Individual factors influencing uptake of benign prostate hyperplasia services among older men in Kenya

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Abstract: Background: Benign prostate hyperplasia is a reproductive health condition which refers to obstruction of the bladder neck due to an enlargement of the prostate as men ages. The symptoms are irritative and obstructive that cause urinary difficulties.

Objective: The study aims to determine individual factors associated with uptake of benign prostate hyperplasia services among men above 40 years in Nyamira County, Kenya.

Materials and methods: The study employed mixed method study design. The study utilized qualitative and quantitative research methods in order to obtain the required information from respondents. The researcher interviewed 387 respondents who were randomly selected from 18 villages of Nyamira south and Masaba wards. Descriptive data was analyzed using Statistical Package for Social Sciences (SPSS) version 20.0. Inferential statistics such as Chi-Square tests at 95% confidence level was used to determine the association between studied variables.

Results: Chi-square analysis revealed significant relationship between individual factors such as commonness of benign prostate hyperplasia condition (0.001), seriousness of condition (0.002), Knowledge of anyone suffering from the condition (0.01), knowledge of benign prostate hyperplasia screening services (0.021), screening preventing condition (0.001), Cost of screening (0.001), Income (0.002), Medical insurance (0.001) and uptake of benign prostate hyperplasia services. Results from focused group interviews were reported as direct quotes or narrations.

Conclusion: The study concluded that there was low uptake of benign prostate hyperplasia services and that most of the individual factors were significantly associated with uptake of benign prostate hyperplasia services. This implies that a lot needs to be done by the stakeholders in sensitizing the men who at risk to know more about the prostate hyperplasia services and also scale up the services to reach the most vulnerable.

Key Words: Benign prostate hyperplasia, Uptake, Individual factors, Health seeking behaviour.

I. INTRODUCTION

G lobally more than 210 million men have benign prostate hyperplasia.¹ It is estimated that men 1 in 4 men will suffer from benign prostate hyperplasia over their life time.² The likelihood of a man developing benign prostate hyperplasia within a span of 30 years for a man who is symptom free is 45%.³ Benign prostate hyperplasia usually causes physical compression of the urethra leading to the bladder obstruction resulting to kidney problems thus affecting urine flow.⁴ Benign prostate hyperplasia 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.² A study done in Nairobi revealed out of 108 men who were involved in the study 76% tested positive for benign prostate hyperplasia with only 24% testing positive of prostate cancer.⁵ These services include counselling services, testing, IPSS scores and clinical services.

Patients suffering from Benign prostate hyperplasia get affected in their day-to-day activities including socializing with others such as playing games, drinking before visiting places and driving thus causing emotional discomfort as well as sexual performance. This condition is associated with a lot of stigma and discrimination especially from the family, health care providers and the general. This affects an individual's willingness to seek for a health care service early hence seeking services when the condition is in advanced stage affecting its prognosis.⁶ Benign prostate hyperplasia condition has an enormous economic implication to the individual and family at large. In developing countries like Kenya, Benign prostate hyperplasia services are offered in few hospitals due to the small ratio of doctor to patient.¹ The costs of intervention may include the indirect, direct and intangible costs which can be a hindrance especially to the men in low socio-economic status group.⁷

Benign prostate hyperplasia screening service in Kenya 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. Limited studies on benign prostate hyperplasia have been documented in Kenya leading to researchers to over-relying on findings from other countries in the world or regions even when risk factors might be different.⁵

II. 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.⁸ 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.⁵

A growing problem of conditions associated with elderly have been observed globally due to the unprecedented population aging tendency. Research have shown that that 15-60% men 40 years and above are faced with prostatic symptoms.³ Prostatism symptoms increases susceptibility to other diseases including risk of falls, depression, low quality of life and sleeping disorders. 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.⁹

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.² 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 their participation in health issues is often minimal.¹⁰ 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.⁷

2.2 Individual factors influencing health seeking behavior

Individual factors that influence health seeking behavior may include physical, cultural, and socio-economic among others. Socio-cultural aspects may impact patient's use of health care services for instance Prostatism screening, counselling and clinical services. Patients may feel embarrassed to report some prostatism symptoms such as nocturia even if they are suffering. Those affected continue to suffer as their health status worsen progressively. Majority of these victims are afraid of sharing such information with their partners who might give them advice to seek services. This further prevents early detection of health conditions consequently resulting in advancement of prostatism symptoms.⁵

Aspects of the socio-economic status plays a significant role in determining the rate at which individuals seek prostatism services. For example, the individual's level of education acts a key factor in seeking health services at disposal since it rises the level of awareness on this condition. Educations empowers people with knowledge and life skills on specific health issues as well as appropriate preventive mechanisms thus increasing the possibility of seeking for such services.⁹ Education enhances individuals to have better employment opportunities leading to higher income levels. This means that they can afford the costs associated with seeking prostatism services at their disposal. A study done in Turkey found out that prostate awareness risks were unsatisfactory in the Turkish male population and that urologists needed to conduct health promotion and advocacy about the condition. Prostatism knowledge was still lacking through all education levels.¹¹

A study conducted among Public servants in Anambra state, Nigeria found out that 74.1% of the respondents were aware of the Prostatism condition with majority of the respondents being able to identify at least one symptom of the condition. However, the study also found out that very few men had sought for any Prostatism service (6.5%) within that year signifying very low uptake of the services despite majority of them being aware of the condition.¹² Lack of awareness about the condition results to late diagnosis and therefore affecting the prognosis of the condition. If the condition can be diagnosed early those suffering from the condition can be able to start utilizing the services early enough before the condition worsens thus positively influencing the prognosis of the condition.¹³ A study conducted in India reported that majority of the people suffering from Prostatism were not aware of their condition and their health seeking behavior was generally poor. In most developing countries individuals wait till the condition worsens before seeking for the services despite high prevalence of the condition in these countries.¹⁴

III. MATERIALS AND METHODS

3.1 Study design

The study employed a mixed method design to determine individual factors that influence health seeking behaviors associated with benign prostate hyperplasia services among men above 40 years.

3.2 study setting

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. 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 130 health facilities of which 82 are public facilities. In Nyamira County the doctor-patient ratio is 1:20000 while the Nurse-patient is 1:2632. Nyamira County had a total of around 69,939 households with Masaba and Nyamira South Sub Counties having 3581 and 5348 household's respectively.¹⁵

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. According to the population projections, the total number of men aged 40 years and above was approximately 12,000 in the two sub counties.¹⁵ The study included Men above 40 years who consented and had lived in Masaba and Nyamira South sub-counties for at least one year. However, the study excluded men who were sick and those unable to participate.

3.4 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 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 form each sub location to make a total of 18 villages. The respondents selected were proportional to the number of Households in each selected village. See table 3.1 below:

Table 3.1 showing proportion of respondents selected per the sub-location in Gesima ward of Masaba sub-county

| Sub location | villages | No. households | Proportion of sample size |
|--------------|-------------|-------------------|------------------------------|
| Nyabiosi | | 699 | 54 |
| | Nyansimwamu | 47 | 20 |
| | Enchoro | 38 | 16 |
| | Botana | 43 | 18 |
| | Sub total | 128 | 54 |
| Riamoni | | 731 | 56 |
| | Riakworo | 41 | 19 |
| | Risa | 33 | 15 |
| | Nyaboraire | 46 | 22 |
| | Sub total | 120 | 56 |
| Nyamakoroto | | 772 | 59 |
| | Kambini | 52 | 22 |
| | Sungututa | 44 | 19 |
| | Riamisiani | 42 | 18 |
| | Sub total | 138 | 59 |
| Total | | 2202 | 169 |

Table 3.2 showing proportion of respondents selected per the sub-location in Bonyamatuta ward of Nyamira South sub-county

| Sub location | Villages | No. of households | Proportion of sample size |
|--------------|-----------|-------------------|------------------------------|
| Kebirigo | | 864 | 77 |
| | Bomweri | 127 | 47 |
| | Nyangongo | 43 | 16 |
| | Rirumi | 37 | 14 |

| | Sub total | 207 | 77 |
|------------|--------------|------|-----|
| Siamani | | 1064 | 95 |
| | Endabu | 95 | 36 |
| | Masosa | 85 | 31 |
| | Nyamwetureko | 74 | 28 |
| | Sub total | 254 | 95 |
| Nyabisimba | | 908 | 81 |
| | Ekenyoro | 120 | 24 |
| | Riasindani | 134 | 28 |
| | Kenyenya | 138 | 29 |
| | Sub total | 392 | 81 |
| | | 2836 | 253 |

3.5 Sample size determination

A sample size was obtained using the formula as used by Fisher et al .¹⁶ since there was no current data showing the rate of up take of benign prostate hyperplasia, the researcher had an assumption of 50% of the target population having similar characteristics. When substituted the sample size was 384 and to cater for non-responses the researcher added 10% to make 422 respondents.

3.6 Data collection techniques

Quantitative data was collected using semi-structured research questionnaires. Each questionnaire consisted open and closed ended questions on Knowledge of benign prostate hyperplasia condition, self-vulnerability, commonness of condition, cost of seeking services, knowledge of patients with condition, Knowledge of services and medical insurances. To ensure reliability the research properly selected and trained research assistants and instruments were pre-tested in the field prior to the conduct of the actual study. To ensure validity research tools were well structured and ensured all relevant aspects of the study variables were addressed, the sampling techniques adopted ensured randomization and representativeness and use of well-structured research tools (standard tools). Qualitative data was obtained from focused group discussions held with patients in four sessions.

3.7 Data management and analysis approach

Quantitative data was entered and stored in Microsoft Excel program. Data cleaning, Coding and verification of the data was done for easy 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 Chisquare 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. Qualitative data was analyzed through examination of patterns and trends of responses to generate themes and results presented as direct quotes or narrations and triangulated with quantitative data.

3.8 Ethical considerations

To conduct the research 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.

IV. RESULTS

4.1 Uptake of benign prostate hyperplasia services

These services included; counselling services, testing, IPSS scores and clinical services. This was measured through enquiring whether the respondents had sought for any of these services after which the number of those who had sought and those who had never was recorded. Table 3.1 below shows that Majority of the respondents 340(87.9%) had never sought for any benign prostate hyperplasia services Results were as table 4.1 below:

| Respondent's response | | Frequency | Percent |
|-----------------------|-------|-----------|---------|
| Ever sought for any | Yes | 47 | 12.1 |
| benign prostate | No | 340 | 87.9 |
| hyperplasia services | Total | 387 | 100.0 |

4.2 Individual factors influencing uptake of benign prostate hyperplasia

The individual factors of the study include the following:

4.2.1 Awareness of benign prostate hyperplasia

Majority of the respondents 289(74.7%) were aware of benign prostate hyperplasia condition while the rest 98(25.3%) were un aware as presented in the table 4.2 below.

| Table 4.2 Awareness | of Prostatism | (n=387) |
|---------------------|---------------|---------|
|---------------------|---------------|---------|

| Respondent's response | | Frequency | Percent |
|-----------------------|-------|-----------|---------|
| | Yes | 289 | 74.7 |
| Awareness | No | 98 | 25.3 |
| | Total | 387 | 100.0 |

4.2.2 Believe on whether benign prostate hyperplasia is common

More than half of the respondents 227(58.7%) believed that benign prostate hyperplasia was a common condition whereas the rest 160(41.3%) said was not a common. This information was represented as shown in the table 4.3 below.

| Respondent re | esponse | Frequency | percent |
|---------------|---------|-----------|---------|
| | Yes | 227 | (58.7%) |
| commonness | No | 160 | (41.3%) |
| | Total | 387 | (100%) |

Table 4.3: Believe on whether BPH is common (n=387)

4.3.3 Believe on seriousness of the BPH

Concerning benign prostate hyperplasia condition being serious, majority of the respondents 336(86.8%) indicated they believed it was a serious condition with 51(13.2%) believing it was not. This was presented in the table 4.4 below:

Table 4.4: Believe on whether BPH is common (n=387)

| Respondent response | | Frequency | Percent |
|---------------------|-------|-----------|---------|
| | Yes | 336 | (86.8%) |
| Seriousness | No | 51 | (13.2%) |
| | Total | 387 | (100%) |

4.3.4 Know on anyone suffering from BPH condition

When the respondents were asked whether they knew of anybody suffering from benign prostate hyperplasia, majority of them 280(72.4%) knew of a person(s) suffering from it while 107(27.6%) indicated not knowing of anyone suffering from the condition. This is shown in the table 4.5 below:

Table 4.5: Know on anyone suffering from benign prostate hyperplasia (n=387)

| Respondent's response | | Frequency | Percent |
|------------------------------|-------|-----------|---------|
| Anyone suffering from BPH | Yes | 280 | 72.4 |
| | No | 107 | 27.6 |
| | Total | 387 | 100.0 |

4.3.5 Ever heard of benign prostate hyperplasia services

Majority of the respondents 269 (69.5%) indicated to have heard about benign prostate hyperplasia services while 118 (30.5%) had never heard of it. This was summarized in the table 4.6 below:

| Respondent response | | Frequency | Percent |
|-------------------------------|-------|-----------|---------|
| Ever heard of BPH services | Yes | 269 | (69.5%) |
| | No | 118 | (30.5%) |
| | Total | 387 | (100%) |

Table 4.6: Ever heard of BPH services (n=387)

4.3.6 Channel of information on BPH services

Among those who indicated to have heard about BPH services 72(26.8%) indicated to have heard about the condition at the church, 66(24.5%) health facility, 44(16.4%) media, 42(15.6%) health campaign, 30(11.2%) school and 13(4.8) homes. The information was presented as shown in the figure 4.1



Fig 4.1: Channel of information on BPH services (n=269)

4.3.7 Source of information

Majority 109(40.5%) indicated to have heard about the services from a health care provider, 69(25.7%) from a friend, 42(15.6%) church leaders, 24 (8.9%) from spouse, 21(7.8%) from teacher and 4(1.5%) from a parent. This is shown in the figure 4.2 below:



Fig 4.2: Source of information (n=269)

4.3.8 Can screening prevent benign prostate hyperplasia services

Majority of the respondents 237(61.2%) recorded that they didn't know whether screening prevents benign prostate

hyperplasia or not. Those who disagreed that screening can help prevent BPH condition were 82(21.2%) whereas the rest 68(17.6%) agreed that screening can help prevent. This is shown in the table 4.7 below:

| Table 4.12: Car | screening preve | ent BPH (n=387) |
|-----------------|-----------------|-----------------|
|-----------------|-----------------|-----------------|

| Respondent response | | Frequency | Percent |
|-------------------------------------|------------|-----------|---------|
| Can screening prevent Prostatism | Yes | 68 | 17.6 |
| | No | 82 | 21.2 |
| | Don't know | 237 | 61.2 |
| | Total | 387 | 100.0 |

4.3.9 Cost of seeking for benign prostate hyperplasia service

The study showed that 106 (27.4%) of the respondents indicated they thought that the cost of seeking for services to be between kshs 2,000-4,000, 104(26.9%) between kshs1, 000-2,000, 97(25.1%) more than kshs5, 000, 49(12.7) less than kshs1,000 while the rest 31(8%) thought it was free. The respondents' responses are presented in the figure 4.3 below:



Fig.4.3: Cost of screening

4.3.10 Affordability of benign prostate hyperplasia services

When respondents were asked whether they thought their income could enable them to seek Prostatism services majority 253(65.4%) said their income couldn't enable them seek for services. Those who agreed that their income could enable them seek any prostatism services were 134(34.6%). One FGD discussant commented:

".... even seeking for a mere treatment for a burn I cannot afford, what about seeking for these services which I hear is expensive? Unless the county government pays for the service I can't afford"

This information was presented as shown in the table 4.8 below:

| Respondent response | | Frequency | Percent |
|-----------------------------|-------|-----------|---------|
| Income | Yes | 134 | 34.6 |
| enables seek services | No | 253 | 65.4 |
| | Total | 387 | 100.0 |

Table 4.8: income enable seek for services

4.3.11 Health insurance scheme

More than half of the respondents 210(54.3%) didn't have any health insurance while the rest 177(45.7%) reported to be having a medical insurance. when asked about health insurance one man in FGD session narrated:

"...Nhif which is the common insurance is expensive for since I have children to take care of and I don't have any meaningful job can not only cater for my family expenses but also enable me pay for the insurance.in any case you may be and never use the service immediately..."

The table 4.9 below shows the respondents responses on health insurance:

| Respondent response | | Frequency | Percent |
|---------------------|-------|-----------|---------|
| Health insurance | Yes | 177 | 45.7 |
| | No | 210 | 54.3 |
| | Total | 387 | 100.0 |

Table 4.9: Health insurance scheme (n=387)

4.3 Relationship between individual factors and uptake of benign prostate hyperplasia services

The study sought to find out the association between individual factors and uptake of benign prostate hyperplasia services among the respondents. Results revealed that, Majority of the respondents (34(72.3%) who had sought for benign prostate hyperplasia service reported to have ever heard about the condition. Knowledge about benign prostate hyperplasia did not have a significant influence on uptake of benign prostate hyperplasia services as there was no association (p=0.407) between knowledge about the condition and the utilization of benign prostate hyperplasia services. Men who had utilized benign prostate hyperplasia services 39(83%) agreed that is a benign prostate hyperplasia common condition. indicated that was not a common condition. There was statistical significance between reporting that the condition is common and utilization of benign prostate hyperplasia services (p=0.001).

All of the men who had used benign prostate hyperplasia services 47(100%) reported that it was a serious condition. The study showed a significant statistical association (p=0.002) between seriousness of the condition and utilization of benign prostate hyperplasia services. Majority of those utilizing benign prostate hyperplasia services 39(83%)reported that they had heard about benign prostate hyperplasia services. There was a significant statistical association between awareness of the services and uptake of BPH services (p=0.021). Majority 35(74.5%) of the men who had utilized the benign prostate hyperplasia services agreed indeed screening can help prevent benign prostate hyperplasia. The study showed a significant statistical association (p=0.001) between screening helping prevent benign prostate hyperplasia and uptake of services.

The study showed that 15(31.9%) of those utilizing benign prostate hyperplasia services were either free or could cost them between kshs2000- 5000. The study showed a significant statistical association (p=0.001) between cost of the service and utilization of benign prostate hyperplasia services. Majority 229 (67.4%) of the respondents who felt that their income could not enable them access the BPH services did not uptake the services. There was statistically significant association between income enabling access to services and uptake of BPH services (p=0.002). Further results revealed that most 210(61.2%) of the respondents who did not have medical insurance had not utilized BPH services. There was a significant statistical association between having medical insurance and uptake of BPH services. Results were as presented in table 4.10 below:

| Independent | | Dependent variable Uptake of benign prostate hyperplasia services | | |
|-----------------------------------|------------------------|--|------------|--------------------------|
| variable Individual factors | Respondent response | Yes(N=47) | No (N=340) | Statistical significance |
| Awareness of | Yes | 34(72.3%) | 255(75%) | $\chi^2 = .154$ |
| hyperplasia | No | 13(27.7%) | 85(25%) | p=0.407 |
| Believe BPH | Yes | 39(83%) | 188(55.3%) | $\chi^2 = 13.05$ |
| condition | No | 8(17%) | 152(44.7%) | p=0.001 |
| Believe BPH | Yes | 47(100%) | 289(85%) | $\chi^2 = 8.12$ |
| condition | No | 0(0.0%) | 51(15%) | p*=0.002 |
| Anyone | Yes | 47(100%) | 233(68.5%) | $\chi^2 = 20.444$ |

Table 4.10: Relationship between individual factors and uptake of benign prostate hyperplasia services

| suffering from the condition | No | 0(0.0%) | 107(31.5%) | df=1 p*=0.001 |
|--|--------------------|-----------|------------|--------------------------------------|
| Ever heard of BPH services | Yes | 39(83%) | 230(67.6%) | $\chi^2 = 4.58$ df=1 p=0.021 |
| | No | 8(17%) | 110(32.4%) | |
| whether screening can help prevent benign prostate hyperplasia | Yes | 35(74.5%) | 21(6.2%) | $\chi^2 = 8.534$ df=1 p*=0.001 |
| | No | 3(6.4%) | 82(24.1%) | |
| | Don't know | 8(17.1%) | 237(69.7%) | |
| Cost of services | Free | 15(31.9%) | 7(2.0%) | $\chi^2 = 146.724$ df=4 0.001 |
| | <u>≤</u> kshs.1000 | 5(10.7%) | 49(14.4%) | |
| | Kshs.1000-2000 | 4(8.5%) | 104(30.6%) | |
| | Kshs.2000-5000 | 15(31.9%) | 91(26.8%) | |
| | <u>≥</u> 5000 | 8(17.0%) | 89(26.2%) | |
| Income enable you seek services | Yes | 23(48.9%) | 111(32.6%) | $\chi^2 = 4.84$ df=1 p=0.002 |
| | No | 24(51.1%) | 229(67.4%) | |
| Medical insurance | Yes | 23(48.9%) | 130(38.2%) | $\chi^2 = 63.471$ df=1 p=0.001 |
| | No | 24(51.1%) | 210(61.2%) | |

P*=Fischer's exact

IV. DISCUSSIONS AND CONCLUSIONS

4.1 Discussions

4.2 Individual factors influencing uptake of benign prostate hyperplasia services

Majority of the respondents who had sought for benign prostate hyperplasia service reported to had ever heard about benign prostate hyperplasia condition. When an individual is aware of a disease he will always try to seek for information on the particular diseases and also the services available with the intention to seek. However, Knowledge about did benign prostate hyperplasia not have a significant influence on uptake of benign prostate hyperplasia services as there was no association between knowledge about the condition and the utilization of services. This study findings were contrary to the results from Uganda which showed that awareness and education level influenced uptake of services where by those who were aware about condition and services sought for the services.¹⁷

Believe that benign prostate hyperplasia was a common condition was statistically associated with uptake of services among adult men. Those men who felt like the condition was common were more likely to seek for health care service because they might have feared they could develop the condition. This study findings were consistent with the results of study conducted in Turkey which found out that commonness of prostate condition was significantly associated with uptake of services among Turkish male population.¹⁸

Seriousness of the condition was significantly associated with uptake of benign prostate hyperplasia service. Men who felt like the condition posted a serious health problem to them they were likely to seek for health care service. This study results were similar to the study that was conducted among Ugandan men which found out that those men who felt that the condition was so serious they sought for services in the nearest health care facilities.¹⁷

Cost of seeking for benign prostate hyperplasia services was significantly associated with up take. A high number of the men reported that seeking for the service was expensive to them since seeking for the service will cost an individual direct, indirect and intangible costs. Majority of the men also reported that they did not have a medical insurance scheme. Large number of the interviewed men came from lower income level thus the costs incurred could be a problem to them. This study results were consisted to the findings amongst Ugandan men which found out that majority of the respondents failed to seek for the services because they felt that they could not afford to pay for the costs associated with the services since majority came from lower income families.¹⁷

V. CONCLUSIONS

The study concluded that Believe on benign prostate hyperplasia being common, knowledge about screening, believe about its seriousness, perception on self-vulnerability, having a medical insurance were significantly associated with uptake of benign prostate hyperplasia. The study recommends the County government of Nyamira in collaboration with relevant stakeholders should develop, implement and scale up education, empowerment initiatives and programmes aimed reducing stigma and early detection and treatment of Prostatism before it becomes more complicated. Also, County should enhance access to and use of relevant information on Prostatism.

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