KNOWLEDGE AND ATTITUDE OF MEN TOWARDS VASECTOMY AS A FAMILY PLANNING METHOD IN CHIPATA DISTRICT

BY

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(RN/RM)

A Research Study Submitted in partial fulfilment of the requirements for the Bachelor of Science in Nursing Degree in the Department of Nursing Sciences, School of Medicine, University of Zambia

UNZA  2011
Acknowledgement

I would like most sincerely acknowledge and thank the all mighty God for giving me good health and strength during my training period and not forgetting the following:

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<tr>
<td>AVSC</td>
<td>Association for Voluntary Surgical Contraception</td>
</tr>
<tr>
<td>BTL</td>
<td>Bilateral Tubal Ligation</td>
</tr>
<tr>
<td>CARMMA</td>
<td>Campaign for Accelerated Reduction of Maternal Mortality</td>
</tr>
<tr>
<td>CHAZ</td>
<td>Churches Health Associations of Zambia</td>
</tr>
<tr>
<td>CSO</td>
<td>Central Statistical office</td>
</tr>
<tr>
<td>HPM</td>
<td>Health Promotion Model</td>
</tr>
<tr>
<td>IEC</td>
<td>Information education communication</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal Child Health</td>
</tr>
<tr>
<td>MNPI</td>
<td>Maternal and neonatal program effort index</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NCDP</td>
<td>National Commission for Development Planning</td>
</tr>
<tr>
<td>NPP</td>
<td>National Population Policy</td>
</tr>
<tr>
<td>PPAZ</td>
<td>Planned Parenthood Association of Zambia</td>
</tr>
<tr>
<td>SFH</td>
<td>Society for Family Health</td>
</tr>
<tr>
<td>ZDHS</td>
<td>Zambia Demographic Health Survey</td>
</tr>
</tbody>
</table>
DECLARATION

I declare that the work presented in this study for the Bachelor of Science in Nursing programme is as a result of my own studies. This work has not been presented either wholly or in part for any other degree program and is not being currently submitted for any other degree program.

Signed: ........................................ Date: 30/05/11

CANDIDATE

THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE

Signed: ........................................ Date: 31/05/11

SUPERVISING LECTURER

DEPARTMENT OF SCIENTIFIC
SCIENCE
PO BOX 50110 LUSAKA
STATEMENT

I, Samuel Chizalila, hereby certify that this is all entirely, the result of my own independent investigation. The various sources to which I am indebted are clearly and gratefully acknowledged in the text and in the references.

Signed: ........................................

CANDIDATE

Date: .......................... 20 July 2011
DEDICATION

This research has been dedicated to my wife Namusa B. Chizalila and our first born son Geoffrey Chizalila for their patience and understanding during my study at the University of Zambia, School of Medicine, Department of Nursing sciences.
ABSTRACT

Vasectomy is a small operation to cut the vas deferens. This is the tube that takes sperm from the testes to the penis. Sperm are made in the testes. Once the vas deferens is cut, sperm can no longer get into the semen that is ejaculated ('comes') during sex. Vasectomy is an effective and permanent form of male contraception. The operation is quicker, easier and more effective than female sterilisation and it is used as a means of contraception in many parts of the world including Zambia. The reason for this study was to determine knowledge and attitude of men towards vasectomy as a method of family planning. Chipata District Health Action plan 2008-2010 has indicated an increase of BTL uptake by women, but statistics for men has shown a very low number of men opting for vasectomy. Hence the outcome of this study will help to formulate strategies for male involvement in family planning services.

Literature from various scholars globally, regionally and nationally was reviewed on men’s knowledge and attitude towards utilization of vasectomy.

A pilot study was done at Feni Sub Centre in Chipata District so as to assess whether the instrument to be used would be suitable to collect the desired data and also to detect and correct the mistakes.

The study was conducted at Mwami Hospital and Mwami Health Centre in Chipata District Eastern Province of Zambia. This was a cross-sectional study, using self-administered pre-tested questionnaires containing mainly close-ended questions. The questionnaires were given to 50 men selected using simple random method. The responses were analyzed manually using a data master sheet. The study finding has revealed that that the majority of the respondents 32 (64%) had low level knowledge while only 18 (36%) of the respondents had high level of knowledge on vasectomy as a family planning method. The study has also shown that the majority of the respondents 31 (62%) had negative attitude while 19 (38%) had positive attitude towards vasectomy as a family planning method.
Vasectomy was viewed as castration by 33 (66%) of respondents. Their lack of knowledge on vasectomy and poor attitudes towards vasectomy were based on myths and misconceptions regarding the procedure. Interestingly, level of education did not show to improve vasectomy uptake. The study has indicated that out of 41 respondents who had secondary and college/university, only 41.5% had high knowledge on vasectomy, while the majority 58.5% had low level of knowledge on vasectomy. This shows that despite having good educational background, the majority of the respondents had low level of knowledge about vasectomy as a family planning method. The health care system need to make a concerted effort to involve men in reproductive health. Interpersonal communication and counselling
CHAPTER 1

1.0 INTRODUCTION

1.1 Background information

The Ministry of Health (MoH) has integrated the reproductive health activities with others in the implementation of the basic health care package, which includes prenatal care, management of high risk pregnancies, delivery and post partum care and family planning (Reproductive Health Policy, 1992):

Following the adoption of the Reproductive Health Policy in 1992, a comprehensive National Family Planning Programme and a National Population Information Education Programme were prepared for the period 1992-2000 to give effect to, and achieve the policy objectives. The policy objectives were as follows To achieve the highest possible level of integrated reproductive health for all Zambians as close to the family as possible so as to promote quality of life.

- To ensure that procurement of family planning commodities are made on a sustainable basis.
- To ensure that provision of and the production and distribution of IEC materials for dissemination especially to health institutions at all levels of the health care delivery system.
- Provide commodities including contraceptives at every facility in the country to every individual of reproductive age especially women without consent from the spouse or partner.
- To campaign and advocate for public support of family planning programmes. *(Reproductive Health Policy, 1992)*
- To offer several methods of contraception, some with short term, long term and permanent effects in the Family Planning in Zambia *(Reproductive Health Policy, 1992).*
In Zambia there are many organisations that are working with the Government in providing family planning services to the general public such as Planned Parenthood Association of Zambia (PPAZ), Family Life Movement (FLM), Care International, and Society for Family Health (SFH).

Family planning services are conducted in almost all the clinics in Zambia, examples of the methods are oral contraceptives, sheaths, loops, Norplants and permanent methods of which vasectomy is one of the method which is a male surgical procedure.

From studies conducted in the past, many of the contraceptive methods such as BTL, and Norplants, have been widely used by women. Women have more knowledge about contraceptives and their attitudes and practice is positive unlike their male counterparts. This is because the past and present campaigns on family planning programmes have focused attention on women because of the need to free women from excessive child bearing and to reduce maternal and infant mortality through the use of modern methods of contraception and a good example is a recent campaign entitled ‘Campaign for accelerated Reduction of Maternal Mortality in Africa’ (CARMMA) which was first launched in Addis Ababa in May, 2009, and later here in Zambia on the 12th June 2010, at Mulungushi International Conference Centre, Lusaka. The component which emphasises that “every woman should access family planning services” should have included men also. (CARMA, 2010).

In Zambia, male contraceptive methods are unpopular except condoms, which have become popular because of the advent of HIV/AIDS. About one third (1/3) of Zambian men know about vasectomy (ZDHS, 2007).

During the first decade after independence, Zambia did not view the high rate of population growth as a development problem. The results of the 1980 population and housing census exposed the rapidity with which the population was expanding and implied adverse effect on development and individual welfare.
This led to government to re-appraise the role of population in national development efforts. Men are the “seed planters” in Reproductive Health and so they are part and parcel of the population increase in the country.

The country has tried to curb population increase by introducing Family Planning since 1984; the National Commission for Development Planning (NCDP) was given a mandate to initiate a draft population policy which would aim at achieving a population growth rate that is consistent with the growth rate of the economy (NCDP, 1989). The National Population Policy (NPP) was accepted in May, 1989. Since then the country’s population growth rate has remained high and continues to be a serious impediment to sustainable development. The population has increased rapidly over the last 30 years. In 1980, Zambia’s population was 5.7 million and rose to 9.9 million in 2000 with a population growth rate of 2.4 percent per annum (ZDHS, 2007).

**Benefits of Vasectomy as a family planning method**

Vasectomy like any other family planning methods has so many benefits to the family, and the nation as a whole.

i. To the Family: Family planning improves family well-being. Couples with fewer children are better able to provide them with enough food, clothing, housing and schooling (MoH, 1997).

ii. To the Nation: Family planning helps nations to develop, controlling population explosion, can lead to improvement in economic situations in the country and future demands on natural resources such as water, fertile soils will be less and every one will have a better opportunity for good life (MoH, 1997).

iii. Family planning helps the nation as a whole to develop because it reduces fertility and this helps relieve the pressures that rapidly growing populations place on economic, social and natural resources (MoH, 1997).
If Men can also be eager and be in the forefront in seeking family planning methods especially opting to choose a long term method like vasectomy, this can help to reduce rapid population increase and so reduce the burden on women who sometimes walk long distances to health facilities to seek family planning services.

1.2 STATEMENT OF THE PROBLEM

In the past, family-planning programs have focused attention primarily on women, because of the need to free women from excessive child-bearing, and to reduce maternal and infant mortality through the use of modern methods of contraception. Most of the family-planning services were offered within maternal and child health (MCH) centres, and most research and information campaigns focused on women and so has not been gender-sensitive.

This focus on women has reinforced the belief that family planning is largely a woman’s business, with the male being portrayed as playing a subordinate role (Touré L, 2006).

In many parts of the world, women live in male dominated societies due to customs and traditions. Zambia is not an exception. Although most family planning motivation efforts are directed mainly at women, the population growth cannot be controlled without the involvement of men. Despite increased coverage by family planning programmes in Zambia, fertility has remained high. The tendency of family planning programmes has been to target women and men have only been marginally involved. Major fertility research programmes such as the World Fertility Surveys (WFS), Contraceptive Prevalence Surveys (CPS) and Demographic and Health Surveys (DHS) have all focused on studying the fertility behaviour of women.
The chances of man’s survival, good health, productivity and economic independence have become threatened and can only be achieved through reduction of population growth. Many Zambians today are living below the poverty datum line. This results from population growth which cannot match with the economic growth of the nation. 73% of Zambian’s are poor (CSO, 2007).

Although vasectomy is an important alternative to female sterilization for couples who want a permanent method of contraception, barriers to its wider use exist in many places. This can be confirmed by Zambian statistics (ZDHS, 2007) which has shown that only a small percentage of men (4.3%) countrywide are vasectomised, hence there is need to find out their knowledge and views concerning vasectomy as a method of family planning.

Table 1: Use of contraception by Men according to age (ZDHS 2007).

<table>
<thead>
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<th></th>
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</thead>
<tbody>
<tr>
<td>15-19</td>
<td>0.0</td>
<td>20.0</td>
<td>10.2</td>
<td>0.1</td>
<td>25.9</td>
<td>9.9</td>
<td>0.0</td>
<td>18.9</td>
<td>5.4</td>
</tr>
<tr>
<td>20-24</td>
<td>0.2</td>
<td>56.2</td>
<td>37.9</td>
<td>0.3</td>
<td>59.1</td>
<td>37.0</td>
<td>0.2</td>
<td>57.6</td>
<td>23.9</td>
</tr>
<tr>
<td>25-29</td>
<td>0.1</td>
<td>62.8</td>
<td>60.0</td>
<td>0.0</td>
<td>63.8</td>
<td>59.6</td>
<td>0.3</td>
<td>70.1</td>
<td>49.7</td>
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<td>30-34</td>
<td>0.3</td>
<td>64.1</td>
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<td>61.2</td>
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<td>70.6</td>
<td>0.2</td>
<td>64.5</td>
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<td>40-44</td>
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<td>46.1</td>
<td>75.2</td>
<td>0.6</td>
<td>46.4</td>
<td>71.7</td>
<td>0.6</td>
<td>54.4</td>
<td>62.5</td>
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<tr>
<td>45-49</td>
<td>0.1</td>
<td>34.8</td>
<td>70.0</td>
<td>0.0</td>
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<td>0.3</td>
<td>42.4</td>
<td>63.2</td>
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<td>50-59</td>
<td>1.1</td>
<td>7.8</td>
<td>55.9</td>
<td>1.1</td>
<td>8.9</td>
<td>56.9</td>
<td>0.4</td>
<td>35.9</td>
<td>58.6</td>
</tr>
<tr>
<td>TOTALS</td>
<td>2.4%</td>
<td></td>
<td></td>
<td>2.5%</td>
<td></td>
<td></td>
<td>2.4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of all Men currently married and sexually active unmarried men 15 – 49 years who have used any contraceptive method by method according to age (ZDHS, 2007). As indicated in the table above, it shows that utilization of male sterilization compared to other male methods, (vasectomy) is still fluctuating and it does not show any upward trend between 1996 -2007.
Table 2: Knowledge of Contraceptive methods both Men and women

<table>
<thead>
<tr>
<th>Method</th>
<th>1996 All Men</th>
<th>1996 All women</th>
<th>2001-2 All Men</th>
<th>2001-2 All women</th>
<th>2007 All Men</th>
<th>2007 All women</th>
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<tr>
<td>Female sterilization</td>
<td>60.0</td>
<td>70</td>
<td>62.7</td>
<td>71.8</td>
<td>62.0</td>
<td>64.6</td>
</tr>
<tr>
<td>Male sterilization</td>
<td>28</td>
<td>20</td>
<td>30</td>
<td>22.6</td>
<td>30.0</td>
<td>19.3</td>
</tr>
<tr>
<td>Orals</td>
<td>81</td>
<td>91</td>
<td>82</td>
<td>92.2</td>
<td>85.6</td>
<td>91.5</td>
</tr>
<tr>
<td>Injectables</td>
<td>60.8</td>
<td>81</td>
<td>62.6</td>
<td>81.4</td>
<td>75.1</td>
<td>86.8</td>
</tr>
<tr>
<td>Male condoms</td>
<td>90</td>
<td>93</td>
<td>97.5</td>
<td>94.1</td>
<td>98.4</td>
<td>92.2</td>
</tr>
<tr>
<td>Female condoms</td>
<td>50</td>
<td>56</td>
<td>57.7</td>
<td>57.8</td>
<td>65.6</td>
<td>65.8</td>
</tr>
</tbody>
</table>

Percentage of all Men and Women currently married and sexually active respondents’ age 15-49 who know any contraceptive method, by specific method. (ZDHS 2007)

Again this table shows that knowledge on Male Sterilization as a family planning method by both Men and Women has not improved since 1996 compared to other family planning methods.

The effects of non-male involvement in Family Planning will be as follows;

- If population explosion is not checked, it can give rise to a sharp increase in population which cannot much with the economy of the state, leading to a high number of un-employment, mushrooming of shanty compounds because people cannot afford to build or rent dissent houses. Crime rate will be also at an increase, overcrowding in shanty compound will also be a problem leading to outbreak of diseases like cholera, and dysentery due to poor sanitation.

With the effects of population explosion indicated above, men should be induced on adopting vasectomy as a Family Planning choice.
In Zambia nothing much has been done to improve on knowledge and views of men towards vasectomy as a method of family planning. The ZDHS, 2007 has revealed that only one third of men 15-59 years old had knowledge on vasectomy. But no campaigns have been launched to sensitize men on the availability of vasectomy services in the country. No print or electronic media talks about vasectomy whereas female methods of contraception are advertised. (Engender Health, 2004).

Since the introduction of Health reforms, the Ministry of Health has never even launched a campaign to sensitize men over the benefits of vasectomy as a family planning method.

The first step in increasing male participation in reproductive health is to understand their knowledge and views towards family planning. Finding out the knowledge and views of men towards vasectomy as a method of family planning is vital if solutions are to be found to the problems of inadequate male participation in family planning.

The information expected out of this study will help in lobbying policy makers, non-Governmental Organizations and other stakeholders to launch campaigns on vasectomy as the most effective method to reduce population growth. Findings will also be used to expel any myths and misconceptions concerning vasectomy as well as handling the associated factors on knowledge and attitude of men towards vasectomy as a family planning method in Mwami, Chipata District.
1.3 FACTORS ASSOCIATED WITH THE KNOWLEDGE AND ATTITUDE OF MEN TOWARDS VASECTOMY AS A FAMILY PLANNING METHOD

There are many assumed factors that surround the knowledge and attitude of men towards vasectomy. These factors range from socio-cultural to service related factors. The following are some of the factors.

1.3.1 SERVICE-RELATED FACTORS

1.3.1.1 Lack of Information about Vasectomy

Knowledge about vasectomy on the part of service provider may influence the men’s attitude towards utilization of vasectomy because if the service provider has limited or lack of knowledge on the method he/she will not be able to give the men convincing reasons for them to make informed choices. As a result the men may not opt to go for vasectomy. If the service provider has knowledge about the method he/she will be able to give the men necessary information about the method and they will be able to make an informed choice.

1.3.1.2 Attitude of service providers

Many health workers do not promote vasectomy as a family planning method. Maternal and Child Health (MCH) focus has been targeting women and children and so the men have been left out in family planning programmes. Sometimes men have not been given the opportunity to discuss family planning issues (Family Health International, 2007). This marginalisation discourages men from even participating in family planning choices. They will just give their wives consent to go for family planning.

If the attitude of the service provider is bad this will prevent men from accessing the service. If the attitude of the service provider is good many men will be able to access the service.
1.3.1.3. Vasectomy Services
Some health facilities may not offer men vasectomy services due to lack of infrastructure and trained personnel to perform vasectomy as a surgical procedure. Sometimes, family planning counsellors may not have adequate information about the method and so fail to inform their clients about vasectomy being an option for family planning (FHI, 1997).

1.3.2 SOCIO-ECONOMIC FACTORS

1.3.2.1 Myths and Misconception
Myths and misconception can influence the men’s attitude towards utilization of vasectomy as a family planning method because if there any myth or misconception about the method men will shun away to adopt vasectomy as a choice of family planning.
For example some men may believe that; Vasectomy causes testicular cancer; vasectomy is castration; it leads to impotence; it is very painful and leads to bad swellings, and after vasectomy a one cannot enjoy sexual intercourse (USAID, 1997). All these myths and misconceptions may influence men from accessing vasectomy as a family planning method.

1.3.2.2 Level of Education
Men who are literate may understand more on the importance of having fewer children whom they can support adequately. These men may readily agree to have a vasectomy as a method of family planning, because they may have been exposed to information on the availability of vasectomy services by reading widely and relating with many other people (USAID, 1997).

On the other hand, illiterate men may not have been exposed to modern ideas. They may still be bound to their traditional and cultural beliefs hence may not opt to have a vasectomy as a method of family planning (Adwaba, 2008).
The information men may have about vasectomy may influence men’s attitude towards utilization of vasectomy. Those who may be well informed about vasectomy as a family planning method will be able to make an informed choice and be able to adopt vasectomy as a family planning choice. While those who may not have information, they may have difficult to decide whether to opt for vasectomy or not because they will not have facts about the method, hence they will base their decisions on rumors and misconceptions

1.3.2.3 Customs and Traditional Beliefs

Beliefs and customs also indicate that men should have as many children as possible to prove their virility (ICPD, 2001). To prove their virility, men may not opt to have a vasectomy as a family planning method.

Most African men are brought up to think that family planning issues are women’s issues, mainly because family planning programmes have been targeting women. Some customs consider children as wealth and the more the children one has, the more is fulfilled and respected.

1.3.2.4 Age

Men who are younger may not opt for vasectomy as a method of family planning due to its permanency. Most of them may want to have many children in their life. In Zambian culture, a large family is associated with virility. Most men view their manhood as per the number of children they have had (Riccio and Samson, 1997).

1.3.2.5 Embarrassment

Culturally, a vasectomised man may be regarded as a weak man. Traditional beliefs and customs indicate that men should have as many children as possible as proof of their virility. Fear of being embarrassed by friends may discourage men from going for vasectomy as a family planning method ((USAID, 1997).
1.3.2.6 Religious Beliefs

Religious beliefs may play a role in men’s choice and use of contraception in particular on their views about vasectomy.

Christian men may believe that only God should determine the number of children they should have. They may believe that terminating their fertility by having vasectomy, may be against the will of God. These beliefs may negatively affect men’s views towards vasectomy as a family planning method.

1.3.2.7 High poverty levels

The socioeconomic status may affect an individual’s access to health care. This may also be true in the case of men seeking family planning services, in particular, vasectomy. Lack of money may make it impossible for men to travel to health care facilities where vasectomy services are offered. Sometimes may not even afford a small fee charged for the service.

1.3.3 CLIENT CENTERED FACTORS

1.3.3.1 Fear of the Unknown

Many people have fear of unknown concerning surgical operations regardless of its nature. Some people may fear that they will sleep forever when undergoing surgery or develop complications. Hence this may influence men towards accessing vasectomy as a family planning method.

1.3.3.2 Marital Status

Married men who have reached satisfied parity may be inclined to go for vasectomy as family planning method, but Single, divorced or widowed men may still want to marry and have many children (Whitehead, 1992). Men in polygamous marriages may also not want to have a vasectomy because some of their wives may still desire to have more children.
FIGURE 2: DIAGRAM SHOWING THE FACTORS CONTRIBUTING TO LOW UTILIZATION OF VASECTOMY BY MEN AS A FAMILY PLANNING METHOD.

Service Related Factors  Client Centred Factors  Social Economic Factors

Vasectomy Services  Fear of unknown  Marital status  Age

Knowledge about vasectomy on the part of service provider  Embarrassment  Cultural Beliefs and Customs

Attitudes of Health Workers

VASECTOMY AS A FAMILY PLANNING METHOD

Misconception  Lack of information  Education

Religion  Poverty level
1.4 THEORETICAL FRAMEWORK

Health Promotion Model

This study will be guided by the *Health Promotion Model* (HPM). The health promotion model (HPM) was proposed by Nola J Pender (1982; revised, 1996).

It defines health as a positive dynamic state not merely the absence of disease. Health promotion is directed at increasing a client’s level of wellbeing. The health promotion model describes the multi dimensional nature of persons as they interact within their environment to pursue health. The model focuses on following three areas:

- Individual characteristics and experiences
- Behaviour-specific cognitions and affect
- Behavioural outcomes

The health promotion model notes that each person has unique personal characteristics and experiences that affect subsequent actions. The set of variables for behavioural specific knowledge and affect have important motivational significance. These variables can be modified through nursing actions. Health promoting behaviour is the desired behavioural outcome and is the end point in the HPM.

Health promoting behaviours should result in improved health, enhanced functional ability and better quality of life at all stages of development. For example if people use family planning methods effectively they end up of having a better quality of life where they will have a family which they will manage to feed, and to give support in terms of education.
ASSUMPTIONS OF THE HEALTH PROMOTION MODEL

The HPM is based on the following assumptions, which reflect both nursing and behavioural science perspectives:

1. Individuals seek to actively regulate their own behaviour.
2. Individuals in all their bio-psychosocial complexity interact with the environment, progressively transforming the environment and being transformed over time.
3. Health professionals constitute a part of the interpersonal environment, which exerts influence on persons throughout their lifespan.
4. Self-initiated reconfiguration of person-environment interactive patterns is essential to behaviour change.

THEORETICAL PROPOSITIONS OF THE HEALTH PROMOTION MODEL

Theoretical statements derived from the model provide a basis for investigative work on health behaviours. The HPM is based on the following theoretical propositions:

1. Prior behaviour and inherited and acquired characteristics influence beliefs, affect, and enactment of health-promoting behaviour.
2. Persons commit to engaging in behaviours from which they anticipate deriving personally valued benefits.
3. Perceived barriers can constrain commitment to action, a mediator of behaviour as well as actual behaviour.
4. Perceived competence or self-efficacy to execute a given behaviour increases the likelihood of commitment to action and actual performance of the behaviour.
5. Greater perceived self-efficacy results in fewer perceived barriers to specific health behaviour.
6. Positive-emotions toward a behaviour results in greater perceived self-efficacy, which can in turn, result in increased positive affect.

7. When positive emotions or affect are associated with behaviour, the probability of commitment and action is increased.

8. Persons are more likely to commit to and engage in health-promoting behaviours when significant others model the behaviour, expect the behaviour to occur, and provide assistance and support to enable the behaviour.

9. Families, peers, and health care providers are important sources of interpersonal influence that can increase or decrease commitment to and engagement in health-promoting behaviour.

10. Situational influences in the external environment can increase or decrease commitment to or participation in health-promoting behaviour.

11. The greater the commitments to a specific plan of action, the more likely health-promoting behaviours are to be maintained over time.

12. Commitment to a plan of action is less likely to result in the desired behaviour when competing demands over which persons have little control require immediate attention.

13. Commitment to a plan of action is less likely to result in the desired behaviour when other actions are more attractive and thus preferred over the target behaviour.

13. Persons can modify cognitions, affect, and the interpersonal and physical environment to create incentives for health actions.

**PERSONAL FACTORS**

Personal factors categorized as biological, psychological and socio-cultural. These factors are predictive of a given behaviour and shaped by the nature of the target behaviour being considered.

**Personal biological factors**

- Include variable such as age, gender, body mass index pubertal status, aerobic capacity, strength, agility, or balance.
Personal psychological factors

- Include variables such as self esteem, self motivation, personal competence, perceived health status and definition of health.

Personal socio-cultural factors

- Include variables such as race, ethnicity, acculturation, education and socioeconomic status.
- Behavioural Specific Cognition and Affect

PERCEIVED BENEFITS OF ACTION

- Anticipated positive outcomes that will occur from health behaviour.

PERCEIVED BARRIERS TO ACTION

- Anticipated, imagined or real blocks and personal costs of understanding a given behaviour

PERCEIVED SELF EFFICACY

Judgment of personal capability to organise and execute a health-promoting behaviour. Perceived self efficacy influences perceived barriers to action so higher efficacy result in lowered perceptions of barriers to the performance of the behaviour.

ACTIVITY RELATED AFFECT

Subjective positive or negative feeling that occur before, during and following behaviour based on the stimulus properties of the behaviour itself. Activity-related affect influences perceived self-efficacy, which means the more positive the subjective feeling, the greater the feeling of efficacy. In turn, increased feelings of efficacy can generate further positive affect.
INTERPERSONAL INFLUENCES
Cognition concerning behaviours, beliefs, or attitudes of the others. Interpersonal influences include: norms (expectations of significant others), social support (instrumental and emotional encouragement) and modelling (vicarious learning through observing others engaged in a particular behaviour). Primary sources of interpersonal influences are families, peers, and healthcare providers.

SITUATIONAL INFLUENCES
Personal perceptions and cognitions of any given situation or context that can facilitate or impede behaviour. Include perceptions of options available, demand characteristics and aesthetic features of the environment in which given health promoting is proposed to take place. Situational influences may have direct or indirect influences on health behaviour.

BEHAVIOURAL OUTCOME

Commitment to Plan of Action
The concept of intention and identification of a planned strategy leads to implementation of health behaviour.

Immediate competing demands and preferences
Competing demands are those alternative behaviours over which individuals have low control because there are environmental contingencies such as work or family care responsibilities. Competing preferences are alternative behaviour over which individuals exert relatively high control, such as choice of ice cream or apple for a snack.
Health promoting behaviour

Endpoint or action outcome directed toward attaining positive health outcome such as optimal well-being, personal fulfilment, and productive living. All what has been mentioned above, has been summarized in a schematic diagram below.

Application of the Model to this Research study

As Nurses we are moving toward an era of science-based practice in nursing, so this study intends to incorporate the latest findings from the behavioral and biological sciences into practice to assist Men of varying cultural backgrounds to adopt vasectomy as a family planning method.

As what they say, prevention is better than cure, thus, health promotion is valued much. Health teachings are always part of nurses’ experience in their workplace. Despite of various clinical & community health care settings, we nurses are always interacting with our clients (Pender, 2008)

Community health care setting is the best avenue in promoting health which includes promoting family planning services in our community. Using Pender’s Health Promotion Model, community program may be focused on activities that can improve the well-being of the people such accessible family planning services.

Nurses, though are scattered in different fields, have common primary concern: to promote health to every individual (Pender, 2008).

Nurses have knowledge on family planning methods thus, we are expected to share this to laymen and contribute to their well-being. As what Pender 2009, said, “We cannot continue to let people become ignorant about different family planning methods when we have the means to keep many people well-informed about different family planning methods available. Thus, the theory of Pender on Health Promotion is indeed a great to advocate prolonging and preserving life. This theory really manifests the noble work of a NURSE that is to share knowledge about family planning and prevent the explosion of rapid population growth (Pender, 2008).
Figure 3: Conceptual Model

Health Promotion Model

INDIVIDUAL CHARACTERISTICS AND EXPERIENCE

Prior related behaviour

Personal factors
Biological, Psychological, Socio-cultural.

BEHAVIOUR-SPECIFIC COGNITIONS AND AFFECT

Perceived benefits of action
Perceived barriers to action
Perceived self-Efficacy
Activity-Related affect

Interpersonal influences
Family, peers, norms

Situational influences
Options, Demands Characteristics, Aesthetics.

BEHAVIOURAL OUTCOME

Immediate competing demands (low control) and Preferences (high
Commitment to a plan of action
Health promote behaviors
1.5 JUSTIFICATION FOR THE STUDY

The Zambian statistics (ZDHS, 2007) show that only a small percentage of men (4.3%) countrywide are vasectomised, meaning that the issue of family planning is still regarded as an issue of women alone. In countries like Ghana and Kenya where campaigns on vasectomy have been launched, the knowledge and acceptance of men towards vasectomy has increased after the sensitization campaigns meaning that men will also have a free will to access family planning services without regarding family planning as a an issue of women alone, which is a different case here in Zambia.

Very few studies have been done in Zambia to ascertain the knowledge and attitude of men towards vasectomy as a family planning method. Most of the studies on family planning have centred on women. But unless men become actively involved in family planning, the problem of rapid population growth will not be solved, because they are the decision makers. Hence the reason why i want to conduct this study is to find out the knowledge and attitude of men towards vasectomy as a family planning method in Chipata District.

It is my hope that the findings from this study will be used by reproductive health programme designers, Non-Governmental Organizations and other stakeholders to launch campaigns on vasectomy in order to sensitize men. This is hoped to impart men with the knowledge they need concerning vasectomy as a method of family planning and dispel any fears and myths they may have about the method. It is therefore appropriate that this study be carried out so that more men can have a positive attitude towards vasectomy as a family planning method which has been documented by both the WHO and Ministry of Health that it is a safe and simple permanent family planning method.

1.7 RESEARCH QUESTION

Why is there underutilization of vasectomy as a family planning method in Chipata district?

1.8 RESEARCH HYPOTHESIS

Inadequate knowledge on vasectomy and poor attitude will affect the utilization of vasectomy by men as a family planning method.
1.9 RESEARCH OBJECTIVES

An objective is a summary of what is to be achieved by the study. It is a clear, concise, declarative statement that is expressed in the present tense. (Burns and Grove, 2005)

1.9.1 General Objective

To determine knowledge, attitude and utilization of vasectomy as a family planning method by men in Chipata District.

1.9.2 Specific Objectives

i. To assess the men’s level of knowledge on vasectomy as a family planning method.

ii. To assess the men’s attitude towards utilization of vasectomy as a family planning method.

iii. To determine the relationship between attitude and knowledge.

1.10 ACTUAL DEFINITIONS

Vasectomy: The surgical contraception method for men which is achieved by making an incision in the scrotum, then cutting and ligating the vas deferens to prevent sperms from being ejaculated during sexual intercourse (WHO, 2008)

A variable :- is a characteristic or attribute of a person or object that varies (it takes on different values) within the population under study (Polit and Beck, 2006).

Dependent Variable: This is a variable which depends on the independent variable or that is hypothesized to dependent on or be caused by another variable (called the independent variable), sometimes referred to as a criterion variable (Polit et al, 2006).

Independent Variable: This is a variable that is believed to cause or influence the dependent variable, in experimental research, that is, the manipulated variable (Polit et al, 2006).

Contraception: This is the prevention of conception and pregnancy (Weller, 2006)
1.11 VARIABLES

1.11.1 Dependent variable

i. Knowledge

1.11.2. Independent variable

ii. Attitude

Table 3: VARIABLES AND CUT OFF POINTS

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>INDICATORS</th>
<th>CUT-OFFPOINT</th>
<th>QUESTION No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge about vasectomy as a family planning method</td>
<td>High</td>
<td>Correct response to knowledge questions with scores of 4-6. When the respondent is able to state what vasectomy is, at what time is appropriate and if able to state the benefits.</td>
<td>11 - 16</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>Correct response to knowledge questions with scores of 0-3. When respondent is not able to define what vasectomy is, and fail to mention some of the benefits of vasectomy.</td>
<td>11 - 16</td>
</tr>
<tr>
<td>Attitude towards utilization of vasectomy as a family planning method</td>
<td>Positive</td>
<td>Correct response to attitude questions with scores 4-6. When respondent strongly agree the utilization of vasectomy as a family planning method</td>
<td>17,18,19,22, &amp; 26</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>Correct response with scores 0-3. When respondent strongly disagree the utilization of vasectomy as a family planning method.</td>
<td>17,18,19,22, &amp; 26</td>
</tr>
</tbody>
</table>
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is defined as "a critical summary of research on a topic of interest, often prepared to put a research problem in context or as the basis for an implementation project." (Polit, D. and Hungler, B. 1999).

The purpose of literature review is mainly to avoid duplication of work that has already been done by finding out what others have found and reported on the particular problem.

Literature review also helps in refining the problem statement and helps the researcher to become familiar with various types of methodology that might be used in the study. In view of this, it is important for every researcher to review available literature.

A good literature review draws from a wide range of sources, contains relevant information and provides a summary of current knowledge on the research topic (Watson R. et al., 2008).

Overview of vasectomy as a male contraception method.
Vasectomy is a surgical contraception method for men which is achieved by making an incision in the scrotum, then cutting and ligating the vas deferens to prevent sperms from being ejaculated during sexual intercourse. It is an important alternative to female sterilization for couples who want a permanent method of contraception. It is safe, simple, inexpensive and quick surgical procedure and can be done even in a clinic with proper infection prevention practices. It is also one of the effective methods of contraception with failure rate of usually less than 0.5% after one year. Vasectomy is not castration and does not affect the testes and it does not affect sexual ability (WHO, 2008).
KNOWLEDGE

Knowledge is defined as understanding of or information about a subject which has been obtained by experience or study, and which is either in a person’s mind or posed by people generally (Gillard, 2003).

Vasectomy is used as a means of contraception in many parts of the world. A total of about 50 million men have had vasectomy, world over, a number that roughly corresponds to 5% of all married couples of reproductive age. In comparison, about 15% of couples rely on female sterilization for birth control (USAID, 2008).

Approximately half a million vasectomies are done in the United States each year. About 1/6 of men, 35 years of age and over have been vasectomised. Prevalence of vasectomy increases along with education and income (USAID, 2008).

The analysis of a study conducted in India on knowledge and attitude of Men towards vasectomy, and other Family planning methods, the analysis revealed that less than half of the men had correct knowledge of vasectomy (46 per cent), tubectomy (45 per cent) and oral pills (41 per cent).
Very small proportion of the men had correct knowledge of IUD (18 per cent), injectable (1 per cent), and safe period (29 per cent). Most men and women were aware of condoms and how to use them correctly (Khan E., et al, 1997).

Lack of knowledge contributed to negative view. Men did not know or understand the consequences or benefits of vasectomy. ¼ of all the men interviewed believed that the procedure is really painful and leads to bad swelling. Men also had myths about vasectomy. 7% of all the men interviewed believed that vasectomy makes one less a man, 7% said it reduces testosterone levels and may lead to impotence, 12% believed that it is like being castrated and 3% believed that it leads to a high tone of voice (Khan E., et al, 1997).

A study conducted in Cambodia on challenges and opportunities for male involvement in reproductive health revealed that strategic plans and services lack indicators for men, and most service providers are not equipped or trained to accommodate male clients. Due to the female-oriented services, men are often reluctant to avail themselves for the services (Watson, 2005).

Male involvement programmes have improved family health in Cambodia. Providing information to both men and women increases the knowledge and male participation in reproductive health which improves family health and well being. The Voluntary Surgical Contraception (VSC) projects had been implemented in 17 referral hospitals in Cambodia. The projects focused on leaders, authorities and health centre staff. There was a significant increase of men going for vasectomy of 28% (RHPWG, 2007)

According to Adwaba (2008), a study on knowledge and attitudes of men about family planning conducted in Sub-Saharan Africa, in Ghana in particular, results indicate that socio-cultural factors such as spousal communication and cultural misconceptions about family planning, contribute to the low level of male involvement in use of contraceptives by men in Ghana. The findings indicate that demographic factors such as education, religion and types of marital relationship and exposure to mass-media education have significant effects on the participants' increased knowledge, and reproductive decision-making. The study identifies socio-cultural misconceptions resulting from lack of knowledge and education as the main deterrents for the use of different family planning devices including vasectomy.
The study calls for further research and male-friendly programs that would clarify myths surrounding the use of contraceptive devices, their benefits and effects on the physiology of the users (Adwaba, 2008).

When it comes to Africa Sub-region Lynam (2008), state that “Kenyan men have interest in planning their families, despite widespread misinformation about vasectomy. The studies which have been done reveal considerable interest in learning more about it and if accurate and complete information including information on how and where to get services can be available, the use of vasectomy can really increase in Kenya”.

All these studies suggest that availing the information about vasectomy to men will make them take part in this method of family planning. Men who lack knowledge, have unknown fears and myths about vasectomy are less likely to use vasectomy as a family planning method.

2.2 ATTITUDE
Basavantapa (2007) defines attitude as the way one thinks and feels about something or the way one behaves towards somebody.

This section looks at the attitude of men towards utilization of vasectomy as a family planning method.

Landry, (2008), study showed that men’s role varies greatly according to cultural and social context. In the USA, among couples who choose both tubal ligation and vasectomy, the woman plays a key role in the decision to have a vasectomy. Among couples who have chosen vasectomy, women are more likely to have discussed the procedure with their partners and to have known a satisfied vasectomy user before the choice was made. 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.

Service providers who believe men are not interested and who consequently limit information and access are a principal constraint; other barriers are negative attitudes and misinformation. Yet even in Latin America, where few family planning policymakers believed vasectomy would ever be used, experience has shown that when information and services are provided, men will seek out and use vasectomy.
A study was conducted in New Zealand on attitudes of men towards vasectomy in 2006. The study was conducted on men 35 to 44 years old and it revealed that many men are opting for vasectomy. 90% of the men interviewed indicated the desire to take their turn in family planning. 80% wanted vasectomy because they had satisfied parity (on average 3 children) and 70% did it because of pressure from their wives. Men said they wanted to share the responsibility for their reproduction. Some feared that their wives would develop complications from taking contraceptive pills or having a Bilateral Tubal Ligation (BTL).

In Kenya, the Association for Voluntary and Safe Contraception (AVSC) conducted a number of surveys to assess knowledge of and attitudes towards vasectomy. AVSC further provided training for Kenyan doctors to provide vasectomy services as the demand grew. A workshop was also organized in 1990 which brought together family planning providers, vasectomised men, and representatives from government and Non-Governmental Organizations (NGOs). Recommendations were then made after the workshop that service providers and the general public needed to be informed about vasectomy. In 1993, the first family planning centre for men opened in Nairobi, Kenya, to provide counselling, reproductive health services and vasectomy services for men. Four other centres were opened by AVSC. The number of men who used the centres rose sharply after each advertisement. It was concluded that given information, men can respond positively to vasectomy. The men showed that they did not want children they could not care for. The Nairobi Centre alone saw over 500 men and performed over 200 vasectomies (Van, et al, 1996).

Since 1990, 46 countries most in sub-Saharan Africa have taken nationally representative surveys of men’s attitude towards family planning. In nearly all the surveyed countries, most men know and approve of contraception (USAID, 2007).

But on average, they say they want more children compared to women. Many men are getting involved in family planning programmes in the advent of male reproductive health clinics. The adjustment of many men to economic realities confronting sub-Saharan Africa today has tended to unify the attitudes of men with those of their wives with regard to contraception (USAID, 2007).
In a study conducted in Uganda to assess family planning provider’s readiness to provide service, it was found that there were no clear guidelines on family planning and providers provided their own rules and restrictions.

Cost of family planning methods was also high, especially for the villagers who needed to add transport money. Vasectomy services were only offered at 16% of health facilities, while BTL was offered at 24% of the health facilities (Yinyinade et al, 2009).

A national-wide study conducted in Lusaka urban district on knowledge and attitude of men towards vasectomy in Zambia revealed that 54% of the respondents had positive opinion about vasectomy. 58% of the respondents felt that vasectomy should be encouraged. Contrary to these positive views, when asked whether they could go for vasectomy, 60% of the men declined. Men felt that the method was very incompatible with the Zambian culture as many children are valued. Others feared losing their manhood which would affect their sexual performance. They said according to Zambian culture it is prestige and a sign of wealth to have more children. Others said it was against God’s will (Shikupa, 2000).

Another study conducted in Zambia on the attitude of men towards vasectomy in some District Hospitals, revealed that vasectomy as a family planning service was rated the lowest service at 30% compared to other family planning services, but no other studies have been done to show the reasons why the low utilization of the service (USAID, 2007).

An interview with an in-charge, at Urology Clinic (UTH) where vasectomies are done revealed that on average, 2 vasectomies are performed per month compared to women who come for BTL. Most men interviewed they say family planning is the issue of women. (Chilindila, 2010) further explained that there is need to conduct a research to determine the attitude of men towards vasectomy as a family planning method.

In another interview with the in-charge at MCH clinic at Mwami Health Centre, the staff revealed that men do not come forward to request for vasectomy services.

During the period 2001 - 2005, 96 women have had tubal ligations but no man has had a vasectomy and trying to find out the reason why, she said she was not sure because no research has been done.
2.3 CONCLUSION

From the literature reviewed, it is clear that there are a number of factors affecting the utilization of vasectomy as a family planning method. Such factors include inadequate knowledge, myths and misconceptions. In Countries like the U.S.A and Mexico literature has revealed that the number of men undergoing vasectomy is increasing. In Africa, the most of the literature available talks about female family planning methods. There is very little on male involvement in family planning programmes. Vasectomy is still unknown in many African societies including Zambia.

Its current low level of prevalence does not indicate that this method is intrinsically unpopular or impractical; The AIDS crisis has shown that it is possible to raise the use of male methods substantially through a multitude of promotion strategies; this is true many men throughout the world including Zambia are potential clients for vasectomy services, especially if they can have access to non-coercive, well-designed and widely accessible services.
3.0 RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

The research design refers to the overall plan for addressing a research question including the specifications for enhancing the integrity of the study (Burns and Grove, 2005). It spells in advance the strategies the investigator will adopt to develop information that is accurate and interpretable.

In this study, a descriptive, non-experimental, cross-sectional design was used. A descriptive study is a non-experimental research designed to discover new meaning and to provide new knowledge when there is very little known about the phenomenon of interest (Burns and Grove, 2005).

The study was a cross-sectional and involved collection of data at one particular point in time. The study was conducted in Mwami Catchment area Chipata District Eastern province.

A sample survey was done to obtain information regarding the activities, beliefs and attitudes of people through direct questioning of a sample of respondents.

3.2 RESEARCH SETTING

Research setting is the physical location and conditions in which data collection takes place in a study (Pilot and Beck, 2008)

The study was conducted in Mwami Catchment area in Paramount Chief Mpezeni territory in Chipata District. The Catchment area has got one 1st Level Hospital, which is Mwami Adventist Hospital, 8 Health centres and 2 Health Posts with 6 basic Schools. The catchment population is 57,000 and a projected growth rate of 5.6%.

Since I was at Mwami Hospital, the site was chosen because it is centrally located and the sample was a representative of the entire population.
3.3 STUDY POPULATION

Study population refers to the entire number of units under study or the whole or the inhabitants (Burns and Grove, 2005). The study population of this study will be the residents of Paramount Chief Mpezeni area who will be Males of 15-50 years old. Study population consist of the target population and the accessible population.

3.3.1 Target population

A target population is defined as the entire set of individuals or elements who meet the sampling criteria (Burns and Grove, 2005). The target population in this study were sexually active men between the ages of 18 to 50 years of Mwami catchment area in Chipata district.

3.3.2 Accessible Population

Accessible population is the aggregate of cases that conform to the designated criteria and that are accessible to the researcher as a pool of subjects for a study (Polit and Hungler 19195). In this study the accessible population were Men of Mwami Catchment area in Chipata District.

3.5 SAMPLE SELECTION

A sample denotes the selected group of people or elements included in a study. Sampling is the process of selecting a portion of the population to represent the entire population in the study (Polit and Hungler, 2001). A convenient sampling was used.

In selecting the respondents, simple random sampling was used. According to Basavantapa 2007, simple random sampling is defined as a probability sampling procedure in which a required number of sampling units are selected at random from the population in such a way that each population element has an equal chance of being selected for the study. The selection was done at Mwami Hospital and Mwami Health centre.
3.5.1 Inclusion Criteria

The inclusion criterion is defined as the criterion that specifies the characteristics of the population (Burns and Grove 2005). The study included sexually active men aged 18 years and above who access health services at Mwami Mission Hospital and Mwami health Centre.

3.5.2 Exclusion criteria

An exclusion criterion is defined as a population that does not poses the required characteristics for the study group (Burns and Grove, 2005).

In this study, male health workers working at the mentioned Hospital and Clinic were not included in the study as it was assumed that the staff were oriented to the modern methods of contraception, and may have high knowledge levels and that their attitude may have been influenced by the profession in which they are.

3.6 SAMPLE SIZE

Sample size is a smaller part of the population selected in such a way that the individuals in the sample represent the characteristics of the population typically shown as ‘n’ (Burns and Grove, 2005). In this study a total of fifty (50) respondents comprised the sample. The reason for selecting this sample size was due to limited time, inadequate human and financial resources.

3.7 DATA COLLECTION TOOL

A tool in research refers to an instrument or equipment used to collect data (Burns & Grove, 2005). A semi structured interview schedule was used to collect data from the respondents.

The questionnaire had both open and closed ended questions. It was divide into three (3) sections namely; Demographic data, Knowledge and Attitude of men towards vasectomy as a family planning

3.8 DATA COLLECTION TECHNIQUE

Data collection technique is the actual method on how the data is going to be collected (Polit and beck, 2006). In this study, data was collection was done through administering questionnaires to the respondents who showed willingness to complete them.
Firstly, clearance was obtained from the supervisor and Head of Department of Nursing Sciences, School of Medicine. Further, I also obtained permission from the District Medical Officer to allow me to conduct the study in the district. Permission was also obtained from the Hospital Administrator at Mwami Hospital and from the In-charges at Mwami Health Centre. Finally, the other permission was obtained from all the respondents. Each respondent was assured of privacy, confidentiality and anonymity by using serial numbers on each questionnaire. After collecting the questionnaires from each respondent, the investigator checked them for consistency based on the responses and completeness of the tool and then thanked them for taking part in the study.

3.9 VALIDITY

Validity is the degree to which an instrument measures what is intended to measure (Basavantapa, 2007). In this study, the researcher ensured validity by employing strategies that dealt with threats to validity. These strategies included; appropriate selection of study design, data collection tool and pre-testing research instruments in the pilot study after being checked by the supervising lecture.

Validity constitutes external and internal validity.

**Internal validity** refers to interpretation of findings within the study or data collected. It seeks to find out if the effect on the dependent variable observed was actually due to the action of the independent variable (Burns and Grove, 2005).

To ensure internal validity I assured that questions which I asked the respondents were uniform, written in a simple and clear language. The questionnaire was pretested to insure that desired information was collected. The same instrument was used to all the respondents.

**External validity** is the extent to which the findings of the research can be generalized to a larger population or to a different social, economical, political setting (ibid). To ensure external validity, I ensured that the respondents comprises of different religious, socio-economic, political and different educational back grounds. The questionnaire was administered to all the respondents without changes. The questionnaire was also administered to the respondents without any influence from the investigator.
3.10 RELIABILITY

Reliability is the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure whereby if the same instrument was used after some time, it will have the same responses (Burns and Groove, 2009).

Reliability was measured by standardising the instrument. The researcher used expert to review it such as my supervisor before going ahead to administer it. The tool was tested before the study was conducted using a pilot study.

3.11 PILOT STUDY

A pilot study is defined as the study carried out at the end of the planning phase of research in order to explore and test the research elements. It is a small scale rehearsal that proceeds as if it were the actual study, except for the fact, that subjects who will participate in the actual study are not used (Basavanthappa, 2006).

The pilot study was conducted in Feni sub centre as this area is a highly populated and it comprises of people with different background, culture, and educational background.

The sample comprised of 10 Men. This helped me to assess the appropriateness and clarity of the questions as well as test the feasibility, validity and reliability of the questionnaire.

3.12 ETHICAL AND CULTURAL CONSIDERATIONS

In the first place the permission was obtained from the University of Zambia, department of Nursing Sciences and before going in the field, the researcher obtained written permission to collect data for the pilot and actual study from the Medical officer, Chipata District Health office and the Hospital Administrator, Mwami Mission Hospital. Verbal permission was sought from each and every respondent. No respondent was forced to take part in the study. The nature and purpose of the study was thoroughly explained to the respondents so that they would be able to make an informed decision and that they had the right to participate or with draw from the study. It was also mentioned that there would no monetary gain by participating in the study. The respondents were assured anonymity and confidentiality.
On the questionnaire, no names were written instead the numbers were used. The completed questionnaire were secured and no unauthorized person touched them or having access to the information that was collected.
4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION
This chapter describes the analysis and interpretation of the respondent’s knowledge and attitude of Men towards vasectomy as a family planning method. The statistical information was derived from a sample of 50 Men who were interviewed.

4.2 DATA ANALYSIS
Data analysis is the systematic organization and synthesis of research data, and the testing of research hypothesis using those data (Polit and Beck, 2005). Data can only be useful when arranged in a meaningful manner, in order to be able to derive patterns of relationships (Polit and Hungler, 2006). Data was reorganized according to three major sections; Demographic, Knowledge and data on attitude. Data was then edited for completeness and later entered on the data master sheet for manual procession. Both qualitative and quantitative data were analyzed.

4.2.1 Quantitative data
According to Polit & Beck (2005), quantitative data is defined as information collected in the course of the study that is in a quantified or numerical form. The responses from closed ended questions were entered on the data master sheet manually and then data displayed in frequency tables.

4.2.2 Qualitative data
Qualitative data is the information collected in the course of the study that is in the narrative form (Polit & Beck, 2005). For open ended questions each response was transcribed, read and reread to get the concepts in the responses and later written down in themes and displayed in frequency table.
4.3 PRESENTATION OF FINDINGS

The findings of the study have been presented in frequency tables, pie charts, and graphs. The frequency tables summarised the results of the study to ensure that the readers understand the findings of the research study. The use of pie charts and graphs in the presentation of findings makes the work neat, presentable and easy to read by the reader. Cross tabulations of the variables help to show clearly the relationship between variables and enable the researcher to draw meaningful inferences. The findings from this study are presented according to the sequence and sections in the questionnaire i.e. demographic data, knowledge, and attitude towards vasectomy as a family planning method.

4.3.1 SECTION A:

4.3.1.1 Demographic Data

This section looks at the demographics of the respondents, which include age of the respondents, their marital status, and number of children, religion, tribe, and level of education. This data has been summarized in one table as shown below.

Table 4: Demographic data (n = 50)

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGE RANGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 - 25</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>26 - 35</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>36 - 45</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>46 - 50</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>MARITAL STATUS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Married</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Separated</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>RELIGIOUS DENOMINATION</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Roman Catholic</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>UCZ</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Pentecost</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>SDA</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRIBE</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonga</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Chewa</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Tumbuka</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Ngoni</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION LEVEL</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Primary</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Secondary</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>College/University</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF CHILDREN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>1 – 3</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>4 – 6</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>7 – 9</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The data on the previous page shows that close to half of the respondents, 19 (38%) were in the age group of 36 – 45 years. Most of the respondents 32 (64%) were married. Almost half of the respondents 24 (48%) were belonged to Seventh Day Adventist church. The Chewas and Ngonis tribe were the majority 14 (28%) for each tribe. Slightly half of the respondents, 28 (56%) had attained College/university level of education, and about 15 (30%) of the respondents had no children.
4.3.2 SECTION B

4.3.2.1 Knowledge on Vasectomy

This section presents knowledge on Vasectomy. The table below shows the respondent’s knowledge levels related to whether they got the questions correct or wrong in relation to their responses on knowledge.

Table 5: Information on knowledge (n=50)

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is vasectomy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cutting &amp; ligating (tying) the vas deferens</td>
<td>17</td>
<td>34%</td>
</tr>
<tr>
<td>Castration (removing the testes)</td>
<td>33</td>
<td>66%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td>Where did you get this information about vasectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Friends</td>
<td>25</td>
<td>50%</td>
</tr>
<tr>
<td>Clinic/Hospital staff</td>
<td>10</td>
<td>20%</td>
</tr>
<tr>
<td>Books</td>
<td>15</td>
<td>30%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td>Can a man after vasectomy have children again?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td>When can a man have vasectomy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any time he decides that he want no more children</td>
<td>15</td>
<td>30%</td>
</tr>
<tr>
<td>After 60 years</td>
<td>35</td>
<td>70%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td>Can vasectomy makes a man lose his sexual ability?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13</td>
<td>36%</td>
</tr>
<tr>
<td>No</td>
<td>37</td>
<td>74%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td>Can vasectomy prevent a man from contracting STIs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td>Can a man after vasectomy still use a condom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>44%</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>56%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>
More than half 33 (66%) of the respondents knew what vasectomy was all about, and 25 (50%) of the same number indicated that friends were source of information. Almost 3 quarters 37 (74%) of the respondents indicated that vasectomy can make a man lose his sexual ability, and only 15 (30%) of the respondents were able to mention the correct time when a man can go for vasectomy.

Figure 1: Level of knowledge on vasectomy (n=50)

The pie chart above indicates that the majority 64% of respondents had low level of knowledge while 36% had high level of knowledge on vasectomy as a family planning method.

Table 6: Relationship between knowledge and age (n=50)

<table>
<thead>
<tr>
<th>Level Of Knowledge</th>
<th>Age Range</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18-25</td>
<td>26-35</td>
</tr>
<tr>
<td>High</td>
<td>4 (33.3%)</td>
<td>3 (33.3%)</td>
</tr>
<tr>
<td>Low</td>
<td>8 (66.7%)</td>
<td>6 (66.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>12 (100%)</td>
<td>9 (100%)</td>
</tr>
</tbody>
</table>

The table above shows that respondents between the ages of 46-50 years, 5 (50%) had high knowledge, while 5 (50%) also had low knowledge about vasectomy. The age group ranging 36-45 had a highest number of respondents 13 (68%) who were not knowledgeable about vasectomy.
Table 7: Relationship between Knowledge and Level of education (n=50)

<table>
<thead>
<tr>
<th>Level Of Knowledge</th>
<th>Level of education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Primary</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
<td>1 (11.1%)</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>8 (88.9%)</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>9 (100)</td>
</tr>
</tbody>
</table>

Table 7 above, shows that respondents who went up to primary level, 1 (11.1%) had high level of knowledge, 8 (88.9%) had low level knowledge. For those who went up to secondary level, 5 (38.5%) had high level knowledge while 8 (61.5%) had low level of knowledge. Respondents who went up to college or university level, 12 (42.9%) had high level of knowledge on Vasectomy as a family planning method.

4.3.3 SECTION C
4.3.3.1 Attitude towards utilization of Vasectomy
This section presents data on attitude towards utilization of vasectomy. This data has been summarized in one table as shown below.
<table>
<thead>
<tr>
<th>QUESTIONS &amp; MARKED RESPONSES</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does/would your religion say about vasectomy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly support</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Support</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>Against</td>
<td>24</td>
<td>48%</td>
</tr>
<tr>
<td>Strongly against</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>What does your tribe/custom say about vasectomy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly support</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Support</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Against</td>
<td>37</td>
<td>74%</td>
</tr>
<tr>
<td>Strongly against</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>What is your opinion about vasectomy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is good</td>
<td>19</td>
<td>38%</td>
</tr>
<tr>
<td>It is bad</td>
<td>31</td>
<td>62%</td>
</tr>
<tr>
<td>Would you go for vasectomy as a family planning method?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>60%</td>
</tr>
<tr>
<td>Do you think vasectomy should be encouraged?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>Agree</td>
<td>16</td>
<td>32%</td>
</tr>
<tr>
<td>Not sure</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td>30%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>12</td>
<td>24%</td>
</tr>
<tr>
<td>What is the attitude of health workers/family planning providers towards vasectomy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>They give encouragement</td>
<td>4</td>
<td>8%</td>
</tr>
<tr>
<td>They encourage moderately</td>
<td>25</td>
<td>50%</td>
</tr>
<tr>
<td>They don’t talk about it</td>
<td>17</td>
<td>34%</td>
</tr>
<tr>
<td>They discourage</td>
<td>4</td>
<td>8%</td>
</tr>
</tbody>
</table>

Almost half (48%) of the respondents indicated that their religion is against the issue of encouraging Men to opt for vasectomy as a family planning method.
Majority of the respondents 37 (74%) indicated that their tribe would not support men to go for Vasectomy. On personal opinion about Vasectomy, more than half 31 (62%) of respondents indicated that Vasectomy is bad. Majority of respondent 30 (60%) indicated that they would not go for vasectomy as a family planning method. On the issue of whether Vasectomy should be encouraged or not, only 16 (32%) agreed with the statement. Half (50%) of the respondents indicated that health workers encourage men moderately to go for vasectomy as a family planning method.

Table 9: Summary of attitude towards utilization of vasectomy (n=50)

<table>
<thead>
<tr>
<th>Attitude category</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>19</td>
<td>38%</td>
</tr>
<tr>
<td>Negative</td>
<td>31</td>
<td>64%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>

The data above shows the aggregate findings of respondent’s attitude towards utilization of vasectomy as a family planning. Results shows that out of the total number of 50 respondents, majority 31 (64%), had negative attitude, while only 19 (38%) of the respondents had positive attitude.

Table 10: Respondents Attitude in relation to age

<table>
<thead>
<tr>
<th>Attitude Level</th>
<th>Age Range</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18-25</td>
<td>26-35</td>
</tr>
<tr>
<td>Positive</td>
<td>6 (50%)</td>
<td>5 (55.6%)</td>
</tr>
<tr>
<td>Negative</td>
<td>6 (50%)</td>
<td>4 (44.4%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>12 (100%)</td>
<td>9 (100%)</td>
</tr>
</tbody>
</table>

The data above shows that the age group between 26-35 years had a highest number of respondents 5 (55%) with positive attitude towards vasectomy as a family planning method, while the age group between 46-50 years had the highest number of respondents with a negative attitude towards vasectomy.
Table 11: Respondents Attitude in Relation to Denomination

<table>
<thead>
<tr>
<th>Attitude Level</th>
<th>Respondent's Religious Denomination</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RCC</td>
<td>UCZ</td>
</tr>
<tr>
<td>Positive</td>
<td>3 (33.3%)</td>
<td>2 (22.2%)</td>
</tr>
<tr>
<td>Negative</td>
<td>6 (66.7%)</td>
<td>7 (77.8%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9 (100%)</td>
<td>9 (100%)</td>
</tr>
</tbody>
</table>

The majority of the respondents (24) who were SDA, 50% had positive attitude and 50% hand negative attitude towards Vasectomy as a family planning method, while the highest number of respondents 7 (77%) who had negative attitude towards vasectomy belonged to UCZ.

Table 11: Respondents’ level of knowledge in relation to Tribe

<table>
<thead>
<tr>
<th>Attitude Level</th>
<th>Respondent’s Tribe</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tonga</td>
<td>Chewa</td>
</tr>
<tr>
<td>Positive</td>
<td>3 (50%)</td>
<td>5 (35.7%)</td>
</tr>
<tr>
<td>Negative</td>
<td>3 (50%)</td>
<td>9 (64.3%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6 (100%)</td>
<td>14 (100%)</td>
</tr>
</tbody>
</table>

Between the Chewa and Ngoni who had the highest number of respondents, the Ngoni had the highest number of respondents 10 (71.4%) who had negative attitude towards vasectomy, while the Tonga and Tumbuka had half the number of respondents (50%) who had positive and negative attitude towards vasectomy.
Table 12: Respondent’s attitude in relation to their level of education

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Level of Education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Primary</td>
</tr>
<tr>
<td>Positive</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Negative</td>
<td>0</td>
<td>9 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>9 (100%)</td>
</tr>
</tbody>
</table>

Respondents with primary education, all the 9 (100%) had negative attitude towards vasectomy. For those with secondary education, only 3 (23.1%) had positive attitude while the majority 10 (76.9%) had negative attitude towards vasectomy. For respondents with college or university education, only 12 (42.9%) had positive attitude, while the majority had negative attitude towards vasectomy as a family planning method.

Table 13: Respondent’s Knowledge in relation to Attitude

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Respondent’s Attitude</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>High</td>
<td>10 (52.6%)</td>
<td>8 (25.8%)</td>
</tr>
<tr>
<td>Low</td>
<td>9 (47.4%)</td>
<td>23 (74.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>19 (100%)</td>
<td>31 (100%)</td>
</tr>
</tbody>
</table>

Out of 18 Respondents with high level of knowledge on vasectomy, the majority 10 (52.6%) had positive attitude towards vasectomy as a family planning method, while 8 (25.8%) had negative attitude towards vasectomy.
CHAPTER 5

DISCUSSION OF FINDINGS AND IMPLICATIONS FOR THE HEALTH CARE SYSTEM

5.1 CHARACTERISTICS OF THE SAMPLE

The sample consisted of men with age ranging from 18-50 years. The majority of the respondents 19 (38%) were aged between 36-45 years old mostly because they were the ones found at the Hospital and Health Centre during data collection, and they are the energetic and mostly are the ones who takes the sick to the Hospital, hence larger the number. 11 (22%) were aged between 18-25 years, and 10 (20%) for both age groups 26-35 years and 46-50 years (table 4, page 39).

The majority of the respondents 32 (64%) were married, and 16 (32%) were single and this could be largely because they are still adolescents and are in school. 2 (4%) were on separation (Table 4).

The study also revealed that all respondents were Christians though belonging to different religious denomination; this is because Zambia is predominantly a Christian nation as pronounced by the third republic of Zambia in 1995. The majority of the respondents 24 (48%) belonged to the Seventh Day Adventist Church, 9 (18%) to both Roman Catholic and United Church of Zambia. 4 (8%) belonged to both the Pentecostal Church and other denomination (Table 4).

These findings are similar to study conducted in Ghana which indicated that the significant of religion is that it is an indicator of the influence of the community level cultural norms on acceptance of family planning method.

Mwami Hospital and Mwami Health Centre in Chipata district is predominantly an Ngoni and Chewa speaking area. It was therefore not surprising to find that majority of the respondents (28%) were for both Ngoni and Chewa speaking people. The Tumbuka constituted 16%, the Tonga 12% of the respondents and 16% were from other tribes (Table 4). The fact that a total of 28% of the respondents were from other tribes shows that Zambians freely intermingle in different provinces, regardless of their tribe.
The study also indicate that no respondent had never been to school, this indicates that free education in Zambia is bearing fruits which is a positive thing, it might also be an advantage that if people are given information on good health behaviour, people will easily comply. The majority of these respondents 28 (56%) had gone up to College/University level, 13 (26%) had gone up to Secondary school level and 9 (18%) had gone up to primary school level.

The majority of the respondents 15 (30%) had no children, generally because most of the respondents (32%) were youth who were not yet married and therefore had no children. 14 (28%) had 1-3 children. 13 (26%) had 4-6 children, and 8 (16%) had 7-9 children, this could be those who probably never uses any family planning methods.

5.2 DISCUSSION OF EACH VARIABLES

5.2.1. Knowledge of men about Vasectomy

Knowledge about vasectomy is essential to help men make informed choices about using vasectomy as a family planning method.

Knowledge according to Basavantapa (2007) is defined as “a state of knowing about a particular fact or situation. Knowledge is a pre condition for higher utilization of any given services. Therefore for men to appreciate the importance of family planning in relation vasectomy, they must have basic knowledge about this method.

The study revealed that out of 50 respondents, only 18 (36%) had high knowledge about vasectomy while the majority 32 (64%) had low level of knowledge. The study also shows that 33 (66%) of the respondents were able to give the correct answer that vasectomy was the “cutting of the vas deference” while 17 (34%) of the respondents gave a wrong answer as they stated that vasectomy was “castration”. 78% stated that the source of information about vasectomy was friends indicating that; there was little information coming from Heath institutions educating the community on vasectomy as a family planning method.

If men believe that vasectomy is castration, this misconception can lead to men not accepting vasectomy as a family planning method.
This implies that there is need for health workers to intensify their health information on vasectomy as a family planning method.

Men were also asked whether vasectomy can make a man lose his sexual ability; the majority 74% responded that ‘yes’ vasectomy can make a man lose his sexual ability, while only 36% stated that vasectomy can not make man lose his sexual ability (Table 8.)

This finding is inline with the study done by Touré (2006) which reviewed that most of the respondents stated that vasectomy has the ability of reducing men’s sexual ability.

5.2.2 Attitude of men towards Vasectomy

In Zambia, religion plays a big role in influencing the beliefs of people. As a Christian nation, a large number of Zambian people belong to one religious denomination or another, and people usually do what they are taught at church. When asked whether their religion allows them to go for vasectomy as a family planning method, only 42% of the respondents indicated that their religion supports vasectomy as a family planning method, while the majority 58% indicated that religion does not support vasectomy as a family planning method. This could be due to the fact that most of the religious denominations lack knowledge about vasectomy and therefore do not discuss it. This can lead to men not understanding what vasectomy is all about and how it works, hence affecting the uptake of vasectomy as a family planning method. For this reason, Sensitization of the public about vasectomy has to be done in churches as well so that church members and religious leaders can acquire the knowledge and be able to teach and encourage their members to go for vasectomy.

Respondents were also asked on what their tribe/custom says about vasectomy, the majority of the respondents 74% stated that their tribe was against vasectomy and 22% stated that tribe was strongly against vasectomy. Only 4% stated that their tribe would support vasectomy. This is largely because traditionally, large families are valued in the African/Zambian society. For example, the Ngoni people in Eastern province, they consider high number children as wealth and the more one has, the more prestigious they are in the community.
Regarding whether they would opt for vasectomy as a family planning method, 60% of the respondents stated that they would not go for vasectomy for various reasons. 66% stated that they would not opt for vasectomy because it is the same as castration. The other reason which came out strongly was the issue that vasectomy reduces sexual ability in men. These findings are similar to the study by Enwereji (2009) in his study on attitude of men towards vasectomy as a family planning method in Nigeria, which indicated that Vasectomy was viewed as castration by 55 (40.7%). There was a lack of knowledge of vasectomy and attitudes towards it were based on myths and misconceptions regarding the procedure.

Respondents were further asked whether Health workers/Family planning providers promote vasectomy as a family planning method or not. Only 8% stated that health workers/Family planning providers give encouragement towards utilization of vasectomy as a family planning method while 92% stated that health workers/family planning providers encourage moderately and that sometimes they don’t talk about vasectomy as a family planning method. The attitude of health workers towards vasectomy has an influence on Men’s attitude and views towards vasectomy (FHI, 1997). A study conducted by Touré L, (2007) indicates that health workers do not give men information about vasectomy. Health workers play a big role in promoting health services to the general public. A good example which has shown good results on vigorous campaign on health promotion is the recent campaign conducted by Ministry of Health on Male circumcision. This campaign has shown an increase in the number of males coming for male circumcision as a preventive measure against HIV transmission.

If this can also be done on promoting vasectomy as a family planning method, the numbers of men opt for vasectomy can increase. This can also be a very good strategy for male involvement in family planning services.

This study also revealed the respondents attitude in relation to level of education. In this study, interestingly level of education did not show to improve vasectomy acceptance. Out of the total number of respondents that is; (41) who had high level of education only 15 (36.6%) had positive attitude towards vasectomy as a family planning method, while the majority 26 (63.4%) had a negative attitude towards vasectomy (Table 12 page 48 ).
These results are similar to the study conducted by Ezegwui (2009) which indicated that only 10 (6.8%) of the respondents with high education their attitude to vasectomy was good while the majority (93.2%) had negative attitude towards vasectomy. This further shows that their level of education did not improve vasectomy uptake. In Zambia it has shown that through sensitization campaigns, a high number of women have stated to accept Bilateral Tubal Ligation (BTL) as a family planning method (DHS, 2007). Hence a concerted effort to involve men in reproductive health is needed.

5.2.3 Relationship between knowledge and level of education

On the relationship between knowledge on vasectomy and level of education, the study has shown that there is no relationship between knowledge and level of education on acceptance of vasectomy as a family planning method. The study has indicated that out of 41 respondents who had secondary and college/university, only 17 (41.5%) had high knowledge on vasectomy, while the majority 24 (58.5%) had low level of knowledge on vasectomy. This shows that despite having good educational background, the majority of the respondents had low level of knowledge about vasectomy as a family planning method.

This is contrary to the studies conducted in West Africa, Central and southern Africa which revealed that good educational background increases the knowledge on any family planning method. This is an indication that people are still lacking information on vasectomy as a family planning method despite have a sound educational background.
5.3 IMPLICATIONS ON THE HEALTH CARE SYSTEM

This section discusses the implications that this study will have on the health care system as regards to Practice, Administration, Education and Research.

5.3.1 Practice

The finding of this study has revealed that education does not improve vasectomy uptake. Out of the total number of respondents (41) who had high level of education only 19 (46%) had positive attitude towards vasectomy as a family planning method, while majority 22 (53.6%) had a negative attitude towards vasectomy. The study has also shown that health workers/family planning providers they encourage men moderately and that sometimes they don’t talk about vasectomy as a family planning method. The attitude of health workers towards vasectomy has an influence on Men’s attitude and views towards vasectomy (FHI, 1997).

A study conducted by Touré, (2007) also indicates that health workers do not give men information about vasectomy. Health workers play a big role in promoting health services to the general public. If health workers fail to promote vasectomy as a family planning method we can not expect men to go for vasectomy. Hence a concerted effort to involve men in reproductive health is needed. Campaigns similar to CARMMA 2010, and Male circumcision campaigns, need to be conducted to promote vasectomy as a family planning method. Interpersonal communication and counseling also can greatly improve vasectomy uptake by men, especially if this can be done during outreach activities and involvement of community health based agents (CHBA).

5.3.2 Administration

The study revealed that the majority of the respondents 80% indicated that they were not sure whether vasectomy services exist or not at Mwami Hospital which is the only first referral Hospital in Mwami Catchment area. Management need to advertise the vasectomy services which are available at the institution so that general public is aware that the service is available for free like any other family planning services which are rendered to the general public. This can be done through the local radio station known as Radio Breeze. Supervisory visits are also needed in all the 8 health centres to ensure that effective teaching strategies are used in delivering of family planning information to the communities.
5.3.3 Education

The study revealed that out of 50 respondents, only 18 (36%) had high knowledge about vasectomy while the majority 32 (64%) had low level of knowledge. To find out their knowledge levels, one of the questions asked was on “what is vasectomy”? and “what their source of information was”. The study shows that 33 (66%) of the respondents were able to give the correct answer that vasectomy was the “cutting of the vas deference” while 17 (34%) of the respondents gave a wrong answer as they stated that vasectomy was “castration”. 78% stated that the source of information about vasectomy were friends, indicating that there was little source from Heath institutions educating the community on vasectomy as a family planning method.

This simply shows that clients are not given full information concerning the method. Therefore there is a greater need for the health sector to empower the health workers with the knowledge concerning vasectomy as a family planning method. This can be done through pre-service and in-service or even through workshop and seminars.

According to WHO (2008), vasectomy is a simple procedure, even simpler than BTL for women which can be done even in an office as long as sterile techniques are maintained.

5.3.4 Research

Vasectomy is one of the oldest methods of family planning. In Zambia very little has been done in terms of research compared to other family planning methods such as jadelle, and BTL. It is for this reason that this method of contraception (vasectomy) is still met with a lot of myths and misconceptions. Hence further Qualitative research should be carried out to look for answers to these questions: (1) what is men’s role in fertility decision making? (2) How does a couple reach a consensus on the choice and use of a contraceptive method? Hence if this is not done, Men will continue perceiving family planning as an issue for women alone.
5.4 RECOMMENDATIONS

According to Gillard (2003), the word recommendation is defined as advice telling to someone what the best thing to do is. This section outlines the recommendations made to the Provincial Health Office, the District Health Office, and Mwami Hospital/ Mwami Health Centre.

5.4.1 Provincial Health Office

Campaigns similar to CARMMA 2010, and Male circumcision campaigns, need to be conducted to promote vasectomy as a family planning method. There is also need to equip health workers with necessary information and skills by conducting workshops on vasectomy, its techniques, benefits, and side effects. The PHO should also work in conjunction with the local media in the province such as Radio Breeze, so that vasectomy is advertised on mass media, for all men to hear about it and make informed choices.

5.4.2 District Health Office

The DHO should ensure that health care delivery centres are giving IEC to the men by carrying out supervisory visits and technical support to staff to ensure that information reaches even the people at the grass root level.

DHO should provide the IEC materials such as posters and pamphlets to the community through health centres and should ensure good referral system from the health centres to Mwami Hospital where vasectomy services are rendered.

5.4.3 Mwami Hospital/ Mwami Health Centre

Innovative programs, such as the use of support groups, dram groups, sporting events, fathers’ clubs, and male opinion leaders, are excellent and give the opportunity to involve more men in program design and implementation. They demystify FP, and remove its negative connotations. The successes from Malawi’s “Man to Man” and Swaziland’s “Man Talk” initiatives show that using men to inform and educate other men about family-planning works. Hence the Hospital/Health centres should ensure that these programmes are incorporated in out reach activities.
5.5 DISSEMINATION OF FINDINGS

Dissemination of findings entails the measures that would be undertaken to make known to the relevant authorities and the study subjects what the study has measured (Basavantappa, 2007).

The findings of this study will be disseminated by presenting a bound report to the Department of Nursing Sciences in the School of Medicine to serve as reference to other researchers. Other bound reports will be presented to the library, school of Medicine, CHAZ who are my sponsors, Chipata District Health office and Mwami Hospital.

The researcher also intends to present the findings through workshops, or publication as opportunity arises.

5.6 LIMITATIONS OF THE STUDY

Some of the limitations of the study were as follows: -

• The study sample used was too small to be representative of the population in Chipata District. The respondents selected were the clients who seek treatment at Mwami Hospital and Mwami Health centre. Therefore, generalization of the results should be made with caution as this sample may not be representative of the entire population in Mwami Catchment area.

• In this study, male nurses working in the mentioned Clinics and Hospital were not be included in the study as it was assumed that the staff were oriented to the modern methods of contraception, and may have high knowledge levels and that their attitude may be influenced by the profession in which they are.
References


THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF NURSING SCIENCES

INTERVIEW SCHEDULE

TOPIC: KNOWLEDGE AND ATTITUDE OF MEN TOWARDS UTILIZATION OF VASECTOMY AS A FAMILY PLANNING METHOD IN CHIPATA DISTRICT

Date of Interview: ________________________________

Place of Interview: ________________________________

INSTRUCTIONS TO THE INTERVIEWER

1. Introduce yourself to the respondent
2. Explain the purpose of the interview
3. Tell the respondent how he was selected and obtain verbal consent to interview him
4. Assure respondent of confidentiality and anonymity
5. Do not write name of respondent on interview schedule
6. Tick in the box corresponding to the correct answer or write responses in spaces provided.
SECTION A: DEMOGRAPHIC DATA

1. How old were you on your last birthday? Specify............

2. What is your marital status?
   (a) Single [ ]
   (b) Married [ ]
   (c) Divorced [ ]
   (d) Separated [ ]
   (e) Widowed [ ]

3. What is your religious denomination?
   (a) Roman Catholic [ ]
   (b) United church of Zambia [ ]
   (c) Pentecostal Assemblies of God [ ]
   (d) Seventh Day Adventist [ ]
   (e) Other, (specify)________________________

4. What is your tribe?
   (a) Tonga [ ]
   (b) Chewa [ ]
   (c) Tumbuka [ ]
   (d) Ngoni [ ]
   (e) Other, (specify)________________________

5. What is your highest level of education?
   (a) None [ ]
   (b) Primary [ ]
   (c) Secondary [ ]
   (d) College/ University [ ]
6. What do you do for a living?
   (a) Business [ ]
   (b) Formally employed [ ]
   (c) Unemployed [ ]
   (d) Other, specify ________________________________

7. What does your wife do for a living?
   (a) Housework [ ]
   (b) Business [ ]
   (c) Formally employed [ ]
   (d) Other, (specify) ________________________________

8. How many children do you have?
   (a) None [ ]
   (b) 1 -3 [ ]
   (c) 4 -6 [ ]
   (d) 7 - 9 [ ]
   (e) 10 and above [ ]
SECTION B: KNOWLEDGE

9. Have you heard about the family planning method called, “Vasectomy?”
   (a) Yes [ ]
   (b) No [ ]

10. If yes where did you get this information about Vasectomy?
    (a) Media [ ]
    (b) Friends [ ]
    (c) Clinic/Hospital staff [ ]
    (d) Books [ ]
    (e) Any other (specify) ...........................................

11. What is vasectomy?
    (a) Cutting and ligating (tying) the vas deferens (tubes) for the purpose of family planning [ ]
    (b) Castration (removing the testes) [ ]
    (c) Impotence [ ]
    (d) Cutting the urethra [ ]
    (e) Other, (specify) ________________________________

SECTION C: QUESTIONS ON ATTITUDE

12. What does/would your religion say about vasectomy?
    (a) Strongly support [ ]
    (b) Support [ ]
    (c) Against [ ]
    (d) Strongly against [ ]
13. What does your tribe/custom say about vasectomy?
   (a) Strongly support  [ ]
   (b) Support  [ ]
   (c) Against  [ ]
   (d) Strongly against  [ ]

14. What is your opinion about vasectomy?
   (a) It is good  [ ]
   (b) It is bad  [ ]
   (c) Other, (specify) ____________________________

15. Would you go for vasectomy as a family planning method?
   (a) Yes  [ ]
   (b) No  [ ]

16. If No to question 18, please explain________________________
    ____________________________
    ____________________________

17. Do you think vasectomy should be encouraged?
   (a) Strongly agree  [ ]
   (b) Agree  [ ]
   (c) Not sure  [ ]
   (d) Disagree  [ ]
   (e) Strongly disagree  [ ]

18. If the answer to question 17 is No, please explain
    ____________________________
    ____________________________
    ____________________________

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19. Are there vasectomy services here in Mwami or Chipata?
   (a) Yes [ ]
   (b) No [ ]

20. If Yes, how accessible are the services?
   (a) Readily accessible [ ]
   (b) Available sometimes [ ]
   (c) Not accessible [ ]
   (d) Other, specify ______________________ 

21. What is the attitude of health workers/family planning providers towards vasectomy?
   (a) They give encouragement [ ]
   (b) They encourage moderately [ ]
   (c) They discourages [ ]
   (d) They strongly discourage [ ]
Dear Participant,

My name is Samuel Chizalila; I am a student pursuing a Bachelor of Science in Nursing in the Department of Nursing Sciences at the School of Medicine, University of Zambia.

In partial fulfilment of my program, I am required to undertake a research project. My topic is on men attitude towards utilization of Vasectomy as a family planning method.

You have randomly selected to participate in this study and I wish to inform you that participation in this study is voluntary and you are free to withdraw at any stage of the study if you so wish. You will be asked some questions about vasectomy and its benefit as a family planning method. Any information you will give, will be kept confidential and no name will be written on the interview schedule.

In this study you there will be no monetary gain. This information you give, will help develop better understanding of the men attitude towards utilization of vasectomy as a family planning method and will be used by health planners and other organization who deals with family planning programs to come up with better programs which will suit every one.

I ..........................................................hereby called the participant understands the guidelines of this study and I am willing to participate in this study.

Dated this .......... day of ......................2010

Signature/ thumb print of respondent ......................

Signature of interviewer ...........................................
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<tr>
<th>TASK TO BE PERFORMED</th>
<th>RESPONSIBLE PERSON</th>
<th>DATES</th>
<th>DAYS REQUIRED</th>
</tr>
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<tr>
<td>1. Literature review</td>
<td>Researcher</td>
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<td>Continuous</td>
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<tr>
<td>2. Finalize research proposal</td>
<td>Researcher</td>
<td>12th July to 28th September, 2010</td>
<td>78 days</td>
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<td>4. Clearance from relevant authorities</td>
<td>DNS, Mwami Hospital, Chipata DHO, Feni Village Head Man.</td>
<td>4th October to 15th October 2010</td>
<td>12 days</td>
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<tr>
<td>6. Pilot study</td>
<td>Researcher and research assistant</td>
<td>11th September to 18th September 2010</td>
<td>8 days</td>
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<tr>
<td>7. Data collection (actual study)</td>
<td>Researcher and research assistant</td>
<td>18th September to 8th October 2010</td>
<td>20 days</td>
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<td>8. Data analysis</td>
<td>Researcher</td>
<td>11th October 2010 to 7th November 2010</td>
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<td>9. Report writing</td>
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<td>10. Submission of draft research report to DNS</td>
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<td>24th – 31st January 2011</td>
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<td>11. Finalizing research report and binding</td>
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<td>28th February 2011 to 6th April 2011</td>
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<td>12. Monitoring and evaluation</td>
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<td>Continuous</td>
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<tr>
<td>13. Dissemination of findings</td>
<td>Researcher</td>
<td>21st March 2011 to 8th April 2011</td>
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## APPENDIX 3: GANTT CHART

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<td>Researcher and research assistant</td>
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<tr>
<td>Report writing</td>
<td>Researcher</td>
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<tr>
<td>Submission of draft research report to PBN</td>
<td>Researcher</td>
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## APPENDIX 4: BUDGET

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<td>Reams of paper</td>
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APPENDIX 5

JUSTIFICATION OF THE BUDGET

In order for the research to be carried out successfully, the research proposal has been divided into five parts namely; stationery, secretarial services and personnel cost, information dissemination and transport cost.

Stationery
The reams of paper will be used for drafting the research proposal, interview schedule and research report. The scientific calculator will be used during the data analysis. The other accessories will be required for the routine collection of data.

Secretarial Services
Secretarial services will be used for typing, printing and photocopying the research proposal and the research report with the appendices. Binding of the research proposal and research report will also be done.

Personnel
A Research Assistant will be needed due to limited time and the nature of the study. The respondents may not be readily found because they usually go out for various types of work.
Lunch allowance will be needed because data collection may be taking 12 hours to try and find the respondents. Transport will also be needed because the main compound is quite far from Mwami Hospital. Taxis will have to be used because there are no minibuses operating within the area.

Contingency
This is an amount of money equivalent to 10% of the total budget which is included to the total amount to cover for shortfalls. It is also used to cushion the effects of inflation.
The Hospital Administrator  
Mwami Adventist Hospital  
P/B 5,  
Chipata,

U.F.S: The Head – Department of Nursing Sciences  
University of Zambia  
P.O Box 50110  
Lusaka.

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT A RESEARCH IN CHIPATA DISTRICT

I am a fourth year student pursuing a Bachelor of Science Degree in Nursing at the above mentioned institution. In partial fulfillment of this program, I am required to carry out a research project.

I am therefore, requesting for permission to conduct this study at Mwami Hospital/Mwami Health Centre. I intend to interview men accessing family planning and other services from Mwami Hospital and Mwami Health Centre from 11th October 2010 to 12 November 2010. The Topic of my study is Knowledge and attitude men towards utilization of Vasectomy as a family planning method in Chipata District.

Thank You in anticipation,

Yours Faithfully,

Samuel Chizalilila

4th Year BSc. NRS Student
The Medical Officer
Chipata District Health Office
Chipata.

U.F.S: The Head – Department of Nursing Sciences
University of Zambia
P.O Box 50110
Lusaka.

Dear Sir/Madam,

**RE: PERMISSION TO CONDUCT A PILOT STUDY**

I am a fourth year student pursuing a Bachelor of Science Degree in Nursing at the above mentioned institution. In partial fulfillment of this program, I am required to carry out a research project.

I am therefore, requesting for permission to conduct this Pilot Study at Mwami Hospital and Mwami Health Centre. I intend to interview men accessing family planning and other services from Mwami Hospital and Mwami Health Centre from 11th October 2010 to 18th October 2010. The Topic of my study is **Knowledge and attitude men towards utilization of Vasectomy as a family planning method in Chipata District.**

Thank You in anticipation,

Yours Faithfully,

Samuel Chizalila

4th Year BSc. NRS Student
September 2010.

The Medical Officer
Chipata District Health Office
Chipata,

U.F.S: The Head – Department of Nursing Sciences
University of Zambia
P.O Box 50110
Lusaka.

Dear Sir/Madam,

**RE: PERMISSION TO CONDUCT A RESEARCH IN CHIPATA DISTRICT**

I am a fourth year student pursuing a Bachelor of Science Degree in Nursing at the above mentioned institution. In partial fulfillment of this program, I am required to carry out a research project.

I am therefore, requesting for permission to conduct this study at Mwami Hospital/Mwami Health Centre. I intend to interview men accessing family planning and other services from Mwami Hospital and Mwami Health Centre from 11th October 2010 to 12 November 2010. The Topic of my study is **Knowledge and attitude men towards utilization of Vasectomy as a family planning method in Chipata District.**

Thank You in anticipation,

Yours Faithfully,

Samuel Chizalila

4th Year BSc. NRS Student