KNOWLEDGE, ATTITUDE AND ACCEPTANCE OF VASECTOMY AS A METHOD OF CONTRACEPTION AMONG MALE STAFFS IN A TERTIARY HEALTH INSTITUTION

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OCTOBER,2025

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IN PARTIAL FULFILMENT OF THE AWARD OF DEGREE OF BACHELOR OF NURSING SCIENCE ,FACULTY OF NURSING SCIENCES, UNIVERSITY OF BENIN, BENIN CITY

OCTOBER,2025

DECLARATION

This is to declare that this research project titled **"KNOWLEDGE, ATTITUDE AND ACCEPTANCE OF VASECTOMY AS A METHOD OF CONTRACEPTION AMONG MALE STAFFS IN UNIVERSITY OF BENIN TEACHING HOSPITAL"** was carried out by OMOKHEGBELE SUCCESS AISOSA it is solely the result of my work except when acknowledged as being derived from other person(s) or resources.

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CERTIFICATION/APPROVAL

This is to certify that this research project titled **" KNOWLEDGE, ATTITUDE AND ACCEPTANCE OF VASECTOMY AS A METHOD OF CONTRACEPTION AMONG MALE STAFFS IN UNIVERSITY OF BENIN TEACHING HOSPITAL"** was carried out by OMOKHEGBELE SUCCESS AISOSA with Matriculation Number **BMS1806821** in the Faculty of Nursing Sciences, under the supervision of **MRS. F. A ESEBAME**

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MRS. F. A ESEBAME

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External Examiner

DEDICATION

This work is dedicated to GOD ALMIGHTY who provided me with the strength to complete my academic journey.

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ABSTRACT

Despite the availability and effectiveness of vasectomy as a permanent method of male contraception, its acceptance remains low in many developing countries, including Nigeria. Misconceptions, cultural norms, and religious beliefs significantly hinder its uptake. This study assessed the knowledge, attitude, and acceptance of vasectomy among male staff at the University of Benin Teaching Hospital (UBTH), Benin City. A descriptive cross-sectional survey design was employed. A stratified random sampling technique was used to select 278 male staff across different departments of UBTH. Data were collected using a structured, pretested questionnaire and analysed using the Statistical Package for the Social Sciences (SPSS) version 26.0. Descriptive and inferential statistics were used to interpret the results. The study revealed that only 41% of respondents had good knowledge of vasectomy, with a grand mean score of 1.4, indicating a generally poor understanding. Attitudes were predominantly negative, with 56% expressing unfavourable views and a mean attitude score of 2.1. Acceptance of vasectomy was also low, as only 38% indicated willingness to consider the procedure. Cultural and religious beliefs, fear of complications, perceived threats to masculinity, and misinformation about the procedure were identified as major barriers to acceptance. Despite working in a healthcare setting, many respondents held misconceptions about vasectomy's effects on sexual performance and health. The study found poor knowledge, negative attitudes, and low acceptance of vasectomy among male staff at UBTH. These findings underscore the persistence of cultural, religious, and psychological barriers even within educated, medically-inclined populations. Targeted health education interventions are urgently needed to dispel myths, address cultural concerns, and promote accurate information about vasectomy among healthcare workers. Empowering male staff with correct knowledge could enhance their role as advocates for male involvement in family planning.

Keywords: knowledge, attitude, acceptance, vasectomy, contraception, male staffs

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Globally, family planning remains a cornerstone of public health and population control strategies, significantly contributing to the reduction of maternal and child mortality, enhancement of economic stability, and improvement of quality of life (White et al., 2022). Among the various contraceptive methods available, vasectomy stands out as a highly effective, permanent method for men. It is a simple surgical procedure that involves cutting or sealing the vas deferens to prevent sperm from mixing with semen during ejaculation. Despite its safety, cost-effectiveness, and minimal health risks, vasectomy remains underutilized—particularly in low- and middle-income countries (Ndu et al., 2022; Sharma et al., 2024). In Nigeria, and sub-Saharan Africa at large, the uptake of vasectomy is remarkably low compared to female contraceptive methods such as tubal ligation or the use of hormonal contraceptives. This disparity is deeply rooted in sociocultural norms, religious beliefs, poor knowledge, and misconceptions about the procedure (Olabode et al., 2024; Nwankwo et al., 2022). Many men believe that vasectomy leads to a loss of sexual function, masculinity, or is an outright emasculation. These misconceptions are compounded by the perception that reproductive responsibility lies solely with women (Nicholas et al., 2021; Sait et al., 2021).

Studies in Nigeria and other parts of Africa have consistently shown that knowledge about vasectomy among men is generally poor. For instance, Umeobieri et al. (2023) found that a significant number of married male workers at the University of Nigeria, Enugu Campus, had limited understanding of vasectomy and held negative

perceptions about its impact on male health and virility. Similarly, Auma et al. (2025), in a study conducted in Uganda, revealed that many men were not only unaware of vasectomy as a contraceptive option but also considered it culturally inappropriate. These findings suggest a persistent gap in reproductive health education that targets men. Attitude also plays a critical role in the acceptance of vasectomy. Amilia et al. (2024) and Khafidzatunnisa et al. (2024) emphasized the influence of personal attitudes and subjective norms on the intention to adopt vasectomy. In particular, their studies highlighted that men who had accurate knowledge and perceived social support were more likely to have a positive attitude towards vasectomy and consider its uptake. However, in many Nigerian communities, social stigma, fear of spousal disapproval, and concerns over community perception act as powerful deterrents (Shaibu et al., 2024; Sangam et al., 2023).

In the healthcare setting, including tertiary institutions such as the University of Benin Teaching Hospital (UBTH), one might expect higher levels of awareness and a more favorable disposition towards vasectomy due to exposure to medical information and reproductive health programs. Nonetheless, existing studies suggest that even among health workers, misconceptions and low acceptance of vasectomy persist (BUSSI et al., n.d.; Chinnaiyan & Babu, 2021). This contradiction underscores the complexity of sociocultural and psychological factors that influence decision-making, even among educated and medically-informed populations. The role of educational interventions in shaping knowledge and attitudes has been well-documented. For example, Dey et al. (2025) demonstrated that targeted teaching programs significantly improved knowledge and perception of no-scalpel vasectomy among community health workers. However, such structured interventions are often lacking in Nigerian institutions,

including hospitals, where continuous education for male staff on male-centered family planning options is not prioritized.

The importance of involving men in reproductive health decisions cannot be overemphasized. Male participation is essential not only for achieving gender equity in family planning responsibilities but also for improving overall contraceptive uptake and reproductive health outcomes (Nath & Ng, 2023; Prieto-Campos et al., 2023). By understanding the levels of knowledge, attitudes, and acceptance of vasectomy among male staff at UBTH, this study seeks to provide evidence that can guide educational interventions and policy development to encourage male involvement in family planning. Despite the proven benefits of vasectomy, its low uptake in Nigeria is a public health concern. Investigating the knowledge, attitudes, and acceptance of vasectomy among male staff at the University of Benin Teaching Hospital is crucial to identify existing gaps and barriers. The outcome of this study could inform tailored health promotion strategies aimed at increasing the visibility and acceptance of vasectomy, thereby promoting shared responsibility in reproductive health and enhancing the overall effectiveness of family planning programs in the country.

1.2 Statement of problem

Despite the increasing global emphasis on shared responsibility in family planning, the uptake of vasectomy among men remains low, especially in sub-Saharan Africa, including Nigeria. Vasectomy—a safe, permanent, and cost-effective method of male contraception—is still rarely chosen, even among populations that are expected to be more knowledgeable, such as healthcare professionals (White et al., 2022; Wang et al., 2021). This persistent low adoption raises questions about what men, particularly male hospital staff, know and believe about the procedure and why many remain

unwilling to accept it as a viable family planning option. In many developing countries, contraception is predominantly viewed as the responsibility of women. This gendered expectation is reinforced by sociocultural norms, religious beliefs, and myths that surround male sterilization (Ndu et al., 2022; Shaibu et al., 2024). Numerous studies have shown that men harbor misconceptions that vasectomy leads to reduced sexual performance, weakness, or loss of manhood (Rijal et al., 2024; Khafidzatunnisa et al., 2024). Even among educated or medically inclined men, these attitudes persist (Umeobieri et al., 2023), revealing a disconnect between access to information and acceptance of the method. Within the University of Benin Teaching Hospital (UBTH), male staff represent an educated demographic that is presumed to possess better reproductive health awareness. However, anecdotal evidence suggests that acceptance of vasectomy is still low, despite their professional exposure. This contradiction emphasizes the need to investigate the underlying reasons behind such reluctance.

The underutilization of vasectomy is not limited to the general population but also affects male staff within health institutions who are both potential users and health educators. In Nigeria, vasectomy prevalence remains under 1%, while female-oriented methods continue to dominate family planning usage statistics (Nwankwo et al., 2022; Sangam et al., 2023). In tertiary hospitals like UBTH, where male healthcare workers can influence public health behavior, the limited personal uptake and poor attitude towards vasectomy represent a missed opportunity for broader societal change. The scope of the problem is therefore two-fold: limited individual acceptance and reduced capacity for health promotion regarding male contraception.

If the knowledge gaps and negative attitudes towards vasectomy among male hospital staff persist, the implications are significant. Firstly, the continued underuse of vasectomy sustains the imbalance in contraceptive responsibility, placing an undue burden on women (Khafidzatunnisa et al., 2024; Patel et al., 2024). Secondly, the lack of positive male role models in reproductive health discourages wider community acceptance. Thirdly, male staff who harbor misconceptions may unintentionally propagate myths when educating patients, thereby undermining family planning campaigns and limiting the success of national population control strategies (Nicholas et al., 2021; Saragih, 2021).

While several studies have explored knowledge and perception of vasectomy in the general population (Chinnaiyan & Babu, 2021; Degu Ayele et al., 2021), few have specifically targeted male healthcare workers in Nigeria. Even fewer studies focus on the unique context of tertiary health institutions like UBTH, where staff are presumed to be better informed. This leaves a gap in the understanding of how knowledge, attitude, and occupational role intersect to influence acceptance. There is a pressing need for data that captures these variables in this specific setting to inform targeted interventions. This study seeks to assess the knowledge, attitude, and acceptance of vasectomy among male staff at the University of Benin Teaching Hospital. By identifying the factors that influence acceptance—such as education level, professional role, cultural beliefs, and personal values—this study aims to provide evidence that can guide the development of education programs and institutional policies promoting male involvement in family planning. The findings will not only bridge knowledge gaps but also support initiatives aimed at normalizing vasectomy as a safe and responsible reproductive choice for men.

1.3 Objective of the study

The general objective of the study is to assess the knowledge, attitude, and acceptance of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital.

The specific objectives of the study are:

1. To assess the level of knowledge of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital.
2. To examine the attitudes of male staffs towards vasectomy in University of Benin Teaching Hospital.
3. To determine the level of acceptance of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital.
4. To identify factors influencing the acceptance or rejection of vasectomy among male staffs in University of Benin Teaching Hospital.

1.4 Research Questions

1. What is the level of knowledge of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital?
2. What are the attitudes of male staffs towards vasectomy in University of Benin Teaching Hospital?
3. What is the level of acceptance of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital?
4. What are the factors influencing the acceptance or rejection of vasectomy among male staffs in University of Benin Teaching Hospital?

1.5 Hypothesis

1. There is no significant relationship between the level of knowledge of vasectomy as a method of contraception and the level of acceptance among male staffs.

2. There is no significant relationship between the attitudes of male staffs towards vasectomy and the level of acceptance.

3. There is no significant relationship between the level of acceptance of vasectomy as a method of contraception among male staffs and the factors influencing the acceptance or rejection of vasectomy.

1.6 Significance of the Study

To the Nursing Profession

This study holds substantial significance for the nursing profession, particularly in the area of reproductive and community health. Nurses serve as frontline educators and advocates for family planning services. Understanding the levels of knowledge, attitude, and acceptance of vasectomy among male healthcare workers can inform nurses about the common misconceptions and sociocultural barriers that men, including their colleagues, face regarding male contraception. This knowledge equips nurses to design and implement more effective health education strategies that are evidence-based and culturally sensitive. Additionally, the findings may encourage male nurses to become active advocates for male involvement in family planning, thereby reducing the overreliance on female-centered contraceptive methods.

To Healthcare Providers

For healthcare providers as a whole—doctors, pharmacists, public health officers, and health educators—this study provides critical insights into the perceptions and barriers

that influence the uptake of vasectomy among peers. Since male staff in health institutions are not only potential users of family planning services but also trusted sources of information for patients, their acceptance or rejection of vasectomy can significantly influence public opinion. By identifying gaps in knowledge and attitude among this group, the study offers a foundation for developing continuing education programs and institutional campaigns that promote male contraceptive responsibility. Ultimately, the study could lead to a shift in provider-based communication approaches, making them more inclusive of male-centered contraceptive counseling.

To the Society

At the societal level, this research contributes to the broader discourse on gender equity in reproductive health. The continued low uptake of vasectomy reflects entrenched gender norms that place the burden of contraception largely on women. By shedding light on the perceptions of educated men within a tertiary health institution, this study challenges prevailing stereotypes and opens up new pathways for public education campaigns. Increased male participation in family planning through vasectomy can lead to improved reproductive health outcomes, reduced unintended pregnancies, and better allocation of family resources. Moreover, normalizing vasectomy in healthcare settings may gradually influence public attitudes, thereby promoting a more balanced and equitable approach to reproductive responsibilities within families and communities.

1.7 Scope of the Study

This study focuses on non-medical male staff members at the University of Benin Teaching Hospital (UBTH) and examines their knowledge, attitude, and acceptance of

vasectomy as a method of contraception. It will involve male employees across the administrative staff.

1.8 Operational Definition of Terms

Knowledge of Vasectomy

Refers to the understanding or awareness that male staff members of UBTH have about vasectomy as a method of contraception. This includes their knowledge about the procedure, its purpose, safety, effectiveness, and potential risks or benefits.

Attitude Towards Vasectomy

The general feelings, beliefs, or opinions of male staff at UBTH regarding vasectomy as a contraceptive method. This includes positive, neutral, or negative views based on personal, cultural, and societal factors. It reflects how they perceive the procedure in terms of its acceptability, effectiveness, and potential impact on their masculinity and sexual health.

Acceptance of Vasectomy

The willingness or readiness of male staff members at UBTH to undergo a vasectomy procedure or endorse its use as a family planning method. Acceptance will be measured based on their self-reported intentions to either undergo vasectomy in the future or support its use among other men.

Male Staff

Refers to all male employees working at the University of Benin Teaching Hospital, including those in medical, nursing, administrative, and other support staff roles, regardless of their marital status or age.

Contraception

Refers to methods or devices used to prevent pregnancy. In this study, the term primarily focuses on vasectomy, a permanent male sterilization method, as a form of contraception.

Vasectomy

A surgical procedure involving the cutting and sealing of the vas deferens to prevent sperm from mixing with semen. This operation results in permanent male sterility and serves as a form of contraception.

CHAPTER TWO

LITERATURE REVIEW

This chapter reviewed several related literatures on knowledge and compliance of standard precautions among undergraduate nursing students. This is reviewed under the following sub-headings; conceptual literature review, empirical literature review and theoretical literature review and summary.

2.1 Conceptual review

2.1.1 Concept of Vasectomy

Vasectomy is a surgical procedure designed to provide permanent male contraception by preventing the release of sperm during ejaculation. It involves cutting and sealing the vas deferens, the tubes that carry sperm from the testes to the urethra. This procedure is considered one of the most effective forms of permanent contraception available to men. Vasectomy does not affect the production of testosterone or the ability to have sexual intercourse, but it does eliminate the possibility of fathering a child. The procedure is typically performed under local anesthesia and is considered a

minimally invasive intervention with a relatively low complication rate (Chinnaiyan & Babu, 2021; Degu Ayele et al., 2021).

The most common technique for vasectomy is the conventional vasectomy, where small incisions are made in the scrotum to access the vas deferens, which is then cut, tied, or cauterized to prevent sperm from mixing with semen. Another approach is the no-scalpel vasectomy, a newer, less invasive method that uses a small puncture in the scrotum, which reduces the risk of bleeding and infection and promotes a quicker recovery (Saragih, 2021). While vasectomy is considered a permanent form of contraception, some men may later seek reversal, though the success rate of reversal is not guaranteed, and it is not always effective (Nagar et al., 2023).

Vasectomy's primary purpose is to provide men with a safe, reliable, and permanent method of contraception. It is an appealing option for couples who have completed their families or for individuals who do not wish to have children. One of the advantages of vasectomy over female sterilization is that it involves a simpler procedure with fewer risks and a shorter recovery time. Additionally, vasectomy is more cost-effective compared to female sterilization (Bağlan & Esencan, 2025; Dey et al., 2025). Despite these advantages, vasectomy remains underutilized in many regions, largely due to misconceptions about its safety, its impact on masculinity, and societal resistance to male contraceptive methods (Gandhimathi, 2021).

The procedure's effectiveness is nearly 100%, with failure rates typically below 1%. However, it takes several weeks or months after the surgery for sperm to be completely cleared from the male reproductive system. Men are generally advised to use an alternative method of contraception until follow-up testing confirms the absence of sperm in the semen (Degu Ayele et al., 2021). This aspect of vasectomy is

often overlooked, and many men may mistakenly assume that they are immediately sterile after the procedure.

Therefore, Vasectomy is a permanent, safe, and effective method of contraception that involves the surgical severing or occlusion of the vas deferens. While it offers significant benefits for men and their partners, its acceptance is influenced by cultural, social, and personal factors, as well as misconceptions about the procedure's impact on sexual and reproductive health (Khafidzatunnisa et al., 2024; Ndu et al., 2022).

2.1.2 Knowledge of Vasectomy

Vasectomy is a highly effective form of male contraception, yet studies show that general awareness of the procedure remains relatively low, particularly in certain regions and among specific population groups. Despite its benefits, vasectomy is underutilized, largely due to a lack of knowledge regarding the procedure and its effectiveness (Degu Ayele et al., 2021; Hurisa et al., 2022). In various global settings, studies have demonstrated that many men remain unaware of the vasectomy procedure, its safety, and its long-term efficacy. For example, a study by Auma et al. (2025) in Uganda found that a significant portion of the male population had limited knowledge about vasectomy as a family planning method. Although many men were familiar with traditional contraceptive methods such as condoms and withdrawal, vasectomy was often misunderstood or unknown, despite its benefits for couples who wish to stop childbearing.

In a study conducted in India, Chinnaiyan and Babu (2021) found that while a majority of married men were aware of vasectomy, a considerable number were unaware of the procedure's effectiveness, the reversibility of some vasectomy types, and the post-operative recovery process. This knowledge gap has important

implications for contraceptive choices, as misinformation about vasectomy can discourage men from considering it as a viable option. Similarly, a study by Rijal et al. (2024) in Nepal highlighted the prevalence of misconceptions regarding vasectomy, with many men associating it with negative physical or psychological consequences, such as a reduction in masculinity or sexual performance.

In addition to general lack of knowledge, research also shows that awareness of vasectomy often correlates with higher levels of education and greater exposure to healthcare services. This suggests that information dissemination and targeted education efforts could significantly increase the uptake of vasectomy in regions where it remains underutilized (Auma et al., 2025; Hurisa et al., 2022). For instance, studies indicate that men in urban areas are generally more informed about vasectomy compared to those in rural settings, likely due to better access to health services and information (Bağlan & Esencan, 2025).

While knowledge of vasectomy is crucial for its uptake, various factors influence how much men know about this method of contraception. Education, age, healthcare exposure, cultural factors, and social influences all contribute to shaping men's understanding and acceptance of vasectomy.

Education: Studies consistently find that higher levels of education are associated with greater knowledge of vasectomy. Educated men are more likely to have accurate information about the procedure and its benefits. In a study by Khafidzatunnisa, Anida, and Qomaruddin (2024), educated individuals were found to be more knowledgeable about vasectomy, and this knowledge was linked to a higher acceptance of the procedure. Education provides individuals with the skills to

critically evaluate information and to overcome misconceptions that may deter them from considering vasectomy.

Age: Age is another factor that influences knowledge of vasectomy. Older men, particularly those who have already fathered children, are more likely to be aware of vasectomy as a permanent contraceptive option (Nagar et al., 2023). Conversely, younger men, especially those who have not yet started families, may be less aware or more hesitant to consider vasectomy due to misconceptions or concerns about future fertility (Dejene Wolde et al., 2023). A study by Ayele et al. (2021) found that age-related differences in knowledge were particularly significant in developing countries, where older men were more likely to have received information about vasectomy through healthcare channels.

Healthcare Exposure: Men who have regular contact with healthcare providers, such as during annual checkups, family planning consultations, or visits to clinics, tend to have better knowledge of vasectomy. This exposure is critical, as healthcare providers are often the main source of information about reproductive health and family planning methods (Bağlan & Esencan, 2025). Men who engage with healthcare systems are more likely to be informed about various contraceptive options, including vasectomy, and to feel confident in their ability to make an informed choice. However, a lack of exposure to healthcare services, particularly in rural areas, can result in lower levels of knowledge and understanding of vasectomy (Auma et al., 2025).

Cultural Factors: Cultural and societal norms also play a significant role in shaping men's knowledge of vasectomy. In societies where male contraception is stigmatized or where there is a strong cultural emphasis on fertility, men may be less likely to seek out information about vasectomy (Khafidzatunnisa et al., 2024). Cultural views

on masculinity, fertility, and fatherhood can contribute to misconceptions that deter men from considering vasectomy, even when they are aware of its existence (Dejene Wolde et al., 2023).

Social Influences: Peer influence and family attitudes toward vasectomy can also affect men's knowledge. In communities where vasectomy is more commonly accepted, men may be more likely to have accurate information, as it is more likely to be discussed openly among peers and family members (Saragih, 2021). In contrast, in communities where vasectomy is taboo or misunderstood, misinformation may proliferate, further reinforcing negative perceptions and preventing men from exploring it as a viable contraceptive option. ·

Addressing the knowledge gaps surrounding vasectomy, particularly through targeted health education campaigns and healthcare interventions, can play a pivotal role in increasing its adoption as a family planning method (Dey et al., 2025; Khafidzatunnisa et al., 2024).

2.1.3 Attitude Towards Vasectomy

Men's attitudes toward vasectomy are shaped by a complex interplay of cultural, societal, and personal factors. While vasectomy is a safe, cost-effective, and reliable method of permanent male contraception, it is often met with resistance and skepticism due to entrenched gender norms, misconceptions, and limited public discourse. These attitudes can significantly affect the acceptance and uptake of vasectomy, particularly in regions where reproductive responsibility is viewed predominantly as a woman's domain (Dejene Wolde et al., 2023; Hurisa et al., 2022).

Cultural, Societal, and Personal Factors Influencing Men's Attitudes Toward Vasectomy

Culture plays a vital role in shaping attitudes toward vasectomy. In many African and Asian societies, fertility is highly valued, and men are often expected to father many children as a sign of virility, social status, and family legacy (Auma et al., 2025; Chinnaiyan & Babu, 2021). As a result, permanent methods of contraception like vasectomy are sometimes perceived as inappropriate or even threatening to a man's identity. In these contexts, vasectomy may be wrongly associated with emasculation or weakness, reinforcing negative attitudes and discouraging men from considering the procedure (Khafidzatunnisa et al., 2024). Societal expectations further exacerbate these perceptions. In patriarchal societies, reproductive decisions are typically dominated by men, yet paradoxically, contraception is often viewed as the woman's responsibility. This societal paradox creates a barrier to the male acceptance of contraceptive methods, especially permanent ones like vasectomy. According to Bağlan and Esencan (2025), the societal belief that men should avoid interfering with reproductive health procedures contributes to poor vasectomy uptake, even when knowledge and access exist. On a personal level, attitudes are influenced by individual beliefs, family experiences, religious teachings, and peer influence. Men who lack exposure to accurate information are more likely to view vasectomy with suspicion. For instance, men who grew up in environments where contraceptive discussions were taboo may internalize negative perceptions of vasectomy and reject it without understanding its benefits or implications (Saragih, 2021). On the other hand, men with supportive spouses and informed social circles tend to hold more positive attitudes and may be more open to considering vasectomy (Rijal et al., 2024).

Gender Roles, Masculinity, and Perceptions of Fertility in Relation to Vasectomy

Traditional gender roles and constructs of masculinity are among the most significant psychological barriers to vasectomy acceptance. In many cultures, masculinity is closely linked with sexual prowess, fertility, and the ability to produce offspring. Vasectomy, despite being a minor surgical procedure that does not impair sexual function, is often falsely believed to diminish a man's virility or sexual satisfaction (Dejene Wolde et al., 2023). Such misconceptions stem from deep-rooted gender norms that equate fertility with manhood, creating stigma around male sterilization (Dey et al., 2025).

Moreover, the societal expectation for men to demonstrate control and dominance within the household can lead to reluctance in adopting a contraceptive method that symbolizes finality and partnership in reproductive decision-making. This resistance is also fueled by fears of regret or loss of control, particularly among men who are uncertain about their future fertility desires or who perceive vasectomy as irreversible—even though reversal procedures are sometimes possible (Chinnaiyan & Babu, 2021). Gender dynamics in reproductive health discussions further marginalize men from actively participating in family planning. Men are less likely to receive counseling or targeted education about contraception, and the absence of male-oriented reproductive health services limits their engagement and fosters continued ignorance and apprehension (Auma et al., 2025).

Positive and Negative Attitudes Toward Vasectomy, Including Misconceptions

Attitudes toward vasectomy are varied and often polarized. On the positive side, some men recognize vasectomy as a responsible, cost-effective, and permanent solution for birth control, especially when their desired family size has been achieved. According to Nagar et al. (2023), men with higher educational levels and greater exposure to

healthcare systems tend to appreciate vasectomy for its simplicity, quick recovery time, and lack of hormonal side effects. These individuals often express satisfaction with the procedure, citing enhanced intimacy in relationships and shared contraceptive responsibility. However, negative attitudes are still widespread and are commonly shaped by persistent myths and misinformation. Among the most common misconceptions is the belief that vasectomy causes impotence, reduces sexual pleasure, or results in physical weakness (Hurisa et al., 2022; Khafidzatunnisa et al., 2024). Other false beliefs include the notion that vasectomy is a form of castration or that it affects the production of male hormones. These misconceptions are often perpetuated by social stigma and lack of comprehensive sexual education. In addition, some men fear the irreversibility of the procedure or worry that they might change their minds about having children in the future. Such concerns are particularly prevalent among younger men or those with few or no children, who may be uncertain about their long-term reproductive goals (Rijal et al., 2024).

2.1.4 Acceptance of Vasectomy

Acceptance of vasectomy as a method of family planning remains low in many parts of the world, particularly in sub-Saharan Africa and other developing regions, despite its proven safety, efficacy, and long-term benefits. Vasectomy is underutilized compared to female sterilization and other temporary contraceptive methods, even though it is a simpler and less invasive procedure (Dejene Wolde et al., 2023). Understanding the factors that influence men's acceptance of vasectomy, as well as the pivotal role of healthcare providers and the interplay between knowledge and attitude, is essential for improving uptake and promoting shared responsibility in reproductive health.

Factors Influencing Men's Acceptance of Vasectomy as a Family Planning Method

Multiple factors contribute to whether a man will accept or reject vasectomy as a viable family planning method. These factors range from individual characteristics such as age, education level, marital status, and number of children to broader social, cultural, and religious contexts. Generally, men who are older, better educated, and have completed their desired family size are more likely to consider vasectomy (Rijal et al., 2024; Chinnaiyan & Babu, 2021). For example, in a study conducted by Nagar et al. (2023), it was found that men with tertiary education were significantly more open to vasectomy due to greater access to accurate information and exposure to family planning services.

Religious and cultural beliefs often act as either enablers or barriers to acceptance. In patriarchal societies where masculinity is linked to the ability to father many children, vasectomy may be seen as an affront to manhood. This cultural perspective results in fear of social stigma, ridicule, or being perceived as less of a man (Bağlan & Esencan, 2025; Khafidzatunnisa et al., 2024). Furthermore, myths surrounding vasectomy—such as the belief that it causes impotence or permanent weakness—further discourage men from embracing the method (Hurisa et al., 2022).

Spousal influence also plays a major role in the acceptance of vasectomy. Men who engage in open discussions with their partners about family planning are more likely to consider vasectomy as a shared responsibility (Dey et al., 2025). In contrast, lack of partner support or fear of disapproval can inhibit men from making this decision. Socioeconomic factors, such as the cost of the procedure and access to facilities, may

also influence acceptance, although vasectomy is generally less expensive in the long term compared to many other contraceptive options.

The Role of Healthcare Providers in Promoting Vasectomy Acceptance

Healthcare providers are crucial agents in the promotion and acceptance of vasectomy. They serve as trusted sources of information and are positioned to correct misconceptions, provide counseling, and offer reassurance about the safety and effectiveness of the procedure. When healthcare professionals provide comprehensive and culturally sensitive education, men are more likely to develop a favorable perception of vasectomy (Auma et al., 2025).

However, the role of healthcare providers is sometimes limited by their own biases, lack of training, or discomfort in discussing male sterilization. In many settings, reproductive health services are predominantly focused on women, leaving men marginalized and uninformed. As Dejene Wolde et al. (2023) note, many family planning clinics lack male-friendly services, and providers are often not adequately equipped to counsel men on permanent contraception. Training healthcare workers to communicate effectively with male clients, address cultural concerns, and debunk myths is vital in increasing vasectomy acceptance.

Moreover, healthcare providers can influence public perception by involving community leaders, religious authorities, and media platforms in awareness campaigns. These strategies help normalize vasectomy and reduce stigma by fostering community dialogue and acceptance. When trusted figures endorse vasectomy, it can shift public opinion and encourage men to view the procedure as responsible and respectable.

The Relationship Between Knowledge and Attitude in Shaping Acceptance

The relationship between knowledge, attitude, and acceptance of vasectomy is interdependent and cyclical. Knowledge serves as the foundation for informed decision-making. Men who have accurate and comprehensive information about vasectomy—its procedure, benefits, and side effects—are more likely to develop positive attitudes and ultimately accept it as a contraceptive option (Nagar et al., 2023). On the other hand, lack of knowledge contributes to fear, myths, and negative perceptions, which hinder acceptance.

Attitudes act as a bridge between knowledge and behavior. Even when men have basic awareness of vasectomy, their attitudes may still be shaped by cultural biases or misinformation. For example, a man may know that vasectomy is safe and effective but still reject it due to the belief that it reduces masculinity or sexual performance. Therefore, positive attitudes cannot develop solely from knowledge—they must be supported by cultural acceptance, peer reinforcement, and personal confidence (Chinnaiyan & Babu, 2021).

Conversely, when attitudes are positive, they reinforce the desire to seek more knowledge and ultimately take action. Men who are open to learning about family planning options are more likely to participate in counseling sessions, discuss reproductive decisions with their partners, and make informed choices. Thus, interventions aimed at increasing vasectomy acceptance should not only provide knowledge but also address underlying attitudes and cultural beliefs.

2.1.5 Barriers to Vasectomy Uptake

Despite being a safe, effective, and permanent method of male contraception, vasectomy remains significantly underutilized in many parts of the world, particularly in Africa and other developing regions. Several interrelated factors—ranging from sociocultural beliefs to systemic healthcare challenges—act as barriers to the uptake of vasectomy among men. These barriers contribute to its low acceptance rate and highlight the need for strategic interventions aimed at addressing myths, reducing stigma, and improving access to reproductive health services.

Sociocultural Barriers to Vasectomy Acceptance: Stigma, Fear, and Misinformation

Sociocultural barriers remain some of the most prominent impediments to vasectomy uptake. In many patriarchal societies, deeply ingrained gender norms equate masculinity with sexual prowess and fertility, creating a perception that vasectomy undermines manhood. Men often fear that undergoing the procedure will render them sexually weak or socially inferior (Bağlan & Esencan, 2025). These stigmatizing views are sustained by misinformation and cultural myths. For instance, many believe that vasectomy leads to impotence, a loss of sexual desire, or an overall decline in physical strength, despite scientific evidence proving otherwise (Hurisa et al., 2022).

Stigma surrounding vasectomy also extends to social and community expectations. In settings where large families are valued and male virility is tied to reproductive capacity, men who opt for vasectomy may face ridicule or social isolation. As noted by Khafidzatunnisa et al. (2024), societal pressures often discourage open discussions about male contraception, especially permanent methods like vasectomy. The fear of being labeled as weak or irresponsible toward family traditions creates psychological barriers that deter men from considering the procedure.

Economic, Religious, and Psychological Factors Influencing Decisions

Economic considerations can also influence the decision to undergo vasectomy, though in somewhat paradoxical ways. On one hand, vasectomy is cost-effective over the long term when compared to temporary contraceptive methods. On the other hand, men may perceive short-term costs—such as time off work, transportation to healthcare facilities, or medical fees—as burdensome, especially in low-resource

settings (Dejene Wolde et al., 2023). Additionally, the absence of incentives or health insurance coverage for male sterilization can further discourage uptake.

Religious beliefs are another powerful influence. In some religious contexts, contraception in general, and permanent sterilization in particular, are viewed as sinful or morally wrong. Religious teachings that emphasize procreation as a divine duty may cause men to reject vasectomy outright, even if they have completed their desired family size (Auma et al., 2025). Religious leaders' attitudes towards vasectomy often play a crucial role in shaping community perceptions, and their opposition can significantly impede acceptance.

Psychological factors such as fear of the unknown, anxiety about surgery, and distrust in the medical system also act as barriers. Many men fear complications, pain, or regret after the procedure, especially due to myths about its irreversibility or adverse health effects (Nagar et al., 2023). The decision to undergo a permanent procedure also carries emotional weight, especially when future life circumstances are uncertain, such as the possibility of remarriage or the loss of children.

Role of Healthcare Infrastructure and Services in Facilitating or Hindering Vasectomy Uptake

Healthcare systems and services play a pivotal role in either facilitating or hindering access to vasectomy. In many settings, reproductive health services are predominantly targeted at women, leaving men with limited opportunities for counseling and support. Lack of male-focused family planning services, inadequate training of healthcare providers, and poor dissemination of information about vasectomy contribute to its underutilization (Dejene Wolde et al., 2023; Rijal et al., 2024).

Infrastructural limitations such as the absence of trained personnel to perform the procedure, poorly equipped facilities, and infrequent outreach programs make it difficult for interested men to access vasectomy services, particularly in rural areas. Moreover, when healthcare providers themselves harbor negative attitudes or are ill-informed about vasectomy, they may fail to properly counsel or encourage clients, reinforcing the cycle of ignorance and fear (Chinnaiyan & Babu, 2021).

Conversely, settings where vasectomy is normalized through accessible, well-publicized services tend to see higher uptake. Health systems that actively involve men in reproductive health education, offer male-friendly clinics, and integrate family planning into broader health initiatives are more successful in overcoming barriers. Training healthcare workers to address misconceptions empathetically and provide culturally appropriate counseling is essential in changing perceptions and increasing acceptance (Dey et al., 2025).

2.2 Theoretical review

2.2.1 The Health Belief Model (HBM)

The study adopted the Health Belief Model (HBM), a psychological framework developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels working in the U.S. Public Health Service. It was initially conceptualized to explain the widespread failure of people to participate in programs to prevent and detect disease (Rosenstock, 1974). Since then, the HBM has been extensively applied to a wide range of health behaviors, including contraceptive use, and provides a valuable lens through which to understand how individual beliefs influence health-related decisions. At its core, the HBM posits that a person's decision to engage in a health behavior is influenced by their perception of four key constructs: perceived

susceptibility, perceived severity, perceived benefits, and perceived barriers. These constructs are moderated by cues to action and self-efficacy (Glanz, Rimer, & Viswanath, 2008).

Perceived susceptibility refers to an individual's belief about the likelihood of experiencing a health problem or condition. In the context of vasectomy, men who perceive themselves or their partners at risk of unwanted pregnancy might be more inclined to consider vasectomy as a contraceptive option. **Perceived severity** relates to beliefs about the seriousness of the consequences of an unwanted pregnancy or overpopulation in the family, which can also influence contraceptive decisions.

Perceived benefits involve the individual's assessment of the value or efficacy of taking action to reduce the risk or seriousness of a condition. For vasectomy, this may include the belief that it is a highly effective, permanent method of contraception that allows for greater sexual freedom without the fear of pregnancy. In contrast, **perceived barriers** are the individual's assessment of the obstacles to taking the health action—these may include fears of pain, myths about loss of masculinity, infertility, or societal stigma.

The model also incorporates **cues to action**, which are factors that trigger decision-making processes. These cues may be internal (such as fear of an unplanned pregnancy) or external (such as a healthcare provider's recommendation or public health campaigns). Finally, **self-efficacy**—added to the model later—refers to one's confidence in their ability to successfully execute the behavior, such as undergoing the vasectomy procedure and coping with the consequences.

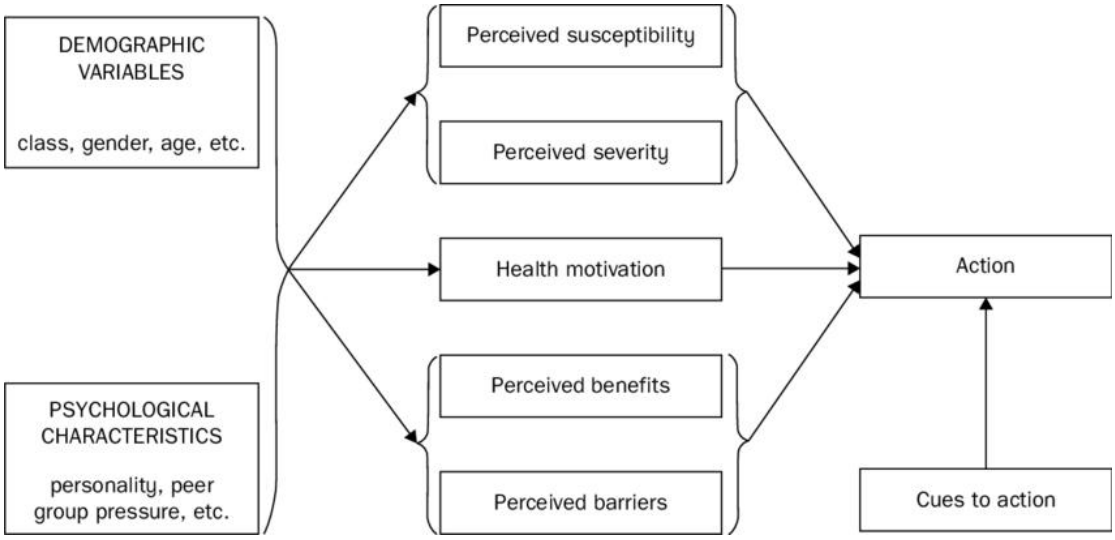

Fig 1: The Health Belief Model (HBM)

2.2.2 Application of the theory

The Health Belief Model (HBM) provides a valuable framework for understanding and interpreting the knowledge, attitudes, and acceptance of vasectomy among male staff at the University of Benin Teaching Hospital. By addressing the core constructs of the model—perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy—this study seeks to explore the psychological and sociocultural factors influencing men's decisions regarding vasectomy.

Knowledge is a foundational element of the HBM, as individuals must first be aware of a health threat and its preventive measures before evaluating their beliefs and motivations. In the context of vasectomy, knowledge includes understanding the procedure, its effectiveness, permanence, and implications. According to the HBM, if male staff are not adequately informed, they are unlikely to perceive vasectomy as a relevant or viable option. By assessing knowledge levels, the study will identify gaps

that may contribute to low perceived benefits or inflated perceived barriers, thereby influencing behavior negatively.

Attitudes are shaped by a combination of beliefs, cultural expectations, and personal experiences. Within the HBM framework, attitudes reflect perceived benefits and barriers. If vasectomy is viewed as emasculating or associated with loss of sexual function or fertility, these represent perceived barriers that reduce the likelihood of acceptance. Conversely, if men recognize the procedure's benefits—such as its safety, effectiveness, and relief from the burden of future contraception—positive attitudes may emerge. Exploring attitudes through the HBM helps to uncover these underlying perceptions and evaluate how they impact behavioral intentions.

Acceptance, in HBM terms, occurs when perceived benefits outweigh perceived barriers, and the individual feels both vulnerable to the health consequence (unwanted pregnancy) and confident in their ability to take preventive action (self-efficacy). Men who accept vasectomy likely have internalized the procedure’s value and trust its effectiveness while dismissing myths and misinformation. This objective aligns with the overall behavioral prediction capacity of the HBM, where acceptance is the outcome of a favorable combination of cognitive beliefs and perceived control.

This objective directly examines the interplay between all constructs of the HBM. Factors such as fear of complications, societal stigma, religious opposition, and misinformation are considered perceived barriers (Khafidzatunnisa et al., 2024). Meanwhile, exposure to accurate information from healthcare providers (cues to action) and confidence in undergoing the procedure without complications (self-efficacy) can facilitate acceptance. The model thus supports a comprehensive analysis

of both internal and external determinants that affect the decision-making process regarding vasectomy.

2.3 Empirical Review

2.3.1 The level of knowledge of vasectomy as a method of contraception among male

In a study conducted by Gandhimathi (2021), on "A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge regarding No-Scalpel Vasectomy (NSV) among Married Men and Women in a Selected Rural Area, Coimbatore," the researcher aimed to assess the knowledge of married men and women regarding No-Scalpel Vasectomy (NSV) and to evaluate the effectiveness of a planned teaching program in improving their understanding of this procedure. NSV is a newer and less invasive method of vasectomy, yet its adoption remains low in rural areas due to lack of awareness and misconceptions. The study utilized a pre-experimental one-group pretest-posttest design, where data were collected from 60 married men and women residing in Semmanichetti Palayam, Coimbatore, using purposive sampling. The researcher administered a structured questionnaire to assess the participants' baseline knowledge of NSV, followed by a planned teaching program aimed at improving their knowledge. The teaching program focused on educating participants about the procedure, benefits, and potential risks of NSV. The study found a significant improvement in the participants' knowledge following the intervention. The mean knowledge score increased from 14.93 in the pre-test (with a standard deviation of 1.7) to 24.32 in the post-test (with a standard deviation of 1.8), demonstrating a marked gain in understanding. The study concluded that the planned teaching program was

highly effective in enhancing knowledge about NSV among the rural population. It highlighted the importance of educational interventions in promoting awareness and acceptance of permanent contraceptive methods like NSV in rural communities.

Dey et al. (2025) conducted a study on "Effectiveness of a Planned Teaching Program on Knowledge and Perception Regarding No-Scalpel Vasectomy among Community Health Workers in an Urban Area of Murshidabad, West Bengal." The purpose of the study was to assess the effectiveness of a planned teaching program in enhancing community health workers' knowledge and perception of No-Scalpel Vasectomy (NSV) in an urban area of West Bengal, where the uptake of NSV has been suboptimal despite its advantages. The researchers employed a quasi-experimental study design with a pretest-posttest approach. The study involved 44 community health workers from Berhampore Municipality in Murshidabad, who were assessed on their baseline knowledge and perceptions of NSV before the intervention. The teaching program was based on a structured NSV teaching module, and the participants were reassessed two weeks after the intervention. The results of the study showed a significant increase in the participants' knowledge of NSV, with the mean post-test knowledge score rising to 12.27, compared to a pre-test mean score of 4.41. The researchers also observed a favorable shift in the participants' perceptions of NSV, indicating that the teaching program had a positive impact on both their understanding and attitudes toward the procedure. Statistical analysis using paired t-tests and McNemar's chi-square test confirmed the significance of the results ($t=26.77$, $p < 0.0001$).

In a study conducted by Degu Ayele et al. (2021) on "Men's Knowledge of Vasectomy and its Associated Factors in Debre Tabor Town, Northwest Ethiopia: A

Community-Based Cross-Sectional Study," the researchers aimed to assess the level of knowledge of vasectomy and its associated factors among married men in Debre Tabor Town, Ethiopia. Despite being one of the safest, simplest, and most effective family planning methods available for men, vasectomy remains one of the least utilized contraceptive methods, particularly in developing countries like Ethiopia. This community-based cross-sectional study was conducted between December 5 and 25, 2019. A total of 413 married men were selected using simple random sampling to participate in the study. Data were entered into EpiData version 4.2 and analyzed using SPSS version 23. The study employed bivariable and multivariable logistic regression models to assess associations between various factors and men's knowledge of vasectomy. Variables with a P-value of less than 0.05 at a 95% confidence interval were considered statistically significant. The findings indicated that only 38.5% of the men had an adequate level of knowledge about vasectomy. The multivariable logistic regression analysis revealed several factors significantly associated with knowledge of vasectomy. Men with secondary or higher education were more likely to have better knowledge about vasectomy, with odds ratios (AOR) of 4.70 (95% CI = 1.26–17.55) for those with secondary education and 8.36 (95% CI = 2.41–28.97) for those with a college education or higher. Additionally, having four or more children was inversely associated with vasectomy knowledge (AOR = 0.51, 95% CI = 0.29–0.89). A positive attitude towards vasectomy was also found to be a strong predictor of better knowledge (AOR = 2.47, 95% CI = 1.58–3.86). The study concluded that knowledge of vasectomy among married men in Debre Tabor Town was relatively low. However, it highlighted that educational status, the number of children, and the men's attitudes were significantly associated with their level of knowledge. The researchers emphasized the need to improve the educational status of

men and to work towards positively changing cultural attitudes towards male contraceptive methods. This could be achieved by focusing on male education from childhood, which would likely lead to a more positive attitude towards vasectomy in the future.

In a study conducted by Norhisham and Arifin (2024) on "Knowledge and Attitude Towards Vasectomy Among Male Kuantan Community," the researchers aimed to assess the knowledge and attitudes towards vasectomy among men in Kuantan, Malaysia. Vasectomy, a contraceptive procedure involving the cutting and tying of the spermatic cord to prevent sperm from reaching the testes, is known to carry fewer risks than female sterilization methods like Bilateral Tubal Ligation. Despite this, vasectomy remains underutilized, and there is limited research on this subject in Malaysia. The study utilized a convenience sampling method and collected 219 responses using Google Forms distributed via email and social media platforms. The results revealed that 67.1% of participants had a high level of knowledge about vasectomy, while 32.9% had moderate knowledge. In terms of attitudes, only 11.9% of participants exhibited a high attitude towards vasectomy, with the remaining 88.1% having a moderate attitude. Interestingly, no significant associations were found between knowledge and attitudes towards vasectomy and demographic factors such as age, religion, ethnicity, education level, occupation, income, marital status, or number of children. The study concluded that the Kuantan community demonstrated both high and moderate levels of knowledge and attitudes towards vasectomy. The authors emphasized the need for public health campaigns to enhance awareness and understanding of vasectomy as a viable contraceptive method, which could ultimately help increase its acceptance among the population.

In their study on "Knowledge and Perception of Vasectomy Among Resident Doctors at 5 Teaching Hospitals in Nigeria: A Cross-Sectional Survey," Ojewuyi et al. (2022) sought to explore the knowledge and perceptions of vasectomy among resident doctors in Nigeria. Vasectomy is an elective surgical procedure for male sterilization, but despite its availability, male participation in family planning is often overlooked. This is partly due to inadequate knowledge and misconceptions about the procedure among both the public and healthcare providers. The cross-sectional study involved 218 respondents, with 169 men (77.5%) and 49 women (22.5%), primarily drawn from surgical departments. The results indicated that 93.6% of the participants acknowledged vasectomy as a permanent form of contraception, and 97.7% had heard of the procedure. However, only 64.2% demonstrated good knowledge, particularly those working in surgical departments. A majority of respondents (56.4%) had a positive perception of vasectomy, though women were three times less likely to hold negative views compared to men. Despite this, only about 40% of participants expressed a willingness to recommend vasectomy to patients. The study highlighted the gap between knowledge and willingness to recommend vasectomy, pointing out that misconceptions and biases persist among healthcare providers. The authors suggested that addressing these misconceptions and increasing awareness through training and educational programs could improve the acceptance of vasectomy and its promotion as a viable contraceptive method.

In a study on "Vasectomy Knowledge and Interest Among U.S. Men Who Do Not Intend to Have More Children," White et al. (2022) assessed the knowledge and interest in vasectomy among U.S. men aged 25 to 55 years who did not intend to have more children. The study aimed to explore the gap in vasectomy awareness and how accurate information might influence men’s interest in undergoing the procedure.

Using a nationally representative online survey conducted between May and June 2018, the researchers gathered responses from 620 men. Of the respondents, 564 provided complete data. The results showed that 51% of the participants demonstrated high vasectomy knowledge, defined as correctly answering at least three out of four questions regarding vasectomy's effects on sexual functioning and method efficacy. Men who knew someone who had undergone a vasectomy were more likely to have high knowledge (prevalence ratio [PR] = 1.50; 95% CI [1.22, 1.85]). About one-third of the men (35%) expressed interest in undergoing a vasectomy. The study found that men with high vasectomy knowledge were more likely to consider the procedure (PR = 1.36; 95% CI [1.04, 1.77]). The researchers also explored whether providing a paragraph addressing common misconceptions about vasectomy influenced men's interest. However, they found that race/ethnicity, income level, and receiving informational content had no significant impact on vasectomy interest. The study concluded that greater knowledge of vasectomy significantly increased men's interest in the procedure. Given that many U.S. men lack accurate information about vasectomy, the authors called for efforts to address misinformation and promote accurate knowledge to ensure men have the information necessary to make informed decisions about their reproductive health.

2.3.2 To examine the attitudes of male staff towards vasectomy

In the study on "Belief and Attitudes About Vasectomy in Staff of a Community Hospital in Argentina: Cross-Sectional Study," Bussi et al. (2024) examined the beliefs and attitudes regarding vasectomy among the staff at the Hospital Privado de Comunidad in Argentina. Despite vasectomy being included in the country's mandatory medical plan at no additional cost, its adoption remains relatively low in Argentina, as well as in many other low- and middle-income countries. The study

involved 448 hospital staff members, 66.5% of whom were healthcare professionals. The majority of the respondents (64%) were women, and 19% were aged 50 years or older. The researchers used the Beliefs and Attitudes Vasectomy Questionnaire (BAVQ), which was distributed electronically to all hospital staff. The BAVQ scores ranged from 0 to 135, with higher scores indicating more negative attitudes towards vasectomy. The results revealed a global BAVQ score of 58.7 (SD = 9.1). Negative attitudes were particularly pronounced among older participants and those with lower educational levels. Interestingly, there was no significant correlation between gender and the overall BAVQ score. The findings indicated that while aspects of virility and the fear of surgery were positively regarded by many respondents, the benefits of vasectomy were not as favorably perceived. The study concluded that healthcare professionals, despite their proximity to medical procedures, held predominantly negative beliefs towards vasectomy. It suggested that further education and cultural shifts might be needed to change attitudes towards male contraceptive methods like vasectomy.

Chinnaiyan and Babu (2021) conducted a study on "A Study of Attitude, Awareness, and Knowledge of Vasectomy Among Married Men in Urban Slums of Chennai, Tamil Nadu, India," with the aim of assessing the awareness, knowledge, and attitudes of married men towards vasectomy in urban slums. Despite vasectomy being a safe and relatively inexpensive permanent contraception option, female sterilization remains far more common in India. The study employed a descriptive cross-sectional design and was carried out among married men aged 21–49 in the urban slums of Chennai. A total of 132 respondents participated, with the majority (40.9%) aged between 20 and 29. The findings revealed that 84% of the participants had heard about vasectomy, primarily through television (75%) and from family or friends

(72%). Despite this awareness, the respondents demonstrated only moderate knowledge of vasectomy and held generally negative attitudes toward it. The study highlighted a significant gap between the knowledge and attitudes towards vasectomy. Many men believed that contraception should primarily be the woman's responsibility, and attitudes toward male sterilization were influenced by misconceptions. The study concluded that there is a need for comprehensive health education campaigns and counseling to promote positive attitudes and knowledge about vasectomy. In particular, family members and healthcare professionals have a key role in changing the perceptions around male sterilization in India.

Rijal et al. (2024) conducted a study on "Awareness and Attitude towards Vasectomy Among Married Men of a Selected Community," focusing on assessing the awareness and attitudes towards vasectomy in Birendranagar Municipality, Surkhet District, Nepal. Despite its effectiveness and safety, vasectomy remains one of the least used contraceptive methods in developing countries like Nepal. The study was descriptive and cross-sectional, involving 96 married men who had at least one child. The researchers employed purposive sampling and used a semi-structured interview schedule to collect data. The results indicated that 53.1% of the participants had moderate awareness of vasectomy, while 38.5% had inadequate awareness, and only 8.3% demonstrated high awareness. Interestingly, 86.5% of the participants had a positive attitude towards vasectomy, while 13.5% had a negative attitude. The study identified a significant association between the level of awareness and the respondents' educational status ($p = 0.024$). This suggests that men with higher educational levels were more likely to have greater awareness of vasectomy. The study concluded that there is a need for enhanced awareness programs about

vasectomy in Nepal, particularly through mass media, to provide accurate and reliable information and to promote its acceptance.

In the study on "Perceptions and Experiences Regarding Vasectomy Among Vasectomized Men at Larterbiokorshie," Menlah et al. (2021) explored the perceptions and experiences of men who had undergone vasectomy in the Larterbiokorshie community. Vasectomy is known to be an effective and safer contraceptive method, yet it remains one of the least used methods globally, partly due to misconceptions surrounding it. The study employed a qualitative approach using a phenomenological research design. A total of 18 vasectomized men were selected through purposive sampling, and face-to-face semi-structured interviews were conducted to gather data. The results revealed that while the vasectomized men held positive perceptions about vasectomy, particularly in terms of promoting sexual health within couples, the broader public perception remained negative. Socio-cultural and religious factors played a significant role in shaping attitudes toward vasectomy. Despite these challenges, the vasectomized men expressed positive personal experiences and cited various reasons for choosing the procedure. The study concluded that, despite the common misconceptions about vasectomy, those who had undergone the procedure generally viewed it favorably. The authors recommended that policies aimed at increasing vasectomy uptake be formulated, including continuous monitoring and evaluation of services to address the socio-cultural barriers.

Mahendravarman (2021) conducted a study on "Comparative Study to Assess the Knowledge and Attitude of Rural and Urban Men (30-50 Years) Regarding Vasectomy," focusing on the knowledge and attitudes toward vasectomy in rural and urban settings in Erode District, India. Vasectomy, while being the most effective

permanent family planning method, faces poor acceptance compared to female sterilization methods. The study adopted a non-experimental quantitative approach with a descriptive-comparative design. A total of 60 married men (30 from rural areas and 30 from urban areas) aged 30–50 years were selected using purposive sampling. Data was collected using a structured knowledge questionnaire and attitude scale. The study found that urban men had significantly higher knowledge and more positive attitudes toward vasectomy compared to their rural counterparts. The mean knowledge score for urban men was 15.26 ± 2.273, while for rural men it was 10.4 ± 2.472, with a statistically significant difference ($p < 0.0001$). Similarly, urban men had a more favorable attitude toward vasectomy, with a mean score of 33.2 ± 6.504, compared to rural men's mean score of 26.7 ± 7.758, with a statistically significant difference ($p < 0.010$). The study concluded that rural men exhibited lower knowledge and less favorable attitudes toward vasectomy compared to urban men. The author suggested that awareness programs, including self-instruction modules and mass health education campaigns, could help improve knowledge and attitude towards vasectomy, particularly in rural areas. Misconceptions about the health consequences of vasectomy were identified as key barriers to male participation in family planning.

2.3.3 To determine the level of acceptance of vasectomy as a method of contraception

In the study on "Demographics of Men Receiving Vasectomies in Poland 2019–2020," Pawłowska-Krajka et al. (2022) aimed to characterize the demographic and social factors influencing the decision to undergo vasectomy in Poland, focusing on motivation, acceptance, and the impact of religious beliefs. The study adopted a prospective observational design, collecting 253 survey responses from men who underwent vasectomy between 2019 and 2020. Results showed that 56.52% of men

were between the ages of 31 and 40. About 90.91% of the participants had no intention of having more children, and 50.59% expressed no interest in adoption. The majority (59.29%) of men had been considering vasectomy for 1-3 years prior to undergoing the procedure. Most participants used oral contraception (26.88%) or condoms (26.09%) as their primary contraceptive methods. Notably, vasectomy did not conflict with religious beliefs for 95.26% of participants, and 18.18% of men chose vasectomy due to concerns about their partner's health. The study concluded that while vasectomy has been performed in Poland for over 18 years, its popularity is increasing. The demographic trends align with those found in other global studies, indicating a growing acceptance of shared responsibility in family planning.

In their study "Knowledge and Willingness to Accept Vasectomy as a Method of Family Planning among Married Male Workers in the University of Nigeria, Enugu Campus, Enugu State, Nigeria," Umeobieri et al. (2023) assessed knowledge and willingness to accept vasectomy as a family planning method among married male workers in a Nigerian university. This cross-sectional study involved 405 male married workers who were selected using multistage sampling. Data was gathered through a pre-tested structured questionnaire, and analyzed using proportion, chi-square, and logistic regression. Results revealed that only 10.6% of participants had good knowledge of vasectomy, and 20.7% showed willingness to consider it as a contraceptive method. Factors such as educational level, wife support, and completed family size were significant predictors of willingness to adopt vasectomy. The study concluded that knowledge of vasectomy and willingness to accept it were low, emphasizing the need for awareness campaigns and health education to improve knowledge and acceptance. Family planning services should also target couples with completed family sizes.

Wang et al. (2021) conducted a study on "Awareness and Attitudes Toward Vasectomy in Rural Dominican Republic." This research aimed to explore awareness and attitudes toward vasectomy among a rural population in the Dominican Republic, a region where vasectomy use is minimal. During an annual mission trip, 61 patients were surveyed, with 29 completing the 21-question survey (response rate of 48%). Results indicated that 45% of respondents had never heard of vasectomy, and among those who were familiar with the procedure, none believed it could be performed in an office setting. A significant number of participants (77%) expressed concerns about complications, particularly recovery time and absence from work, while 61% were worried about impotence or decreased masculinity. Despite these concerns, 74% of respondents said they would consider a vasectomy, with lack of knowledge being the most common reason for refusal. The study concluded that the lack of knowledge about vasectomy in the rural Dominican Republic, coupled with misconceptions about the procedure, contributed to its underutilization. The authors suggested that education efforts should be focused on raising awareness about the benefits and risks of vasectomy to increase its acceptance in these communities.

In the study on "Knowledge and Acceptability of Vasectomy Among Male Health Workers in Teaching Hospitals in Ogbomoso," Bobo et al. (2024) aimed to assess the knowledge and acceptability of vasectomy among male health workers in Nigeria, particularly in the context of challenges to its utilization in the region. This study involved 223 male healthcare workers from teaching hospitals in Ogbomoso, Nigeria, and used standard survey techniques to gather data. The findings revealed that a significant proportion of respondents (94.6%) recognized the importance of contraception, and the majority (89.2%) had good knowledge of vasectomy. However, despite the high level of knowledge, only 29.1% of the participants expressed

willingness to accept vasectomy as a contraceptive method. The study identified cultural and religious beliefs as key barriers to the acceptability of vasectomy. These beliefs were found to contribute to a reluctance to undergo the procedure despite a solid understanding of its benefits. The authors concluded that while there is high awareness of vasectomy among male health workers, its actual uptake remains low due to sociocultural and religious factors. The study recommended that targeted educational campaigns, counseling, and training programs be implemented to address these barriers and increase the acceptance of vasectomy as a viable family planning option.

In the study "Knowledge, Attitude, and Associated Factors Towards Vasectomy Among Married Men in Arba Minch Town, Southern Ethiopia," Dejene Wolde et al. (2023) explored the knowledge and attitudes of married men towards vasectomy in Ethiopia, a country where male contraceptive methods are significantly underutilized. The study aimed to bridge the gap in the limited research on vasectomy in Ethiopia. A community-based cross-sectional study was conducted between May 2 and June 2, 2021, with a sample of 624 participants, of whom 600 completed the questionnaire, resulting in a response rate of 96.2%. The study utilized simple random sampling, and data were collected through face-to-face interviews using a semi-structured, pretested questionnaire. The results showed that 36.8% of the men had heard of vasectomy, and among them, 60.6% had good knowledge of the method, while 48.4% had a positive attitude towards it. The study found that factors such as higher education (college or university attendance), age (particularly 31–40 years and ≥41 years), and discussion of family planning with their wives were positively associated with better knowledge and attitudes toward vasectomy. Specifically, men who were older (≥41 years), had a later-aged last child, and had discussed family planning with their wives were more

likely to have a positive attitude toward vasectomy. The authors concluded that while a significant proportion of married men in Arba Minch town had good knowledge and a positive attitude toward vasectomy, there is still room for improvement, particularly in raising awareness and addressing cultural and social barriers to its acceptance. The study highlighted the importance of targeting education on vasectomy in both men's and women's family planning discussions, and recommended strengthening outreach programs to improve knowledge and uptake.

2.3.4 To identify factors influencing the acceptance or rejection of vasectomy

In a study conducted by Nwankwo et al. (2022), on "Knowledge, perception, and acceptance of vasectomy among male teachers in secondary schools in Chikun local government area of Kaduna State, Nigeria," the researchers sought to assess the level of knowledge, perception, and acceptance of vasectomy among male teachers in the region. This study was motivated by the longstanding misconception that family planning is primarily a woman's responsibility, with men playing a secondary role. Vasectomy, a safe and effective permanent contraceptive method, has seen poor uptake globally despite its benefits, particularly in Nigeria. The researchers utilized a cross-sectional descriptive study design, employing a pretested, interviewer-administered questionnaire to gather data from 178 male teachers who were selected through a multistage random sampling technique. The study revealed that only a small proportion of the participants, 6.7%, had a good understanding of vasectomy, and even fewer (5.6%) held a positive perception of the procedure. The vast majority (92.1%) of the respondents expressed unwillingness to undergo vasectomy. Analysis of the data showed that factors such as the teachers' age and the number of children they had were significantly associated with their acceptance of vasectomy ($P = 0.004$ and $P < 0.0001$, respectively). These findings indicated that misconceptions about

vasectomy were prevalent, contributing to low acceptance and poor knowledge. The researchers concluded that there is a critical need to improve awareness about vasectomy and address the misconceptions surrounding it. They recommended that the local government health authorities should organize continuous awareness campaigns to educate the community about vasectomy and other family planning methods. This would help dispel myths and increase the acceptance of vasectomy as a viable contraceptive option.

In the study "Unraveling Factors Shaping the Acceptance and Non-acceptance of Non-scalpel Vasectomy in Rural Central India: A Cross-Sectional Study," Sharma et al. (2024) explored the factors influencing the acceptance and non-acceptance of non-scalpel vasectomy (NSV) in rural India. Despite the method's advantages—being less complex and cost-effective compared to female sterilization—its acceptance remains low, and the study aimed to understand the socio-demographic determinants of NSV acceptance.The study was cross-sectional, involving 116 NSV acceptors and 116 non-acceptors from rural Central India. Data were collected over six months using a pre-designed questionnaire, covering socio-demographic details, reasons for acceptance/non-acceptance, and sources of information. Statistical analysis was performed using Epi Info 7.2.6, employing descriptive statistics and tests of association. The study found significant associations between NSV acceptance and several factors, including the age and education of the participants, the age of their wives, the duration of marriage, and the number of children. Incentives provided for undergoing the procedure also played a role in its acceptance. The most common reasons for accepting NSV included previous cesarean section (40.52%), simplicity of the procedure (26.72%), and health issues of the wife (23.28%). On the other hand, common reasons for non-acceptance included opposition from family and friends

(38%), lack of awareness (25%), and fear of surgery (23.28%). The study concluded that socio-demographic factors, cultural beliefs, and lack of awareness are crucial in shaping attitudes towards NSV. It recommended community-based interventions, increased advertisement, and counseling by health providers to enhance awareness and acceptance. Despite challenges, satisfaction with NSV among acceptors was high, and the study provided valuable insights for informing family planning strategies in rural India.

In the study "Socio-Cultural Factors Affecting the Use of Modern Family Planning Methods by Married Men in Omala Local Government Area, Kogi State, Nigeria," Shaibu et al. (2024) investigated how socio-cultural factors influence the use of modern family planning methods among married men in Omala LGA, Nigeria. Using a survey research design, the study distributed 306 questionnaires among married men, with 235 completed questionnaires returned. The study found that 51% of the respondents were not aware of modern family planning methods, and 34% had no access to such methods. Key socio-cultural factors identified as influencing family planning usage included cross-cultural differences, religious beliefs, gender roles, fertility desires, and the number of living children. Moreover, partner discussions and approval were also significant factors in family planning decisions. The study highlighted the perceived benefits of modern family planning methods, including reduced economic and emotional burdens of parenthood, and improvements in maternal health and child survival. However, respondents also noted hindrances to family planning, such as lack of knowledge, limited contraceptive supplies, high costs, and cultural or personal objections.The study concluded that socio-cultural factors significantly impact the practice of family planning in Omala LGA and recommended the implementation of awareness programs by health workers and religious

organizations to improve family planning practices. These initiatives could help enhance reproductive health outcomes and facilitate greater acceptance of modern contraceptive methods in the community.

In the study "Exploring Barriers to Vasectomy Adoption Among Married Men in Dadra and Nagar Haveli," Patel et al. (2024) aimed to assess the knowledge, attitude, and perceptions towards vasectomy, as well as the barriers to its adoption among married men in this region. Despite vasectomy being a safe, simple, and effective permanent contraceptive method, its use remains limited in India. The study was a cross-sectional, hospital-based survey involving 300 married male participants. Data were collected regarding sociodemographic details, knowledge about vasectomy, attitudes and perceptions toward the procedure, and the participants' intention to adopt vasectomy in the future. The results revealed that 86% of participants had heard of vasectomy as a contraceptive method, but only one participant had actually undergone the procedure. Although 95% of the participants agreed that family planning is a shared responsibility between men and women, 61.7% expressed unwillingness to undergo vasectomy. The study identified several barriers to vasectomy adoption, including procedure-related concerns, post-procedure complications, social factors, the availability of alternative contraceptive methods, and a preference for female sterilization (tubectomy). The authors concluded that there is a need for comprehensive information and counseling on vasectomy and non-scalpel vasectomy to address misconceptions and encourage the adoption of vasectomy as an accessible and effective family planning method.

In the review article "Barriers to Vasectomy Acceptance and Uptake in Nigeria: A Review of the Literature," Ndu et al. (2022) explored the barriers preventing the wider

acceptance and uptake of vasectomy in Nigeria, a country with less than 1% prevalence of vasectomy uses among women of reproductive age. The review aimed to understand sociocultural and health system-related factors that hinder the adoption of vasectomy as a family planning option. The authors conducted a scoping review of literature between 2009 and 2021, focusing on qualitative studies and grey literature. Their findings revealed a strong awareness of vasectomy among Nigerian men, yet several barriers to its uptake were identified, including fears surrounding the procedure, religious beliefs, and cultural perceptions that favor female-based contraceptive methods over male ones. These sociocultural factors contribute to a lack of confidence in vasectomy, despite the widespread use of female contraceptive methods. The review concluded that addressing these barriers requires a multi-faceted approach, including education and sensitization programs to overcome fears, as well as policy and healthcare system changes that integrate voluntary vasectomy services into national family planning initiatives. These findings have significant implications for future strategies to increase vasectomy acceptance and adoption in Nigeria.

2.4 Summary of literature review

The conceptual review explores the definitions and understanding of vasectomy as a male contraceptive method. Vasectomy is a permanent surgical procedure that provides an effective and low-cost means of contraception. Despite its advantages, its adoption remains limited due to various socio-cultural and healthcare-related factors. The review discusses the key components influencing vasectomy, such as awareness, knowledge, and perceptions of its effectiveness and safety. It also highlights the importance of male involvement in family planning, traditionally seen as the responsibility of women, and how this shift in responsibility can impact contraceptive choices.

The review further investigates the concept of male fertility and masculinity, often linked to the reluctance towards vasectomy adoption. Cultural and religious beliefs, along with misconceptions about the procedure's impact on sexual performance and fertility, significantly influence men's attitudes towards vasectomy. These factors shape public perceptions, often contributing to the stigma around male sterilization methods. In addition, the review addresses the role of healthcare systems in providing adequate information and support for vasectomy services. Accessibility and affordability are key considerations, with rural areas facing more challenges due to a lack of trained healthcare providers and limited resources. Thus, understanding these conceptual factors is essential for addressing barriers and improving vasectomy uptake.

The theoretical review is based on the Health Belief Model (HBM)**,** which is often used to understand health-related behaviors, including the decision-making process related to vasectomy adoption. The HBM posits that individuals are more likely to engage in health behaviors when they perceive a health threat and believe that the benefits of taking action outweigh the perceived barriers. In the context of vasectomy, this model explains how factors like perceived susceptibility (e.g., concerns about fertility), perceived severity (e.g., misconceptions about long-term effects), and perceived benefits (e.g., shared responsibility for contraception) influence men's decisions to undergo the procedure. The review further explores the Theory of Planned Behavior (TPB**)**, which suggests that behavior is influenced by intentions, attitudes, subjective norms, and perceived behavioral control. This theory is useful in understanding how attitudes towards vasectomy, societal norms, and perceived control over reproductive decisions influence men’s willingness to adopt this contraceptive method. Both theories highlight the importance of addressing individual

perceptions and external influences in promoting vasectomy as a viable family planning option. By applying these theories, the review underscores the need for targeted interventions that address the cognitive, emotional, and social barriers to vasectomy adoption. The integration of these theoretical frameworks into family planning programs can help inform strategies to reduce misconceptions and increase acceptance of male contraceptive methods.

The empirical review examines studies on the knowledge, attitudes, and acceptance of vasectomy across various populations, including men in Africa and Asia. A study by Bobo et al. (2024) found that while male health workers in Nigeria had good knowledge of vasectomy, few were willing to undergo the procedure due to concerns about its permanence and societal stigma. Similarly, research in Ethiopia by Dejene Wolde et al. (2023) revealed that while many men had heard of vasectomy, the level of awareness and positive attitudes were lower, especially among those with limited education and younger men. The review also highlights studies that identify key barriers to vasectomy adoption, including misconceptions about the procedure's impact on masculinity, fear of surgical complications, and the cultural preference for female sterilization (Patel et al., 2024). In rural areas, socio-demographic factors such as age, education, and marital status influence the acceptance of vasectomy. Men who had higher education and more children were more likely to consider vasectomy as a viable option for family planning (Sharma et al., 2024). Moreover, the review discusses interventions aimed at increasing vasectomy acceptance, such as mass media campaigns, educational workshops, and male involvement in family planning discussions. These strategies have been shown to improve knowledge and attitudes towards vasectomy, particularly when coupled with counseling services to address concerns and debunk myths (Ndu et al., 2022). However, despite these efforts, the

adoption rate remains low, indicating the need for more comprehensive approaches to integrate vasectomy into national family planning programs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a descriptive cross-sectional survey design. This design was appropriate because it allowed for the collection of data at a single point in time to assess the knowledge, attitudes, and acceptance of vasectomy among male non-medical staff of the University of Benin Teaching Hospital (UBTH).

3.2 Research setting

The study was conducted at the University of Benin Teaching Hospital (UBTH), located in Benin City, Edo State, Nigeria. UBTH is a federal tertiary health institution that provides comprehensive health services and has a wide range of professional and non-professional staff, including doctors, nurses, pharmacists, administrative workers, and technicians.

3.3 Target population

The target population comprised all non-medical male staff working in UBTH, with an estimated population of 1000. This administrative officers, clerks, porters, and other supporting staff.

3.4 Sample size determination

The sample size was determined using the Cochran's formula:

$$n_0 = \frac{Z^2 . p . (1 - p)}{e^2}$$

Where:

- n0 = sample size (without correction)
- Z = Z-value (for a confidence level of 95%, Z=1.96)

- p = estimated proportion of the population (if unknown, p=0.5 is often used as it gives the largest sample size)
- e = margin of error (0.05)

Once we calculate n0 , we can adjust it for a finite population using the finite population correction:

$$n = \frac{n_0 \,.\, N}{n_0 + N - 1}$$

Where:

- n = adjusted sample size
- n0 = sample size from the first formula
- N = total population size

Given:

- Confidence level: 95% (so, Z=1.96)
- Estimated proportion (p) = 0.5 (if no prior estimate is available)
- Margin of error (e) = 0.05
- Total population (N) = 1000

$$n_0 = \frac{(1.96).\,0.5.\,(\,1 - 0.5)}{0.05^2}$$

$$n_0 = \frac{3.8416.\,0.5.\,(\,0.5)}{0.025}$$

$$n_0 = \frac{3.8416.\,0.25}{0.0025}$$

$$n_0 = 384.16$$

Applying to

$$n = \frac{n_0 \,.\, N}{n_0 + N - 1}$$

$$n = \frac{384.16 \,.\, 1000}{384.16 + 1000 - 1}$$

$$n = \frac{384160}{384.16 + 999}$$

$$n = \frac{384160}{1383.16}$$

$$n = 277.74$$

Hence, the sample size is approximately 278.

3.5 Sampling technique

A stratified random sampling technique was used. The male staff were stratified into clinical and non-clinical groups to ensure representation from all categories. Proportionate sampling was then used to select participants from each stratum, followed by simple random sampling to select the final respondents.

3.6 Instrument for data collection

The instrument for data collection in this study was a self-structured questionnaire. This was developed based on the objectives of the study. The questionnaire was made up of five sections with. Questions were carefully drafted, sequenced and constructed in a bid to get in-depth information that is useful and relevant to the study will be used.

Section A: Socio-demographic data

Section B: Knowledge of vasectomy

Section C: Attitudes toward vasectomy

Section D: Acceptance and influencing factors

Section E: Factors influencing the acceptance or rejection of vasectomy

3.7 Validity of the instrument

The instrument's validity pertained to its capability to accurately measure the intended construct or concept (Surucu & Maslakci, 2020). Researchers assessed various validity types such as content, construct, criterion, and face validity to evaluate the instrument's accuracy. For this research, face and content validity was utilized to validate the research tool. The questionnaire was validated by both the project supervisor and a data analyst, and necessary adjustments was implemented by the researcher before starting the main study.

3.8 Reliability of the Instrument

The reliability of an instrument referred to its stability and consistency in delivering uniform outcomes when assessing the same criteria under identical circumstances (Surucu & Maslakci, 2020). It essentially gauged how consistently the instrument produced similar results across multiple trials. A reliable instrument is one that could produce the same results if the behavior was measured again by the same scale. The Cronbach's alpha reliability technique was employed in this study. The researcher conducted reliability testing on the instrument by distributing 28 questionnaires, which constituted 10% of the total sample size of 278, to male non-medical staff working at the Edo Specialist Hospital, Benin City Edo state. If a coefficient of 0.71 is obtained the instrument will be considered reliable.

3.9 Method of Data Collection

A well-structured questionnaire was administered to the male non-meddical staff until the required sample size of 278 was achieved. The researcher will distribute the questionnaires to the male staffs on morning, afternoon and night shifts within a

period of one week in order to ensure that all the male staff in various units are reached.

3.10 Method of Data Analysis

The data collected was analyzed using the Statistical Package for the Social Sciences (SPSS) version 29.0. Descriptive statistics such as mean, frequency, and percentages was computed to summarize the data. Hypothesis testing was conducted using the Chi-square test of association, with the level of significance set at $p < 0.05$. The results of the analysis will be presented using tables, graphs, frequencies, and percentages to provide a clear overview of the findings.

3.11 Ethical Considerations

Ethical approval will be sought from the health research ethics committee of the University of Benin Teaching Hospital. Permission was obtained from the unit's head to proceed with the research. Before data collection begins, participants received detailed explanations about the research's purpose, content, and implications. They will be assured of confidentiality, ensuring the protection of their personal and private information. Throughout the research, ethical guidelines will be strictly adhered to, including the following considerations:

1. Confidentiality: Respondents' information will be treated confidentially, with no request for names or addresses in the questionnaire. Participants will understand that their responses are confidential and solely used for research purposes. No personal identifiers will be used in any document or questionnaire to maintain anonymity.
2. Voluntary Participation: Participants will be informed of their right to voluntary participation without facing penalties or bias. They can choose to withdraw or decline to provide information at any point if they feel uncomfortable or unsure.

3. Avoidance of Plagiarism: Proper citation of all authors used in the study will be ensured, both within the content and in the reference page.

CHAPTER FOUR

RESULTS

This chapter deals with the representation of data collected regarding the knowledge, attitude and acceptance of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital. A total of 278 questionnaires were distributed to nurses during the period of this study. 269 were properly filled and valid for data analysis, giving a response rate of 96.8%.

Table 4.1: Socio-demographic data of respondents

Variable	Frequency (n = 269)	Percent (%)
Age		
20–29 years	111	41.3
30–39 years	88	32.7
40–49 years	51	19
50 years and above	19	7.1
Marital Status		
Single	121	45
Married	130	48.3
Divorced	15	5.6
Widowed	3	1.1
Religion		
Christianity	179	66.5
Islam	70	26
Traditional	9	3.4
Others	11	4.1
Level of Education		
Primary	21	7.8
Secondary	89	33.1
Tertiary	120	44.6
Postgraduate	39	14.5
Years of Working Experience		
Less than 5 years	51	19
5–10 years	110	40.9
11–15 years	79	29.4
16 years and above	29	10.8
Number of Children		
None	91	33.8
1–2	100	37.2
3–4	59	21.9
5 and above	19	7.1
Ethnic group		

Yoruba	43	16
Hausa	23	8.55
Bini	97	36.1
Esan	61	22.7
Igbo	32	11.9
Others	13	4.83

Table 4.1 shows the socio-demographic characteristics of the 269 respondents. The majority of the respondents (41.3%) were aged between 20 and 29 years, followed by those aged 30–39 years (32.7%). About 19.0% were between 40 and 49 years, while 7.1% were aged 50 years and above. In terms of marital status, 48.3% of the respondents were married, 45.0% were single, 5.6% were divorced, and 1.1% were widowed. Regarding religious affiliation, most respondents (66.5%) identified as Christians, 26.0% as Muslims, 3.4% practiced traditional religion, while 4.1% belonged to other religious groups. The educational background of the respondents indicated that 44.6% had tertiary education, 33.1% had secondary education, 14.5% had postgraduate qualifications, and 7.8% had only primary education Considering years of working experience, 40.9% of the respondents had worked for 5–10 years, 29.4% had 11–15 years of experience, 19.0% had less than 5 years, and 10.8% had worked for 16 years and above. Regarding family size, 37.2% of the respondents had 1–2 children, 33.8% had no children, 21.9% had 3–4 children, while 7.1% had 5 or more children. Ethnically, 36.1% of the respondents were Bini, 22.7% were Esan, 16.0% were Yoruba, 11.9% were Igbo, 8.5% were Hausa, and 4.8% belonged to other ethnic groups.

Answering Research Questions

Research Question 1: What is the level of knowledge of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital?

Table 4.2: The level of knowledge of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital

Items	Frequency	Correct Answer	Incorrect Answer	Mean	Remark
What is vasectomy?		158 (58.7)	111 (41.3)	1.6	Good
A permanent method of male contraception	158 (58.7)				
A method to enhance male fertility	56 (20.8)				
A temporary method of birth control for women	55 (20.5)				
Which organ is involved in a vasectomy procedure?		77 (28.6)	192 (71.4)	1.3	Poor
Vas deferens	77 (28.6)				
Urethra	60 (22.3)				
Prostate gland	132 (49.1)				
What happens during a vasectomy?		69 (25.7)	200 (74.3)	1.3	Poor
The vas deferens is cut or sealed to prevent sperm from mixing with semen	69 (25.7)				
The penis is surgically shortened	56 (20.8)				
The testicles are removed	144 (53.5)				
Which of the following is TRUE about vasectomy?		65 (24.2)	204 (75.8)	1.2	Poor
It does not affect sexual performance	65 (24.2)				
It leads to hormonal imbalance	71 (26.4)				
It causes erectile dysfunction	133 (49.4)				
How effective is vasectomy as a contraceptive method?		86 (32)	183 (68)	1.3	Poor
Over 99% effective in preventing pregnancy	86 (32)				
About 60% effective	44 (16.3)				
Rarely effective	139 (51.7)				
Can vasectomy be reversed?		117 (43.5)	152(56.5)	1.4	Poor
Yes, in some cases, but it's not guaranteed	117 (43.5)				

No, it can never be reversed	91(33.8)				
Yes, it is always 100% reversible	61 (22.7)				
When does vasectomy start becoming effective?		155 (57.6)	114 (42.4)	1.6	Poor
Several weeks after the procedure, after all the remaining sperms are cleared	155 (57.6)				Good
Immediately after surgery	81(30.1)				
Before the surgery is completed	33 (12.3)				

Table 4.2 Cont'd

Items	Frequency	Correct Answer	Incorrect Answer	Mean	Remark
Which of the following is a myth about vasectomy?		129 (48)	140 (52)	1.5	Good
Vasectomy reduces man's masculinity	129 (48)				
Vasectomy reduces sperm from reaching the sperm	49 (18.2)				
Vasectomy is a safe contraceptive method	91(33.8)				
Who can undergo vasectomy?		127 (47.2)	142 (52.8)	1.5	Good
A man who has completed his desired family size	127 (47.2)				
A man who wants to stop child birth	101 (37.6)				
A teenager who wants to delay pregnancy.	41 (15.2)				
Where is vasectomy typically performed?		121 (45)	148 (55)	1.5	Good
In a clinic or hospital as a minor surgery procedure	121 (45)				
Only in emergency rooms	94 (34.9)				
At home using herbal methods	54 (20.1)				
		Grand Mean		**1.4**	Poor

Mean Cut-off: 1.5

Table 4.2 shows the level of knowledge of vasectomy as a method of contraception among male staff in the University of Benin Teaching Hospital. The highest mean scores of **1.6** were recorded for the items "What is vasectomy?" and "When does

vasectomy start becoming effective?", followed by mean scores of 1.5 each for "Which of the following is a myth about vasectomy?", "Who can undergo vasectomy?", and "Where is vasectomy typically performed?". The item "Can vasectomy be reversed?" had a mean score of 1.4, while "Which organ is involved in a vasectomy procedure?", "What happens during a vasectomy?", and "How effective is vasectomy as a contraceptive method?" all had mean scores of 1.3. The lowest mean score of 1.2 was recorded for "Which of the following is TRUE about vasectomy?". The grand mean was 1.4, indicating an overall poor level of knowledge, based on a cut-off mean of 1.5.

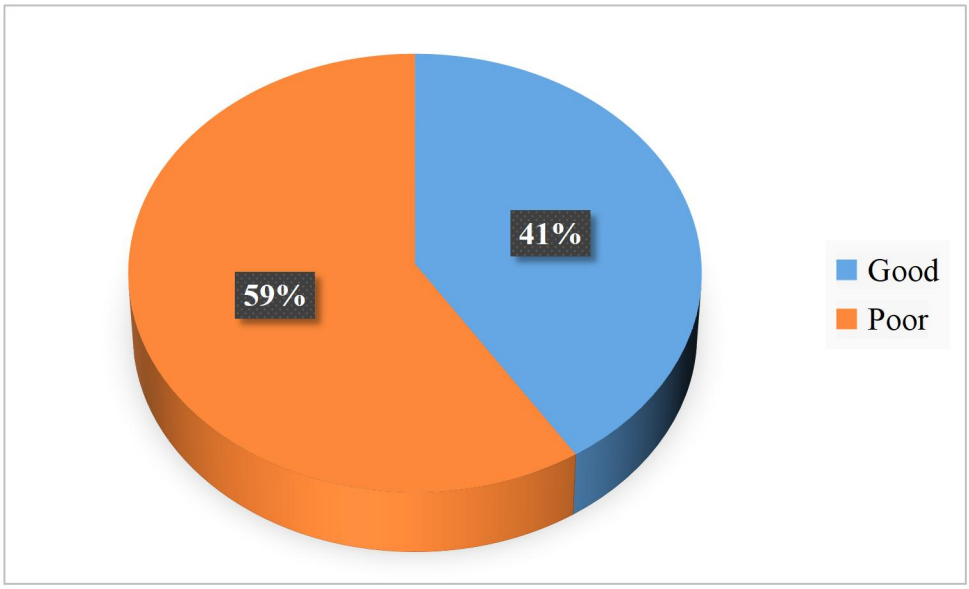

Fig 4.1: Pie-chart showing the level of knowledge of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital.

Figure 4.1 presents a pie chart showing the level of knowledge of vasectomy as a method of contraception among male staff at the University of Benin Teaching

Hospital. Out of the 269 respondents, **110 (41%)** demonstrated a **good level of knowledge**, while **159 (59%)** exhibited a **poor level of knowledge** of vasectomy.

Research Question 2: What is the attitudes of male staffs towards vasectomy in University of Benin Teaching Hospital?

Table 4.3: The attitudes of male staffs towards vasectomy

Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Remark
Vasectomy is a responsible decision for men who do not want more children.	37 (13.8)	56 (20.8)	91 (33.8)	85 (31.6)	2.2	Negative
I believe men should share equal responsibility with women in family planning.	41 (15.2)	60 (22.3)	84 (31.2)	84 (31.2)	2.2	Negative
I would feel less of a man if I undergo a vasectomy. (reverse-coded)	89 (33.1)	79 (29.4)	51 (19.0)	50 (18.6)	2.2	Negative
Vasectomy is an acceptable method of contraception for married men.	31 (11.5)	53 (19.7)	92 (34.2)	93 (34.6)	2.1	Negative
I am open to discussing vasectomy with my partner or spouse.	43 (16.0)	56 (20.8)	86 (32.0)	84 (31.2)	2.2	Negative
Vasectomy promotes family well-being and economic stability.	35 (13.0)	58 (21.6)	87 (32.3)	89 (33.1)	2.1	Negative
I would be ashamed if people found out I had a vasectomy. (reverse-coded)	87 (32.3)	75 (27.9)	53 (19.7)	54 (20.1)	2.3	Negative
Men who undergo vasectomy are making a wise health decision.	27 (10.0)	51 (19.0)	95 (35.3)	96 (35.7)	2	Negative
Cultural beliefs influence my attitude toward vasectomy.	109 (40.5)	71 (26.4)	49 (18.2)	40 (14.9)	1.9	Negative
Religious beliefs discourage me from considering vasectomy.	113 (42.0)	67 (24.9)	49 (18.2)	40 (14.9)	2.1	Negative
I trust the healthcare system to provide safe vasectomy procedures.	39 (14.5)	61 (22.7)	85 (31.6)	84 (31.2)	2.2	Negative
I would recommend vasectomy to other men who do not wish to have more children.	29 (10.8)	47 (17.5)	99 (36.8)	94 (34.9)	2	Negative
I fear that vasectomy may lead to health complications.	121 (45.0)	69 (25.7)	40 (14.9)	39 (14.5)	2	Negative
I think vasectomy should be promoted more in public health campaigns.	33 (12.3)	57 (21.2)	91 (33.8)	88 (32.7)	2.1	Negative

Undergoing vasectomy would make me feel secure in preventing unwanted pregnancies.	31 (11.5)	51 (19.0)	94 (34.9)	93 (34.6)	2.1	Negative
			Grand Mean		**2.1**	Negative

Mean Cut-off = 2.5

Table 4.3 shows the attitudes of male staff toward vasectomy in the University of Benin Teaching Hospital. The highest mean score of **2.3** was recorded for the item **"I would be ashamed if people found out I had a vasectomy"**, followed by mean scores of **2.2** each for **"Vasectomy is a responsible decision for men who do not want more children," "I believe men should share equal responsibility with women in family planning," "I would feel less of a man if I undergo a vasectomy," "I am open to discussing vasectomy with my partner or spouse,"** and **"I trust the healthcare system to provide safe vasectomy procedures."** Items such as **"Religious beliefs discourage me from considering vasectomy," "Vasectomy promotes family well-being and economic stability," "Vasectomy is an acceptable method of contraception for married men," "I think vasectomy should be promoted more in public health campaigns,"** and **"Undergoing vasectomy would make me feel secure in preventing unwanted pregnancies"** had mean scores of **2.1**. Lower mean scores of **2.0** were recorded for **"Men who undergo vasectomy are making a wise health decision," "I would recommend vasectomy to other men who do not wish to have more children,"** and **"I fear that vasectomy may lead to health complications."** The lowest mean score of **1.9** was observed for **"Cultural beliefs influence my attitude toward vasectomy."** The **grand mean** was **2.1**, indicating an overall **negative attitude** toward vasectomy, based on a cut-off mean of **2.5**.

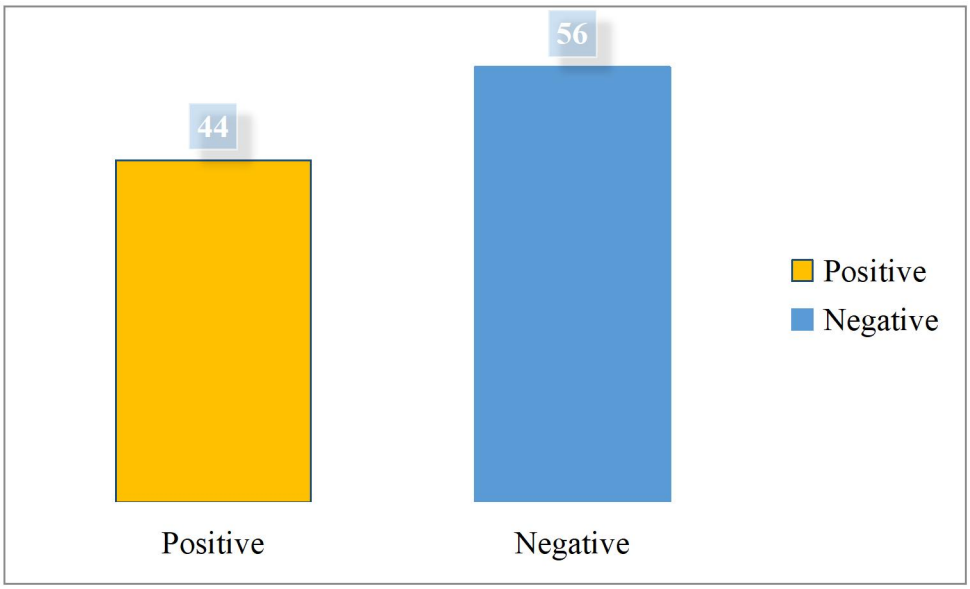

Fig 4.2: Bar chart showing the attitudes of male staffs towards vasectomy in University of Benin Teaching Hospital

Figure 4.2 presents a bar chart showing the attitudes of male staff toward vasectomy at the University of Benin Teaching Hospital. Out of the 269, **118 (44%)** demonstrated a **positive attitude**, while **151 (56%)** exhibited a **negative attitude** toward vasectomy.

Research question 3: What is the level of acceptance of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital?

Table 4.4: The level of acceptance of vasectomy as a method of contraception

Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Remark
I would consider undergoing vasectomy if I decided not to have more children.	29 (10.8)	46 (17.1)	94 (34.9)	100 (37.2)	2.0	Low
I believe vasectomy is a good long-term contraceptive option for men.	31 (11.5)	51 (19.0)	89 (33.1)	98 (36.4)	2.1	Low
I would support my partner if she suggested I undergo a vasectomy.	33 (12.3)	47 (17.5)	91 (33.8)	98 (36.4)	2.1	Low
Vasectomy should be widely promoted as a male contraceptive method.	35 (13.0)	56 (20.8)	84 (31.2)	94 (34.9)	2.1	Low
I would be willing to undergo vasectomy in the future if needed.	27 (10.0)	49 (18.2)	90 (33.5)	103 (38.3)	2	Low
I believe that vasectomy is a safer option than other forms of contraception for men.	30 (11.2)	45 (16.7)	92 (34.2)	102 (37.9)	2	Low
I would encourage other men to undergo vasectomy as a method of contraception.	25 (9.3)	43 (16.0)	94 (34.9)	107 (39.8)	1.9	Low
I feel comfortable with the idea of permanent contraception like vasectomy.	26 (9.7)	44 (16.4)	93 (34.6)	106 (39.4)	2	Low
Vasectomy is not an acceptable method of contraception for men. (reverse-coded)	111 (41.3)	74 (27.5)	46 (17.1)	38 (14.1)	2.1	Low
The idea of undergoing vasectomy makes me feel anxious. (reverse-coded)	113 (42.0)	69 (25.7)	44 (16.4)	43 (16.0)	2.1	Low
I would trust healthcare providers to advise me on the benefits and risks of vasectomy.	39 (14.5)	52 (19.3)	87 (32.3)	91 (33.8)	2.1	Low
The cost of the vasectomy procedure would influence my decision to undergo it.	41 (15.2)	54 (20.1)	83 (30.9)	91 (33.8)	2.2	Low
I believe that vasectomy can improve the quality of life for	27 (10.0)	49 (18.2)	90 (33.5)	103 (38.3)	2	Low

men in stable relationships.						
I think vasectomy is an irreversible decision and would not consider it. (reverse-coded)	109 (40.5)	75 (27.9)	45 (16.7)	40 (14.9)	2.1	Low
I would be more likely to accept vasectomy if there were more information and education available on the procedure.	33 (12.3)	55 (20.4)	88 (32.7)	93 (34.6)	2.1	Low
			Grand Mean		**2.0**	Low

Mean cut-off= 2.5

Table 4.4 presents the level of acceptance of vasectomy as a method of contraception among male staff in University of Benin Teaching Hospital. The highest mean score of 2.2 was recorded for "The cost of the vasectomy procedure would influence my decision to undergo it," followed by mean scores of 2.1 each for "I believe vasectomy is a good long-term contraceptive option for men," "I would support my partner if she suggested I undergo a vasectomy," "Vasectomy should be widely promoted as a male contraceptive method," "Vasectomy is not an acceptable method of contraception for men" (reverse-coded), "The idea of undergoing vasectomy makes me feel anxious" (reverse-coded), "I would trust healthcare providers to advise me on the benefits and risks of vasectomy," "I think vasectomy is an irreversible decision and would not consider it" (reverse-coded), and "I would be more likely to accept vasectomy if there were more information and education available on the procedure." Mean scores of **2.0** were recorded for "I would consider undergoing vasectomy if I decided not to have more children," "I would be willing to undergo vasectomy in the future if needed," "I believe that vasectomy is a safer option than other forms of contraception for men," "I feel comfortable with the idea of permanent contraception like vasectomy," and "I believe that vasectomy can improve the quality of life for men in stable relationships." The lowest mean score of 1.9 was observed for "I would encourage other men to

undergo vasectomy as a method of contraception." The grand mean was 2.0, indicating an overall low level of acceptance of vasectomy, based on a mean cut-off of 2.5.

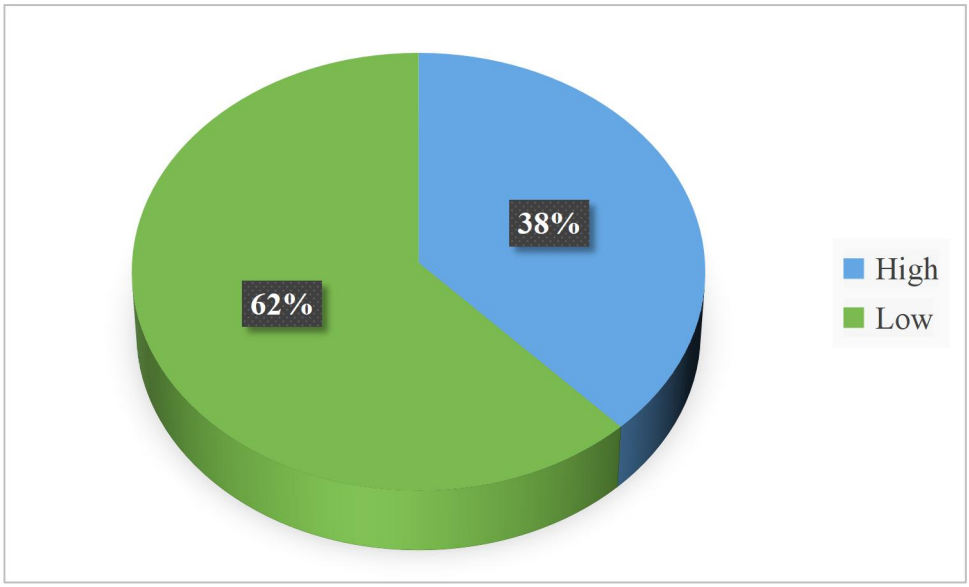

Fig 4.3: Pie-chart showing the level of acceptance of vasectomy as a method of contraception among male staffs in University of Benin Teaching Hospital

Figure 4.3 shows the level of acceptance of vasectomy as a method of contraception among male staff at the University of Benin Teaching Hospital. A total of 38% of the respondents, representing 101, demonstrated a high level of acceptance, while 62%, representing 168, showed a low level of acceptance.

Research question 4: What are the factors influencing the acceptance or rejection of vasectomy among male staffs in University of Benin Teaching Hospital?

Table 4.5: The factors influencing the acceptance or rejection of vasectomy

Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Remark
My level of education influences my decision to accept or reject vasectomy.	83 (30.9)	72 (26.8)	57 (21.2)	57 (21.2)	2.7	**Factor**
Cultural beliefs about masculinity influence my attitude toward vasectomy.	109 (40.5)	69 (25.7)	47 (17.5)	44 (16.4)	2.9	**Factor**
My religious beliefs discourage me from considering vasectomy.	113 (42.0)	66 (24.5)	45 (16.7)	45 (16.7)	2.9	**Factor**
I would consider undergoing vasectomy based on advice from healthcare professionals.	61 (22.7)	81 (30.1)	63 (23.4)	64 (23.8)	2.5	**Factor**
The opinions of my family members or friends influence my acceptance of vasectomy.	91 (33.8)	74 (27.5)	53 (19.7)	51 (19.0)	2.8	**Factor**
I feel that my financial situation would affect my decision to undergo vasectomy.	71 (26.4)	82 (30.5)	59 (21.9)	57 (21.2)	2.6	**Factor**
I am influenced by the availability of healthcare facilities that perform vasectomy.	77 (28.6)	86 (31.9)	53 (19.7)	53 (19.7)	2.7	**Factor**
The perceived risks or complications of vasectomy would prevent me from accepting it.	121 (45.0)	69 (25.7)	41 (15.2)	38 (14.1)	3	**Factor**
If my partner is supportive, I would be more likely to accept vasectomy.	67 (24.9)	91 (33.8)	59 (21.9)	52 (19.3)	2.6	**Factor**
I believe that social stigma against vasectomy would prevent me from undergoing the procedure.	107 (39.8)	73 (27.1)	51 (19.0)	38 (14.1)	2.9	**Factor**
My age has an influence on my acceptance or rejection of vasectomy.	81 (30.1)	71 (26.4)	61 (22.7)	56 (20.8)	2.7	**Factor**
The success rate of vasectomy in preventing pregnancies influences my decision to consider it.	89 (33.1)	79 (29.4)	53 (19.7)	48 (17.8)	2.8	**Factor**
The fear of permanent infertility is a major factor in my decision	117 (43.5)	71 (26.4)	43 (16.0)	38 (14.1)		**Factor**

to reject vasectomy.						
I would be more likely to accept vasectomy if I had more information about its benefits and risks.	73 (27.1)	87 (32.3)	53 (19.7)	56 (20.8)	2.7	**Factor**
The availability of alternative contraception methods influences my likelihood to accept vasectomy.	69 (25.7)	81 (30.1)	61 (22.7)	58 (21.6)	2.6	**Factor**
				Grand Mean	**2.7**	**Factor**

Mean cut-off= 2.5

Table 4.5 presents the factors influencing the acceptance or rejection of vasectomy among male staff at the University of Benin Teaching Hospital. The perceived risks or complications of vasectomy had the highest mean score of 3.0, indicating it as the most significant influencing factor. This was followed by cultural beliefs about masculinity, religious beliefs, and social stigma, each with a mean of 2.9. Other notable factors include the opinions of family or friends (2.8), the success rate of vasectomy in preventing pregnancies (2.8), level of education, age, access to healthcare facilities, and access to information about the procedure (each scoring 2.7). Financial situation, partner support, and availability of alternative contraception methods also emerged as relevant factors, each with a mean score ranging from 2.5 to 2.6. The grand mean of 2.7 suggests that these variables significantly influence male staff's decision-making regarding vasectomy.

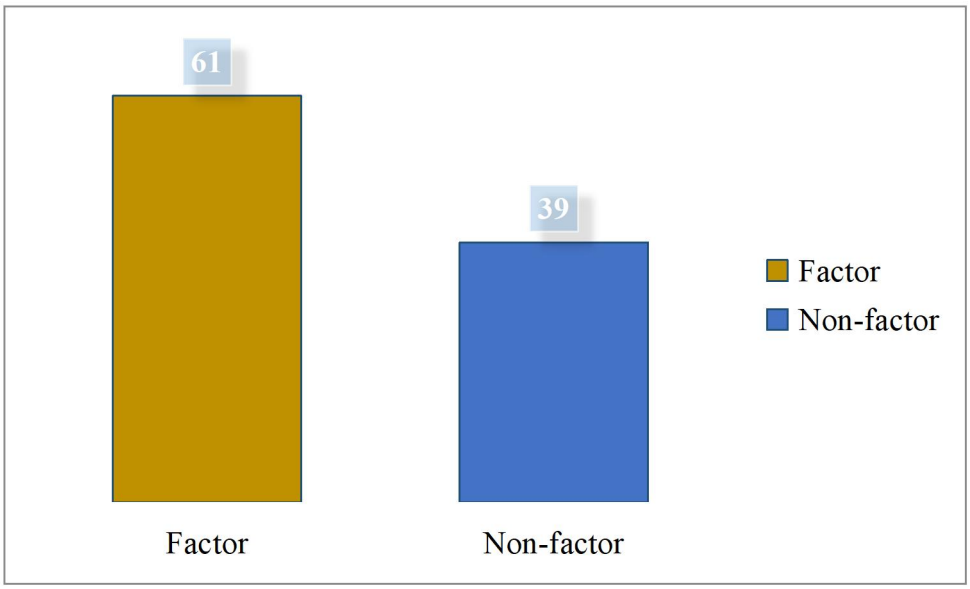

Fig 4.4: Bar chart showing the factors influencing the acceptance or rejection of vasectomy among male staffs in University of Benin Teaching Hospital

Figure 4.4 presents a bar chart showing the factors influencing the acceptance or rejection of vasectomy among male staff in the University of Benin Teaching Hospital. Out of the total respondents, 165 (61%) identified various personal, cultural, religious, and informational factors as influencing their decisions regarding vasectomy, while 104 (39%) reported no such influencing factors.

Hypothesis Testing

1. There is no significant relationship between the level of knowledge of vasectomy as a method of contraception and the level of acceptance among male staff.

Table 4.6: Relationship between level of knowledge and level of acceptance of vasectomy among male staff

Knowledge	Acceptance	Test Statistic (χ^2)	df	P-value	Decision
Good (110)	High (101)	5.214	1	0.073	Accepted
Poor (159)	Low (168)				

The analysis in Table 4.6 examines the relationship between the level of knowledge of vasectomy and its acceptance among male staff at the University of Benin Teaching Hospital. The chi-square test produced a test statistic of $\chi^2 = 5.214$ with a p-value of 0.073. Since the p-value is greater than the 0.05 significance level, the null hypothesis is accepted. This means that there is no statistically significant relationship between the level of knowledge and level of acceptance of vasectomy. Although the data suggests that individuals with a better understanding of vasectomy are more likely to accept it, this trend is not strong enough to be considered statistically significant at the 5% level.

2. There is no significant relationship between the attitudes of male staffs towards vasectomy and the level of acceptance.

Table 4.7: Relationship between attitude towards vasectomy and acceptance among male staff

Attitude	Acceptance	Test Statistic (χ^2)	df	P-value	Decision
Positive (118)	High (101)	4.326	1	0.038	Rejected
Negative (151)	Low (168)				

The analysis in Table 4.7 examines the relationship between the attitudes of male staff towards vasectomy and their level of acceptance of the procedure. The chi-square test yielded a statistic of $\chi^2 = 4.326$ with a p-value of 0.038. Since the p-value is less than the significance threshold of 0.05, the null hypothesis is **rejected**. This result indicates a statistically significant relationship between attitude and acceptance of vasectomy. Specifically, those with a more positive attitude were more likely to accept vasectomy as a method of contraception.

CHAPTER FIVE

DISCUSSION AND FINDINGS

This chapter discusses the major findings of the research compared with the literature reviewed, the implication for nursing, summary, conclusion, Recommendations and Suggestions for further Studies.

5.1 Discussion of Major Findings

This study examined knowledge, attitudes, and acceptance of vasectomy among male staff at the University of Benin Teaching Hospital. The sample (n=269) was predominantly young (41.3% aged 20–29), contrasting with studies like Pawłowska-Krajka et al. (2022) where vasectomy users were older. This younger age group may explain the lower knowledge and acceptance, consistent with Dejene Wolde et al. (2023) who reported higher knowledge among older men. Educationally, 59.1% had tertiary/postgraduate education, aligning with Degu Ayele et al. (2021), who linked higher education to better vasectomy awareness. Respondents largely had no children (33.8%) or 1–2 children (37.2%), differing from studies like Umeobieri et al. (2023) and Sharma et al. (2024), where vasectomy acceptance was higher among men with completed family size. A notable 45% were single, offering rare insight into premarital perceptions, unlike many studies focusing solely on married men. Religious affiliation (66.5% Christian, 26% Muslim) provided context for evaluating faith-based influences on vasectomy acceptance, with contrasting findings from Ndu et al. (2022) in Nigeria and Pawłowska-Krajka et al. (2022) in Poland.Ethnic diversity (Bini, Esan, Yoruba, Igbo, Hausa) and a well-established workforce (40.9% with 5–10 years experience) added further depth, enabling assessment of cultural and professional influences. Compared to studies in rural or slum settings (e.g., Chinnaiyan & Babu, 2021; Rijal et al., 2024), this study's urban and educated

demographic may allow for more generalizable insights. Overall, the inclusion of younger, single, and childless respondents, along with ethnic and educational diversity, provides a broader understanding of vasectomy perceptions than typically explored in existing literature.

Knowledge of Vasectomy Among Male Staff at UBTH

The findings that 41% of the respondents demonstrated good knowledge about vasectomy. While 58.7% of participants correctly identified vasectomy as a permanent method of male contraception, there were significant knowledge gaps in more specific aspects of the procedure. Only 28.6% correctly identified that the vas deferens is the organ involved in vasectomy, and merely 25.7% understood what actually happens during the procedure. These findings align with Degu Ayele et al. (2021), who found that only 38.5% of men in their Ethiopian study had adequate knowledge about vasectomy, suggesting that limited understanding of vasectomy is not unique to UBTH. Particularly concerning was the misconception about vasectomy's effects on sexual function, with only 24.2% correctly stating that it does not affect sexual performance. This corresponds with Wang et al. (2021), who reported that 61% of their respondents in rural Dominican Republic were concerned about impotence or decreased masculinity following vasectomy. These persistent misconceptions appear to transcend geographical boundaries. However, the knowledge level at UBTH contrasts with findings from Norhisham and Arifin (2024), who reported that 67.1% of participants in the Kuantan community had high levels of knowledge about vasectomy. Similarly, it differs from Ojewuyi et al. (2022), who found that 64.2% of resident doctors in Nigeria demonstrated good knowledge about vasectomy. This suggests that the level of knowledge at UBTH is lower than expected for a healthcare setting, where one might anticipate greater awareness among staff.

The relatively better knowledge about when vasectomy becomes effective (57.6% answered correctly) and recognition of myths about vasectomy (48% answered correctly) indicates some areas of better understanding. Similarly, White et al. (2022) found that 51% of U.S. men demonstrated high vasectomy knowledge, suggesting comparable levels in some aspects. These findings underscore the need for targeted educational interventions even among hospital staff, similar to what Gandhimathi (2021) and Dey et al. (2025) implemented in their studies, where significant improvements in knowledge were observed following planned teaching programs. Unlike Bobo et al. (2024), who found 89.2% of healthcare workers had good knowledge about vasectomy, the current study reveals considerable knowledge deficits among UBTH staff that need addressing. The overall poor knowledge level among UBTH male staff, despite working in a healthcare environment, highlights the universal challenge of vasectomy awareness and understanding, reinforcing the need for educational initiatives targeted specifically at healthcare workers who may influence public perceptions and acceptance of this contraceptive method.

Attitudes of Male Staff Towards Vasectomy

The findings showed that 56% of respondents exhibiting negative attitude towards vasectomy. The negative attitudes found among UBTH male staff align with the findings of Bussi et al. (2024) who reported predominantly negative beliefs towards vasectomy among healthcare professionals in an Argentinian community hospital. Despite their medical background, healthcare workers in both studies demonstrated resistance to vasectomy as a contraceptive method, suggesting that professional medical knowledge does not necessarily translate to personal acceptance. However, these findings contrast sharply with Rijal et al. (2024), who found that 86.5% of

married men in a Nepalese community held positive attitudes towards vasectomy despite having only moderate awareness levels. This disparity suggests that factors beyond knowledge may significantly influence attitudes toward vasectomy, particularly in medical settings where awareness should theoretically be higher. The strong influence of cultural and religious beliefs observed in this study (with 66.9% agreeing that cultural beliefs influence their attitudes and 66.9% acknowledging religious discouragement) mirrors the findings of Nwankwo et al. (2022) and Shaibu et al. (2024), who identified sociocultural factors as primary barriers to vasectomy acceptance in Nigerian communities. This persistent pattern suggests deeply embedded cultural resistance to male contraception in Nigerian society that transcends educational and professional boundaries.

Particularly concerning is the finding that 70.7% of male staff at UBTH fear health complications from vasectomy, despite their medical background. This mirrors Wang et al.'s (2021) findings in the Dominican Republic, where 77% of respondents feared complications. However, it is especially troubling in a healthcare workforce that should be better informed about the procedure's safety profile. Unlike Mahendravarman's (2021) study, which found more favorable attitudes among urban men compared to rural men in India, the current study shows that urban, educated, healthcare professionals still harbor negative attitudes toward vasectomy. This suggests that in the Nigerian context, urbanization and education may not overcome cultural barriers to vasectomy acceptance as readily as in other settings. The reluctance to share contraceptive responsibility (only 37.5% agreed men should share equal responsibility with women) contradicts the findings of Patel et al. (2024), where 95% of participants agreed that family planning is a shared responsibility. This stark

difference highlights potentially stronger gender role expectations in the Nigerian healthcare setting.

The low percentage of respondents willing to recommend vasectomy to others (28.3%) aligns with Ojewuyi et al.'s (2022) finding that only about 40% of Nigerian resident doctors were willing to recommend vasectomy to patients, further confirming the medical community's hesitancy toward promoting male contraception. These findings collectively suggest that negative attitudes toward vasectomy persist even among healthcare professionals in Nigeria, with cultural, religious, and gender norms appearing to outweigh medical knowledge and professional exposure. This presents a significant challenge for promoting vasectomy, as healthcare providers who hold negative attitudes are unlikely to effectively advocate for or provide comprehensive counseling about this contraceptive option.

Vasectomy Acceptance

The findings revealed that 38% demonstrating high acceptance while a substantial 62% showed low acceptance. This pattern is reflected consistently across all survey items, with mean scores around 2.0 (below the 2.5 cut-off), indicating general reluctance toward vasectomy. These results align with several previous studies from the literature review. Similar to the findings of Umeobieri et al. (2023) at the University of Nigeria, where only 20.7% of male workers expressed willingness to consider vasectomy, this study demonstrates comparable hesitation among healthcare workers. Despite being in a medical setting, the majority of respondents were unwilling to consider vasectomy for themselves, support partners who suggest it, or promote it to others. This contrasts somewhat with Bobo et al. (2024), who found that 29.1% of male healthcare workers in Ogbomoso teaching hospitals were willing to accept vasectomy. While this percentage is still low, it exceeds the apparent

acceptance in several items from the UBTH study, where percentages of "strongly agree" and "agree" combined rarely surpassed 30%. The UBTH findings more closely resemble those of Patel et al. (2024), who found that 61.7% of participants in Dadra and Nagar Haveli expressed unwillingness to undergo vasectomy.

An interesting parallel emerges with Bussi et al. (2024), who discovered that even healthcare professionals in Argentina held predominantly negative beliefs toward vasectomy despite their medical backgrounds. The UBTH study similarly suggests that medical knowledge does not necessarily translate to personal acceptance, as demonstrated by the low scores on items regarding trusting healthcare providers for advice (only 33.8% agreeing) and believing vasectomy is a safer option (just 27.9% agreeing). The findings diverge from Rijal et al. (2024), who reported that 86.5% of participants in Nepal had a positive attitude toward vasectomy despite moderate awareness levels. The UBTH results indicate that respondents not only demonstrate low acceptance but also express anxiety about the procedure (67.7% agreeing) and concerns about its irreversibility (68.4% agreeing). Notably, the UBTH results suggest that even increased information might have limited impact on acceptance, with only 32.7% indicating they would be more likely to accept vasectomy with more education. This contrasts with studies like Gandhimathi (2021) and Dey et al. (2025), which found educational interventions significantly improved knowledge and attitudes.

Factors Influencing Vasectomy Acceptance or Rejection

The findings from this study reveal that 61% of respondents acknowledged various influencing factors in their decision-making process, while 39% reported no such influences. Among the most significant factors identified, perceived risks or complications of vasectomy emerged as the strongest deterrent (mean = 3.0), with

70.7% of respondents either strongly agreeing or agreeing that this would prevent them from accepting the procedure. This finding aligns with the study by Wang et al. (2021), which found that 77% of participants expressed concerns about complications, particularly recovery time. Similarly, Patel et al. (2024) identified procedure-related concerns and post-procedure complications as major barriers to vasectomy adoption. Cultural beliefs about masculinity (mean = 2.9) and religious beliefs (mean = 2.9) were equally influential factors, with 66.2% and 66.5% of respondents respectively agreeing that these aspects discourage them from considering vasectomy. This corresponds with findings from Ndu et al. (2022), who highlighted cultural perceptions and religious beliefs as significant barriers to vasectomy uptake in Nigeria. Likewise, Bobo et al. (2024) identified cultural and religious beliefs as key factors limiting vasectomy acceptance despite high knowledge levels among healthcare workers. The fear of permanent infertility was another major deterrent (mean = 2.9), with 69.9% of respondents agreeing this influenced their rejection of vasectomy. This finding reflects concerns observed in previous studies, including Wang et al. (2021), where participants worried about impotence or decreased masculinity. Social stigma against vasectomy also emerged as a significant barrier (mean = 2.9), with 66.9% of respondents indicating this would prevent them from undergoing the procedure. In contrast to some previous studies, the current findings show that healthcare professional advice (mean = 2.5) had the least influence among the factors studied, with only 52.8% of respondents agreeing they would consider vasectomy based on such advice. This differs somewhat from Sharma et al. (2024), who recommended counseling by health providers to enhance vasectomy acceptance. The influence of family and friends' opinions (mean = 2.8) and partner support (mean = 2.6) were notable factors, with 61.3% and 58.7% of respondents respectively acknowledging

their importance. This aligns with Shaibu et al. (2024), who found that partner discussions and approval were significant in family planning decisions. Similarly, Dejene Wolde et al. (2023) identified discussion of family planning with wives as positively associated with better knowledge and attitudes toward vasectomy. Educational level was recognized as an influential factor (mean = 2.7) by 57.7% of respondents, consistent with findings from Degu Ayele et al. (2021), who found that men with secondary or higher education were more likely to have better knowledge about vasectomy. Additionally, age was acknowledged as influential (mean = 2.7) by 56.5% of respondents, supporting Nwankwo et al. (2022), who found significant associations between teachers' age and their acceptance of vasectomy. Interestingly, the success rate of vasectomy in preventing pregnancies was also identified as an important factor (mean = 2.8), with 62.5% of respondents indicating this influenced their decision. This suggests that effectiveness is a consideration, though perhaps overshadowed by concerns about risks and cultural factors.

5.2 Implications to Nursing

The findings of this study hold important implications for nursing practice, education, and policy, particularly in the area of reproductive health and family planning. Despite being healthcare professionals, male staff at the University of Benin Teaching Hospital demonstrated low levels of knowledge, predominantly negative attitudes, and poor acceptance of vasectomy. This highlights a significant gap in internal health education and underscores the need for nurses, especially those in family planning and health promotion roles, to actively engage in correcting misconceptions and providing evidence-based information about vasectomy—not only to patients but also within the healthcare workforce itself. Nurses are often the first point of contact in reproductive health services and play a pivotal role in counseling individuals and

couples on contraceptive options. The poor knowledge and misconceptions uncovered in this study, such as beliefs that vasectomy leads to sexual dysfunction or permanent harm, suggest that even healthcare workers may harbor biases that hinder effective communication with patients. This underscores the urgent need to strengthen continuing professional education for nurses and other health personnel on male contraceptive methods, including vasectomy. Enhanced training programs should focus on demystifying the procedure, emphasizing its safety, effectiveness, and role in shared contraceptive responsibility.

5.3 Summary of the Study

This study explored the knowledge, attitude, and acceptance of vasectomy as a method of contraception among male staff at the University of Benin Teaching Hospital (UBTH). A total of 269 male staff members participated in the study, representing a wide range of ages, educational levels, marital statuses, ethnic backgrounds, and work experiences. Notably, a significant proportion of respondents were young (20–39 years), with a high level of formal education, and a mix of both married and single individuals. This diverse demographic profile provided a rich context for understanding the multifaceted perceptions surrounding vasectomy. The study revealed that overall knowledge of vasectomy among the respondents was poor, with a grand mean score of 1.4—below the accepted threshold for good knowledge. Although most respondents correctly identified vasectomy as a permanent contraceptive method, there were major gaps in understanding the procedure itself, particularly regarding the anatomy involved, the actual process, and the effect on sexual performance. These findings suggest a lack of detailed awareness even within a healthcare setting. Attitudes toward vasectomy were also largely negative. With a grand mean of 2.1, well below the 2.5 threshold for a positive attitude, more than half

of the participants expressed disapproval or skepticism about vasectomy. Cultural and religious beliefs, fears of health complications, and misconceptions about masculinity and fertility were identified as key contributors to these negative perceptions. These sociocultural barriers appear deeply entrenched and pose significant challenges to promoting male contraceptive options. Acceptance of vasectomy was similarly low, with only 38% of respondents expressing willingness to consider or support the procedure. Many were unwilling to recommend it, undergo it themselves, or support their partner's suggestion of it. Despite their professional environment, most respondents shared the same concerns as the general public—particularly regarding the irreversibility of the procedure, fear of complications, and the stigma associated with male sterilization.

5.4 Conclusion

This study explored the knowledge, attitudes, and acceptance of vasectomy among male staff at the University of Benin Teaching Hospital. Despite a high level of formal education, the findings revealed poor knowledge of vasectomy, negative attitudes, and low acceptance. Cultural beliefs, religious views, fear of complications, and misconceptions about masculinity were major barriers. The study concludes that awareness alone is insufficient to improve acceptance; rather, a multifaceted approach—incorporating education, cultural sensitivity, and provider engagement—is essential to promote vasectomy as a viable contraceptive option among men in healthcare and beyond.

5.5 Limitations of the Study

While this study provides valuable insights into the knowledge, attitudes, and acceptance of vasectomy among male staff at the University of Benin Teaching

Hospital, certain limitations should be acknowledged. Firstly, the study was limited to a single institution, which may affect the generalizability of the findings to other hospitals or regions with different demographic or cultural profiles. Additionally, the reliance on self-reported data may have introduced response bias, as participants might have provided socially desirable answers, especially given the sensitive nature of the topic.

5.6 Recommendations

Based on the findings of this study, the following recommendations are made to enhance knowledge, improve attitudes, and increase the acceptance of vasectomy among male staff at the University of Benin Teaching Hospital:

1. Hospital Management should design and implement structured educational programs to address misconceptions surrounding vasectomy—particularly regarding its safety, reversibility, and effects on masculinity or sexual performance. These sessions should be regular, interactive, and tailored to both clinical and non-clinical staff.
2. Hospital Administrators, in collaboration with the Human Resources Department and Family Planning Unit, should integrate vasectomy education into routine staff wellness programs. This can include periodic workshops, health talks, and peer-led forums.
3. The Public Relations Unit, together with local health authorities, should actively involve religious and community leaders in vasectomy advocacy campaigns to address deeply rooted cultural and religious biases.

4. Policy Makers and the Ministry of Health should include male-centered family planning—such as vasectomy—into national reproductive health policies and guidelines, with targeted campaigns encouraging male involvement.
5. Professional Health Associations and NGOs should develop continuing education modules for health workers to ensure they are equipped to provide accurate, non-biased information on vasectomy to the public.
6. Mass Media Outlets should be engaged to broadcast culturally appropriate educational content that demystifies vasectomy, featuring testimonies from men who have undergone the procedure and health professionals.
7. Peer Educator Programs should be established, where trained male staff who support or understand vasectomy are empowered to educate and influence their colleagues positively.

5.7 Suggestions for Further Study

Given the findings and limitations of this study, further research is recommended to deepen understanding of vasectomy acceptance among Nigerian men.

1. Future studies should consider including a larger and more diverse population across multiple healthcare institutions and geographical locations to enhance generalizability.
2. In addition, qualitative research exploring personal, cultural, and religious narratives behind men's resistance to vasectomy would offer more nuanced insights.
3. It is also suggested that future studies incorporate female perspectives to understand how spousal influence shapes male decisions regarding permanent contraception.

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APPENDIX I

QUESTIONNNAIRE

DEPARTMENT OF NURSING SCIENCE,
FACULTY OF BASIC MEDICAL SCIENCE
UNIVERSITY OF BENIN,
BENIN CITY, EDO STATE

Dear Respondents,

I am a final year student of the above institution who is currently conducting a research on: **KNOWLEDGE, ATTITUDE AND ACCEPTANCE OF VASECTOMY AS A METHOD OF CONTRACEPTION AMONG MALE STAFFS IN UNIVERSITY OF BENIN TEACHING HOSPITAL**. Any information provided will be used for research purposes only and will be treated with utmost confidentiality. Thank you for your cooperation.

Please fill in the following by ticking ☑ the appropriate options:

Section A: Socio-demographic data

Age: ☐ 20–29 years☐ 30–39 years ☐ 40–49 years ☐ 50 years and above

Marital Status: ☐ Single ☐ Married ☐ Divorced ☐ Widowed

Religion: ☐ Christianity ☐ Islam ☐ Traditional ☐ Others (please specify):

_____

Level of Education: ☐ Primary ☐ Secondary ☐ Tertiary ☐ Postgraduate

Years of Working Experience: ☐ Less than 5 years ☐ 5–10 years ☐ 11–15 years ☐ 16 years and above

Number of Children: ☐ None ☐ 1–2 ☐ 3–4 ☐ 5 and above

Have you ever heard about vasectomy? ☐ Yes ☐ No

If yes, from where? (You can tick more than one) ☐ Health worker

☐ Media (TV, radio, newspaper, internet) ☐ Friends/Family ☐ Workshop/Seminar ☐ Others (please specify): _____

Section B: Knowledge of vasectomy as a method of contraception among male staffs

What is vasectomy? (A) A permanent method of male contraception ( ) (B) A method to enhance male fertility ( ) (C) A temporary method of birth control for women ( )

Which organ is involved in a vasectomy procedure? (A) Vas deferens ( ) (B) Urethra ( ) (C) Prostate gland ( )

What happens during a vasectomy? (A) The vas deferens is cut or sealed to prevent sperm from mixing with semen ( ) (B) The penis is surgically shortened ( ) (C) The testicles are removed ( )

Which of the following is TRUE about vasectomy? (A) It does not affect sexual performance ( ) (B) It leads to hormonal imbalance ( ) (C) It causes erectile dysfunction ( )

How effective is vasectomy as a contraceptive method? (A) Over 99% effective in preventing pregnancy ( ) (B) About 60% effective ( ) (C) Rarely effective ( )

Can vasectomy be reversed? (A) Yes, in some cases, but it is not guaranteed ( ) (B) No, it can never be reversed ( ) (C) Yes, it is always 100% reversible ( )

When does vasectomy start becoming effective? (A) Several weeks after the procedure, after all remaining sperm are cleared ( ) (B) Immediately after the surgery ( ) (C) Before the procedure is completed ( )

Which of the following is a myth about vasectomy? (A) Vasectomy reduces a man's masculinity ( ) (B) Vasectomy prevents sperm from reaching semen ( ) (C) Vasectomy is a safe contraceptive method ( )

Who can undergo vasectomy? (A) A man who has completed his desired family size ( ) (B) A woman who wants to stop childbirth ( ) (C) A teenager who wants to delay pregnancy ( )

Where is vasectomy typically performed? (A) In a clinic or hospital as a minor surgical procedure ( ) (B) Only in emergency rooms ( ) (C) At home using herbal methods ( )

Section C: Attitudes of male staffs towards vasectomy

Items	Strongly Agree	Agree	Disagree	Strongly Disagree
Vasectomy is a responsible decision for men who do not want more children.				
I believe men should share equal responsibility with women in family planning.				
I would feel less of a man if I undergo a vasectomy. (reverse-coded)				
Vasectomy is an acceptable method of contraception for married men.				
I am open to discussing vasectomy with my partner or spouse.				
Vasectomy promotes family well-being and economic stability.				
I would be ashamed if people found out I had a vasectomy. (reverse-coded)				
Men who undergo vasectomy are making a wise health decision.				
Cultural beliefs influence my attitude toward vasectomy.				
Religious beliefs discourage me from considering vasectomy.				
I trust the healthcare system to provide safe vasectomy procedures.				
I would recommend vasectomy to other men who do not wish to have more children.				
I fear that vasectomy may lead to health complications.				
I think vasectomy should be promoted more in public health campaigns.				
Undergoing vasectomy would make me feel secure in preventing unwanted pregnancies.				

Section D: Acceptance of vasectomy as a method of contraception among male staffs

Items	Strongly Agree	Agree	Disagree	Strongly Disagree
I would consider undergoing vasectomy if I decided not to have more children.				
I believe vasectomy is a good long-term contraceptive option for men.				
I would support my partner if she suggested I undergo a vasectomy.				
Vasectomy should be widely promoted as a male contraceptive method.				
I would be willing to undergo vasectomy in the future if needed.				
I believe that vasectomy is a safer option than other forms of contraception for men.				
I would encourage other men to undergo vasectomy as a method of contraception.				
I feel comfortable with the idea of permanent contraception like vasectomy.				
Vasectomy is not an acceptable method of contraception for men. (reverse-coded)				
The idea of undergoing vasectomy makes me feel anxious. (reverse-coded)				
I would trust healthcare providers to advise me on the benefits and risks of vasectomy.				
The cost of the vasectomy procedure would influence my decision to undergo it.				
I believe that vasectomy can improve the quality of life for men in stable relationships.				
I think vasectomy is an irreversible decision and would not consider it. (reverse-coded)				
I would be more likely to accept vasectomy if there were more information and education available on the procedure.				

Section E: Factors influencing the acceptance or rejection of vasectomy among male staffs

Items	Strongly Agree	Agree	Disagree	Strongly Disagree
My level of education influences my decision to accept or reject vasectomy.				
Cultural beliefs about masculinity influence my attitude toward vasectomy.				
My religious beliefs discourage me from considering vasectomy.				
I would consider undergoing vasectomy based on advice from healthcare professionals.				
The opinions of my family members or friends influence my acceptance of vasectomy.				
I feel that my financial situation would affect my decision to undergo vasectomy.				
I am influenced by the availability of healthcare facilities that perform vasectomy.				
The perceived risks or complications of vasectomy would prevent me from accepting it.				
If my partner is supportive, I would be more likely to accept vasectomy.				
I believe that social stigma against vasectomy would prevent me from undergoing the procedure.				
My age has an influence on my acceptance or rejection of vasectomy.				
The success rate of vasectomy in preventing pregnancies influences my decision to consider it.				
The fear of permanent infertility is a major factor in my decision to reject vasectomy.				
I would be more likely to accept vasectomy if I had more information about its benefits and risks.				
The availability of alternative contraception methods influences my likelihood to accept vasectomy.				

APPENDIX II

RELIABILITY OF INSTRUMENT

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.71	0.70	55

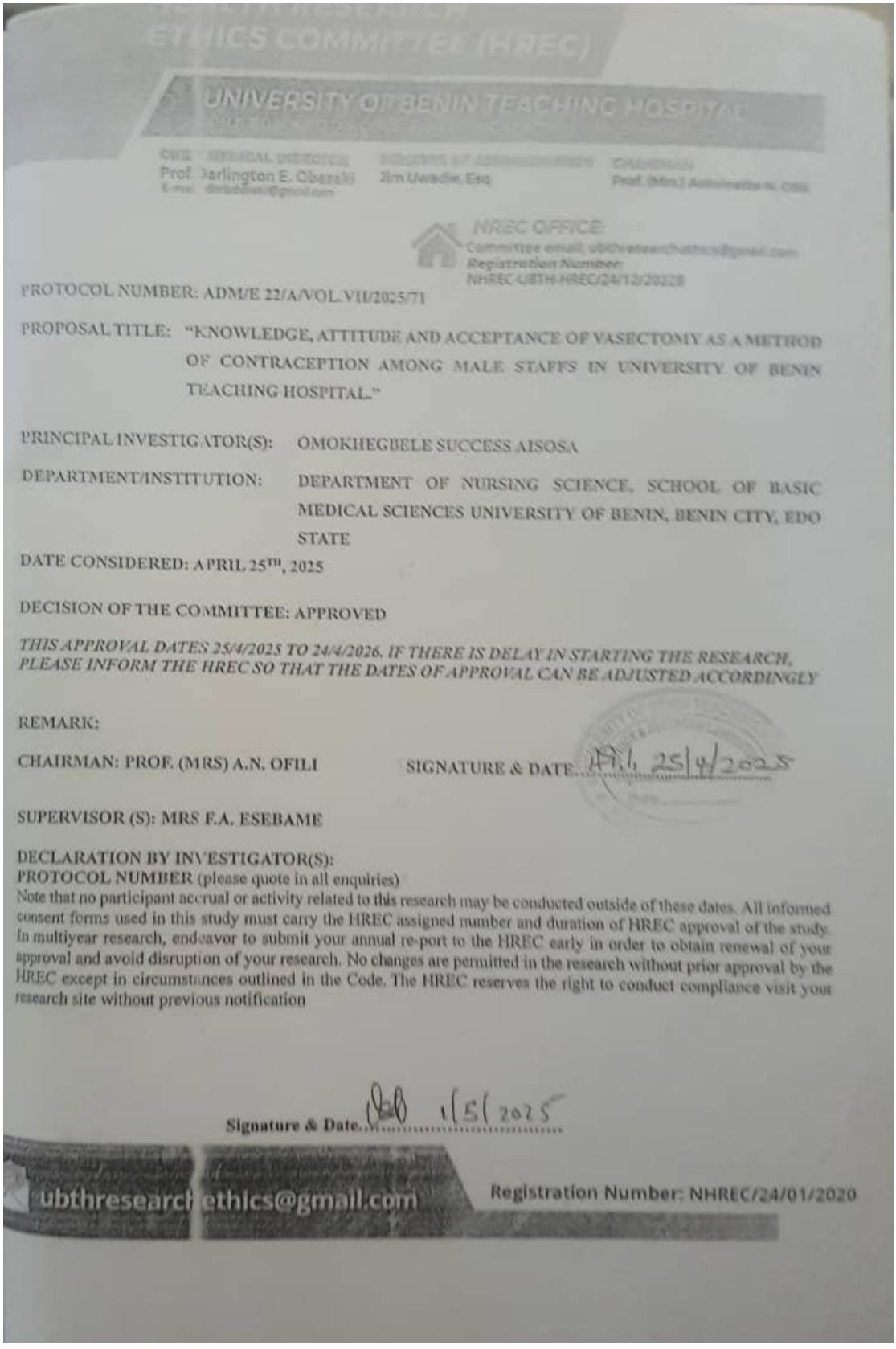
Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
What is vasectomy?	53.4931	15.077	-.047	.701
Which organ is involved in a vasectomy procedure?	54.1111	15.302	.204	.210
What happens during a vasectomy?	53.4167	15.126	-.061	.185
Which of the following is TRUE about vasectomy?	87.3188	27.590	-.123	.099
How effective is vasectomy as a contraceptive method?	87.4813	26.138	.053	.092
Can vasectomy be reversed?	53.4931	15.077	-.047	.565
When does vasectomy start becoming effective?	53.2986	14.141	.055	.196
Which of the following is a myth about vasectomy?	53.4931	15.077	-.047	.701
Who can undergo vasectomy?	54.1111	15.302	.204	.210
Where is vasectomy typically performed?	53.4167	15.126	-.061	.185
Vasectomy is a responsible decision for men who do not want more children.	87.3188	27.590	-.123	.099
I believe men should share equal responsibility with women in family planning.	87.2313	27.034	-.044	.078
I would feel less of a man if I undergo a vasectomy.	87.3188	27.590	-.123	.099
Vasectomy is an acceptable method of contraception for married men.	87.3188	27.590	-.123	.099
I am open to discussing vasectomy with my partner or spouse.	87.4813	26.138	.053	.092
Vasectomy promotes family well-being and economic stability.	53.4931	15.077	-.047	.165
I would be ashamed if people found out I had a vasectomy.	87.4500	25.582	.125	.071
Men who undergo vasectomy are making a wise health decision.	87.3188	27.590	-.123	.099
Cultural beliefs influence my attitude toward vasectomy.	87.4813	26.138	.053	.092
Religious beliefs discourage me from considering vasectomy.	87.3188	27.590	-.123	.099
I trust the healthcare system to provide safe vasectomy procedures.	87.4813	26.138	.053	.092
I would recommend vasectomy to other men who do not wish to have more children.	53.4931	15.077	-.047	.701
I fear that vasectomy may lead to health complications.	54.1111	15.302	.204	.210
I think vasectomy should be promoted more in public health campaigns.	53.4167	15.126	-.061	.185

Undergoing vasectomy would make me feel secure in preventing unwanted pregnancies.	87.3188	27.590	-.123	.099
I would consider undergoing vasectomy if I decided not to have more children.	87.6438	27.325	-.076	.081
I believe vasectomy is a good long-term contraceptive option for men.	87.5938	26.658	.058	.077
I would support my partner if she suggested I undergo a vasectomy.	87.3188	27.590	-.123	.099
Vasectomy should be widely promoted as a male contraceptive method.	87.4813	26.138	.053	.092
I would be willing to undergo vasectomy in the future if needed.	86.2813	26.719	-.064	.095
I believe that vasectomy is a safer option than other forms of contraception for men.	86.3500	25.675	.024	.090
I would encourage other men to undergo vasectomy as a method of contraception.	86.3000	24.714	.114	.081
I feel comfortable with the idea of permanent contraception like vasectomy.	82.2313	27.034	-.044	.071
Vasectomy is not an acceptable method of contraception for men.	87.4625	26.917	-.043	.080
The idea of undergoing vasectomy makes me feel anxious.	87.3188	27.590	-.123	.099
I would trust healthcare providers to advise me on the benefits and risks of vasectomy.	87.4813	26.138	.053	.092
The cost of the vasectomy procedure would influence my decision to undergo it.	86.3500	25.675	.024	.090
I believe that vasectomy can improve the quality of life for men in stable relationships.	86.3000	24.714	.114	.081
I think vasectomy is an irreversible decision and would not consider it.	82.2313	27.034	-.044	.071
I would be more likely to accept vasectomy if there were more information and education available on the procedure.	87.4625	26.917	-.043	.080
My level of education influences my decision to accept or reject vasectomy.	87.3188	27.590	-.123	.099
Cultural beliefs about masculinity influence my attitude toward vasectomy.	87.4813	26.138	.053	.092
My religious beliefs discourage me from considering vasectomy.	87.3188	27.590	-.123	.099
I would consider undergoing vasectomy based on advice from healthcare professionals.	87.6438	27.325	-.076	.081
The opinions of my family members or friends influence my acceptance of vasectomy.	87.5938	26.658	.058	.077
I feel that my financial situation would affect my decision to undergo vasectomy.	87.3188	27.590	-.123	.099
I am influenced by the availability of healthcare facilities that perform vasectomy.	87.3188	27.590	-.123	.099
The perceived risks or complications of vasectomy would prevent me from accepting it.	87.4813	26.138	.053	.092
If my partner is supportive, I would be more likely to accept vasectomy.	53.4931	15.077	-.047	.701
I believe that social stigma against vasectomy would prevent me from undergoing the procedure.	54.1111	15.302	.204	.210
My age has an influence on my acceptance or rejection of vasectomy.	87.5938	26.658	.058	.077
The success rate of vasectomy in preventing pregnancies influences my decision to consider it.	87.3188	27.590	-.123	.099
The fear of permanent infertility is a major factor in my decision to reject vasectomy.	87.3188	27.590	-.123	.099
I would be more likely to accept vasectomy if I had more information about its benefits and	87.4813	26.138	.053	.092

risks.				
The availability of alternative contraception methods influences my likelihood to accept vasectomy.	87.5938	26.658	.058	.077

Comment: The reliability analysis using Cronbach's Alpha, yielding a result of 0.71, for the overall scale. Additionally, the Cronbach's Alpha of 0.52 when the items are standardized. These values suggest a good level of internal consistency among the items in this scale.



ETHICS COMMITTEE (HREC)

UNIVERSITY OF BENIN TEACHING HOSPITAL

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Registration Number:
NHREC-UBTH-HREC/24/12/20228

PROTOCOL NUMBER: ADM/E 22/A/VOL.VII/2025/71

PROPOSAL TITLE: "KNOWLEDGE, ATTITUDE AND ACCEPTANCE OF VASECTOMY AS A METHOD OF CONTRACEPTION AMONG MALE STAFFS IN UNIVERSITY OF BENIN TEACHING HOSPITAL."

PRINCIPAL INVESTIGATOR(S): OMOKHEGBELE SUCCESS AISOSA

DEPARTMENT/INSTITUTION: DEPARTMENT OF NURSING SCIENCE, SCHOOL OF BASIC MEDICAL SCIENCES UNIVERSITY OF BENIN, BENIN CITY, EDO STATE

DATE CONSIDERED: APRIL 25TH, 2025

DECISION OF THE COMMITTEE: APPROVED

THIS APPROVAL DATES 25/4/2025 TO 24/4/2026. IF THERE IS DELAY IN STARTING THE RESEARCH, PLEASE INFORM THE HREC SO THAT THE DATES OF APPROVAL CAN BE ADJUSTED ACCORDINGLY

REMARK:

CHAIRMAN: PROF. (MRS) A.N. OFILI SIGNATURE & DATE 25/4/2025

SUPERVISOR (S): MRS F.A. ESEBAME

DECLARATION BY INVESTIGATOR(S):
PROTOCOL NUMBER (please quote in all enquiries)
Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual re-port to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit your research site without previous notification

Signature & Date 1/5/2025

ubthresearchethics@gmail.com Registration Number: NHREC/24/01/2020