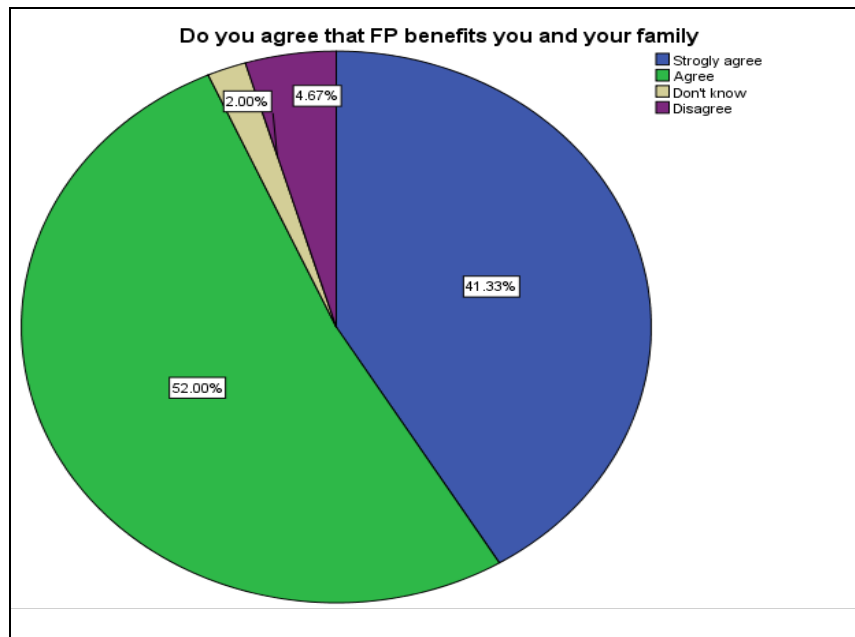


Figure 4.10 Benefit of family planning to self and family (N=150)

4.5.3 Type of family planning method(s) self or partner ever used

For this item, the respondents were asked to specify the type of contraceptive methods themselves or their partners had ever used. Injectables were found to be the predominant method (28%) followed by IUCD which 27.3% of respondents used. Of the respondents, 16% (n=24) reported that themselves or their partners had never used any method. Three respondents indicated that their partners used female sterilisation and only one respondent stated that he had used vasectomy. This study revealed that vasectomy is the least used family planning method. Figure 4.11 illustrates these findings.

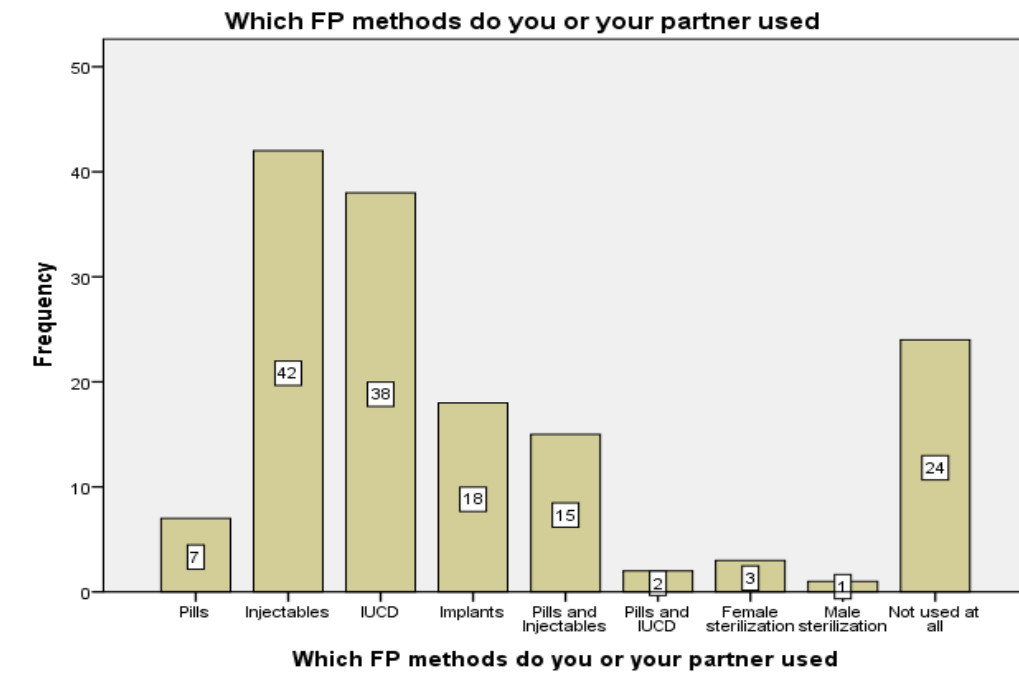


Figure 4.11 Which FP methods you or your partner used? (N=150)

4.5.4 Believe that men can play significant role in family planning

The respondents in this item had to state whether they believe that they could play a significant role in family planning. More than half of the respondents, 54% (n=81) agreed that men could play a significant role in family planning and only 6.7% (n=10) disagreed that men could play significant role in FP as illustrated in Figure 4.12 below.



Figure 4.12 Belief that men could play a significant role in FP (N=150)

4.5.5 Want to share responsibility for using family planning with partner

In order to gauge the respondents view on wanting to share responsibility, they were asked to state whether they agreed in sharing the responsibility to use family planning. As a result, more than half of respondents, (56%) agreed on wanting to share responsibility, 29.3% strongly agreed, 9.3% didn't know and 5.3% of respondents disagreed on wanting to share responsibility for using FP with their female partners.

4.5.6 Are you or your partner finished having more children

Of the respondents, 38% (n=57) indicated that they had finished having any more children and 62% (n=93) stated that they hadn't finished having children. The majority of respondents reported that they want to have more children.

4.5.7 What type of Family planning method yourself are interested, if you no longer want to have more children?

Those respondents who had reported that they had finished having children were required to indicate the type of family planning methods they are interested. 21.3% (n=32) of respondents were interested in IUCD, 10% of them in implants, 7.3% (n=11) interested in female sterilisation and only 0.7% (n=1) interested in vasectomy. Some of the respondents indicated interest in having some types of family planning methods though they hadn't finished having children. The study revealed that, the respondents were not interested in male sterilisation.

Table 4.13 In which family planning methods you are interested (n=83)

If yes, In which FP methods you are interested	Frequency	Percentage
Implants	15	18.1
IUCD	32	38.6
Female sterilisation	11	13.3
Male sterilisation	1	1.2
Others	14	16.9
Not interested at all due to many reasons like religion	10	12.0
Total	83	100.0

4.5.8 Are you or your partner interested in the possibility of vasectomy?

The respondents were also asked to provide their views regarding interest in possibility of having vasectomy. Almost one-third (n=45) of respondents reported that they are interested in the possibility of having vasectomy, while the majority, 70% (n=105) were not interested in the possibility of having vasectomy as family planning method option.

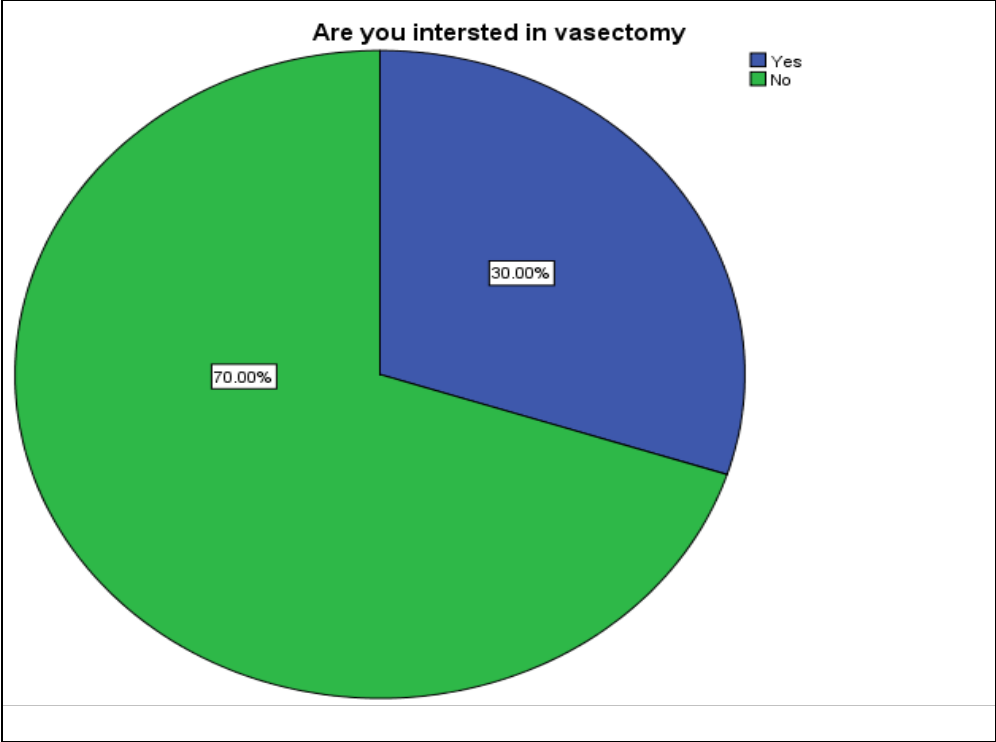


Figure 4.13 Are you or your partner interested in the possibility of vasectomy? (N=150)

4.5.9 Interest in vasectomy by education

Table 4.14: Cross-tabulation: Respondents interest in possibility of having vasectomy to educational background

		Are you interested in possibility of having vasectomy		Total	
		Yes	No		
Educational background	Not able to read and write	Count	6	12	18
		Expected count	5.4	12.6	18.0
		% of total	4.0%	8.0%	12.0%
	Able to read and write	Count	11	11	22
		Expected count	6.6	15.4	22.0
		% of total	7.3%	7.3%	14.7%
	Primary	Count	13	34	47
		Expected count	14.1.0	32.9	47.0
		% of total	6.7%	23.3%	30.0%
	Secondary	Count	10	35	45
		Expected count	13.5	31.5	45
		% of total	6.7%	23.3%	30.0%
	Tertiary	Count	5	13	18
		Expected count	5.4	12.6	18.0
		% of total	3.3%	8.7%	12.0%
	Total	Count	45	105	150
		Expected count	45.0	105.0	150.0
		% of total	30.0%	70.0%	100.0%

The researcher then performed a chi-square test to establish the relationship between respondents' educational background and interest in possibility of having undergone vasectomy (see table 4.15). The Pearson chi-square was calculated to be 5.747 at 4df, $p=0.219$. This value is smaller than the tabulated value of 9.488 at 4df, $\alpha=0.05$. Hence, it can be concluded that there is no a significant relationship between the interest in possibility of having undergone vasectomy and educational background.

Table. 4.15 Chi-square tests

	Value	df	Asymptotic. Sig. (2-sided)
Pearson Chi-Square	5.747 ^a	4	.219
Likelihood Ratio	5.470	4	.242
N of Valid Cases	150		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.40.

4.5.10 Relationship between heard about vasectomy and interest in undergoing vasectomy

The researcher had performed analysis to establish relationship between individuals who had heard or know about individuals who underwent vasectomy and respondents interest in possibility of having vasectomy service as family planning method.

Table 4.16: Relationship between respondents who had heard about individuals underwent vasectomy and interest in possibility of having vasectomy

		Are you interested in vasectomy		Total	
		Yes	No		
Heard about individuals who undergone vasectomy	Yes	Count	31	14	45
		Expected cunt	13.5	31.5	45.0
		% of total	20.7%	9.3%	30.0%
	No	Count	14	91	105
		Expected cunt	31.5	73.5	105.0
		% of total	9.3%	60.7%	70.0%
	Total	Count	45	105	150
		Expected cunt	45.0	105.0	150.0
		% of total	30.0%	70.0%	100.0%

Table 4.17 shows that there is significant difference in the means of respondents who heard or know about individuals who undergone vasectomy and interest in possibility of having vasectomy. The calculated p-value is 0.001 (since it should not be reported as 0.000) which is much less than 5% level of significance. The finding revealed that, those who had heard about individuals who had undergone vasectomy are more interested than those who didn't heard about individuals who undergone vasectomy.

Table 4.17: Chi-square tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	46.296 ^a	1	.000		
Continuity Correction ^b	43.689	1	.000		
Likelihood Ratio	44.999	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	45.988	1	.000		
N of Valid Cases ^b	150				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.50.

b. Computed only for a 2x2 table

4.5.1 Know or Heard about individuals who undergone vasectomy

Of the respondents, 70% (n=105) stated that they didn't know or had never heard about individuals who had vasectomy service and 30% (n=45) reported that they know or heard about individuals who had had vasectomy service as family planning method.

Table 4.18 Know or heard about individuals who had undergone vasectomy (N=150)

Know or heard about individuals who undergone vasectomy	Frequency	Percentage
Yes	45	30.0
No	105	70.0
Total	150	100.0

4.5.12 What did you heard about individuals who undergone vasectomy

In this study, the respondents were asked to explain what they knew or heard about individuals who had vasectomy. Accordingly, out of 45 respondents who had reported that they knew or heard about individuals who had undergone vasectomy, 57.7% (n=26) stated that individuals who had vasectomy were stigmatized by the community, 22.2%

(n=10) reported that they are sexually inactive, 2% (n=3) stated that they remain sexually active and the rest 4% (n=6) belonged to others.

Table 4.19 Response about what they heard about individuals who undergone vasectomy (n=45)

If yes, what did you heard about individuals who undergone vasectomy	Frequency	Percentage
They are sexually active	3	6.7
They are sexually inactive	10	22.2
They are stigmatised by the community	26	57.8
Others	6	13.3
Total	45	100.0

4.5.13 Do you think that vasectomy is a frustrating procedure?

Of all the respondents, more than a quarter of respondents (28.67%) they agreed that vasectomy is a frustrating procedure, 48% did not know, 14% disagreed and only 9.33% strongly agree.

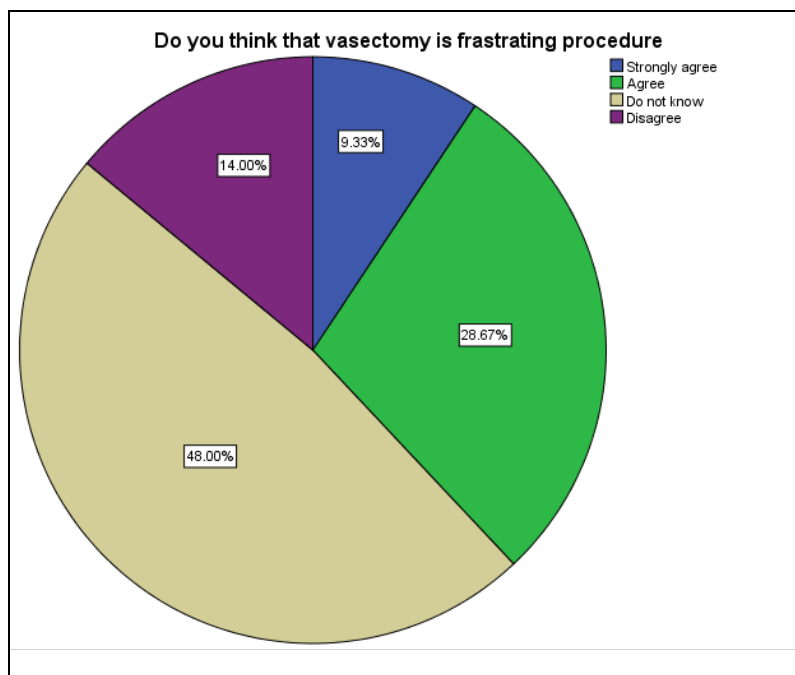


Figure 4.14 Thought of respondents that vasectomy is frustrating procedure

4.5.14 Why you or the community is not using vasectomy?

This question hoped to determine the reasons why the respondents or the community are not using vasectomy. Of the respondents, almost half of the respondents 49.3% (n=74) reported that they or the community didn't know about vasectomy as major reason for not using vasectomy, 15.3% (n=23) indicated that it is due to fear of the procedure, 8% (n=12) indicated that they will be sexually inactive, 7.3% (n=11) they considered it as castration, 8% (n=12) reported it is due to religious factor.

Table 4.20 Reason why you or the community do not use vasectomy (N=150)

Reason why you or the community do not use vasectomy	Frequency	Percentage
Community think that husband will be sexually inactive	12	8.0
Considered as castration	11	7.3
Fear of the procedure	23	15.3
Community didn't know vasectomy	74	49.3
Religious barrier	12	8.0
Lack of trained providers	2	1.3
Didn't know where the service is available	1	0.7
They are sexually inactive and considered as castration	1	0.7
They are sexually inactive, considered as castration, fear of procedure, they don't know about vasectomy	6	4.0
Others	8	5.3
Total	150	100.0

4.5.15 What do you recommend to improve vasectomy service uptake

This was an open ended question for the respondents to verbalize their recommendation to improve vasectomy service uptake and the data collectors mark only those mentioned by the respondents and jot down anything that is not listed in the questionnaire. More than half (50.6%) of respondents recommended awareness creation , 18.6% training of health care providers, 10.6% training of volunteers, and 7.3% of respondents recommended use of mass media.

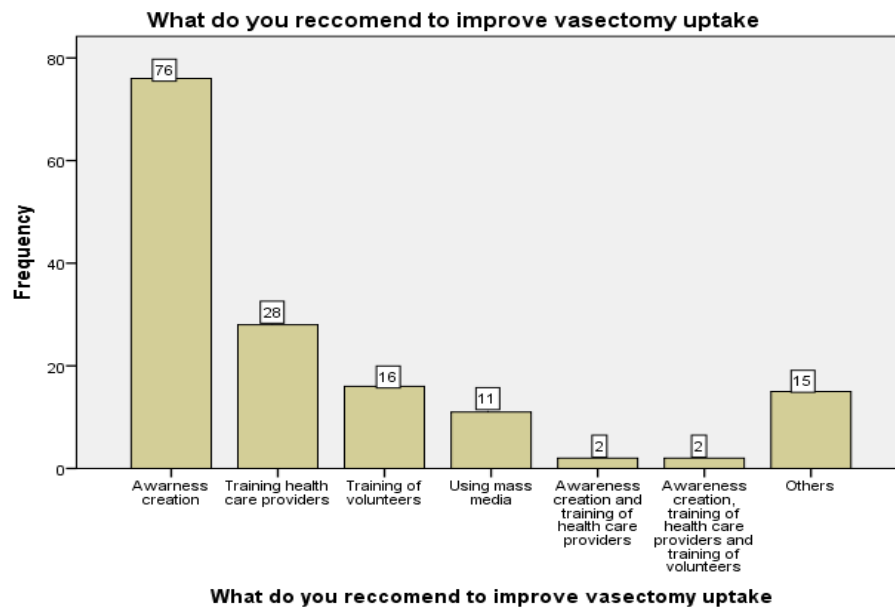


Figure 4.15 Respondent's recommendations to improve vasectomy service uptake (N=150)

4.6 CONCLUSION

This chapter presented the data obtained from the structured questions. The data were presented in the form of cross tabulations, tables and figures. The results indicated a lack of knowledge and interest on vasectomy among the respondents. The next and final chapter in this study will present the discussions, conclusions, limitations and recommendations of the study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In this chapter the researcher presents the conclusions, based on the research findings of the study about men's knowledge of and attitudes towards vasectomy as family planning method options available to men in East Wollega zone of Oromia region, Ethiopia. Limitations were also identified and the researcher made recommendations with regard to education, practice and future research. The purpose of the study was to assess the knowledge and attitude of men of reproductive age groups towards vasectomy. A quantitative, descriptive cross-sectional design was applied in this study, using interviewer administered structured questionnaire. The data was analysed using SPSS version 20. In this chapter, findings are presented in the form of descriptive and inferential statistics. Based on the findings, the researcher made recommendations with regard to education, practice and future research.

5.2 DISCUSSION OF THE FINDINGS

The findings of this study in many ways echo those of previous studies on vasectomy conducted in sub-Saharan Africa countries and elsewhere in the world. For this study, a structured interview schedule was developed which comprised of demographic data, reproductive issues, men's knowledge and attitude towards vasectomy and the results was discussed as follows.

The sample population consisted of 150 respondents, men of reproductive age groups who visited or accompanied their partners to family planning or maternal and child health units at selected five health facilities.

The age of respondents ranged between 21 and 53 years, the average being 37 years. At the time of data collection, 12% of study respondents were not able to read and write (illiterate), while 88% were literate (able to read and write to the level of tertiary school

education). According to CSA (2011:26), half of men attended primary school, less than 5% attended secondary school, and 5% of men attended more than secondary school. In addition, the majority (54%) of respondents belonged to the protestant in terms of religion, 30.7% were from the Orthodox, and the remainder 25.3% belonged to other religions not mentioned in this study. With regard to residential areas, 54.7% of respondents resided in rural areas and 45.3% come from the urban areas.

As the majority (62% of the respondents indicated that they would like to have more children which aligns with previous finding, 68.6% of men said that they want more children (CSA 2011:82). In line with the intention to have more children, 34.4% out of 93 respondents who had reported an intention to have more children indicated that they would like to have one extra child, 23.7% four children, 21.5% three children, 12.9% two children, and only 7.5% indicated that they want to have five children.

Majority (97.3%) of respondents knew about family planning. There was no significant difference between rural and urban respondents with regard to FP knowledge or awareness. Regarding knowledge on permanent family planning or female sterilisation, more than half (58.7%) of respondents reported that they knew female sterilisation or permanent family planning methods. In relation to this, 44.3% out of 88 respondents (26% out of total respondents) reported that they heard about permanent methods from health care providers though the majority of respondents claimed that they didn't receive adequate information. The low uptake of vasectomy in the community is the result of a combination of factors. A lack of information about vasectomy and fear of the procedure were appeared to be the major barriers. Surprisingly, access and availability issues were reported by only a small percentage of the respondents as barriers to vasectomy.

Almost one-third (35.3%) of respondents reported that they did know male sterilisation. Akafuah and Sossou (2008:116) also state that the least known and the less popular family planning devices were spermicidal substances, vasectomy and tubal ligation. The current study findings show a better knowledge compared to the 18% knowledge of male sterilisation by men in the previous research (CSA 2011:94). The data analysed in this study revealed that educational level did have an effect on the level of knowledge of vasectomy. Here, the respondents with secondary education were found to have highest level of knowledge on vasectomy compared to other groups of men with lower

educational levels or illiterate. In line with this, 32.67% of all respondents indicated that they knew where vasectomy service is available.

Out of 150 respondents, 53 (35.33%) indicated that they had realised that vasectomy is permanent and irreversible. Almost one third (30.7%) of the respondents stated that they know who can have vasectomy.

It was interesting to find that the majority 87.3% of the study respondents discuss aspects of family planning with their partners. In the same breadth, this research also revealed that about 93.3% of the respondents reported that they benefited from family planning.

With regard to ever use of any family planning methods, injectables were found to be the predominant methods (28%) followed by IUCD which is used by about 27.3% of subjects. In this case, uses of female and male sterilisation were 2% and 0.7% respectively. In line with this, Barone et al (2004:24) state that female sterilisation was nearly three times to the proportion of those who relied on male sterilisation. The current study findings showed that the use of contraceptives is greater than contraceptive prevalence rate stated in CSA (2011:98) which is 0.5% nationally and 0.2% in Oromia region for female sterilisation with no data for male sterilisation. One of the reasons for this discrepancy may be that those who had ever used or who knew about FP are likely to visit health facilities than those who hadn't used FP. The USAID and Respond Project (2011:28) state that female sterilisation appeared to be one of the most favoured contraceptive methods as opposed to the findings of the current study. Of the respondents, 84.7% agreed to the belief that men can play a significant role in family planning and 85.3% of respondents expressed that they want to share responsibility for using family planning with their partners. Research in the past decades confirmed that men did care about avoiding pregnancies and would like to share the responsibility for family planning with their partners stated (Grady et al 1996; Landry & Ward 1997 cited in Engenderhealth 2007:10).

When it comes to interest in the possibility of having vasectomy, 30% of the respondents had reported interest in the possibility of having vasectomy after data collectors had explained to them about what vasectomy is. The finding showed that, the more the community gets information about vasectomy, the more they are interested in

the possibility of having vasectomy. Less than one-third (30; n=45) of respondents heard about individuals who had undergone vasectomy out of which 68.9% (n=31) were interested in the possibility of having vasectomy. About 38% (n=57) of respondents expressed that they agreed that vasectomy is a frustrating procedure. Almost half (49.3%) of the respondents cited the lack of awareness about vasectomy as major reason for not using vasectomy followed by fear of the procedure as reported by 15.3% of the respondents.

Finally, there was no significant association between educational attainment of the respondents under the study and interest in the possibility of having vasectomy as well as between residential areas and the knowledge about family planning with a p-value of $p>0.05$. However, significant association was found between the educational level and knowledge about vasectomy as well as between heard about individuals who had had vasectomy and interest in possibility of having vasectomy with $P<0.05$. Respondents who heard about individuals who had undergone vasectomy are more interested than those who hadn't heard about individuals who had had vasectomy.

5.3 LIMITATIONS

The study was conducted among 150 purposively selected samples of men of reproductive age groups who visited or accompanied their partners to FP or MCH units. In addition, the researcher only selected men of reproductive age groups in East Wollega zone of Oromia. Data were collected by using interviewer administered questionnaires. Although the researcher and data collectors (family planning providers) had explained about the purpose of the interview, some of the respondents might not answer the question due to fear of denial of services.

Translation may have affected the consistency of the questions asked by Interviewers (interviewers might have misinterpreted some of the questions when translating in to Afan Oromo).

In spite of these limitations, it can be concluded that the majority of men of reproductive age group who visited family planning or MCH unit do not have adequate knowledge about vasectomy as a family planning method option available to men and do not want to have vasectomy service due to lack of knowledge and fear of the procedure.

5.4 RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made for facilitating the enhanced utilisation of vasectomy as a FP method option available to men in East Wollega zone in Oromia region and for conducting future research in this field. These recommendations are made with regard to education, practice and future research.

5.4.1 Recommendations with regard to education

To overcome men's poor knowledge and attitudes towards vasectomy requires the collaboration of all role players, family planning providers, health extension workers, community health workers, and decision makers. The following recommendations are made to educate the community about vasectomy.

- Develop and provide information, education and communication (IEC) materials in local language. Promotional materials like posters, leaflets and brochures should be used too.
- Mass media campaigns should be promoted to curb unintended pregnancies and promote use of vasectomy services among men of reproductive age groups. In line with this, promoting use of radio which is primary communication vehicle, given 23.3% of total population of Oromia region have access to radio and 22% of population of Ethiopia.
- Health care provider especially family planning providers should provide adequate information on vasectomy and dispel misunderstanding with in the community through health education programs and counselling.
- Promotion and community level activities should use satisfied clients as role models for vasectomy to serve as promoters or motivators.
- Training of community health workers and health extension workers should be strengthened to enhance their capacity so that they pass message to the community
- Implementing partners should establish community education sessions for men and their partners about vasectomy, its advantages and dispelling misconceptions.

5.4.2 Recommendations with regard to practice

As of practice, improved utilisation of vasectomy has the potential not only for the lives of men but also for their families. To this effect, Thus:

- Programmes and workshops should be offered about family planning especially vasectomy which is least used FP method despite its being safest and highly effective contraception.
- Attitudes of family planning providers should not prevent nor discourage men from accessing vasectomy services.
- Vasectomy Services have to be expanded to all hospitals and health facilities should be able to provide male friendly services.
- Ensuring quality of services like maintain privacy, confidentiality, provision of adequate and accurate information should be boosted.
- Ensuring sufficient resources and persistent logistic issues should be major supply issues to reach more women /men with vasectomy services.
- Strategies should be devised to ensure that the available human and material resources are utilised to the maximum to avoid long waiting times at health facilities.

5.4.3 Recommendations with regard to future research

As this research was conducted only in one zone and involved only men who had visited family planning or maternal and child health units at selected five health facilities, it is recommended that future research should:

- Be conducted in other parts of the region and the country as well.
- Future research should use questionnaires in respondents' local languages to reduce possibility of misunderstanding/misinterpretation
- Identify men who have had vasectomy service to become promoters or motivators enhancing vasectomy utilisation of the community.
- Use qualitative research designs to describe the lived experience of men who use vasectomy, and their wives views on vasectomy.

5.5 CONCLUSIONS

Family planning does more than help women and men limit their family size. It safeguards individual health and rights, preserves natural resources and can improve the economic outlook for families and the community.

The study was undertaken to assess men's knowledge and attitudes towards vasectomy. Reference was also made to the literature reviewed, where relevant. The researcher discovered a gap in the knowledge of and attitudes towards vasectomy which the study revealed that respondents had low knowledge of and negative attitude towards vasectomy. Generally, the researcher also noted that the concerted effort from all stakeholders and use of multiple strategies to educate the community will raise the awareness of the community which in turn increases the uptake of vasectomy as family planning method options available to men.

LIST OF REFERENCES

Akafuah, AA & Sossou, MA. 2008. Attitudes toward and use of knowledge about family planning among Ghanaian men. *International Journal of Men's Health* 7(2):109-120.

Alderman, PM.1988. Vasectomies motivations and attitudes of physicians as patients. *Canadian Family Physician* 34:1749-1752.

Association of Reproductive Health Professionals. 2011. *A quick reference guide for clinicians. Choosing a Birth control Method*. Washington DC & Oakland:East and West ARHP

Attitude and behaviour. From: <http://www.simplypsychology.org/attitudes.html> (accessed on 4 April 2013).

Attitude. From: [http://en.wikipedia.org/wiki/attitude_\(psychology\)](http://en.wikipedia.org/wiki/attitude_(psychology)) (accessed 28 July 2011).

Barone, MA., Johnson, CH, Luick, MA, Tuetonico, DL & Magnani, RJ. 2004. *Characteristics of men receiving vasectomies in United States, 1998-1999. Perspectives on Sexual and Reproductive Health* 36(1):27-33.

Bekele, D, Fentahun, M, Gutema, K, Getachew, H, Lambiyo,T & Yitayal, M. 2003. *Module on family planning for Ethiopian Health Center team*. Hawassa University & Ethiopian public health training institute: Ethiopia.

Bowling ,A & Ebrahim,S (eds).2006. *Handbook of health research methods. Investigation, measurement and analysis*. Berkshire: Open University Press.

Bunce, A, Guest, G, Searing, H, Frajzyngier, V, Riwa, P, Kanama, J & Achwal, I. 2007. *Factors affecting vasectomy acceptability in Tanzania. International Family Planning Perspectives* 33(1):13-21.

Central Statistical Agency (CSA). 2011. *Ethiopian demographic and health survey. Preliminary report*. Addis Ababa, Ethiopia: CSA.

Central Statistical Agency (CSA) and ICF International. 2012. *Ethiopian demographic and health survey 2011*. Addis Ababa Ethiopia and Calverton, Maryland, USA.

Central Statistical Agency (CSA) and ORC Macro. 2006. *Ethiopian Demographic and health survey 2005*. Addis Ababa, Ethiopia and Calverton, Maryland, USA: CSA and ORC Macro.

Council for International Organization of Medical Science (CIOMs) and in collaboration with World Health Organization (WHO). 2002. *International ethical guidelines for biomedical research involving human subjects*. Geneva: CIOMs and WHO.

Dibaba, A. 2001. Rural men and their attitude towards vasectomy as means of contraception in Ethiopia. *Trop Doct.* 31(2):100-102. Department of population and family health : Jimma University.

Dohle, GR, Diemer T, Kopa, Z, Krausz, C, Gimwercman, A & Jungwirth, A. 2012. *European Association of Urology Guidelines on Vasectomy*. *American Urological association* , 159-163.

Dunmoye, OO, Moodley, J & Popis, M. 2001. Vasectomy in developing countries. *Journal of Obstetrics and Gynaecology* 21(3):295-297.

Ebeigbe, PN, Igberase, GO & Eigbefoh, J. 2011. *Vasectomy: a survey of attitudes, counselling patterns and acceptance among Nigerian resident gynaecologists*. *Nigeria: Ghana Medical Journal*.

Engenderhealth, EH. 2007. *No-scalpel vasectomy curriculum participants' handbook. A training course for vasectomy providers and assistants*. 2nd edition. New York: USAID and Engenderhealth.

Engenderhealth, EH. 2003a. *No-scalpel vasectomy. An illustrated guide for surgeons*. 3rd edition. New York: Engenderhealth.

Engenderhealth, EH. 2003b. *Minilaparatomy for female sterilization. An illustrated guide for service providers.* . New York: Engenderhealth.

Ethiopian Demography and Health. 2008

From: <http://www.ethiodemographyandhealth.org/Oromia.html> (accessed on 10 May 2012).

Federal Democratic Republic of Ethiopia (FDRE), Ministry of Education (MOE), Ministry of Health (MOH) and in collaboration with Carter Centre (EPHTI). 2003. *Manual on reproductive health for the Ethiopian Health Center team.* Ethiopia: EPHTI

Federal Democratic Republic of Ethiopia (FDRE). 2008. Population Census commission. *Summary and statistical report of the 2007 population and housing Census.* Addis Ababa: FDRE.

Federal Democratic Republic of Ethiopia (FDRE) and Ministry of Health (MOH). 2011. *National guideline for family planning services in Ethiopia:* Addis Ababa Ethiopia.

Government of Nepal Ministry of Health and Population. 2006. *No-scalpel vasectomy reference manual.* National Health Training Centre.

Guttmacher Institute and United Nations Population Fund (UNPF). 2012. *Fact Sheet. The cost and benefits of investing in Contraceptive services in the developing world.* . New York: Guttmacher Institute and UNFPA.

Guttmacher Institute and United Nations Population Fund (UNFP). 2009. *The cost and benefits of investing in family planning and maternal and child health.* New York: Guttmacher & UNFP.

Jacobstein, R & Pile, M. 2007. *Vasectomy: the unfinished agenda.* Acquire project working paper. Acquire project.

Joubert, G & Ehrlich, R (eds). 2009. *Epidemiology: a research manual for South Africa.* 2nd edition. Cape Town: Oxford University Press.

Jowel, R. 2005. *Scottish Government social research group social science methods series*. From: <http://www.scotland.gov.uk/resource/Doo/1753561009> (accessed on 30 March 2013).

Karamat, A, Zarel, A & Arabi M. 2005-2007. Asia pacific family medicine. *Barriers and facilitators affecting vasectomy acceptability*.

From: <http://www.apfmj.com/content/10/1/5> (accessed 22 September 2011).

Khandaker, RI, Vereecken, RL & Nijs,P. 2001. *Anticonceptive problems in Bangladesh: an approach by case reports*. Catholic University, Leuven, Belgium. Sexual and relationship therapy.

Knowledge. From: <http://en.wikipedia.org/wiki/knowledge> (accessed 28 July 2011).

Kumar, GA. 2007. Men's perspective on non-scalpel vasectomy in rural Kerala, India. *The Journal of Family Welfare*:60-66.

Kunda, Z. 1999. *Social cognition: making sense of people*. From: <http://books.google.com.et/books?id=BjnOMFtyiwl> (accessed on 6 April 2013).

Landry, E & Ward, V. 1995. *Perspective from couples on vasectomy decision: Geneva. A six country study*. From http://pdf.usaid.gov/pdf_docs/pnacq010.pdf (accessed on 28 May 2011).

LoBiondo-Wood, G & Haber, J.2002.*Nursing research: methods, critical appraisal, and utilization*. 5th edition. St Louis: Mosby.

Lynam, P, Dwyer, Wilkinson, D & Landry,E. 1993. *Vasectomy in Kenya. AVSC working paper No. 4*. From http://www.engenderhealth.org/pubs/workpap/wp4/wp_4.html (accessed on 28 May 2011).

Mahat, K, Pacheun, O & Taechaboonsermsak, P. 2010. Intention to accept vasectomy among married men in Kathmandu, Nepal. *Asia Journal of Public Health*:8-14.

Maio, G & Augoustinos, M. [Sa]. *Attitudes, attributions and social cognition*. From [Http://www.blackwellpublishing.com/intropsych/pdf/c](http://www.blackwellpublishing.com/intropsych/pdf/c) (accessed on 30 March 2013).

Manecksha, RP & Fitzpatrick, JM. 2009. Epidemiology of testicular cancer. *BJU International* 104:1329-1333.

Marie Stops International (MSI). 2003. *Views on vasectomy: the male perspectives*. From: <http://www.mariestops.org/documents/vasectomy-the-male-perspective.pdf> (accessed on 28 July 2011).

Menena-Netshikweta, ML. 2007. *The knowledge, perception and attitudes regarding contraception among secondary school learners in the Limpopo province*. South Africa.

Muhondwa, E & Rutenberg, N. 1997. *A study of the effects of the vasectomy promotion project on knowledge, attitudes and behaviour among men in Dar es Salaam*. The Population Council.

Polit, DF & Beck, CT. 2008. *Nursing research: generating and assessing evidence for nursing practice*. 8th edition. Philadelphia: JB Lippincott.

Population and Housing Census. 2007. Results. Summary and Statistical Report. Addis Ababa: FDRE population census commission.

Population Reference Bureau (PRB). 2008. *The family planning worldwide. Data sheet*. Washington DC. From: <http://www.prb.org/pdf08/fpd508.pdf> (accessed on 13 July 2012).

Quarless, D. [Sa]. *Forms of knowledge and knowledge tables*. SUNY College at Old Westbury, Faculty Guidebook:129-132.

Sahin, NH. 2008. *Male university students had negative views, attitudes and behaviours towards family planning and emergency contraception in Turkey*. 392-398. Istanbul:Japan Society of Obstetrics and Gynaecology

Schneider, M & Stern, E. [Sa]. *Conceptual and procedural knowledge of mathematics problem; Their measurement and their causal interrelations* From: <http://www.psych.unito.it/csc/cogscio5/frame/talk> (accessed on 30 March 2013).

Schneider, M & Stern, E. *Conceptual and procedural knowledge of a mathematics problem: Their measurement and their causal interrelations*. From: <http://www.psych.unito.it/csc/cogscio5/frame/talk> (accessed on 4 April 2013).

Schwarz, N. 2007. *Social Cognition Attitude construction: Evaluation in Context*. 25(5):638-656. University of Michigan. Available from <http://cas.uchicago.edu/workshops/politicalpsych/files> (accessed on 4 April 2011).

Stanley, D, Phelps, E & Banaji, M. 2008. The neural basis of implicit attitudes. *Vol 17(2)*, 164-170. Association for Psychological Science. New York University & Harvard University.

Stretcher, V & Rosen Stock, IM. 1997. The Health Belief Model. In *Health behavior and health education: theory, research and practice*, edited by K Glanz, FM Lewis and BK Rimer San Francisco: Jossey-Bass:31-44

Tandon, S & Sabanegh, E. 2008. Chronic pain after vasectomy: a Diagnostic and treatment dilemma. *BJU International* 102:166-169.

Tesfaye Tafesse. 2007. *The Migration, Environment and conflict nexus in Ethiopia. A case study of Amhara migrant settlers in East Wollega zone: Ethiopia*.

Turek, P. *Vasectomy and other contraceptives*.

From: <http://www.theturekclinic.com/vasectomy-contraceptives.html> (accessed on 28 May 2011)

UNISA. Department of Health Studies. Tutorial Letter MNUALLL/301/2011.

USAID and the ACQUIRE Project. 2008. No 9. *Revitalizing Underutilized family planning methods using communications and community engagement to stimulate demand for vasectomy in Bangladesh: Acquiring knowledge*.

USAID and Engenderhealth (EH). 2007. *No-scalpel vasectomy. Training course for vasectomy providers and assistant's second edition.*

USAID and the Respond Project. 2011. *The respond project study series: factors affecting acceptance of vasectomy in Uttar Pradesh.*

USAID and the Respond Project. 2011. *Factors affecting acceptance of vasectomy in Uttar Pradesh; insights from community based, participatory qualitative research.* From: <http://extranet.respond-project.org/files/proejct-briefs> (accessed on 26 October 2011).

USAID and Health Policy Initiative. 2009. *Achieving the millennium development goals, based on the 2005 Ethiopia demographic and health survey contribution of family planning, Ethiopia.* From: <http://www.healthpolicyinitiative.com> (accessed on 11 June 2011).

Vasectomy. From: <http://en.wikipedia.org/wiki/vasectomy> (accessed 5 June 2011).

Weiske, WH. 2001. Review of vasectomy. *Andrologia* 33:125-134.

Wikipedia. From <http://en.wikipedia.org/wiki/ferility> (accessed on 5 September 2011).

World Health Organization (WHO), John Hopkins University (JHU) and United States Agency for International Development (USAID). 2007. *Family planning: a global hand book for providers.* Baltimore and Geneva: WHO.

World Health Organization (WHO), John Hopkins University (JHU) and United States Agency for International Development (USAID). 2011. *Update. Family planning: a global hand book for providers.* Baltimore and Geneva: WHO.

World Health Organization (WHO). 1994. *Vasectomy: what health workers need to know.* WHO/FHE/FPP/94. Division of Family Health, Family Planning and Population. From: <http://apps.who.int/rht/documents/FPP94-3/fpp943.htm> (accessed on 23 March 2013).

Yohanes Dibaba, Department of Population and Family Health. 2009. *Factors influencing women's intention to limit child bearing in Oromia, Ethiopia*. Jimma University.

Annexure two

Date. 2/8/2012

To: - **Oromia Regional Health Bureau**
Addis Ababa

Subject: - **Requesting Permission**

My name is Belay Ejeta, MPH student at UNISA (University of South Africa). I am going to conduct research on Men's knowledge and attitude towards vasectomy as a family planning method option in East Wollega Zone of Oromia region. I will be conducting client interviews in five selected public health facilities in east wollega zone. A total of 150 clients visiting Maternal and child health/ family planning units will be selected. This research will be a milestone for different stakeholders, policy makers; decision makers and health care providers tackle barriers to vasectomy and improve knowledge about and acceptability of male sterilization in the Region as well as Ethiopia in general.

I have got ethical clearance from UNISA ethical committee.

Hence it is to request your esteemed Bureau to write a cooperation letter to East Wollega Zonal Health office and Nekemete Hospital.

Thanks in advance!



Belay Ejeta
EH-ABRI Oromia, Nekemete

Annexure three

5 00:21 FAX 0115513891

**IROO EEGUMSA FAYYAA
OROMIYAA**



**OROMIA HEALTH BUREAU
የኦሮሚያ ጤና ጥበቃ ቢሮ**

Lakk/Ref. No. QAHX/KTF/1-24/2025

Guyyaa/Date 19/02/2025

Att. to Belem

G/Wallaga Bahaa tiif

amtee

nmi: Waa'ee deeggarssa kennu ilaala

uma ibsuuf yaalametti obbo Balay Ejetaa waa'ee malota qusanno maatii keessa tokko ta'e "permanent method" irratti qoranno waan gagessuf barbaadaniif deeggarssi aachisaa ta'e akka godhamuuf isin gaafanna.

o Balay Ejetaa tiif



Nagaa wajjin

**Immiruu Gabbisaa
ም. ገ. ገ.
Emiru Gebisa (RN, BSC)**

QAHX/KTF

Translated Version –Letter from Oromia Regional health Bureau to Zonal Health

OROMIA REGIONAL HEALTH BUREAU

Ref No. Bero/MHKI/1-84/50053

Date 29/10/2012

To: - East Wollega Zonal Health

Nekemete

Subject: - Providing support

As stated above, it is to request your provide necessary support to Ato Belay Ejeta who is going to conduct research on Permanent family planning, one family planning methods.

CC

To:- Ato Belay Ejeta

With Best regards!

Signature

Emiru Gabisa (RN,BSC)

MCH Process Owner



Ministera Nazanoo Oromiyaa W.
Bajjolekha Fayyaa Wallegga Bah.
SANTIF HAAT
የዘመናዊ ጤና ሚኒስቴር

for file

Ref No 486/105
Date 30/02/2005

- To: - Nekemete Hospital
- Nekemete Town Health office
 - Sire Woreda Health office
 - Guto Gida Health office
 - Jima Arjo Woreda Health office

Subject: - Requesting Permission

AS it is well known, utilization of Voluntary surgical contraception especially vasectomy is nonexistent / not being used in Oromia Region specifically in East Wollega zone.

The Oromia Regional Health Bureau sent us a letter dated 19/02/2005 with Ref No Bero/MHKi/1-84/50053 stating the provision of necessary support to Ato Belay Ejeta who is going to conduct study on the knowledge and attitude of men towards vasectomy in East Wollega zone selected health facilities.

Nek H/c, Nek H/c, Sire ^{UKE & G/Arjo H/c} is one of the selected health facilities in the zone. Hence it is to request your esteemed Office/Institution to provide necessary support to Belay.

Thanks in advance!

[Signature]
Egumsa Fayyaa
 ሰነድ አባ ሰቃ
 nti A/lli Gaafatamaa Wira
 Eegumsa Fayyaa
 የጤና ጥበቃ ጽ/ቤት ም/ኃ/ቤ

Annexure 4: Consent Form

Assessment of Knowledge and Attitude of Health care providers and men and women to wards vasectomy in East Wollega Zone of Oromia Regions

Hello, my name is _____. I am public health professional working at Family planning unit in this health facility.

Background:- Family planning has multiple benefits for the child, for the mother, for the family, and for the community as a whole. Even though Family planning has many advantages, male involvement in family planning service is limited due to many reasons.

The purpose of a study:-As part of obtaining a Master's Degree, I wish to explore the reasons hindering vasectomy by interviewing men of reproductive age groups and base on the findings will develop recommendations for increased use of vasectomy as an option of family planning .

Request to participate:-You have been selected to voluntarily participate in the study by giving me permission to interview you and to complete an anonymous questionnaire on the topic of vasectomy.

Rights of respondent:-Your name will remain confidential throughout the study. You can withdraw from the study at any stage. The information which you provide will remain anonymous at all stage of the study. You will not receive any form of remuneration for participating in the study.

Value of the study:- By providing with your honest views on the matter, we will be able to use the collective data to understand the views, likes, dislikes and challenges with regards to using vasectomy as a method of choice for family planning. The information based on the study will assist health authorities to make relevant policies and for health facilities to provide a service of high quality.

If you have read the above information and you agree to participate in the study, please complete the following section.

I _____ understand the purpose and value of the study .I further understand my rights and my responsibility to provide honest response

to the questions in the questionnaire. I take note of the facts that I will not receive any remuneration and that as an individual will remain anonymous and the information I provide is confidential. I agree that I participate in this study voluntarily.

Signature_____

Date_____

Contact address of the researcher

Name:- Belay Ejeta Awie

Contact address- Mobile 0921 82 88 38

P.O.Box 588

Nekemete

Thank you for your contribution!

Annexure 5. Questionnaire

Study on Men's Knowledge and Attitude towards vasectomy as family planning method option in East Wollega Zone of Oromia Region.

Questionnaire Code No_____

Socio Demographic Information

1. Region_____ Zone_____ Woreda_____
_____ Kebele_____

2. Gender _____ age_____

3. marital status

a) Married b) not married c) divorced d) widowed

4. Educational background

a) Doesn't read and write b) read and write only c) Primary (Grade 1-6) d)
Secondary (Grade 7-12) e) Tertiary

4. Religion a) Orthodox b) Muslim c) catholic d) protestant e) Other,
specify_____

5. Residence a) urban b) Rural

Reproductive health / fertility related variables

6. Number of pregnancies_____

7. Number of children alive _____

8. Do you want to have any more child/children a, yes b, no

9. If yes, how many children? A, one B, two C) three D) four E) five F)
if more than five, ask the number of children _____

Knowledge factors

10. Have you ever heard about family planning? a) Yes b) No

11. If yes, which types of family planning methods do you know? (only mark/circle those that the respondent mentions himself)

- | | |
|------------------------|---------------------------------------|
| a, Contraceptive pills | f) diaphragms |
| b) Injectables | g) cervical cap |
| c) Condoms | h) coitus interruptus |
| d) Calendar method | i) female sterilization |
| e) Male sterilization | j) Inter uterine contraceptive device |
| k) implants | l) Abstinence |

12. Have you heard about voluntary female surgical contraception or permanent contraception? a) Yes b) No

13. If yes, from where a, Radio b) television c) health care providers d) volunteers e) colleagues

14. Do you know or have you heard about male sterilization or vasectomy?
a) Yes b) No

15. If yes, from where (write down what the interviewee mentioned)_____

16. Do you realize that vasectomy is permanent and irreversible?
a) yes b) No

17. Do you know where vasectomy/male sterilization service is available?
a) Yes b) No

18. If yes, where _____

19. Do you know or have you heard that who can have vasectomy as a family planning method option
a) yes b) no

20. If yes, who are they? (mark those the respondent mentions) a), men who has not got children b) men who has got many children c) men who did not want to have any more children

d) Men of any age e, other, specify_____

21. Do you think you received adequate information from the provider about FP methods including vasectomy before you choose one? A) Yes b) No

Attitude factors

22. Do you discuss about family planning methods with your partner

a) yes b) No

23. Do you think that FP benefits you and your family?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

24. Which family planning methods have you or your partner ever used?

25. Do you know or have you heard about individuals who have used male sterilization for fertility control?

a) Yes b) No

26. If yes, what did you heard about it? (Please tick off any answers provided spontaneously and add other non-listed comments)

a) Individuals who undergone vasectomy are sexually active

b) Individuals who undergone vasectomy are sexually inactive

c) Individuals who undergone vasectomy are stigmatized by the community

d) Other, Specify_____

27. Do you believe that men can play a significant role in FP?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

28. Do you Want to share responsibility for using FP with your partner?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

29. Are you and your partner finished having more children? a) Yes b) No

30. If yes, in which family planning method you are interested?

31. Do you think that using vasectomy is frustrating procedure?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

32. Are you or your partner interested in the possibility of a vasectomy?

a) Yes b) No

33. Why do you think you or the community are not using male sterilization? (Mark or circle those that the respondent mentions)

a) The community think that husband will be sexually inactive

b) It is considered as castration

c) Fear of the procedure

d) Community did not know about vasectomy

e) Religious barrier

f) Lack of trained providers

g) They do not know where the service is available

h) Other, specify _____

34. What do you recommend that we need to do in order to improve service up take of vasectomy

a) Awareness creation b) Training of health care providers

c) Training of volunteers d) Using mass media

e) Other, Specify _____

Thank You so much!!!

Annexure 5. Questionnaire

Study on Men's Knowledge and Attitude towards vasectomy as family planning method option in East Wollega Zone of Oromia Region.

Questionnaire Code No _____

Socio Demographic Information

1. Region _____ Zone _____ Woreda _____
_____ Kebele _____

2. Gender _____ age _____

3. marital status

a) Married b) not married c) divorced d) widowed

4. Educational background

a) Doesn't read and write b) read and write only c) Primary (Grade 1-6) d) Secondary (Grade 7-12) e) Tertiary

4. Religion a) Orthodox b) Muslim c) catholic d) protestant e) Other, specify _____

5. Residence a) urban b) Rural

Reproductive health / fertility related variables

6. Number of pregnancies _____

7. Number of children alive _____

8. Do you want to have any more child/children a, yes b, no

9. If yes, how many children? A, one B, two C) three D) four E) five F) if more than five, ask the number of children _____

Knowledge factors

10. Have you ever heard about family planning? a) Yes b) No

11. If yes, which types of family planning methods do you know? (only mark/circle those that the respondent mentions himself)

- | | |
|------------------------|---------------------------------------|
| a, Contraceptive pills | f) diaphragms |
| b) Injectables | g) cervical cap |
| c) Condoms | h) coitus interruptus |
| d) Calendar method | i) female sterilization |
| e) Male sterilization | j) Inter uterine contraceptive device |
| k) implants | l) Abstinence |

12. Have you heard about voluntary female surgical contraception or permanent contraception? a) Yes b) No

13. If yes, from where a, Radio b) television c) health care providers d) volunteers e) colleagues

14. Do you know or have you heard about male sterilization or vasectomy?
a) Yes b) No

15. If yes, from where (write down what the interviewee mentioned)_____

16. Do you realize that vasectomy is permanent and irreversible?
a) yes b) No

17. Do you know where vasectomy/male sterilization service is available?
a) Yes b) No

18. If yes, where _____

19. Do you know or have you heard that who can have vasectomy as a family planning method option
a) yes b) no

20. If yes, who are they? (mark those the respondent mentions) a), men who has not got children b) men who has got many children c) men who did not want to have any more children

d) Men of any age e, other, specify_____

21. Do you think you received adequate information from the provider about FP methods including vasectomy before you choose one? A) Yes b) No

Attitude factors

22. Do you discuss about family planning methods with your partner

a) yes b) No

23. Do you think that FP benefits you and your family?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

24. Which family planning methods have you or your partner ever used?

25. Do you know or have you heard about individuals who have used male sterilization for fertility control?

a) Yes b) No

26. If yes, what did you heard about it? (Please tick off any answers provided spontaneously and add other non-listed comments)

a) Individuals who undergone vasectomy are sexually active

b) Individuals who undergone vasectomy are sexually inactive

c) Individuals who undergone vasectomy are stigmatized by the community

d) Other, Specify_____

27. Do you believe that men can play a significant role in FP?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

28. Do you Want to share responsibility for using FP with your partner?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

29. Are you and your partner finished having more children? a) Yes b) No

30. If yes, in which family planning method you are interested?

31. Do you think that using vasectomy is frustrating procedure?

a) Strongly agree b) Agree c) Don't know d) Disagree e) strongly disagree

32. Are you or your partner interested in the possibility of a vasectomy?

a) Yes b) No

33. Why do you think you or the community are not using male sterilization? (Mark or circle those that the respondent mentions)

a) The community think that husband will be sexually inactive

b) It is considered as castration

c) Fear of the procedure

d) Community did not know about vasectomy

e) Religious barrier

f) Lack of trained providers

g) They do not know where the service is available

h) Other, specify _____

34. What do you recommend that we need to do in order to improve service up take of vasectomy

a) Awareness creation b) Training of health care providers

c) Training of volunteers d) Using mass media

e) Other, Specify _____

Thank You so much!!!