#### **ORIGINAL RESEARCH ARTICLE**

# Factors influencing men's decisions to utilize sexual reproductive health services in KwaZulu Natal, South Africa

DOI: 10.29063/ajrh2023/v27i4.3

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#### Abstract

Sexual and Reproductive Health (SRH) service utilization remains a global public health concern. The SRH problems account for major health challenges and disease burdens for men. This descriptive cross-sectional study of 421 men aims to identify factors influencing men's decisions to utilize SRH services. The interviewer-administered questionnaire obtained data from conveniently selected men who met the inclusion criteria. Frequencies and percentages were used to summarize variables associated with SRH services utilization. Univariable logistic regression was conducted before conducting a multivariable logistic regression. Of the 421 participants, 307 (72.9%) reported having utilized SRH services at least more than once. Although participants reported barriers to SRH service utilization, most men utilize services despite encountering challenges. The final multivariate logistic regression model revealed that age, education level, medical aid, and perceived good quality of services were significantly associated with SRHS utilization (p-value <0.05). Study findings indicate that older men (age 45 and above) were more likely to utilize SRH services than younger men (ages 15 to 44). Barriers to SRH service utilization must be eliminated so that men can easily use the services. Identifying factors influencing men to utilize SRH services will help policymakers and program managers address the poor utilization of SRH services by men. (*Afr J Reprod Health 2023; 27 [4]: 24-33*).

Keywords: Men, sexual and reproductive health services, factors influencing SRH service utilization

#### Résumé

L'utilisation des services de santé sexuelle et reproductive (SSR) reste une préoccupation mondiale de santé publique. Les problèmes de SSR représentent des défis majeurs en matière de santé et des charges de morbidité pour les hommes. Cette étude transversale descriptive de 421 hommes vise à identifier les facteurs influençant la décision des hommes d'utiliser les services de SSR. Le questionnaire administré par l'intervieweur a obtenu des données d'hommes convenablement sélectionnés qui répondaient aux critères d'inclusion. Les fréquences et les pourcentages ont été utilisés pour résumer les variables associées à l'utilisation des services de SSR. Une régression logistique univariée a été effectuée avant de procéder à une régression logistique multivariée. Sur les 421 participants, 307 (72,9 %) ont déclaré avoir utilisé les services de SSR au moins plus d'une fois. Bien que les participants aient signalé des obstacles à l'utilisation des services de SSR, la plupart des hommes utilisent les services malgré les difficultés rencontrées. Le modèle final de régression logistique multivariée a révélé que l'âge, le niveau d'éducation, l'aide médicale et la bonne qualité perçue des services étaient significativement associés à l'utilisation du SRHS (valeur de p < 0,05). Les résultats de l'étude indiquent que les hommes plus âgés (45 ans et plus) étaient plus susceptibles d'utiliser les services de SSR que les hommes plus jeunes (15 à 44 ans). Les obstacles à l'utilisation des services de SSR doivent être éliminés afin que les hommes pussent facilement utiliser les services. L'identification des facteurs incitant les hommes à utiliser les services de SSR aidera les décideurs et les gestionnaires de programmes à remédier à la mauvaise utilisation des services de SSR par les hommes. (*Afr J Reprod Health 2023; 27 [4]: 24-33*).

Mots-clés: Hommes, services de santé sexuelle et reproductive, facteurs influençant l'utilisation des services de SSR

## Introduction

Sexual and Reproductive Health (SRH) is a fundamental part of an individual's well-being<sup>1</sup>; however, it remains a global public health concern<sup>2</sup>. SRH problems account for major health challenges, constitute almost 14% of the disease burden, and contribute to higher mortality and earlier morbidity in men<sup>3</sup>. Despite several international conventions and adopted programs and policies that seek to engage men and boys in reproductive health services, SRH underutilization is still noticeable<sup>4</sup>. For example, a study of the policies and programs of 11 major global health institutions, including

WHO, found that a focus on the prevention of and care for the health needs of men is remarkably lacking<sup>5</sup>. International programs such as Sustainable Development Goals (SDGs) largely focus on women and youth while indirectly disregarding men's SRH needs. For instance, SDG-3 aims to ensure universal access to sexual and reproductive healthcare services, while little or no mention of men<sup>6,7</sup>.

Furthermore, men's SRH service provision is often poorly organized, lacks service integration, and has insufficient infrastructure and technology to meet men's health needs<sup>3,7</sup>. Several initiatives have been rolled out, but low utilization of SRH services is evident. For example, initiatives such as providing information, outreach with male motivators and peer educators/mentors, social marketing, community engagements with relevant stakeholders, and sex education are provided. However, they are unstructured, fragmented, lack a comprehensive approach, and are generally provided by women. Men require information about how to deal with their sexual inadequacies and fertility but generally need to be attended to by male counterparts discuss such sensitive to information<sup>2,6,8</sup>.

All individuals have the right to use sexual and reproductive health services and make decisions related to sexuality<sup>1,2</sup>. Still, less than onequarter of men report accessing and utilizing SRH services<sup>9</sup>. Lancet Commission posited that 4.3 billion people of reproductive age would inadequately utilize sexual and reproductive health services throughout their lives<sup>2</sup>. The Lancet Commission further alluded that two million people were newly infected with HIV, while more than 350 million men and women needed treatment for curable STIs<sup>2</sup>.

The utilization of SRH services refers to accessing the services conveniently<sup>6</sup>. These services provide a state of physical, mental, and emotional well-being and not merely the absence of disease<sup>7,8,10</sup>. Furthermore, SRH services are essential for all individuals' well-being and the socio-economic development of communities and countries<sup>11</sup>. SRH services include contraception, prevention and treatment of mental disorders, communicable and non-communicable diseases, male medical circumcision, and psychosocial interventions such as sexual health counseling<sup>5,6,12-14</sup>.

Men use SRH services and related products significantly less than women<sup>6</sup>. This gap in health service utilization has been translated by life expectancy for men (62.5 years), which is about six years shorter than that of women (68.5 years)<sup>15</sup>. Men's transitory is possible due to poor health knowledge, health-seeking behavior, and risky behavior<sup>16,23</sup>. The 2017 General Household Survey (GHS) also proclaimed that in South Africa, men compared to women, are less likely to visit healthcare services when ill<sup>17</sup>. Consequently, early mortality and morbidity rates among South African men are higher than in women<sup>18</sup>.

Factors influencing men's underutilization are multifaceted. The socio-demographic factors such as unemployment status, lack of knowledge, poverty, and places of residence far from health services, amongst others, play a major role in men's underutilization of SRH services<sup>1</sup>. Some studies have cited social and cultural norms and stereotypical beliefs that men do not need health services as obstacles that may hinder men from accessing health services<sup>19,20</sup>. Men risk their health because they are generally expected to endorse gendered societal prescriptions of being strong, unemotional, and denving weakness to demonstrate masculinity<sup>6,14</sup>. In health systems, the identified hindering factors included long waiting times, staff attitudes, unfriendly and unmanly health establishments, unskilled staff, unavailability of reproductive health services, or experiencing a breach of confidentiality or privacy<sup>1,5,6,20-23</sup>.

In South Africa, the underutilization of SRH services by men is evident despite the efforts made by the Department of Health to ensure that public health facilities are affordable and geographically accessible to all <sup>21</sup>. The research evidence from the province of KwaZulu-Natal (KZN), particularly in rural areas, demonstrates men's underutilization of health services despite being available at no cost<sup>13</sup>. Underutilizing SRH services undermines the constitutional mandate to provide healthcare and reproductive health services for everyone<sup>24</sup>.

Understanding men's SRH service utilization is vital because when men get sick, their sexual partners, families, and communities are also harmed<sup>25</sup>. Henceforth, while addressing men's sexual health needs to afford equal access to prevention services, treatment, care, and support, women benefit indirectly<sup>19</sup>. Men's SRH service

utilization could indirectly prevent the spread of STIs, including HIV, among men and their partners<sup>26</sup>. We believe this is the only study to explore the utilization of SRH services by men comprehensively. This study forms part of a primary PhD study to develop a framework to understand men's SRH service utilization in KZN. This research informs policy and practice, leading comprehensive development to the and implementation of evidence-based, contextappropriate, feasible strategies and interventions in resource-constrained settings. In KZN, there is a paucity of empirical evidence on men's utilization of health services, especially sexual reproductive health services. Hence, this study aims to identify factors influencing men's decisions to utilize SRH services.

# Methods

A cross-sectional study design was implemented to determine the factors influencing men's decisions to utilize SRHS. Data were collected between May and September 2021 in the province of KwaZulu Natal (South Africa). KwaZulu-Natal Natal (KZN) has the second largest population and consists of 11,5 million people (19,2%) living in this province, while black Africans are the largest population group. KZN has a largely rural-based population of 18,9%<sup>15</sup>. KwaZulu Natal has the highest HIV prevalence (27%) when compared to other provinces in South Africa<sup>15</sup>.

Data were collected from men ages 15 years and above who were utilizing or had the potential of utilizing SRH services in selected urology outpatient clinics and men's hostels in KZN (SA). In South Africa, "hostel" refers to a single-sex barrack, dormitory, or housing compound for the accommodation developed and designed for black migrant workers in urban areas. Some participants interviewed in hospitals lived in urban, townships, and rural and informal settlements. "Informal settlements" are housing areas or a few or thousands of dwellings that are often illegally built on municipal land and generally characterized by inadequate infrastructure, poor access to basic services, unsuitable environments, uncontrolled and unhealthy population densities, poor access to health and education facilities and lack of effective administration by the municipality. The term "township" usually refers (but not only)

to underdeveloped, racially segregated urban, residential areas that during Apartheid were reserved for non-whites, namely Black Africans, Coloureds, and Indians who lived near or worked in areas that were designated 'white only.' In hospitals, participants were recruited from the waiting area in urology clinics and taken to a private area where they were provided with interviewer-administered questionnaires. In hostels, participants were organized by a hostel manager ("Induna") to a hall. The purpose of the study was explained, and consent was obtained. Each participant would be given a questionnaire to complete privately away from each other so that they do not influence each other's responses. The study settings were selected through a purposive sampling strategy. Urology clinics and hostels were targeted because most SRH services are provided in these settings, and the feasibility to attain an adequate sample within the submission deadline for the thesis respectively. Through the hostel organization Ubunye Bama Hostel (UBH), we contacted hostel supervisors to gain access to the participants in five hostels around the city of Durban (South Africa).

The study population included participants who attended urology clinics in six hospitals around the province of KwaZulu Natal and those residing in five men's hostels around the city of Durban. Participants were selected through a convenience sampling strategy. We targeted participants from healthcare establishments and hostels to find them in large numbers. Although the participants were not homogenous, they had the potential to attend public health establishments since they share similar socio-economic backgrounds. The minimum sampling size was defined based on the following parameters and estimates: 50% for the prevalence of the event of interest, associated with a 5% estimation error and 95% reliability of the sample. Ten percent (38 individuals) was added to the minimum sample calculated (383 individuals), considering the possibility of losses in completing the data collection tools. The study sample consisted of 421 individuals. A sample size of 421 individuals was selected conveniently from all settings based on feasibility within the study time frame.

The data collection instrument was an interviewer-administered questionnaire. Therefore, the researchers developed the questions to meet the aim of the study from previously published studies

that investigated factors hindering and or facilitating the utilization of SRH services. The structured questionnaire included open-ended and closed-ended questions with opportunities for additional comments to be made as free-text responses. Questions were pilot tested with ten participants in one of the hospitals for clarity and intent before study initiation. The questionnaire, consent, and participants' information were prepared in English and translated to IsiZulu and back to English to check for consistency and meaning. The translation was done in the College of Humanities, School of Arts, African Languages, Discipline of IsiZulu, by a senior IsiZulu lecturer translation who provides services. Study participation was voluntary and anonymous. A paper-based, semi-structured questionnaire was administered with the assistance of a trained interviewer.

To all participants, information about the background and purpose of the study, as well as clear and concise instructions for completing the questionnaire, were provided to the participants. They were informed about their right to participate or withdraw if they did not want and signed written consents. Participants who could not read English were given an IsiZulu version. After that, participants completed an interviewer-administered questionnaire. Each questionnaire consisted of 2 parts: (1) Demographics and (2) Utilization of SRH services. The principal investigator and the research assistant were readily available to clarify questions when necessary. The questionnaire was adopted from previous quantitative and qualitative studies investigating factors influencing men's utilization of SRH services. Variables were measured based on negative and positive experiences. For example, negative treatment or experience would have bad staff attitudes, and positive treatment or experience would have good staff attitudes. The questionnaire was designed to obtain information about the independent variables: Socio-demographic factors (gender, age, marital status, level of education, culture, religion, economic, ethnicity, employment, residential place); barriers and facilitators of SRH service utilization (distance, healthcare workers conduct, health services operations, types of providers, medical aid, social support {wife, friends, relatives}); places where participants usually go for treatment or counseling and information for SRH problems (clinics, hospitals,

school, friends, media); and types of SRH services that were sought by participants (HIV/STI test services, condom use, vasectomy services, information, and counseling).

The dependent variable is Sexual and Reproductive Health (SRH) service utilization and was measured through the dichotomous response (yes or no). We defined the 'utilization of SRH services' as "utilizing services more than once." BF Skinner and his associates proposed that an individual's behavior is a function of its consequences. That is, an individual's behavior with positive consequences tends to be repeated, but an individual's behavior with negative consequences tends not to be repeated<sup>27</sup>. Participants' experiences measured barriers and facilitators of SRH service utilization during their first visit to the health service provider. Therefore, whether participants visit or do not visit health providers for the second time could indicate either facilitation or barrier, respectively. To utilize SRH service utilization.

Completed questionnaires were checked by a research assistant and the principal investigator for errors in the field immediately after collection to ensure completeness and consistency. We collected 421 questionnaires to achieve a one percent response rate. Data were carefully labeled and dated according to the date of collection. The principal investigator kept hard copies of data in a locked cupboard, and electronic data was saved on a computer, which requires a password. After that, data were coded and entered into Statistical Package for the Social Sciences (SPSS) version 27. Frequencies and percentages were used to characteristics summarize demographic and variables associated with sexual and reproductive health services utilization. Univariable logistic regression was conducted before conducting a multivariable logistic regression. Variables with a p-value of less than or equal to 0.05 were entered into multivariate logistic regression. The qualitative responses were analyzed and presented thematically to highlight key concerns, barriers, and facilitators of SRH service utilization. Respondents commenced, also presented in Table 2.

Approvals to conduct this study were obtained from the Biomedical Research and Ethics Committee (BREC) in the University of KwaZulu Natal, KwaZulu Natal (KZN) Department of Health (DoH) Research Committee, and Ubunye Bama Hostel (UBH) organization.

### Results

Table socio-demographic 1 shows the characteristics of the respondents. The 421 comprised 304 (72.2%) males respondents attending urology clinics in various KZN hospitals and 117 (27.8%) males residing in hostels around Durban. The mean average was 49 years. The respondents were predominantly Zulu ethnic group (77.4%), demonstrating that most participants live in Kwa-Zulu Natal. The majority (57%) had presecondary education, followed by those with postsecondary (32.8%) and tertiary (10.2%) education. Nearly half (46.1%) of the respondents were above the age of 55, indicative of adult men's demand for SRH services. The religious backgrounds of the respondents showed that the majority (88.2%) were largely Christians, followed by Shembe traditional church (14.7%), while Muslim (1.2%) and Hindu (1.7%) trailed below two percent.

**Table 1:** Demographic characteristics of the respondents (n = 421)

| Explanatory    | Categories of            | Men n (%)  |  |  |  |  |
|----------------|--------------------------|------------|--|--|--|--|
| variable       | explanatory variables    |            |  |  |  |  |
| Respondents    | Men in hospital          | 304 (72.2) |  |  |  |  |
|                | Men in Hostel            | 117 (27.8) |  |  |  |  |
| Level of       | Pre-secondary education  | 240 (57.0) |  |  |  |  |
| education      | Post-secondary education | 138 (32.8) |  |  |  |  |
|                | Tertiary education       | 43 (10.2)  |  |  |  |  |
| Age (years)    | 15 - 24                  | 28 (6.7)   |  |  |  |  |
|                | 25 - 34                  | 57 (13.5)  |  |  |  |  |
|                | 35 – 44                  | 90 (21.4)  |  |  |  |  |
|                | 45 - 54                  | 52 (12.4)  |  |  |  |  |
|                | 55 – and over            | 194 (46.1) |  |  |  |  |
| Employment     | Employed                 | 96 (22.8)  |  |  |  |  |
|                | Unemployed               | 307 (72.9) |  |  |  |  |
|                | Self-employed            | 18 (4.3)   |  |  |  |  |
| Residential    | Urban                    | 40 (9.5)   |  |  |  |  |
| place          | Township                 | 135 (32.1) |  |  |  |  |
|                | Rural                    | 120 (28.5) |  |  |  |  |
|                | Informal settlements     | 9 (2.1)    |  |  |  |  |
|                | Hostel                   | 117 (27.8) |  |  |  |  |
| Religion       | Hindu                    | 7 (1.7)    |  |  |  |  |
|                | Muslim                   | 5 (1.2)    |  |  |  |  |
|                | Christian                | 347 (82.4) |  |  |  |  |
|                | Shembe                   | 62 (14.70  |  |  |  |  |
| Marital status | Single                   | 205 (48.7) |  |  |  |  |
|                | Married                  | 185 (43.9) |  |  |  |  |
|                | Divorced                 | 12 (2.9)   |  |  |  |  |
|                | Widowed                  | 19 (4.5)   |  |  |  |  |
| Home language  | IsiZulu                  | 326 (77.4) |  |  |  |  |
|                | IsiXhosa                 | 45 (10.7)  |  |  |  |  |
|                | English                  | 35 (8.3)   |  |  |  |  |
|                | Setswana / Sesotho       | 8 (1.9)    |  |  |  |  |
|                | IsiSwati                 | 7 (1.70    |  |  |  |  |

Men's decisions to utilize SRH services in KwaZulu Natal

**Table 2:** Frequency of variables in the study (n=421)

| Employatory      | Cotogonios of            | n (%)      |  |  |
|------------------|--------------------------|------------|--|--|
| Explanatory      | Categories of            | II (70)    |  |  |
| variable         | explanatory variables    |            |  |  |
| Utilized SRHS    | Yes                      | 307 (72.9) |  |  |
| more than once   | No                       | 114 (27.1) |  |  |
| Social support   | Came by myself           | 336 (79.8) |  |  |
|                  | Accompanied by           | 30 (7.1)   |  |  |
|                  | partner                  |            |  |  |
| Have a medical   | Yes                      | 6(14)      |  |  |
| aid              | No                       | 415 (98.6) |  |  |
| Whore do you     | Profor government        | 413(90.0)  |  |  |
| where do you     | (hereitale and aliginar) | 555 (85.8) |  |  |
| prefer to go     | (nospitals and chines)   | 52 (12 (0  |  |  |
| when .           | Prefer general           | 53 (12.60  |  |  |
| experiencing     | practitioners            |            |  |  |
| SRH problems     | Prefer traditional       | 39 (9.3)   |  |  |
|                  | healers                  |            |  |  |
|                  | Prefer pharmacies        | 27 (6.4)   |  |  |
| Utilized sexual  | STI treatment            | 112 (26.6) |  |  |
| and reproductive | Information education    | 24 (5.7)   |  |  |
| health issues    | HIV test                 | 72 (17.1)  |  |  |
|                  | Condoms                  | 18 (4.3)   |  |  |
|                  | Vasectomy                | 4 (1.0)    |  |  |
|                  | ED                       | 8 (1 9)    |  |  |
|                  | Prost CA                 | 93(221)    |  |  |
| Non-specified    | Injury                   | 3(0.7)     |  |  |
| voriables        | Mad Condi                | 5(0.7)     |  |  |
| Vallaules        | Cood quality services    | 40(10.9)   |  |  |
| Facilitators for | Good quality services    | 210 (49.9) |  |  |
| sexual and       | Location of SRHS         | 47 (11 2)  |  |  |
| reproductive     | Less waiting times       | 38 (9.0)   |  |  |
| health service   | Cood staff skills        | 107(254)   |  |  |
| utilization      | Good staff attitudes     | 107(23.4)  |  |  |
|                  | Good stall attitudes     | 08 (10.2)  |  |  |
|                  |                          | 10 (1 2)   |  |  |
|                  | Convenient clinic        | 18 (4.3)   |  |  |
|                  | hours                    |            |  |  |
| Barriers to      | Poor quality services    | 29 (6.9)   |  |  |
| sexual and       |                          | 10 (1 5)   |  |  |
| reproductive     | Unavailability of        | 19 (4.5)   |  |  |
| health service   | services                 |            |  |  |
| utilization      | Inconvenient clinic      | 20 (4.8)   |  |  |
|                  | hours                    |            |  |  |
|                  | Long waiting times       | 122 (29.0) |  |  |
|                  | Lack of privacy          | 22 (5.2)   |  |  |
|                  | Bad staff attitudes      | 27 (6.4)   |  |  |
|                  | HCW judgmental           | 10 (2.4)   |  |  |
|                  | attitudes                |            |  |  |
|                  | Location of the facility | 23 (5.5)   |  |  |
|                  | Embarrassment to be      | 11(2.6)    |  |  |
|                  | seen utilizing services  | 11 (2.0)   |  |  |
|                  | Unaffordability of       | 18 (1 3)   |  |  |
|                  | charlotuability Of       | 10 (4.3)   |  |  |
|                  | Services                 | 2(0.5)     |  |  |
|                  |                          | 2 (0.5)    |  |  |
|                  | Keligion                 | 1(0.2)     |  |  |

Almost forty-nine percent (48.7%) of the respondents were single, surpassing married men (43.9%) by five percent. Most respondents resided in townships (32.1%), rural areas (28.5%), and hostels (27.8%). Unemployed respondents formed the majority (72.9%).

|   |  | Univariable |                        |        | Multivariable |               |                        |        |       |
|---|--|-------------|------------------------|--------|---------------|---------------|------------------------|--------|-------|
| Explanatory<br>variable<br>Level of education | Categories of<br>explanatory<br>variables<br>Pre-secondary | Odds 95%    |                        | р-     | Adjusted 95%  |               |                        | р-     |       |
|   |  | Ratio       | Confidence<br>Interval |        | value         | Odds<br>Ratio | Confidence<br>Interval |        | value |
|   |  | 3.818       | 1.941                  | 7.510  | < 0.001       | 2.740         | 1.271                  | 5.907  | 0.010 |
|   | education  |             |                        |        |               |               |                        |        |       |
|   | Post-secondary   | 2.109       | 1.049                  | 4.239  | 0.036         | 2.124         | 0.990                  | 4.554  | 0.053 |
|   | education  |             |                        |        |               |               |                        |        |       |
|   | Tertiary education   | 1           |                        |        |               |               |                        |        |       |
| Age (years)                                   | 15 - 24  | 0.317       | 0.136                  | 0.738  | 0.008         | 0.371         | 0.150                  | 0.914  | 0.031 |
|   | 25 - 34  | 0.351       | 0.182                  | 0.677  | 0.002         | 0.494         | 0.231                  | 1.056  | 0.069 |
|   | 35 - 44  | 0.410       | 0.230                  | 0.730  | 0.002         | 0.638         | 0.325                  | 1.250  | 0.190 |
|   | 45 - 54  | 0.422       | 0.212                  | 0.841  | 0.014         | 0.438         | 0.209                  | 0.917  | 0.028 |
|   | 55 – and over  | 1           |                        |        |               |               |                        |        |       |
| Employment                                    | Employed   | 1           |                        |        |               |               |                        |        |       |
|   | Unemployed   | 2.392       | 1.464                  | 3.911  | 0.001         | 1.519         | 0.858                  | 2.689  | 0.151 |
|   | Self-employed  | 0.819       | 0.297                  | 2.261  | 0.700         | 0.874         | 0.266                  | 2.868  | 0.824 |
| Residential place                             | Urban  | 0.435       | 0.203                  | 0.935  | 0.033         | 0.612         | 0.249                  | 1.502  | 0.284 |
|   | Township   | 1.217       | 0.664                  | 2.230  | 0.525         | 1.688         | 0.869                  | 3.280  | 0.122 |
|   | Informal settlements                                       | 1.016       | 0.199                  | 5.180  | 0.985         | 2.695         | 0.354                  | 20.508 | 0.338 |
|   | Hostel   | 0.538       | 0.304                  | 0.954  | 0.034         | 1.263         | 0.630                  | 2.533  | 0.511 |
|   | Rural  | 1           |                        |        |               |               |                        |        |       |
| Religion                                      | Hindu  | 1.947       | 0.231                  | 16.398 | 0.540         | 0.585         | 0.061                  | 5.588  | 0.641 |
|   | Muslim   | 0.216       | 0.036                  | 1.316  | 0.097         | 0.161         | 0.024                  | 1.101  | 0.063 |
|   | Theme  | 0.550       | 0.311                  | 0.973  | 0.040         | 0.823         | 0.430                  | 1.577  | 0.557 |
|   | Christian  | 1           |                        |        |               |               |                        |        |       |
| Have a medical aid                            | Yes  | 0.069       | 0.008                  | 0.601  | 0.015         | 0.071         | 0.007                  | 0.680  | 0.022 |
|   | No   | 1           |                        |        |               |               |                        |        |       |
| Good quality                                  | Yes  | 1.706       | 1.100                  | 2.646  | 0.017         | 1.650         | 1.029                  | 2.645  | 0.038 |
| services motivation                           |  |             |                        |        |               |               |                        |        |       |
| for utilization of                            |  |             |                        |        |               |               |                        |        |       |
| SRH –   | Ne   | 1           |                        |        |               |               |                        |        |       |
| C   | NO<br>No-  | 1           | 1 205                  | 2 702  | 0.000         | 1 510         | 0.927                  | 2756   | 0.160 |
| Good stall skills                             | res  | 2.115       | 1.205                  | 5.705  | 0.009         | 1.519         | 0.857                  | 2.750  | 0.169 |
| Motivation for                                |  |             |                        |        |               |               |                        |        |       |
| utilization of SKH –                          | No   | 1           |                        |        |               |               |                        |        |       |
| Get SRH                                       | Yes  | 1.569       | 0.898                  | 2.740  | 0.114         |               |                        |        |       |
| information from the                          | No   | 1           |                        |        |               |               |                        |        |       |
| media   |  |             |                        |        |               |               |                        |        |       |
| Discouraged to                                | Yes  | 0.485       | 0.224                  | 1.051  | 0.067         |               |                        |        |       |
| utilize SRH services                          | No   | 1           |                        |        |               |               |                        |        |       |
| by poor quality                               |  |             |                        |        |               |               |                        |        |       |
| services                                      |  |             |                        |        |               |               |                        |        |       |
| Discouraged to                                | Yes  | 0.179       | 0.016                  | 1.989  | 0.161         |               |                        |        |       |
| utilize SRH services                          | No   | 1           |                        |        |               |               |                        |        |       |
| by lack of services                           |  |             |                        |        |               |               |                        |        |       |
| Discouraged from                              | Yes  | 0.965       | 0.368                  | 2.530  | 0.942         |               |                        |        |       |
| utilizing SRH                                 | No   | 1           |                        |        |               |               |                        |        |       |
| services by lack of                           |  |             |                        |        |               |               |                        |        |       |
| privacy                                       |  |             |                        |        |               |               |                        |        |       |
| Discouraged to                                | Yes  | 0.501       | 0.225                  | 1.116  | 0.091         |               |                        |        |       |
| utilize SRH services                          | No   | 1           |                        |        |               |               |                        |        |       |
| by bad staff attitudes                        |  |             |                        |        |               |               |                        |        |       |
| Discouraged from                              | Yes  | 0.535       | 0.148                  | 1.931  | 0.339         |               |                        |        |       |
| utilizing SRH                                 | No   | 1           |                        |        |               |               |                        |        |       |
| services by HCW's                             |  |             |                        |        |               |               |                        |        |       |
| judgmental attitudes                          |  |             |                        |        |               |               |                        |        |       |
| Discouraged to                                | Yes  | 1.092       | 0.387                  | 3.077  | 0.868         |               |                        |        |       |
| utilize SRH services                          | No   | 1           |                        |        |               |               |                        |        |       |

| Table 3: Bivariate and the odds ratio analy | ysis variables | predicted SRH service | utilization, | p-value <0.05 ( | n=421) |
|---|----------------|-----------------------|--------------|-----------------|--------|
|---|----------------|-----------------------|--------------|-----------------|--------|

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| Explanatory<br>variable  | Categories of<br>explanatory<br>variables | Univariable<br>Odds 95%<br>Ratio Confidence<br>Interval |             | p-<br>value | Multivariable<br>Adjusted 95%<br>Odds Confidence<br>Ratio Interval |  | p-<br>value |
|--|---|---|-------------|-------------|--|--|-------------|
| by inconvenient<br>hours<br>Discouraged from<br>utilizing SRH<br>services by long<br>waiting times | Yes<br>No                                 | 1.091<br>1  | 0.674 1.764 | 0.723       |  |  |             |

Table 2 shows the frequencies and percentages of variables in the study. The overall utilization of SRHS was 72.9%. The majority (83%) preferred to go to government health establishments. Services sought by respondents included STI (26.6%); Prostate Cancer (21.1%); HIV (17.1%); Information about SRH (5.7%), Condoms (4.3%), Erectile Dysfunction (1.9%); Vasectomy (1.0%,) and the latter were not specified.

Table 3 shows univariate and multivariate logistic regression analyses of variables predicted SRHS utilization. In the univariable logistic regression analysis, level of education, age, employment, residential place, religion, medical aid, good quality of SRH services, and good staff skills were significantly associated with SRHS The final multivariate utilization. logistic regression model revealed that age, education level, medical aid, and perceived good quality of services significantly associated were with SRHS utilization. Of all the significant variables in the univariable analysis, ages between 15-24 years (p = (0.031), 45-54 years (p = 0.028), pre-secondary education (p = 0.010), post-secondary education (p = 0.053), having a medical aid (p = 0.022), and perceived good quality services (p = 0.038) were found to be statistically significant in the final multivariable analysis.

Participants with pre-secondary education were approximately three times more likely to utilize SRH services when compared to those with tertiary education (AOR: 2.740; 95%CI: 1.271-5.907). Similarly, men with post-secondary education had higher odds of utilizing SRHS when compared to those with tertiary education, and men who perceived good quality services had higher odds when compared to those who did not. Respondents with medical aid were less likely to utilize SRHS when compared to those who did not have it (AOR: 0.071, 95% CI: 0.007-0.680). Similarly, men aged between 15-24 years, 25-34 years, 35-44 years, and 45-54 years had lower odds of SRH utilization than those aged 55 years and above.

Clinical significance was observed in respondents who resided in informal settlements, who were approximately three times more likely to utilize SRHS when compared to those who resided in rural areas (AOR: 2.695, 95% CI: 0.354-20.508). Similarly, the unemployed men were more likely to utilize SRHS than the employed men; men who got information from media had higher odds when compared to those who did not; respondents who perceived good staff skills had higher odds when compared to those who did not.

Participants who experienced healthcare workers' undesirable behaviors, such as poor-quality services, lack of services, lack of privacy, bad staff attitudes, and bad judgmental attitudes, were less likely to utilize SRHS when compared who did not. However, men who experienced unfavorable operational health systems factors such as inconvenient hours and long waiting times were more likely to utilize SRHS.

## Discussion

This study explored factors that might have hindered or facilitated SRHS utilization at least more than once among men in the province of Kwa-Zulu Natal in South Africa. Of the 421 participants, almost seventy-three percent reported having utilized SRHS at least more than once. Although similar findings were noted in Ethiopia (79.5%) and Myanmar (67%)<sup>28,29</sup>, other studies reported low utilization of reproductive health services<sup>29-31</sup>. Providing health services at no cost for the elderly and unemployed at a low cost for the general population could be the reason for the high utilization of SRH services in South Africa.

Whether or not to use SRHS is multifaceted and influenced by many factors. The study revealed that some socio-demographic and health system factors could be used to predict the utilization of

SRHS among men. The study findings indicate that age and level of education were significantly associated with SRHS utilization.

Age's significant association with SRHS utilization was consistent with several studies<sup>30,32,33</sup>. In this study, as men advance in age, the higher the possibility that they utilize SRHS. For example, men aged 55 years and above mostly utilized SRHS. Addo's (2016) study also noticed this trend at younger ages, whereby SRHS utilization among men aged between 20 and 24 years was three times higher than the lesser ages between 15 and 19 years. The study outcomes may suggest lesser sexual health problems among younger men. These findings vividly point to the unique need to focus on adult men's SRHS utilization rather than a unilateral focus on adolescents, youth, and women<sup>34,35</sup>.

Challenges within the healthcare delivery system do not discourage SRHS utilization by men. Respondents utilized SRHS despite encountering challenges during utilization. This indicates that men desperately need SRHS and possibly lack money to utilize private health services. In this study, most men were unemployed, less educated, and had no medical aid. Research also indicates that barriers are largely experienced by black Africans, unemployed, less educated, poor, rural-based, and uninsured men<sup>36,37</sup>. Some men reported waiting until their conditions were severe since they were scared to visit health establishments due to the unfriendly behavior of healthcare providers. The men's notion of waiting until the condition is severe before presenting to health establishments was also echoed in other studies<sup>23,38</sup>.

The study findings also revealed that men without medical aid were more likely to utilize SRHS in the selected settings. The lack of finance and medical aid insurance can hinder men's choice for better and more convenient services. South African private health services are expensive, and uninsured men cannot afford them<sup>39</sup>. Consequently, men would seek alternative services such as selftreatment and traditional healers<sup>22</sup>. According to the participants in the selected settings, SRH services were provided at no cost. Therefore, the provision of free health services can facilitate SRHS utilization.

Similar to Nalwanda's study, long distances and high transport costs were also cited as hindrances in accessing SRHS, especially by men

residing in rural-based settings<sup>40</sup>. Living in ruralbased settings can also be a barrier to accessing SRHS, as most hospitals are in townships and urban areas. Of the six selected settings, four are in urban areas and two in township areas. Consequently, men residing in places next to urban areas, such as townships and informal settlements, were more likely to utilize SRHS than those in rural areas. The unequal distribution of health resources between men residing next to urban areas compared to those in rural-based settings could be associated with men's uneven utilization of SHRS<sup>41</sup>.

Consequently, most respondents from rural-based settings are commonly not pleased with in the services provided public health establishments closer to them. Men mainly complain about unilaterally available services in urban areas where they must travel long distances to reach them <sup>39,42</sup>. SRHS should aim to be of high quality, accessible, and patient-centered. Most men, especially in low-resource settings, lack access to accurate and high-quality SRHS<sup>2</sup>. The findings may assist policymakers in planning and availing SRHS in the context of disadvantaged settings in rural and urban areas.

Respondents who perceived health system barriers such as inconvenient hours and long waiting times were more like to utilize SRHS. At the same time, those who experienced healthcare workers' poor-quality services, lack of privacy, and bad staff judgmental attitudes were less likely to utilize SRHS. These findings suggest that men tolerated health system factors compared to healthcare workers' untoward behaviors. Consistent with several studies<sup>15,17,18,29</sup>, the healthcare workers' unfriendly and hostile behaviors were more likely to deter men from utilizing SRHS<sup>22,31,40,42</sup>. Further research may reveal the rationale behind such differences. Conversely, healthcare workers' great quality of services significantly motivated SRHS utilization.

## Conclusion

The study findings have policy and programmatic implications. The findings indicate the importance of catering to men, especially from disadvantaged areas of society, regardless of culture, religion, and ethnicity. Most respondents utilizing SRHS in the selected settings were unemployed, residing in townships, rural and informal areas, less educated,

and lacking health insurance. South Africa remains a patriarchal society where men still struggle to utilize SRHS. Program planners, policy, and decision-makers need to establish man-friendly health services. Moreover, SRHS needs to be closer to men. In conclusion, barriers and facilitators to SRHS utilization must be investigated further using qualitative methods to comprehensively explores and unpack all SRH issues and the most important variables not explored by identified qualitative studies. Determining the factors that make men use or not use SRHS is vital in designing interventions for SRHS provision.

# **Strengths and Limitations**

The study participants were not homogenous, which may limit the results' generalizability. The study was limited to men attending outpatient urology clinics in public health establishments and hostel dwellers. Therefore, study results may be biased toward the characteristics of respondents in the clinics and those hostels. Recall bias may also affect responses related to SRH service utilization. Therefore, results in the over or under-reporting of desirable sexual and reproductive health practices.

Moreover, the quantitative method did not allow for probing certain variables like cultural and religious issues. Most respondents were already utilizing the SRHS with chronic conditions and were required to come back for follow-up management; bias in utilization rate may be apparent. A validated tool was not available. According to our knowledge, this is the only study comprehensively investigating SRH service utilization. In this study, we found that men were less likely to utilize SRH services when encountering bad staff attitudes but inclined to use them although encountering deterring operational matters. The study investigated the population of hostel dwellers who are rarely researched due to accessibility.

## Acknowledgments

The authors would like to acknowledge the men who participated in this study.

# Authors' contributions

MN, TD, and BT conceptualized and designed the study. MN drafted the manuscript with input from

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all authors. MN collected and analyzed the data and was supervised by TD and BT. All authors reviewed the manuscript and edited it by MN. MN, TD, and BT approved the final manuscript for publication.

# Funding

The author(s) received no financial support for this article's research, authorship, and publication.

# **Competing interests**

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

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