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Original Research Article

Influence of patient related factors on health seeking behaviours among men with lower urinary tract symptoms attending surgical outpatient clinic at Meru Level Five Hospital, Kenya

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ABSTRACT

Background: Currently there are increased cases of men presenting with lower urinary tract symptoms (LUTS) especially in low resource countries. The purpose of this study was to establish the influence of patient related factors on health seeking behaviors for LUTS among men attending surgical outpatient clinic at Meru hospital, Kenya.
Methods: Descriptive cross-sectional study design was used. Population involved 120 men suffering from LUTS, 2 physicians and 2 nurses. Questionnaires and interview guides were used for data collection. Study period was from August 2018 to March 2020.
Results: Patients (67.0%) were aged between 61-70 years. Primary education level (68.8%). Farmers (72.0%) with income level of below Kenyan Shilling (Ksh.) 20,000. Logistic regression was used whereby p values ($p \leq 0.05$). The inferential statistics pointed out that patient related factors test items had a statistical significant influence since the p values were found to be less than 0.05 at 95% confidence interval.
Conclusions: There was a significant negative influence of patient related factors such as lack of knowledge, low income levels and distance to health care facilities on health seeking practices. Patients sought medical attention when quality of their lives had been threatened. The study recommends adopting measures of rising awareness on need for seeking early medical attention and initiate outreach health services in underserved areas or through telehealth.

Keywords: Patients, Factors, Health seeking behavior, LUTS

INTRODUCTION

Lower urinary tract symptoms (LUTS) manifest frequency, urgency, nocturia, difficult in initiating urination, sense of incomplete bladder emptying, decreased force of stream and interrupted stream.[1] The human prostate is the cause of benign prostate hyperplasia (BPH) and prostate cancer (PCa) which mostly accounts for LUTS.[2] It was projected that 1.9 billion persons of the world population (45.2%) were affected by LUTS in 2008, and 2.3 billion in 2018 will be affected 44.7% of men.[3] In a study of LUTS, the prevalence of LUTS in men was conveyed to be 69%, with 21% of participants under study revealing moderate-to-severe symptoms that justified treatment consideration.[4] Urinary symptoms were the main reason for majority 71.3% of LUTS patients to seek health care services. Other reasons included fear of prostate cancer 8.9%, request by family or friends 1.0% and through physician review 14.9%. Additionally, half of all LUTS patients would wish to reduce the risk of long term complications such as LUTS related surgeries and acute urinary retention.[5-7] Men belief urinary symptoms are associated with ageing and that sexual changes are private and a taboo.[8,9] In addition, the burden of LUTS is expected

to increase mostly in developing regions of Africa.[10] In Nigeria the prevalence of LUTS was 66% of the total population under study and the severity increases with increase in age.[11] In Uganda the prevalence of moderate and severe LUTS were 40.5% and 20% respectively in men aged 55 years and above.[12,13] The objective of the study was to establish influence of patient related factors on health seeking behaviors among men with LUTS attending surgical outpatient clinic at Meru Level Five Hospital.

METHODS

Research design

The design of the study was descriptive cross-sectional design. Both qualitative and quantitative data collection methods were used in the study. These included the use of questionnaires, focused group discussion and key informant interviews.

Study area

The study was carried out at Meru level five hospital surgical outpatient clinic. The clinic attends about 60 LUTS patients per month.

Study population

The total population comprised of 124 respondents, 120 men suffering from LUTS, 2 physicians and 2 nurses. The study population was 120 LUTS patients, 2 physician and 2 nurses working at this clinic (Table 1).

Table 1: Study population.

Respondents	Population
Patients	120
Physician	2
Nurse	2
Total	124

Inclusion criteria

The study included male patients who were above 40 years of age with LUTS.

Exclusion criteria

Patients who had mental illness or neurological diseases which affects bladder emptying, and patients with other chronic conditions like diabetes were also excluded.

Sampling procedure

Sampling is the process of choosing the research units of the target population which are to be included in the study. The study used the census thus sample size was 120 LUTS patients, 2 physicians and 2 nurses.

Data analysis and presentation techniques

Qualitative and quantitative data analysis was used. The responses were analyzed using statistical package for social sciences (SPSS) version 22. Descriptive analysis was used to generate the mean, standard deviation and frequencies. Logistic regressions were used whereby p values were used to determine statistical significance of results with cut off set at $p \leq 0.05$). The results were then presented using frequency distribution tables and charts. Qualitative data was analyzed using qualitative techniques mainly developing and applying codes, identifying themes, patterns and relationships and summarizing the data from direct quotes and selected comments from key informant interviews, and focused group discussion.

Ethical issues

The researcher obtained an introductory letter from Jomo Kenyatta University of Agriculture and Technology (JKUAT) School of Nursing, after which ethical clearance was obtained from Kenya Methodist University (KEMU) ethical review committee, National Commission for Science, Technology and Innovation (NACOSTI), Meru Teaching and Referral Hospital management and Meru level five surgical outpatient clinic in charge. The researcher ensured that the respondents were informed of the research goals and objectives to minimize suspicion.

RESULTS

The sample for the study was 124 respondents who participated in the study. The respondents who filled the questionnaires were 112 the remaining 8 respondents participated in the focused group discussion. Four (4) key informants who were health workers participated in the study. This was 100% response rate.

Respondents' social demographic characteristics

Age of the respondents

The findings indicated that 3 (2.7%) of the respondents were aged between 40-50 years, 20 (17.9%) between 51-60 years, 75 (67.0%) between 61-70 years and 14 (12.5%) aged 70 years and above (Table 2).

Religion of respondents'

The findings pointed out that 72 (64.3%) of the respondents' were catholic 29 (25.9%), Protestants 6 (5.4%), Muslims and 5 (4.4%) belonged to other religions (Table 2).

Respondents' marital status

The findings indicated that 99 (88.4%) of the respondents were married, 2 (1.8%) single, 8 (7.1%) widowed, 3 (2.7%) separated (Table 2).

Respondents' residential region

The results indicated that 32 (29.0%) were from town, 80 (71.0%) rural regions (Table 2).

Table 2: Demographic characteristics.

Characteristics	Frequency	Percent
Age distribution (years)		
40-50	3	2.7
51-60	20	17.9
61-70	75	67.0
Above 70	14	12.5
Total	112	100.0
Religion		
Catholic	72	64.3
Protestants	29	25.9
Muslims	6	5.4
Others	5	4.4
Marital Status		
Married	99	88.4
Single	2	1.8
Widowed	8	7.1
Separated	3	2.7
Total	112	100.0
Level of education		
None	7	6.3
Primary	77	68.8
Secondary	22	19.5
College	5	4.5
University	1	0.9
Total	112	100.0
Income level		
Below 20,000	87	77.7
20,000-50,000	19	17.0
50,000-100,000	6	5.3
Total	112	100.0
Resident		
Town	32	29.0
Rural	80	7.1
Occupation		
Office work	6	6.0
Business	10	9.0
Casual work	15	13.0
Farmer	81	72.0

Respondents' level of education

The results pointed out that 7 (6.3%) had none of education level, 77 (68.8%) primary level of education, 22 (19.5%) secondary, 5 (4.5%) college and 1 (0.9%) university level (Table 2).

Respondents' occupation

The results pointed out that 6 (6.0%) of the respondents had office work, 10 (9.0%) business, 15 (13.0%) casual workers and 81 (72.0%) farmers (Table 2).

Respondents' level of income

The results pointed out that 87 (77.7%) had their income level below Kenyan Shilling (Kshs.) 20, 000, 19 (17.0%) between Kshs. 20,000-50,000, 6(5.3%) between Kshs. 50,000-100,000, none of the respondents had their income levels above Kshs. 100,000 (Table 2).

Health seeking practices in LUTS

The findings indicated that 5 (4.5%) of the respondents had experienced LUTS symptoms for less than 3 months. The results further pointed out that 25 (22.3%) had LUTS symptoms for between 3 months and 1 year. Moreover, 70 (62.5%) of the respondents had experienced the LUTS symptoms for between 1 and 2 years, and 12 (10.7%) had been in possession of LUTS symptoms for more than 2 years (Figure 1).

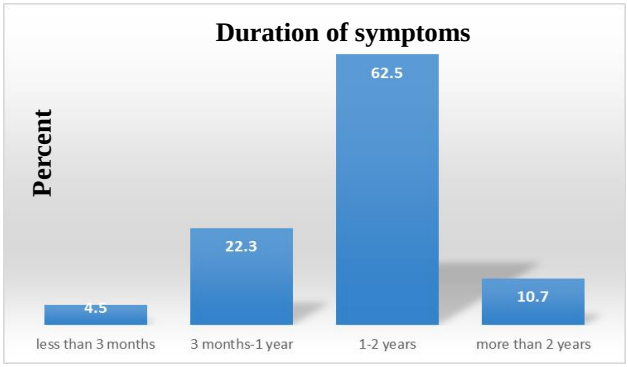

Figure 1: Symptoms of LUTS.

Medical facility help for LUTS patients

The findings showed that 85 (76.0%) declined that they sought for medical help from the health facility, and 27 (24.0%) agreed that they sought for medical help from the health facility (Table 3).

Table 3: Medical facility.

Medical facility help	Frequency	Percent
No	85	76.0
Yes	27	24.0
Total	112	100.0

Medical assistance

The findings pointed out that 4 (3.6%) of the respondents took less than 3 months, 25 (22.3%) took between 3 months - 1 year, 73 (65.2%) above 1 to 2 years, and 10

(8.9%) took more than 2 years before seeking for medical assistance from the health care facility (Figure 2).

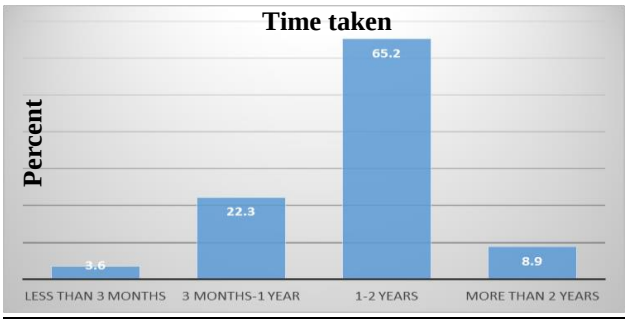

Figure 2: Medical assistance.

Adherence to clinic appointments

The results showed that 28 (25.0%) agreed that they did not adhere to their clinic appointments, and the 84 (75.0%) adhered to their clinic appointments as stipulated by their medical care practitioners (Table 4).

Table 4: Clinic adherence.

Response	Frequency	Percent
No	28	25.0
Yes	84	75.0
Total	112	100.0

Time variation

The findings indicated that 1 (0.9%) of the respondents took a time variance of less than 1 month, 68 (60.7%) took a time variance of between 2 and 3 months, 21 (18.8%) took a time variance of between of 3 and 6 months, 9 (8.0%) of the respondents indicated that they took a time variance of between 6 and 12 months, 8 (7.1%) took a time variance of more than 1 year, and 5 (4.5%) took other time variances (Figure 3).

Figure 3: Time variation.

Patient related factors influencing health seeking practices in LUTS patients

The results pointed out that: 80.8% of respondents agree that they lack information on when to seek for health care, and 19.2% of the respondents declined that they do not lack information on when to seek for health care, 24.2% agreed that screening or testing for LUTS has cultural attachment, and 75.8% declined that screening or testing for LUTS has cultural attachment, 78.6% agreed that lack of funds to cater for health care bill, and 21.4% declined that lack of funds to cater for health care bill hinder people from getting screening or testing for LUTS, 27.7% noted that men with LUTS prefer traditional treatment over convectional one, and 72.3% declined that mean with LUTS prefer traditional treatment over convectional one, and 71.7% agreed that other factors hinder people from getting screening or testing for LUTS, and 28.3% declined that other factors hinder people from getting screening or testing for LUTS (Table 5).

The results pointed out that: 69.6% of respondents agree that disturbing symptoms propel them to seek for LUTS screening and treatment, and 30.4% of the respondents declined that disturbing symptoms propel them to seek for LUTS screening and treatment, 70.5% of the respondents agreed that adverse effect on quality of life is the reason to seek screening and treatment, and 29.5% declined that adverse effect on quality of life is the reason to seek screening and treatment, 81.3% of the respondents agreed that fear of having prostate cancer is the reason to seek for screening and LUTS treatment, and 18.7% of the respondents declined that fear of having prostate cancer is the reason to seek for screening and LUTS treatment, 71.4% of the respondents noted that fear of other complications are the reasons for seeking for LUTS screening and treatment, and 28.6% of the respondents declined that fear of other complications are the reasons for seeking for LUTS screening and treatment, and 70.5% of the respondents agreed that fear of embarrassment due to urinary retention is the reason to seek for screening and treatment of LUTS, and 29.5% of the respondents declined that fear of embarrassment due to urinary retention is the reason to seek for screening and treatment of LUTS, and 67.9% of the respondents agreed that other reasons push them to seek for screening and testing for LUTS, and 32.1% of the respondents declined that other reasons make them seek for screening and treatment of LUTS (Table 5).

Factors influencing health seeking practices in LUTS patients

The results pointed out that; 80.8% of respondents agree that they lack information on when to seek for health care, and 19.2% of the respondents declined that they do not lack information on when to seek for health care, 24.2% of the respondents agreed that screening or testing for LUTS has cultural attachment, and 75.8% declined that screening or testing for LUTS has cultural attachment, 78.6% of the respondents agreed that lack of funds to cater for health care bill, and 21.4% of the respondents declined that lack of funds to cater for health care bill hinder people from getting screening or testing for LUTS, 27.7% of the respondents noted that men with LUTS prefer traditional treatment over convectional one, and 72.3% of the respondents declined that mean with LUTS prefer

traditional treatment over convectional one, and 71.7% of the respondents agreed that other factors hinder people from getting screening or testing for LUTS, and 28.3% of the respondents declined that other factors hinder people from getting screening or testing for LUTS. The information was analyzed and findings presented (Table 6). The results pointed out that: 69.6% of respondents agree that disturbing symptoms propel them to seek for LUTS screening and treatment, and 30.4% of the respondents declined that disturbing symptoms propel them to seek for LUTS screening and treatment, 70.5% of the respondents agreed that adverse effect on quality of life is the reason to seek screening and treatment, and 29.5% declined that adverse effect on quality of life is the reason to seek screening and treatment, 81.3% of the respondents agreed that fear of having prostate cancer is the reason to seek for screening and LUTS treatment, and 18.7% of the respondents declined that fear of having prostate cancer is the reason to seek for screening and LUTS treatment, 71.4% of the respondents noted that fear of other complications are the reasons for seeking for LUTS screening and treatment, and 28.6% of the respondents declined that fear of other complications are the reasons for seeking for LUTS screening and treatment, and 70.5% of the respondents agreed that fear of embarrassment due to urinary retention is the reason to seek for screening and treatment of LUTS, and 29.5% of the respondents declined that fear of embarrassment due to urinary retention is the reason to seek for screening and treatment of LUTS, and 67.9% of the respondents agreed that other reasons push them to seek for screening and testing for LUTS, and 32.1% of the respondents declined that other reasons make them seek for screening and treatment of LUTS.

Table 5: Hindering factors.

Statement	No (%)	Yes (%)
Lack of information on when to seek for health care	23 (19.2)	97 (80.8)
Screening/testing for LUTS has cultural attachment	91 (75.8)	29 (24.2)
Lack of funds to cater for health care bill	39 (21.4)	88 (78.6)
Men with LUTS prefer traditional treatment over convectional one	81 (72.3)	20 (27.7)
Any other	34 (28.3)	86 (71.7)

Table 6: Influencing factors.

Statement	No (%)	Yes (%)
Disturbing of the symptoms	34 (30.4)	78 (69.6)
Adverse effect on quality of life	39 (29.5)	79 (70.5)
Fear of having prostate cancer	21 (18.7)	91 (81.3)
Fear of other complications	22 (28.6)	80 (71.4)
Fear of embarrassment due to urinary retention	33 (29.5)	79 (70.5)
Any other	36 (32.1)	76 (67.9)

Table 7: Patient related factors and health seeking practices.

Statement	No (%)	Yes (%)	P value
Lack of information on when to seek for health care	23 (19.2)	97 (80.8)	0.000
Screening/testing for LUTS has cultural attachment	91 (75.8)	29 (24.2)	0.007
Lack of funds to cater for health care bill	39 (21.4)	88 (78.6)	0.001
Men with LUTS prefer traditional treatment over convectional one	81 (72.3)	20 (27.7)	0.004
Any other	34 (28.3)	86 (71.7)	0.002
Disturbing symptoms	34 (30.4)	78 (69.6)	0.003
Adverse effect on quality of life	39 (29.5)	79 (70.5)	0.004
Fear of having prostate cancer	21 (18.7)	91 (81.3)	0.001
Fear of other complications	22 (28.6)	80 (71.4)	0.003
Fear of embarrassment due to urinary retention	33 (29.5)	79 (70.5)	0.002
Any other	36 (32.1)	76 (67.9)	0.001

DISCUSSION

Health seeking practices

The findings pointed out that the majority (62.5%) of the respondents had experienced the LUTS symptoms for between 1 and 2 years. It was also determined that majority (76.0%) of the respondents declined that they sought for medical help from the health facility immediately they experienced LUTS symptoms whereby majority (65.2%) of the respondents took between 1 and 2 years to seek medical assistance. This was in agreement with a study on preventive and treatment of LUTS. Also, the majority (60.7%) of the respondents took a time variance of

between 2 and 3 months before seeking medical help and the majority (75.0%) of the respondents pointed out that they do adhere to their clinic appointments as stipulated by their medical care practitioners. whereas 25% don't adhere to appointment. This was in agreement with a study conducted in Sweden by which stated that of the men with international prostate symptom score of seven and above only 41% of them had consulted health care providers for their symptoms and that 40% of them didn't seek health care services despite their symptoms.[14]

Patient related factors and health seeking practices

The logistic regression was carried out for every test variable where the p value was compared with table value at 95% confidence level. The findings depicted that the p values of: lack of information on when to seek for health care (p=0.000), screening/testing for LUTS has cultural attachment (p=0.007), lack of funds to cater for health care bill (p=0.001), men with LUTS prefer traditional treatment over convectional one (0.004), disturbing symptoms (0.003), adverse effect on quality of life (0.004), fear of having prostate cancer (0.001), fear of other complications (0.003), fear of embarrassment due to urinary retention (0.002), and any other factor (0.001) were less than 0.005 except screening/testing for LUTS has cultural attachment (p=0.007)>0.005 implying that all patient related factors had a statistical significant influence on health seeking practices. The study indicates deficiency of health education in the larger community of Meru. Lack of knowledge on available health services such as family planning has also been evident among women in Meru community.[15,16] These findings were in agreement with the findings of a study on the health care seeking behaviors in BPH which exhibited that majority of patients (71.3%) reported that disturbing urinary symptoms were the principal reason why they sought medical advice. Therefore the researcher rejected the hypothesis which stated that there are no patient related factors influencing health seeking practices among men with LUTS. Telehealth can be used to combat patient related factors.[17]

CONCLUSION

The research concluded that various factors such as residential proximity to the hospitals, income level, occupation and level of education influences the health seeking behavior among men with LUTS. Factors such as lack of proper knowledge and inadequate income level results to lower health seeking behavior among men with LUTS. In addition, the patients will only be compelled to seek medication or treatment from medical facility if there is adverse effect on the quality of life. Others are long distances from the health care facility as well as expensive treatment. Moreover factors such as adequate knowledge, higher income level urban residence has positive influence on health seeking behavior among LUTS patients. Therefore, it is recommended that in order to facilitate better health seeking practices, patient related factors such as educating the residents in rural regions on the needs of seeking for medical attention as soon as they notice any disease symptoms. Cascading health services in underserved rural areas through outreach or even telehealth is also recommended.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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