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Men's Knowledge and Attitudes Regarding Vasectomy: A Comprehensive Cross-Sectional Study

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ABSTRACT

Background

Male sterilization in sub-Saharan Africa, including Sudan, remains underutilized for various reasons, despite its numerous advantages over other family planning methods.

Purpose

This study aims to assess men's knowledge and attitudes towards vasectomy, identify their sources of information, and evaluate the utilization rate at Omdurman Maternity Hospital in Sudan.

Methodology

We conducted a quantitative, descriptive cross-sectional study to evaluate the level of knowledge and attitudes toward vasectomy. Data were collected using a structured questionnaire, and a random sampling technique was employed to select 195 respondents for participation.

Results

The findings revealed that the majority of participants were aged between 28 and 37 years. Notably, 131 respondents (67.2%) demonstrated poor knowledge of vasectomy, despite being familiar with at least one male family planning method. Additionally, 142 respondents (72.8%) expressed a negative attitude towards vasectomy. The study identified a significant association between respondents' education level and their attitudes towards vasectomy (P-value = 0.00), as well as between marital status and attitudes towards vasectomy (P-value = 0.00).

Conclusion

The study indicates that respondents possess a low level of knowledge regarding vasectomy as a male family planning option and hold negative perceptions about it. These unfavorable views may be influenced by cultural factors, religious beliefs, and a lack of awareness..

Keywords: *vasectomy, male, utilization, knowledge, attitude*

1. INTRODUCTION

Male sterilisation in Sudan is limited for many reasons, despite its numerous advantages over other family planning methods [1]. A vasectomy is a permanent method of contraception for men [2]. This study used a quantitative and descriptive cross-sectional design. We conducted an analysis to understand men's awareness and attitudes towards vasectomy as a family planning method at their disposal.

The underuse of this approach is frequently attributed to male mentality. Frequently cited examples of attitudes that discourage the use of vasectomy include men's lack of interest in or responsibility for reducing pregnancies, the association with castration, and fear of the procedure [3]. A vasectomy is the most effective form of contraception currently available [4].

Low awareness and negative attitudes towards vasectomy still surround the procedure, deterring men from considering it [5]. Despite being one of the least popular and understood methods of contraception worldwide, vasectomies are as successful as female sterilisation and are less expensive [6].

Research conducted in the previous decades has revealed that men do care about reducing pregnancies and want to share the responsibility for family planning with their partners [7-8]. Promoting and educating men about the basic facts and benefits of vasectomy will result in higher use of the method and break down the common myths about the procedure [9].

Although approximately 20% of married women in Sudan said they did not want another child, contraceptive usage is still low [1].

Burundi, Mauritius, and Uganda are East African countries with 0.1% vasectomy cases, while there is no male sterilisation and 0.5% female sterilisation in Sudan [11-12].

Ebeigbe's study in Nigeria found that the pattern of therapy for permanent contraception revealed that 89.4% of the physicians performed and counselled for bilateral tubal ligation (BTL), which was frequent (9.6%), but only 1.0% of the respondents said they had never given BTL counselling [13].

In Sudan, the national contraceptive prevalence rate for women of reproductive age was estimated to be 8.3%, a slight increase compared to 1990, when it was estimated to be 6.9% in North Sudan and 1% in South Sudan [14]. The male sterilisation (vasectomy) rate was 0.1%. These low rates may have been due to poor acceptance, inadequate knowledge, or the inaccessibility of male sterilisation in a large community with such diverse cultural backgrounds. This study aimed to assess and evaluate the knowledge and acceptability of male sterilisation among Sudanese men and define the barriers to male sterilisation.

2. MATERIALS AND METHODS

Study Design

This descriptive, prospective, observational, cross-sectional, and hospital-based study utilized both quantitative and qualitative research methods. The study was conducted from January 2022 to June 2022 at Omdurman Maternity Hospital, the first and largest specialized maternity hospital in Sudan, established in 1957 primarily to train midwives from the nearby midwifery school (founded between 1917 and 1922) and to provide maternity services to women in the greater Khartoum area and surrounding villages.

Study Population

The study population consisted of men of reproductive age who visited the family planning (FP) clinic with their wives at Omdurman Maternity Hospital. According to Polit and Beck (2008), researchers must specify the inclusion criteria for the population. In this study, we included men of reproductive age who visited or accompanied their wives to the clinic.

Inclusion Criteria:

- Males of reproductive age

- Willingness to participate
- Ability to provide informed consent
- Attendance at FP/OMH cases during the study period

Exclusion Criteria:

- Males unwilling to participate
- Males too ill to provide consent or participate in interviews

Sample Size

The required sample size was calculated using the formula:

n=z2pqd2*n=d2z2pq*

Where:

- n*n* = sample size
- z*z* = constant (1.96)
- p*p* = prevalence of the current issue (15%)
- q=100−p*q*=100−*p*
- d*d* = degree of accuracy (5%)

The calculated sample size for this study was 195 participants.

Data Collection Tools

Data were collected using a specifically designed questionnaire. Men of reproductive age attending family planning or maternal and child health units were interviewed through structured interviews. Family planning professionals gathered data after providing services and information, with oversight from the researcher to ensure data quality.

Quality Assurance

To ensure the accuracy of the data, the following measures were implemented:

1. Double-checking data entries prior to analysis.
2. Secure storage of completed questionnaires to prevent unauthorized access.
3. Exclusion of personal information to maintain confidentiality.

Operational Definitions

- **Assess**: Gathering information about respondents' knowledge of vasectomy.
- **Knowledge**: Verbal responses regarding awareness of vasectomy.
- **Attitude**: A complex mental state encompassing beliefs, feelings, values, and tendencies to act in specific ways.
- **Contraception**: Deliberate prevention of pregnancy during sexual intercourse using methods or devices to reduce conception.
- **Family Planning**: A program aimed at controlling the number and spacing of children within a family.
- **Stable Marital Relationship**: Defined as marriage or cohabitation lasting more than six months.
- **Vasectomy Utilization Rate**: The proportion of men of reproductive age using vasectomy as a contraceptive method at a specific time.

Variables

- **Dependent Variables**: Knowledge and attitudes towards vasectomy.
- **Sociodemographic Variables**: Age, education level, cultural factors, beliefs (including religion), approval of vasectomy use, spousal communication, and media exposure.
- **Supply and Access to Services**: Availability of family planning services.

Statistical Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 23. Descriptive analysis was performed for all variables. The chi-square test was used to examine relationships between categorical variables, with a P-value < 0.05 considered statistically significant. The association between two measured quantities was assessed using the t coefficient, and the Pearson correlation coefficient was utilized to explore relationships between continuous variables. A one-way ANOVA test evaluated differences between subgroups.

Ethical Considerations

The purpose of the study was clearly communicated to the participants, and informed consent was obtained prior to data collection. The study received approval from the Sudan Medical Specialization Board (SMSB) and ethical clearance from the hospital ethics committee. Participants were informed of their right to withdraw from the study at any time, and the data collection process did not affect their management.

3. RESULT

This study was conducted at Omdurman Maternity Hospital and included 195 males. The majority of the participants (88, 45.1%) were aged between 20 and 30 years. There were 72 (36.9%) subjects aged between 31 and 40 years. There were 30 (15.4%) subjects aged 41-50 years, and between 51-60 were 5 (2.6%). The mean ± SD was 37.7 ± 7.2 years. Table (1).

Regarding the level of education, the majority of the participants, 68 (34.87%), had secondary school-level education. There were 47 (24.11%) subjects with university or higher levels of education. Illiteracy rate among study participants was only 19 (9.74%). There were 61 subjects (31.28%) with primary education. Table (2).

In terms of occupation, the majority of participants (33.33%) held a job. There were 71 (36.41%) subjects who were workers. There were 21 (10.77%) subjects in private service. Among the study participants, 20 (10.26%) were drivers, and approximately 18 (09.23%) were unemployed. Table (3).

Regarding the length of marriage, the majority of the participants, 66 (33.85%), had been married for 6–10 years. There were 22 (11.28%) subjects between 16 and 20 years old. The number of participants between 1 and 5 years was 51 (26.15%). There were 14 subjects (07.8%) who were >21 yrs. Table (4).

Male knowledge, 162 (83.1%) of respondents agreed that they knew pills, 155 (79.5%) knew injections, 142 (72.8%) knew implants, 139 (71.3%) knew IUCD, 135 (69.2%) knew male condoms, 120 (61.5%) knew the safe period, 109 (55.9%) knew female sterilisation, and about 64 (32.8%) knew vasectomy. Table (5).

The majority of the participants, 18 (28.1%), reported that their source of information about vasectomy was a health professional.

A vasectomy was performed by a health professional. There were 16 (25.0%) subjects who were from media, newspapers, and magazines. There were 10 subjects (15.6%) who came from family planning centers.

The subjects came from family planning centres. Radio/TV were 8 (12.5%), and relatives and friends were 12 (18.8%). Of the respondents, 56 (87.5%) knew that vasectomy was a family planning method, and 39 (60.9%) knew that it was a permanent family planning method (Table 6).

In the present study, only 14 (21.8%) subjects knew that a vasectomy is a simple procedure that can be performed in the clinic under local anaesthesia. Eighteen (28.1%) subjects knew that this procedure is highly successful and cost-effective. Ten (15.6%) subjects were aware of the complications of this procedure, such as haematoma, pain, and infection. Table (7).

Majority 142 (72.9%) subjects agree that vasectomy is castration and should not be done. There were 150 (76.9%) subjects who agree that permanent sterilisation should be only for females. Only 12 participants (11.3%) concurred and authorised the use of vasectomy as a method of contraception. There were 73 (37.4%) subjects who agreed that vasectomy was against their religious beliefs. Table (8).

The present study finds a significant correlation between men's knowledge about vasectomy and the following variables: level of education, residence, and number of children. Table (9).

The present study finds significant correlation between men's attitudes towards vasectomy and the following variables (level of education, level of knowledge on vasectomy, residence and number of children). Table (10).

Knowledge of Male Vasectomy Only 64 (32.8%) of the men had knowledge of vasectomy (Figure 1).

Level of knowledge: 34 (17.4%) had high knowledge, while 30 (15.4%) had low knowledge. Figure (2).

Attitude towards vasectomy: 53 (27.2%) had a positive attitude, while 142 (62.8%) had a negative one (Figure 3).

Only 22 (11.3%) of men approve of and accept vasectomy as a method of family planning. Figure (4)

The majority of men, 191 (97.9%), were Muslims (Figure 5).

Table (1): Distribution of males according to age at OMH (n = 195)

Age	Frequency	Percent
21-30 years	88	45.13
31-40 years	72	36.93
41-50 years	30	15.38
51-60 years	5	2.56
Total	195	100%

Table (2): Distribution of the study population according to the educational level at OMH (n=195)

Level of education	Frequency	Percent
Illiterate	19	9.74
Primary	61	31.28
Secondary	68	34.87
University	32	16.42
Postgraduate	15	7.69
Total	195	100%

Table (3): Distribution of male according to the occupation at OMH (n=195)

Occupation	Frequency	Percent (%)
Employ	65	33.33
Driver	20	10.26
Private service	21	10.77
Worker	71	36.41
No occupation	18	9.23
Total	195	100

Table (4): Distribution of male according to the duration of married life at OMH (n=195)

Duration of married life	Frequency	Percent (%)
1-5 years	51	26.15
6-10 years	66	33.85
11-15 years	42	21.54
16-20 years	22	11.28
21 & above years	14	7.18
Total	195	100

Table (5): Distribution of the study population according to their knowledge about means of family planning at OMH (n=195)

Means of contraceptive	Yes	No	P value		
	Count	%	Count	%	
Pills	162	83.1%	33	16.9%	
Injection	155	79.5%	40	20.5%	000*
Implant	142	72.8%	53	27.2%	0.653
IUCD	139	71.3%	56	28.7%	000*
Male condom	135	69.2%	60	30.8%	0.00*
Female condom	126	64.6%	69	35.4%	000*
Safety period	120	61.5%	75	38.5%	0.483
Female	109	55.9%	86	44.1%	0.431
Sterilizations	64	32.8%	131	67.2%	000*

Table (6). Distribution of male according to their general Knowledge on vasectomy at OMH (n=64)

Characteristics		Count	%
Where did you first learn of vasectomy?	Doctors	18	28.1%
	Mass media	16	25.0%
	Friends/wife	12	18.8%
	FP centers	10	15.6%
	Radio/ TV	8	12.5%
Is a vasectomy a form of family planning method?	Yes	56	87.5%
	No	8	12.5%
What type of family planning method is vasectomy?	Permanent	39	60.9%
	Temporary	15	39.1%
After a vasectomy procedure, does a man lose his sexual urge and desire for sexual activity?	Yes	24	37.5%
	No	40	62.5%
After a vasectomy, can a man still impregnate his wife?	Yes	12	18.7%
	No	52	81.3%
The tendency for prostate cancer increases in men who have had vasectomy?	Yes	37	57.8%
	No	27	42.2%
Vasectomy prevents sexually transmitted infections?	Yes	9	14.1%
	No	55	85.9%

Table (7): Distribution of male according to their general Knowledge on vasectomy at OMH (n=64)

Characteristics		Count	%
Do you know Is it simple enough to be done? Can the procedure be completed? Can do it in clinic by local anesthesia?	Yes	14	21.8%
	No	50	78.2%
You know to use another type of contraception for three months?	Yes	11	17.2%
	No	53	82.8%
Do you know this procedure is highly successful and cost effective?	Yes	18	28.1%
	No	46	71.9%
Do you know complication of this procedure (hematoma, pain Infection	Yes	10	15.6%
	No	54	84.4%

Table (8). Distribution of male according to their general attitudes on vasectomy at OMH (n=195)

Characteristics		Count	%
Vasectomy is castration and should not be done?	Strongly agree	98	50.3%
	Agree	44	22.6%
	Disagree	32	16.4%
	Strongly disagree	21	10.7%
It's preferred. Is it true? Should permanent sterilisation be limited to females?	Strongly agree	102	52.3%
	Agree	48	24.6%
	Disagree	18	09.3%
	Strongly disagree	27	13.8%
I approve of I agree with the use of vasectomy as a method of family planning.	Strongly agree	10	05.1%
	Agree	12	06.2%
	Disagree	88	45.1%
	Strongly disagree	85	43.6%
Should men be prim? Are men primarily responsible for making decisions about which family planning methods to use?	Strongly agree	101	51.8%
	Agree	33	16.9%
	Disagree	21	10.8%
	Strongly disagree	40	20.5%
Is a vasectomy Is it an effective form of family planning?	Strongly agree	56	28.7%
	Agree	54	27.7%
	Disagree	49	25.1%
	Strongly disagree	36	18.5%
Should men take part in family planning?	Strongly agree	78	40.0%
	Agree	29	14.9%
	Disagree	26	13.3%
	Strongly disagree	62	31.8%

It's against my cultural belief for a man to practice vasectomy?	Strongly agree	114	58.5%
	Agree	22	11.3%
	Disagree	34	17.4%
	Strongly disagree	25	12.8%
It's against my cultural belief for a man to practice vasectomy?	Strongly agree	42	21.5%
	Agree	31	15.9%
	Disagree	57	29.3%
	Strongly disagree	65	33.3%

Table (9): Distribution of Sudanese male according to their knowledge of vasectomy in relation to demographic factors at OMH (n=195)

Knowledge of vasectomy	Variable	Yes	No	Df	
Level of education	Illiterate	05 (26.3%)	14(73.7%)	2	.02*
	Primary	15 (24.6%)	46 (75.4%)		
	Secondary	06 (08.8%)	62 (91.2%)		
	University	26 (81.3%)	06 (18.7%)		
	Postgraduate	12 (80.0%)	03 (20.0%)		
Religious status	Islam	61 (31.9%)	130 (68.1%)	2	0.11
	Christian	03 (75.0%)	01 (25.0%)		
Number of children	Non	04 (36.4%)	07 (63.6%)	2	0.00*
	1-2	15(33.3%)	30 (66.7%)		
	3-4	12 (21.1%)	45 (78.9%)		
	5-6	17(31.5%)	37 (68.5%)		
	6 and more	16 (57.1%)	12 (42.9%)		
Residence	Urban	49(35.3%)	90(64.7%)	2	004*
	Rural	15(26.8%)	41(73.2%)		

Table (10): Distribution of Sudanese male according to their attitudes towards vasectomy in relation to demographic factors at OMH (n=195)

Character's	Variable	Positive attitudes	Negative attitudes	Df	
Level of education	Illiterate	05 (26.3%)	14(73.7%)	2	.000*
	Primary	11 (18.1%)	50(81.9%)		
	Secondary	07 (10.3%)	61(89.7%)		
	University	20 (62.5%)	12 (37.5%)		
	Postgraduate	10 (66.7%)	05 (33.3%)		

Religious status	Islam Christian	51 (26.7%) 02 (50.0%)	140 (73.3%) 02 (50.0%)	2	0.67
Number of children	Non 1-2 3-4 5-6 6 and more	00 (00.0%) 08 (17.8%) 15 (26.3%) 12 (22.2%) 18 (64.3%)	11 (100.0%) 37 (82.2%) 42 (73.7%) 42 (77.8%) 10 (35.7%)	2	0.01*
Level of knowledge on Vasectomy	High level Low level No knowledge	26(76.5%) 17 (56.7%) 10 (07.6%)	08(23.5%) 13 (43.3%) 121 (92.4%)	2	000*
Residence	Urban Rural	42 (30.2%) 11 (19.6%)	97 (69.8%) 45 (80.4%)	2	

Table (11): Distribution of Sudanese male according to the factors limited to the low use of vasectomy at OMH (n=195)

Factors	Frequency	Percent
Lack of information	101	51.79%
Fear of the procedure	35	17.95%
Believe status	34	17.44%
Religious status	15	07.69%
Access and availability	10	05.13%
Total	195	100

Table (12): The table presents the significance of vasectomy and its associated p-value.

Dependent	Independent	P value
Acceptance of vasectomy	Age of respondents	0.52
	Education	.000*
	Men having children	.000*
	Number of children	002*
	Fear of procedure	000*
	availability and accessibility of contraceptive	000*
	Believe and religious status	004*
	Respondent knowledge of vasectomy	002*

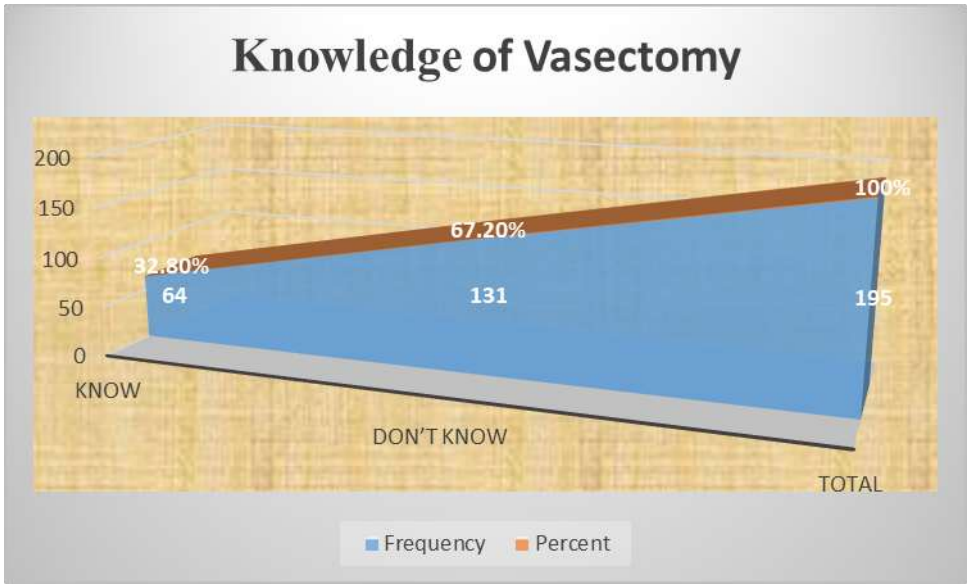

Figure (1): knowledge of Male to Vasectomy (n=195)

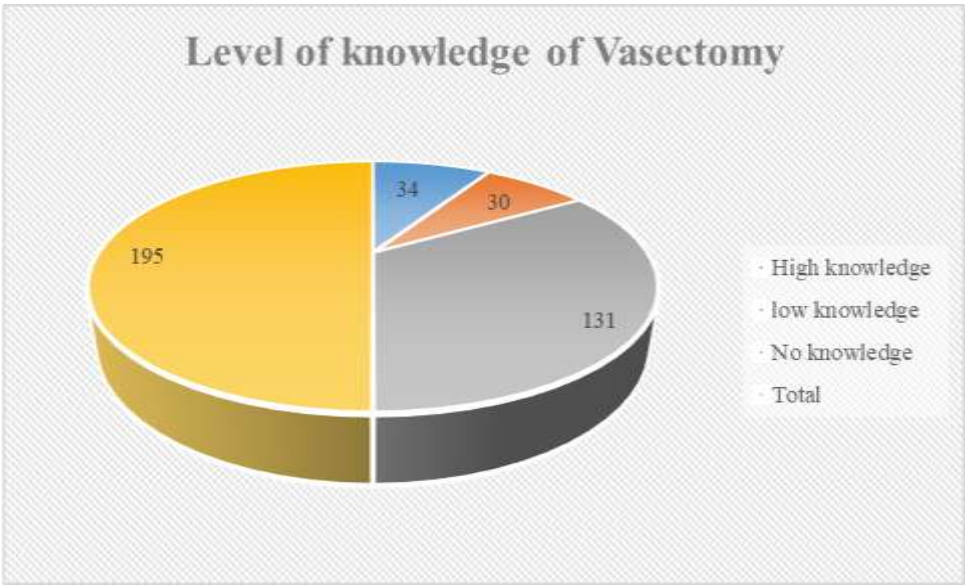

Figure (2): Level of knowledge of Male towards Vasectomy (n=195)

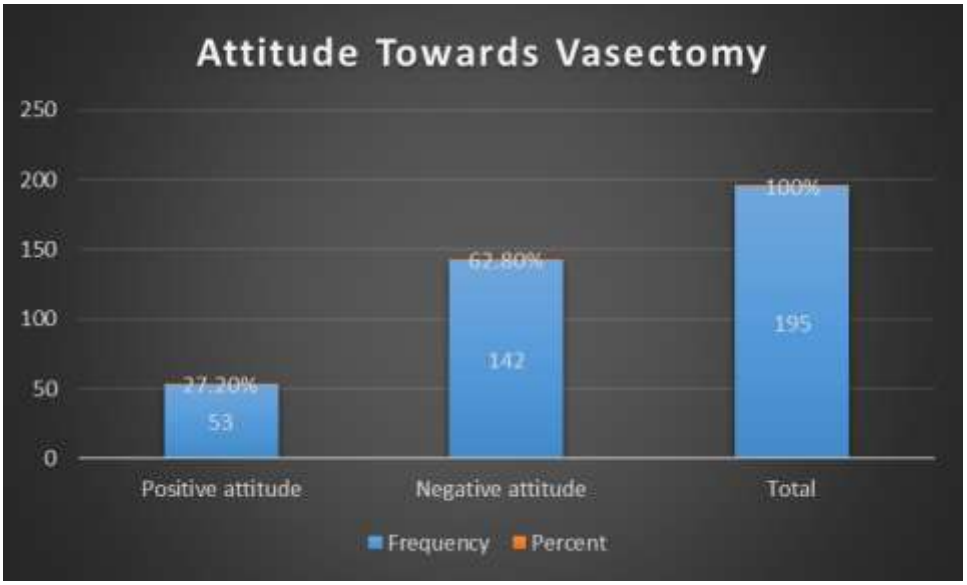

Figure (3): Attitute of Male towards Vasectomy (n=195)

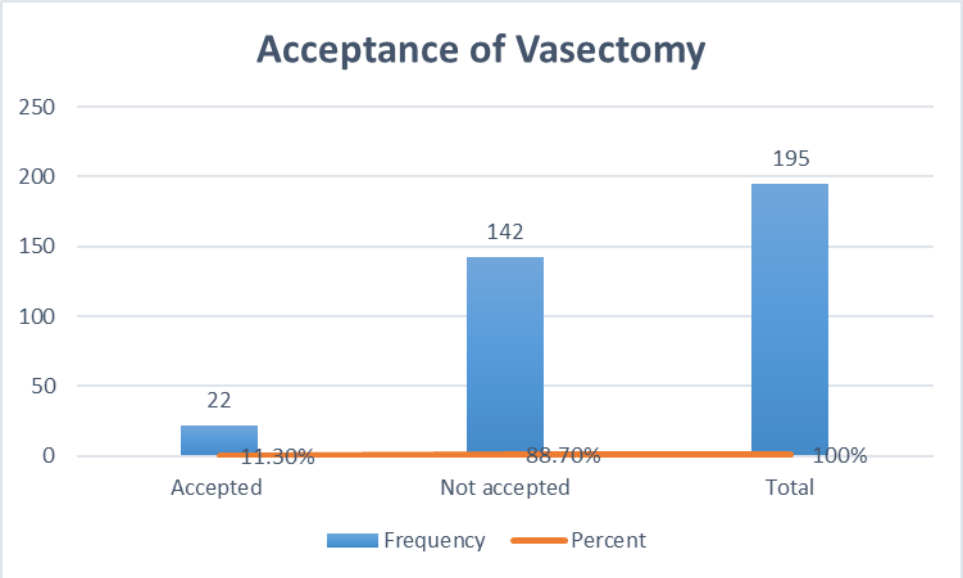

Figure (4): Acceptance of Male to Vasectomy (n=195)

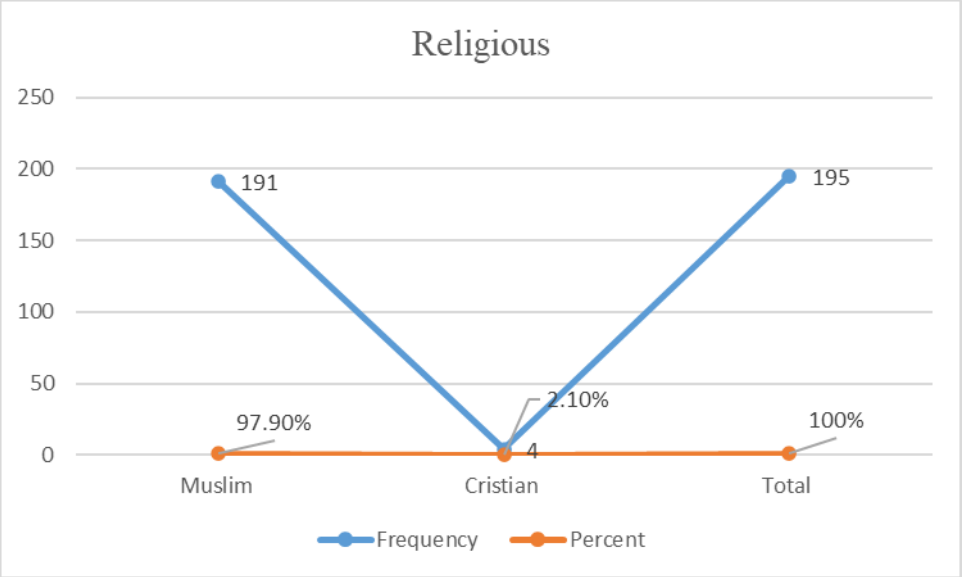

Figure (5): Religious of Male (n=195)

4. DISCUSSION

The findings of this study in many ways echo those of previous studies on vasectomy conducted in sub-Saharan Africa countries and elsewhere in the world [15-17]. In this study, a structured interview schedule was developed which consists of demographic data, reproductive issues, men's knowledge and attitude towards vasectomy, and the results were discussed as follows.

The sample population consisted of 195 respondents, men of reproductive age groups who visited or accompanied their wives to family planning units at Omdurman Maternity Hospital.

At the time of data collection, 9.7% of the study respondents were illiterate, while 90% were able to read and write at the level of tertiary school education. Our finding is comparable to a Nigerian study [18].

In addition, the majority (97.9%) of respondents were Muslim in terms of religion; 2.1% were Christian. With regard to residential areas, 28.7% of respondents resided in rural areas, and 71.3% came from the urban areas. The above findings are comparable with those of Joco Stein, R. & Pile, M. 2007, who obtained the same results [19].

The majority (83.1%) of respondents knew about family planning. There was a significant difference between rural and urban respondents with regard to FP knowledge or awareness. Regarding knowledge on female sterilisation, more than half (55.9%) of respondents reported that they knew female sterilisation or permanent family planning methods. Our result is comparable with the Ghana study [20].

Almost one-third (32.8%) of respondents reported that they did know about male sterilisation (vasectomy). A Tanzania study [21] found a similar awareness rate of 34.2%.

Additionally, our results match those of Kafuah and Sossou, who found that spermicides, vasectomy, and tubal ligation are the least known and least popular family planning methods. Additionally, the current study findings indicate that the practice of vasectomy is more common in Ethiopia than Sudan, suggesting a higher level of knowledge compared to the 18% awareness of male sterilisation reported by men in previous research conducted in Ethiopia [23]. Furthermore, this practice is more prevalent in Cameroon (85.6%), where respondents identified various sources of information about vasectomy: friends (45.3%), the internet (44.5%), health workers (44.3%), media (32.1%), and relatives (28.5%) [24]. This discrepancy can be attributed to cultural and informational barriers to the vasectomy method, and hence, they are in need of appropriate social counselling and accurate information advocacy. The data analysed in this study revealed that educational level did have an effect on the level of knowledge of vasectomy. Here, the respondents with higher education were found to have the highest level of knowledge about vasectomy compared to other groups of men with lower educational levels or illiteracy. Another factor responsible for knowledge of the vasectomy method is the exposure of messages through media in a community; electronic media are crucial. Barone et al. found that men were more likely to choose vasectomy when the media conveyed the method's message [25].

Around 60.1% stated that they had understood that vasectomy is irreversible and irretrievable. Nearly a third (30.7%) of the respondents said they know who is eligible for a vasectomy. With regard to awareness of any family planning methods, pills

were found to be the predominant method, followed by injectables. In this case, knowledge of female and male sterilisation was 55.9% and 32.8%, respectively. In line with this,

Barone et al. [25] state that female sterilisation was nearly three times the proportion of those who relied on male sterilisation.

Despite their knowledge of at least one form of male family planning method, the majority of the respondents had no knowledge of vasectomy, while a few who claimed to have expertise had poor knowledge of vasectomy. Men don't go to family planning clinics, where this is mostly discussed, and their information source was mostly friends and partners.

The majority of respondents also expressed a pessimistic outlook on vasectomy, with the majority believing that it should not be performed on men and that women should be responsible for family planning methods. But they also thought that women, as heads of households, should choose the method.

This finding corroborates the statement of the International Conference on Family Planning (2009) that 89 per cent of men approved their wives to use family planning methods but do not participate in family planning. Additionally, cultural acceptance, acceptance of religious ideas, ignorance, and the accessibility of family planning clinics were major factors influencing men's attitudes towards vasectomy. The low acceptance of vasectomy in the study is the result of a combination of factors. The major barriers to vasectomy appeared to be a lack of information about the procedure and fear surrounding it. Remarkably, only a small percentage of the respondents identified access and availability issues as barriers to vasectomy.

This result implies that cultural and religious ideas of the respondents have a major role in their acceptance and practice of vasectomy, as many societies believe it's a woman's responsibility. In many societies, the home is viewed as a place for planning and caring for the family; therefore, women are often considered responsible for taking appropriate precautions to avoid pregnancy.

Just 11% of respondents expressed interest in the prospect of approving vasectomy after data collectors had educated them about the procedure.

The study revealed that the more knowledge a community has, the more they consider the possibility of vasectomy, and the more they are interested in it.

Our results do not agree with research conducted by Dejene Wolde in Ethiopia, where 36.8% heard about vasectomy, 60.6% have good knowledge, and 48.4% have a good attitude to accept vasectomy as a method of family planning [26]. There may be several reasons for this disparity. A lack of knowledge about vasectomy and a dread of the treatment seemed to be the cause. We identified the primary barriers to vasectomy use among males in our study.

Approximately 38% of those surveyed agreed that vasectomy is an irritating process. Nearly half (51.7%) of the respondents indicated that a lack of awareness about vasectomy is a significant reason for not choosing the procedure, followed by

17.9% of the participants expressed their fear of the surgical procedure. Our findings are similar to research done in Tanzania by Bunce, which found that a lack of knowledge about vasectomy and fear of the process seemed to be the significant impediments to men using vasectomy [27].

In conclusion, there was a strong correlation between the respondents' level of education and their responses. The investigation also revealed a significant correlation between the respondents' marital status and their views on vasectomy. The analysis showed a significant correlation, with $p < 0.05$, between the number of children and the respondents' opinions about vasectomy. Additionally,

There was a strong correlation between the respondents' degree of knowledge and their understanding level. With $p < 0.05$, their perspective on vasectomy is now under investigation. Onasoga and his colleague [18] discovered no statistically significant link between the academic achievement of the study participants and their attitudes towards vasectomy [X2=3.534, P-value=0.171], nor between their marital status and their opinions on vasectomy [X2=0.436, P-value]. With $p > 0.05$, the value is equal to 0.804.

The availability and accessibility of contraceptive methods influence their use [28-30]. The results of this research revealed a substantial connection between the availability and usability of vasectomy. Additionally, this was the case. Suggested that vasectomy, as supported by observations made by service providers, should be accessible in all healthcare facilities, including those in the private sector [31-33].

5. LIMITATIONS

The study involved 195 men of reproductive age who either visited or accompanied their partners to FP. In addition, the researcher only selected men of reproductive age groups in OMH in Khartoum State. The researcher collected data through interviewer-administered questionnaires.

The reproductive age group that visited OMH for family planning lacks sufficient knowledge about available options.

Men often lack knowledge about vasectomy as a family planning option, primarily due to their lack of understanding and fear of undergoing the procedure.

6. CONCLUSION

According to the survey, respondents had poor knowledge and an unfavourable opinion of vasectomy as a form of family planning for males, preferring that family planning choices be left up to the women in the family and community. Culture, religion, and ignorance influenced these negative opinions about vasectomy.

Overall, most men in the reproductive age group who visited family planning services at OMH lack adequate knowledge about vasectomy as a family planning method and are reluctant to seek vasectomy services due to this lack of knowledge and fear of the procedure. In general, the study also highlighted the importance of collaborative efforts among all parties involved.

Increasing community awareness through the use of various educational approaches will lead to a greater acceptance of vasectomy as one of the family planning options available to men. The media, friends, and doctors all impacted men's understanding of vasectomy.

7. RECOMMENDATIONS

The need to address men's poor knowledge and negative perceptions of vasectomy requires the collaboration of every party involved: family planning services, health extensions, community health employees, decision-makers, and labourers.

We should also support media campaigns to prevent unplanned pregnancies and encourage males in the reproductive age range to use vasectomy services. Healthcare practitioners, particularly those involved in family planning, should provide sufficient knowledge to dispel misconceptions about vasectomy in the community through counselling and health education initiatives.

Programmers and workshops should be offered about family planning, especially vasectomy, which is the least used FP method despite being the safest and most effective contraception.

Attitudes of family planning providers should not prevent nor discourage men from accessing vasectomy services.

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Conflicts of interest

There are no conflicts of interest.

Ethical consideration

The Sudan Medical Specialisation Board and Omdurman Maternity Hospital provided the information, and all participants gave consent.

Abbreviation

ARHP: Association of reproductive health professionals

CIOMs: Council for International Organisation of Medical Sciences.

CPR: Contraceptive prevalence rate

CSA: Central Statistical Agency

FP: Family planning

MCH: Maternal and child health

MDGs: Millennium Development Goals

MOE: Ministry of Education

MOH: Ministry of Health

NSV: No scalpel vasectomy

OMH: Omdurman Maternity Hospital

PRB: Population Reference Bureau

UNISA: University of South Africa

UNPF: United Nations Population Fund

WHO: The World Health Organisation.

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