Community Based Survey of lower Urinary Tract Symptoms among Men with Cataract in North-Eastern Nigeria: A Window for Screening.

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Abstract

Introduction: Although Cataract and Lower Urinary tract Symptoms (LUTS) have been observed to be common among Health Problems in senility, recognition and belief by the populace that this condition particularly the LUTS is treatable by seeking medical attention is the main area of challenge. Misconception is very common among population of elderly men who regard LUTS as normal aging process and or untreatable condition.

Objectives: To determine the presence of LUTS in patients planned for cataract extraction and to assess their health seeking behaviour.

Methodology: It is a prospective cross-sectional study. All male patients planned for community based mass cataract surgery in north eastern Nigeria were included. Patients excluded include female patients and male patents that did not consent to participate in the study. A structured questionnaire comprising of the demographic parameters and a standardized International Prostate Symptoms Score (IPSS) was administered to all patients. Data was analysed using SPSS version 20.

Results: There were 250 patients planned for cataract extraction during the study period. Seventy were females hence excluded. Only 124 of the 180 male patients consented to participate in the study. The mean age of the respondents was 65.3yr(±11.0). Separate mean age for those with and without LUTS were 65.9yr (±10.6) and 63.7yr (±11.2) respectively with no statistically significant difference (F=0.094, df=114, P=0.309). Only 35(28.2%) of the respondents have no symptoms. Among the patients who have LUTS, 54 (43.4%) were mild symptoms, 23(18.5%) were moderate and 12(9.7%) were severe. Out of these patients with LUTS, 76(65.5%) have never seek for medical attention, while 13 (14.5%), were once treated for LUTS. Majority of those who had treatment for LUTS are those with severe symptoms.

Conclusion: In this study, LUTS were very common among patients with cataract and majority of them did not seek for medical attention. Doctors at ophthalmology clinic should be vigilant to find out whether their patients have LUTS other than the Primary disease of the eyes. This will serve as a window to get contact with these older patients and screen them to determine the underlined cause of LUTS.

Keywords: Lower Urinary Tract Symptoms, Cataract, international prostate symptoms score.
INTRODUCTION

Urinary Symptoms and Cataract are among the list of common health problems of senility. Due to misconception by a significant number of these elderly men, LUTS are considered as normal ageing process, hence they do not seek for medical attention. Urology related issues are the third most common type of complaints among elderly patients. Elderly men are also known to present with Lower Urinary Tract Symptoms (LUTS) which can be significant enough to affects their Quality of their life (Qol) in a negative way in up to 78% of them. According to International Continence Society, LUTS are those symptoms arising from the conditions and diseases affecting the urinary bladder and the urethra. These symptoms are frequency, urgency, nocturia, urge incontinence, dysuria, stress urinary incontinence, straining and hesitancy. They occur during storage, voiding and post micturition phases.

The objective of this study was to determine the prevalence of LUTS in patients with cataract and assess their health seeking behaviours in relation to LUTS.

METHODOLOGY

This cross sectional study was conducted in the year 2016 among patients undergoing community based mass cataract surgery in Damaturu, north-eastern Nigeria. All male were included in this study. Patients excluded includes female patients and male patents that did not consent to participate in the study. A structured questionnaire comprising of the demographic parameters and a standardized International Prostate Symptoms Score (IPSS) was administered to all patients. IPSS is based on the answers to seven questions concerning urinary symptoms. These symptoms comprises of feeling of incomplete bladder emptying, frequency, intermittency, urgency, weak stream, straining and nocturia. The questionnaire were self-administered. However, for patients who does not understand English, the questions were interpreted it into local languages of the community which are hausa and Kanuri.

There are seven questions concerning LUTS, each question scored from 0 to 5 indicating increasing severity of the particular LUTS. The patient is to choose one out of the six answers. The minimum total score will be zero and the maximum total score is 35 points. Based on the total scores obtained, each patient is then categorised into asymptomatic when the total score is zero, mild symptoms when the total score falls between 1 to 7, moderate when the total score falls between 8 to 19 and severe when the total score falls between 20 to 35. The data were analysed using SPSS version 20 and the results discussed.

RESULTS

Out of the 124 patients interviewed the overall mean age was 65.3yr (± 11.0). The separate means for those with and without LUTS which were observed as 65.9yr (±10.6) and 63.7yr (±11.2) respectively, and there was no statistically significant difference between these two groups (F=0.094, df=114, P=0.309). The age range with highest number of respondents was 70 to 79 years with a frequency 37(29.8%). Almost all the respondents are married (98.4%) as shown in Table 1. Many of the respondents (74(59.7%)) have left eye cataract, only one patient have bilateral cataracts (0.8%) as shown in figure 2. The respondents with LUTS were as high as 89 (71.8%) out of which 54 of them have mild symptoms as shown in Table 2. Most of the respondents (85.5%) with LUTS did not seek for medical attention or treated for the LUTS.

Table 1: Socio demographic characteristics of the respondents

| Variable                  | Frequency | Percentage |
|---------------------------|-----------|------------|
| Age range (years)         |           |            |
| 40-49                     | 4         | 3.2        |
| 50-59                     | 42        | 33.9       |
| 60-69                     | 25        | 20.2       |
| 70-79                     | 37        | 29.8       |
| 80-89                     | 15        | 12.1       |
| 90-99                     | 1         | 0.8        |
| TOTAL                     | 124       | 100        |
| Marital status:           |           |            |
| Married                   | 122       | 98.4       |
| Single                    | 2         | 1.6        |
| TOTAL                     | 124       | 100        |
DISCUSSION

A study of this type on Survey of LUTS restricted to male patients with cataracts is quiet lacking in the literature, and this is virtually first of its kind. In this study, the prevalence of LUTS among patients with cataract was as high as 71.8%. Because of the lack of other studies of the same kind among cataract patients, the prevalence could only be compared with that ones observed generally among older men. Study of Arslantas et al. in Turkey and Coyne, (in the USA, UK and Sweden) revealed prevalence of 78.8% and 72.3% respectively\textsuperscript{6,7} and these figures are similar to the prevalence of 71.8% we got in our study. Prevalence rate of LUTS were observed to be as low as 14% and 18% in France and Scotland respectively\textsuperscript{7}. Also in previous studies, the prevalence rates of LUTS were observed to be increasing with age\textsuperscript{8,9}, this is slightly different in our study, there was initial increase in prevalence with increase age up to the age range of 70-79 and subsequent decrease thereafter as shown in Table 3. This difference observed in our study could probably be due to smaller sample size. In terms of LUTS severity, mild symptoms dominated with highest frequency 54(43.5%) as shown in Table 2, this was similar to other studies in which patients with mild symptom have the highest frequency\textsuperscript{8}. Regarding health seeking behaviour, majority of the respondents, belief that LUTS is a normal aging process, as shown in Figure 1, hence they endure the symptoms rather than seeking for treatment. This was similar to findings by Hunter in which only 38% 0f the respondent seek for treatment of LUTS\textsuperscript{2} and by Sarma et al. in which only 22.2% of the men sought for medical care\textsuperscript{10}. The association between LUTS and Cataract as two entities is that both conditions are among the common health problems in older men\textsuperscript{1}. In this study we targeted and used the population of men with cataract as a window to screen for LUTS, and assess their health seeking behaviour. Our prevalence rate of LUTS as 71.8% has further clarified the fact that association do exist between these two entities. There are many aetiologies of LUTS and discussion on them is outside the objectives of this study, however, in future studies on the aetiology of LUTS among men with cataract similar to the ones described by Masu et al.\textsuperscript{11} will further delineate the exact cause and hence simplify the decision in patients management\textsuperscript{1}.

CONCLUSION

Prevalence of LUTS among cataract patients was high, and few of these patients sought for medical care because many patients regard LUTS as part of normal aging process. Public health enlightenment is crucial to abort this misconception. Ophthalmologists can help a lot

### Table 2: LUTS severity among the respondents

| LUTS severity       | Frequency | Percentage |
|---------------------|-----------|------------|
| No symptom (normal) | 35        | 28.2       |
| Mild                | 54        | 43.5       |
| Moderate            | 23        | 18.5       |
| Severe              | 12        | 9.7        |
| **TOTAL**           | **124**   | **100**    |

![Figure 1: Health seeking behaviour of the patients with LUTS](image1)

![Figure 2: Eye with Cataract](image2)
by inquiring from their patients whether they have LUTS. This will help in early referral to urologists and other clinicians for thorough screening and multidisciplinary management.

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