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Health System Factors That Influence Health Seeking Behavior Associated With Prostatism among Men above 40 Years in Nyamira County

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Abstract:

Background: Prostatism refers to obstruction of the bladder neck due to an enlargement of the prostate as men ages leading to urinary difficulties. Prostatism symptoms are majorly irritative and obstructive. The obstructive ones include hesitancy, the need to initiate micturition and a weakened urinary stream while the Irritative ones which are usually more troublesome to patients includes urgency, frequency as well as nocturia. This study was cross sectional study which was conducted at Nyamira County.

Objective: The study sought to establish Health system factors that influence health seeking behavior associated with Prostatism among men above 40 years in Nyamira County.

Materials and methods: The study adopted a descriptive cross-sectional community study design. The study utilized qualitative and quantitative research methods in order to obtain the required information from respondents. Quantitative data collection was done by use of open and closed ended questionnaires while qualitative data was collected through focused group discussions with adult Men. Confidentiality of information collected was observed and consent was sought from the respondents before collecting any form of information from them. A total of 387 respondents from 18 villages representing 3 villages from six sub locations of Nyamira south and Masaba wards that were randomly selected, were interviewed representing 91.7% response rate. The tools that the researcher used included questionnaire, interview schedule, pens and pencils. Descriptive data was analyzed with the aid of the Statistical Package for Social Sciences (SPSS) version 20.0 with the help of Microsoft Excel programme to generate frequency tables, graphs and pie-charts. Inferential statistics was calculated using Chi-Square tests ($p=0.005$) done at 95% confidence level to determine the linkage between the Variables.

Results: The study found that the overall uptake level of Prostatism services was 12.1%. Chi-square analysis revealed significant relationship between cost of screening (0.001), having medical insurance (0.001), reception and quality of care (0.01), distance to health facility (0.001) and uptake of Prostatism services.

Conclusion: The study findings revealed a low uptake of prostatism services. The findings of this study will help policy makers, facility administrators and care providers to shape comprehensive healthcare policies and programs targeting Prostatism services. This will help come up with a policy specifically addressing health system factors that affect uptake of prostatism services.

Keywords: Prostatism, Uptake, Health system factors, Health seeking behaviour

1. Introduction

Prostatism refers to obstruction of the bladder neck due to an enlargement of the prostate as men ages leading to urinary difficulties (Jong *et al.*, 2014). Prostatism results to development of nodules which are larger blocking the urethra increasing urine flow resistance. The condition is manifested by irritative symptoms (sensory urgency, urgency, frequency plus urgent incontinence) and obstructive (double voiding, decreased stream, urinary retention, terminal dribbling and hesitancy (Cunningham, 2013). Countries in Sub Saharan African are

characterized by insufficient budgets to address health care thus lacking specific program to tackle Prostatism (WHO, 2014). Many countries in sub Saharan Africa are faced with lack of adequate Health care facilities as well as inadequate number of professionals to address issues of Prostatism (David *et al.*, 2014). Nigeria reported that 25% men of at least 40 years developed Prostatism (Ezeanyika *et al.*, 2006).

Information about services for Prostatism in low income countries is scanty particularly in countryside where access to health care services and knowledge on Prostatism is an issue. The services normally provided are hospital-based meaning that those who cannot access health facilities offering services are discriminated from getting such services. Prostatism services are offered mainly at County Hospital level, thus people who are in remote areas are unable to access services due to distance, economic and other factors (Ngugi *et al.*, 2017)

It is estimated that worldwide, approximately 210 million men have Prostatism (WHO, 2013). It is estimated that men 1 in 4 men will suffer from Prostatism over their life time (Lee *et al.*, 2017). The possibility of a man developing Prostatism within a span of 30 years for a man who is symptom free is 45% (Kim *et al.*, 2016). Prostatism usually causes physical compression of the urethra leading to the bladder obstruction resulting to kidney problems thus affecting urine flow. Prostatism impairs quality of life of the patient leading to clinical and social implications. Forced urination, diminished urine caliber, disrupted urine projection, the need to wait before starting urination, dripping at the end of urination, sensation of incomplete emptying of the bladder and rarely urinary retention are some of the problems associated with the condition (Gundogmus., 2017)

Prostatism patients suffer a lot since their everyday normal activities are negatively affected including socializing with others such as playing games, drinking before visiting places and driving thus causing emotional discomfort as well as sexual performance of men suffering from Prostatism. There is stigma and discrimination from the family, health care providers and the general public towards the individuals suffering from the condition affecting an individual's willingness to seek for a health care service hence many men seeking services when the condition is in advanced stage affecting its prognosis (Mcvary *et al.*, 2011).

Prostatism condition has an enormous economic implication to the individual and family at large. In developing countries Prostatism services are offered in few hospitals due to the high ration of doctor to patient (WHO, 2014). The costs of intervention include the indirect, direct and intangible costs which can be a hindrance especially to the men in low socio-economic status group (Silva *et al.*, 2014). Prostatism screening which is sponsored by a few non-governmental organizations which are mostly found in major towns. Even in such towns the programs for screening are limited in coverage whereby only those men enrolled such programs only benefit thus discriminating the others. Majority of men with prostatic symptoms especially in developing countries tend to seek for Prostatism services when the condition is in an advanced stage because of low levels of screening (Kim *et al.*, 2016).

Few studies on Prostatism have been done in Kenya this which has caused researchers to over-rely on findings from other countries in the world or regions even when risk factors might be different. However, those few researches have either have not been documented or have been conducted in urban areas which are characterized with better medical and most educated compared to rural areas hence differentials knowledge on Prostatism (Ngugi *et al.*, 2006). Hospital records at Nyamira County referral hospital revealed significantly high number of Prostatism cases with an approximate reporting rate of 5 new cases per month (GoK, 2014). Few people in Nyamira County have knowledge and awareness about Prostatism services. Thus, most people only seek for the services in the later stages when the condition becomes more prominent and becoming expensive to treat or manage. Studies have shown that early reporting of cases result to good prognosis (Stroup *et al.*, 2012).

2. Literature Review

2.1. Introduction

Prostatism refers to obstruction of the bladder neck due to an enlargement of the prostate as men ages leading to urinary difficulties (Jong *et al.*, 2014). Prostatism leads to development of large nodules in prostate blocking the urethra hence increasing urine flow resistance. This condition is manifested by irritative symptoms (sensory urgency, urgency, frequency and urgent incontinence) and obstructive (hesitancy, decreased stream, terminal dribbling, double voiding, and urinary retention. When prostate gland increases in size, Prostatic patients start developing symptoms of voiding which causes the bladder to over-strain resulting to weakening of the bladder muscles (Cunningham, 2013).

A growing problem of conditions associated with elderly have been observed globally due to the unprecedented population aging tendency. Research have shown that that 1560% men 40 years and above are faced with prostatic symptoms (Kim *et al.*, 2016). Prostatism symptoms increases susceptibility to other diseases including risk of falls, depression, low quality of life and sleeping disorders (Parsons *et al.*, 2010). When Prostatism is not treated severe problems may arise such as acute urinary retention, bladder stones, infection of the urinary tract and renal failure which might require surgical treatment thus troubling resources of the family (Speakman *et al.*, 2015).

In low income countries such as in African countries Prostatism screening has remained unacceptably low. This has led to poor management, minimized detection rates, and high mortality attributed to the condition. Health seeking behavior influences health services utilization among people and thus affect the health outcome (Otieno, 2012). Health seeking behavior of individuals influences their personal health practices which at the end affects ability to seek for medical intervention when sick or in ill health. Men who are viewed as head of the family determines decisions not only their health but also that of other household members (UN, 2011) their participation in health issues is often minimal. Health

seeking behavior can be improved through creating Men's clinics and integrating some health services such as HIV counselling and testing with screening and treatment for Prostatism.

2.2. Global Incidence and Burden of Prostatism

Statistics on Prostatism prevalence has been well documented in most developed countries however in developing countries it has not been well documented (WHO, 2013). In the world about 210million which is equivalent to 6% of entire world population, have Prostatism condition (WHO, 2013). Those aged between 45-49 years have a prevalence rate of 2.7% this rate rises to around 24% by age 80 years. For a man without Prostatism symptom of 46 years old has 45% possibility of developing Prostatism within a span of 30 years. The incidence rates increase from 3-38/1000 between ages 45-49 years and 75-79 years respectively. This clearly shows that the likelihood of one developing the condition increases with age (Kim et al., 2016).

Prostatism prevalence rate in China is at 36.6% of the men above 40 years of age. The prevalence distribution among the age important groups includes: 40-49 years (2.9%), 50-59 years (29%), 60-69 years (44.7%), 70-79 years (58.1%) and those above 80 years (69.2%) (Wang et al., 2014). Therefore, people at this age groups are required to seek for health care services and their IPSS scores be taken to check their vulnerability status.

Majority of the population-based epidemiological researches have revealed that the prevalence of Prostatism ranges from 30-50% in hospital-based and 18-25.3% in community-based settings (Ojewola *et al.*, 2017). Nevertheless, such studies are comparatively rare in sub-Saharan Africans with nearly all existing reports being hospital-based. Furthermore, there exists variances in the stated Prostatism prevalence among nations, perhaps originating from socio-cultural differences. Sub-Saharan Africa countries are characterized with shorter life span of men and low level of screening as well as reporting of cases explain the higher prevalence of prostatism particularly in rural parts sub Saharan Africa (Ojewola *et al.*, 2017).

In Kenya there has been Limited researches done and documented on Prostatism this has led over-relying findings of studies from other countries mostly the developed countries although risk factors are different. Prostatism in Kenya is more common although there is no policy specifically address this issue. Most men only get to know about their condition very late when the condition is deteriorating. A study done in Nairobi revealed out of 108 men who were involved in the study 76% tested positive for Prostatism with only 24% testing positive of prostate cancer (Ngugi *et al.*, 2006).

2.3. Health System Factors That Influence Health Seeking Behaviors

Health seeking behavior refers to chronology of remedial actions undertaken by individuals or populations to address perceived health concerns (Martucci *et al.*, 2012). The patients' perception concerning the quality of service provision is very important since it influences their health outcomes. Provision of services which meets the needs, wishes and expectations of patients ensures they seek medication or treatment from health care systems whenever they require such services (Ngugi *et al.*, 2017). Dehumanizing, devaluing and disempowering experiences leads to perceived challenge to personal identity and undermines self-sensing and thus deters seeking for services (Davidson *et al.*, 2012).

Proper communication, information sharing and patient involvement in making decisions about the services they intend to seek are significant determinant in seeking for services. Healthcare providers should listen to clients' concerns, give reliable advice, and provide full and accurate information. They should also provide explanation for drug use and side effects. They should devote their time, pay attention to patients' problems and offer guidance and counselling before providing Prostatism service. Perceived support from care providers during service delivery improves outcomes and overall men's satisfaction with care (Gwamaka et al., 2012)

The organization of various structures within a given hospital may influence patients' perceptions on service provision quality. Physically appealing structures improve the chances of a good medical procedure thus promoting achievement of a desired outcome, as reflected by patients' satisfaction. Measuring patient's past experience with care reflects on how the health system responds to patient needs as conceptualized by the World Health Organization. Healthcare organizations have been pressurized to promote service quality, safeguard patient safety and reduce the cost of providing healthcare services to patients (Ngugi *et al.*, 2017).

Several factors have been associated with hindering health seeking behaviors. These factors include physical, cultural, socio-economic, political among others. Availability of health care services, qualified personnel and the health facilities especially in Rural areas has significantly affected health seeking behaviors among people. In rural areas people are forced to walk or travel long distances for one to access the health facility of which many have been reported to be providing poor quality services. This negatively influence decision whether to seek for the service again or not (Otieno *et al.*, 2012).

3. Materials and Methods

3.1. Study design

The study employed descriptive cross-sectional design to determine health seeking behaviors associated with Prostatism services among men above 40 years. Descriptive research determines and reports the way things are at that particular time. It also quantified the problem and gave a detailed information that taps into the perceptions of communities and groups. It was also preferred since it ensured situation was described completely hence minimizing chances of bias on collection of data. This provided an operational framework within which the facts were placed,

processed through analyzing procedures and produce valuable research output (Otieno, 2014). It was advantageous to use the design because it was generally cheap and quick

3.2. Location of the study

The study location was Nyamira County. Nyamira County is situated in the Western highlands of Kenya, it covers an area of 894 km² with a projected total population of 650, 676 as at 2013 and a population density of 724 persons per square kilometer. The population growth rate stands at 2.4% (KNBS 2010). It borders the counties of Kericho to the East, Bomet to the South East, Kisii to the South, Homa Bay to the West and Kisumu to the North West. The County is divided into 5 Sub-counties namely; Nyamira South, Borabu, Masaba North, Nyamira North and Manga, which are further subdivided into 20 wards. The County has a total of one hundred and thirty health facilities of which eighty-two (82) are public facilities. In Nyamira County the doctor-patient ratio is 1:20000 while the Nurse-patient is 1:2632 (County Health Data 2015). This ratio is much high than the World Bank recommended doctor: patient ratio of 23:10,000 and Nurse-patient ration of 7: 2,000 (Bourbonnais, 2013). Nyamira County had a total of around 69,939 households with Masaba and Nyamira South Sub Counties having 3581 and 5348 households respectively (Nyamira County development profile, 2013). Gesima ward and Bonyamatuta wards form Masaba and Nyamira south sub counties were selected randomly for the study. Gesima ward had 5 sub- locations namely; Karantini, Nyatieno, Riamoni, Nyamakoroto and Nyabiosi and. Each sub-location had households distributed as Karantini 724, Nyatieno 655, Riamoni 731, Nyamakoroto 772, and Nyabiosi 699 (Gok, 2009). Bonyamatuta ward had 3 sub locations namely, Kebirigo, Siamani and Nyabisimba sub locations. Each sub-location had households distributed as Kebirigo 864, Siamani 1064 and Nyabisimba 908. The villages in Gesima ward were distributed as; Nyatieno 19, Nyamakoroto 16, Karantini 22, Nyabiosi 21 and Riamoni 18. Bonyamatuta ward had villages distributed as Kebirigo 10, Siamani 9 and Nyabisimba 6. The men who had 40 years and above in Nyamira County were Nyamira 41,699 (Census 2009).

3.3. Study Population

The study population comprised of men of at least 40 years who had lived in Masaba and Nyamira south sub counties for more than one year and at risk of developing Prostatism. The researcher included only those who had lived in the area for over a year to avoid imported cases from other counties and regions which might interfere with the results of the study. This population constituted persons of various educational, religious and occupational status. The men were selected at households from villages without checking whether or not they had Prostatism condition.

3.4. Sampling Techniques and Sample Size Determination

3.4.1. Sampling Techniques

Nyamira County was purposively selected for the purpose of this study. Random sampling where Masaba and Nyamira South sub counties were selected. The sub locations in Gesima and Bonyamatuta wards were classified as clusters where simple random sampling of clusters was employed to select the 3 clusters (sub locations) from Gesima ward while all the sub locations (3) were selected from Bonyamatuta ward. Simple random sampling was then used to select villages where the respondents were picked from where by 3 villages were selected from each sub location to make a total of 18 villages. Systematic random sampling of households was used to recruit participants. The method was most suitable because it guaranteed randomization thus minimizing likelihood of bias. A sampling interval of 3 (obtained by dividing the total number of households by the sample size required per village) was used to determine the households to recruit respondents. The lead researcher picked respondent with the help of community health workers (CHEWs), from each household in the selected villages until the required number of participants per village was reached and thus the total sample size of 422. The respondents selected were proportional to the number of Households in each selected village.

3.4.2. Sample Size Determination

Sample size refers to the number of observations made in a sample (Kothari, 2008). Sampling enhances statistical precision of results by reducing bias which is related to low response rates. A sample size was obtained using the formula as used by Fisher et al (1990).

$$n = \frac{z^2 pq}{d^2}$$

Where:

n = Desired sample size (population > 10,000).

z = Standard normal deviation at the required confidence level (set at 1.96).

p = since there is no current data showing the rate of Prostatism cases among the, the researcher will have an assumption of 50% of the target population having similar characteristics. q = 1 – p (1-0.5)

d = level of statistical significance (usually 0.05)

$$n = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 384$$

To cater for non-responses the researcher added 10% of the sample size

Thus, sample size was 422 since the study population is more than 10,000.

3.5. Data Collection Techniques

Quantitative data was collected using semi-structured research questionnaires. Trained research assistants administered the questionnaires to the participants and guided them to fill in their responses. They were monitored, guided and supervised by the researcher. All collected questionnaires were kept in locked cabinets throughout the study period and accessed by the researcher only to ensure confidentiality and avoid data loss. Qualitative data was obtained from focused group discussions held with patients in four FGD sessions. The sessions were moderated by the researcher with the research assistants recording their views by taking notes. This encouraged free discussion among participants thus captured information which was not achievable in a one on one interview. The respondents filled the IPSS scale questions which helped in determining Ipss score for the respondents. Score ranges from 0-35, whereby 0-7, 8-19 and 20-35 scores are categorized minor, moderate and severe symptoms respectively (American urological association, 1992).

3.6. Data Management and Analysis

Quantitative data was entered and stored in Microsoft Excel program. Data cleaning and editing was done where extreme, missing and inconsistent values were identified and corrected. Coding and verification of the data was done for easy manipulation, analysis and presentation. Data were then exported to Statistical Package for Social Sciences (SPSS) software version 20.0 for analysis. Descriptive analysis was done using percentages, frequency tables, charts and graphs. Inferential statistics were computed using Pearson's Chi-square and Fisher's Exact Test presented in cross tabulations. This was done at 95% confidence interval and p-values of less than 0.05 were considered significant in testing the association between study variables. Qualitative data from the FGDs was analysed through examination of patterns and trends of responses to generate themes and results presented as direct quotes or narrations and triangulated with quantitative data.

3.7. Logistical and Ethical Considerations

To conduct the research approval was sought from Kenyatta university graduate school. Ethical Clearance was obtained from Kenyatta University Ethical Review Committee. The research permit was also obtained from the National commission for science and Technology and Innovation (NACOSTI). After which the researcher informed the county commissioner health officer of Nyamira county and local leaders on the purpose and nature of the study prior and during the time of collecting data. To ensure confidentiality anonymity of participants was maintained at all times by not using any identifiers or personal information in the questionnaires. An informed consent to participate was then sought from each respondent by filling the consent form before responding to the questionnaire. In addition, every respondent was assured of non-disclosure of the shared information and made aware of the freedom to withdraw from the study if he so wished. Care and protection of the respondents was assured by ensuring that the interview was done in a private place, respondents were assured of their safety and the purpose of the study was explained to the respondents and it was emphasized that participation was purely voluntary and respondents was free to withdraw from the interview at any point. The respondents were advised to refuse to answer questions that may seem to be uncomfortable to them. Also, the participants who was suspected to have the condition were referred for further medical attention. For the respondents found to have special needs, immediate assistance was provided by the researcher or his assistants.

4. Results

4.1. Socio-Demographic Characteristics of Respondents

The study targeted 422 Men of 40 years and above who had lived for more than a year at Masaba and Nyamira south Sub-Counties of Nyamira County. Out of this, 387 questionnaires were completely filled and considered for analysis representing a response rate of 91.7%. The study established that among the respondents who had sought for Prostatism screening higher number 10(34%) of them were aged 70-74, 9(19.1%) aged between 75-79 years, 7(14.9%) above 80 years and 7(14.9%) those between 65-69 years. Fewer 5(10.6%) with ages between 55-59 years, 4(8.5%) between 60-64 years, 3(6.4%) between 50-54 years, 1(2.1) with ages between 45-49 and 40-44 Years

When asked about their highest level of education the respondents reported that 157(40.6%) of respondents had reached secondary school followed by 104(26.6%) with tertiary education. Those whose highest level of education was Primary school comprised of 82(21.2%) while the rest 44(11.4%) had no formal education. Concerning the occupational status, less than a half 111(28.6%) of the respondents were peasant farmers followed by 73(18.8%) casually-employed, 61(15.7%) were salaried employed. Small scale farmers accounted for 53(13.7%), Large scale business men were 46(11.9%), 36 (9.3%) large scale farmers while the beggars were 8(2.1%). More than half 227(58.7%) of the respondents earned an average family income of less than Kshs 20000, with 108(27.9%) earning between Kshs 21,000-50,000 while the rest 52(13.4%) earned more than 51,000 shillings per month. The results were presented in Table 1 below:

| Independent Variable | Respondent Response | Frequency | Percentage (%) |
|----------------------------|---------------------|-----------|----------------|
| Age | 40-44 | 60 | 15.5 |
| | 45-49 | 74 | 19.1 |
| | 50-55 | 52 | 13.4 |
| | 56-59 | 38 | 9.8 |
| | 60-64 | 21 | 5.4 |
| | 65-69 | 38 | 9.8 |
| | 70-74 | 42 | 10.8 |
| | 75-79 | 25 | 6.6 |
| | ≥80 | 37 | 9.6 |
| Highest level of education | None | 44 | 11.4 |
| | Primary | 82 | 21.2 |
| | Secondary | 157 | 40.6 |
| | Tertiary | 104 | 26.9 |
| Occupation | Salaried | 61 | 15.8 |
| | Casual | 73 | 18.9 |
| | small scale | 52 | 13.4 |
| | large scale | 46 | 11.9 |
| | Peasant | 111 | 28.7 |
| | large scale farmer | 36 | 9.3 |
| | Beggar | 8 | 2.1 |
| Income per month | ≤20,000 | 227 | 58.7 |
| | 21,000-50,000 | 108 | 27.9 |
| | ≥50,000 | 52 | 13.4 |

Table 1: Socio-Demographic Factors of Respondents (N=387)

4.2. Uptake Of Prostatism Services

Majority of the respondents 340(87.9%) have never sought for any Prostatism services while only 47(12.1%) had sought for Prostatism services as shown in the table 4.2 below:

| Respondent's Response | | Frequency | Percent |
|---|-------|-----------|---------|
| Ever sought for any Prostatism services | Yes | 47 | 12.1 |
| | No | 340 | 87.9 |
| | Total | 387 | 100.0 |

Table 4.2: Ever Been Screened (N=387)

4.3. Relationship between Health System Factors and Prostatism Screening

The study showed that among those who had utilized Prostatism services many of the respondents 16(34%) reported that insensitive and poor handling by health workers, fear of screening method 14(29.85), poor quality of services 8(17%), distance 7(14.9%) and lack of equipment 2(4.3%) had hindered them from seeking services. Among those who hadn't sought for the services; 99(29.1%) insensitive and poor handling, 87(25.6%) distance, fear of screening method 82(24.1%), lack of equipment 57(16.8%) and 15(4.4%) poor quality of care. The study showed a significant statistical association ($p=0.001$) between factors hindering one from seeking service and utilization of Prostatism services. Majority of the respondents who had sought for Prostatism services 35(74.5%) reported to have liked the reception they got at the hospital while 12(25.5%) didn't like the reception they received. The study showed that many of the respondents 31(66%) liked the quality of care they received from the hospital whereas 16(34%) didn't like the quality of care they received. When asked whether they were handled well, majority of the respondents reported 35(74.5%) to be handled well by the health care provider while 12(25.5%) didn't like how they were handled by the health care providers. The study showed a significant statistical association ($p=0.001$) between reception, quality of care, handling by health care provider and utilization of Prostatism services. One Man narrated his experience with a casual worker at the hospital and said;

"...When he came and got me standing next to the door, he just roared to me like a hungry lion; move to the other side and follow simple instructions...am only serving those who are on the queue".

The study showed that majority 32(68.1%) of the respondents reported that they were given information about Prostatism before and during screening while 15(31.9%) reported not to have been given information. One Key Informant said;

"...giving men information before and during the screening process prepares them psychologically and also helps them in making decisions whether or not to continue with the process.

Information before and during service did not have a significant influence on uptake of Prostatism services satisfaction level as there was no association ($p=0.16$) between information before and during service and utilization of Prostatism services.

The information was reported as shown in Table 2 below:

| Independent Variable | Respondent Response | Dependent Variable Uptake of Prostatism Services | | Statistical Significance |
|--|-------------------------------|--|------------|--|
| | | Yes (N=47) | No (N=340) | |
| Health system factors | | | | |
| Factors hindering from seeking | Fear of screening method | 14(29.8%) | 82(24.1%) | $\chi^2=22.814$ df=1 $p^*=0.001$ |
| | Lack of equipment | 2(4.3%) | 57(16.8%) | |
| | Insensitive and poor handling | 16(34.0%) | 99(29.1%) | |
| | Poor quality of care | 8(17.0%) | 15(4.4%) | |
| | Distance | 7(14.9%) | 87(25.6%) | |
| Like the reception from health worker | Yes | 35(74.5%) | 0(0.0%) | $\chi^2=20.568$ df=1 $p^*=0.001$ |
| | No | 12(25.5%) | 0(0.0%) | |
| Like quality of care given | Yes | 31(66%) | 0(0.0%) | $\chi^2=10.068$ df=1 $p=0.001$ |
| | No | 16(34%) | 0(0.0%) | |
| Handled well during and after service | Yes | 35(74.5%) | 0(0.0%) | $\chi^2=20.586$ df=1 $p=0.001$ |
| | No | 12(25.5%) | 0(0.0%) | |
| Whether given information about Prostatism screening | Yes | 32(68%) | 0(0.0%) | $\chi^2=1.97$ df=1 $p=0.16$ |
| | No | 15(32%) | 0(0.0%) | |
| Distance to the nearest health facility | Less 1km | 2(4.3%) | 22(6.5%) | $\chi^2=57.929$ df=5 $p^*=0.001$ |
| | Between 1-5km | 4(8.5%) | 36(10.5%) | |
| | Between 6-10km | 9(19.1%) | 97(28.5%) | |
| | Between 11-15km | 13(27.7%) | 53(15.6%) | |
| | Between 16-20km | 12(25.5%) | 110(32.4%) | |
| | Beyond 20km | 7(14.9%) | 22(6.5%) | |

Table 2: Relationship between Health System Factors and Prostatism Screening

5. Discussions

5.1. Health System Factors Influencing Health Seeking Behavior with Regards to Prostatism

The study showed that among those who had utilized Prostatism services many of the respondents reported that insensitive and poor handling by health workers had hindered them from seeking for the services at least in some point. Men narrated their worst experiences with the health care providers and workers especially on their insensitivity and poor handling. Insensitive health care providers and poor handling affects the satisfaction level of individuals which might end up making one not to seek for the services. Research results were consisted to study from Pumwani Maternity hospital which revealed that insensitive and poor handling by health care providers negatively affected individuals' willingness to seek for a service, thus provider friendliness is a predictor of client satisfaction hence seeking for a health service (Nyongesa *et al.*, 2014). The findings of influence of staff friendliness on patient satisfaction were also consistent with another study done by Davidson *et al.* (2012) which showed that poor staff attitudes and poor treatment experiences and insensitivity to patients discouraged them from seeking for health care services.

Majority of the respondents who had sought for Prostatism services reported to have liked the reception and quality of care they received from the health care providers. There was a strong association between reception and quality of care received and seeking for Prostatism services. Study findings were consistent to the results which revealed that good reception and quality of care was associated with likelihood of future hospital visits and subsequent utilization of health care services (Berg *et al.*, 2015).

The study showed that majority of the respondents reported that they were given information about Prostatism before and during screening while few reported not to have been given information. However, the study did not show any significant influence on uptake of Prostatism services satisfaction level as there was no association between information before and during service and utilization of Prostatism services. Giving information to patients increases their decision making towards their health. However, these results were contrary to a study done by Muhammad *et al.* (2014), where it was found that involvement of patients in making decisions about services improved the client's satisfaction thus potentially increasing chances of seeking for a service.

Distance to the nearest health facility was also associated with uptake of Prostatism service. When there is availability of health facility people tend to seek for services since they can easily access the services near to their homes. When health facilities are far or when there are no health care providers people sometimes avoid travelling long distances to seek for the service thus either seeking for services of traditional medicine men or not seeking for the services completely until the condition becomes more complicated. The study results were consistent to the findings in Uganda which found out that distance to the nearest health facility was a major hindrance to utilization of health services in Wakiso district in Uganda (David et al., 2014). The study findings were also similar to the study conducted on utilization of health services among resource limited rural areas in Kenya which revealed that the distance was the main challenge associated affecting uptake of health care services (Ngugi et al., 2017)

5.2. Conclusion

The study established that most health system factors had a significant effect on uptake of Prostatism services. Reception by health worker, quality of care, information about Prostatism and distance to the nearest health facility were strongly associated to uptake of Prostatism services. Insensitive and poor handling by health care providers was the most reported hindrance to seeking for services

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