Knowledge of Prostate Cancer Screening among Native African Urban Population in Nigeria

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ABSTRACT

Background: Cancer of the prostate a worldwide public health concern. It is the most commonly diagnosed cancer in men and ranked second as the cause of cancer-related deaths.

Objective: To evaluate the awareness and attitude of the populace to screening for cancer of the prostate.

Methods: It is a cross-sectional study involving 156 respondents. A structured questionnaire detailing the biodata, the knowledge of cancer of prostate, the practice of screening by prostate specific antigen (PSA) estimation and the readiness to undergo screening by the respondent was used to obtain the set-out objectives.

Results: A total of 156 respondents completed the questionnaire and forms the basis of further analysis. The mean age of the respondents is 44.15 (±11.9) years. Majority of the respondents were civil servant (51.9%) followed closely by politicians. About 23.1% of them have no formal education while 53.8% have acquired tertiary education. The result shows that 78.8% have never heard any information on cancer of the prostate and only 5.8% have heard about PSA. None of the respondents have ever had PSA test done, even once. Eighty four per cent of the respondents are ready to pay for prostate cancer screening test by PSA assay.

Conclusion: We conclude that there was remarkable lack of awareness of prostate cancer among the Nigerian native African urban populace. Prostate cancer screening and serum PSA test for screening is globally unknown among them.

Keywords: Knowledge, prostate cancer, serum PSA, screening

INTRODUCTION

Cancer of the prostate is the most commonly diagnosed cancer in men worldwide and ranked second as the cause of cancer-related deaths. This has constituted a public health concern the world over. It was previously thought that the incidence of cancer of the prostate is low in African population but this has been disputed in the recent past.

The identification and treatment of patients with prostate cancer has changed radically over the past decades. In recent times, prostate specific antigen (PSA) testing has increased the diagnosis of prostate cancer leading to preponderance of screen-detected, organ confined and low volume cancer of prostate.

Majority of the patients in our sub-region present with locally advanced or metastatic disease for which several reasons have been suggested. These reasons include ignorance and poverty; absence of screening programme, inadequate diagnostic facilities, lack of health education and the assumption that lower urinary tract symptoms (LUTS) are part of ageing process.

The study was to evaluate the awareness of prostate cancer among native African urban population and their attitude towards screening for cancer of the prostate probably this could give an insight to as to the late presentation among our patients.

SUBJECTS AND METHODS

This was a cross-sectional study carried out at Ilorin south local government secretariat, Pake in Ilorin, a north-central state of Nigeria. A structured questionnaire evaluating the biodata of the respondents, their knowledge of prostate cancer, screening for prostate cancer using serum PSA and their readiness or otherwise to undergo screening.

The questionnaire was pre-tested for any ambiguity before it was self administered to those that are literate and the illiterates were assisted. Data were collated and analyzed using SPSS version 11 software.

RESULTS

A total of 200 questionnaires were distributed to consecutive volunteers aged 30-years and above; only 156 respondents, representing 78%, completed and returned the questionnaire and formed the basis of further analysis.

The age range of the respondents is 30-70 years with a mean of 44.15 (±11.9). Majority of the respondents are civil servant (51.9%) followed closely by politicians. About 23.1% of them have no formal education while 53.8% have acquired tertiary education. The result shows that 78.8% have never heard any information on cancer of the prostate and only 5.8% have heard about PSA. None of the respondents have ever had PSA test done, even once. Eighty four per cent of the respondents are ready to pay for prostate cancer screening test by PSA assay.
Nine (5.8%) of the respondents have heard about PSA screening for prostate cancer, but none have ever been tested for PSA to screen for prostate cancer or planning to do so in the nearest future (Table 2). All respondents would be willing to be screened for prostate cancer by PSA assay, 15.4% would do it only if they were not to pay for it (Table 2).

Table 1
The distribution of occupation among the respondents

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil servant</td>
<td>72</td>
<td>46.2</td>
</tr>
<tr>
<td>Drivers</td>
<td>6</td>
<td>3.8</td>
</tr>
<tr>
<td>Politicians</td>
<td>75</td>
<td>48.1</td>
</tr>
<tr>
<td>Retired civil servants</td>
<td>3</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2
The knowledge of the respondents about PSA/disposition of the respondents to screening for prostate cancer

<table>
<thead>
<tr>
<th>Question asked/response</th>
<th>frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever heard about PSA?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have heard</td>
<td>9</td>
<td>5.8</td>
</tr>
<tr>
<td>I have never heard</td>
<td>147</td>
<td>94.2</td>
</tr>
<tr>
<td>Will you be willing to screen for Prostate carcinoma?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>156</td>
<td>100.0</td>
</tr>
<tr>
<td>No</td>
<td>nil</td>
<td>0.0</td>
</tr>
<tr>
<td>Will you be willing to pay for screening?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>132</td>
<td>84.6</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>15.4</td>
</tr>
</tbody>
</table>

DISCUSSION

There is a global progressive increase in the reported incidence of cancer of the prostate\(^1,2\) and recent reports emanating from Nigeria also supported this trend.\(^3-7\) Several reasons have been adduced to support these findings; such as increase awareness of the disease, increase use of PSA and/or transrectal ultrasound in evaluating patients with LUTS. However, these reasons as sound as they could be, have not translated to significant stage shift at the time of presentation of prostate cancer in our environment.\(^5-7\)

The findings from the present study did not agree with reasons adduced for the increase incidence of cancer of prostate, the knowledge about cancer of the prostate which translates to awareness is quite scanty and only 5.8% knows something about PSA.

The mean age of 44.15 years and the age range, in the present study, falls within the age range for which cancer of the prostate can occur and needs active screening based on awareness. The mean age also falls within the recommended age limit for screening in the American cancer society guideline, especially the high-risk group with specific mention of men from sub-Saharan African descent. \(^8\) There is the need for awareness about prostate cancer as one is approaching this age range so that cancer prostate can be actively screen for, this may translate to reduced morbidity and mortality.

About a quarter of the respondents have no formal education; the implication of this is that, this group of our
The populace will rely on an organized form of information dissemination to have awareness about such diseases as prostate cancer. It is pertinent to note that, despite 53.8% of respondents having post-secondary education, 78.8% of them have never heard any information on cancer of the prostate and the others have limited knowledge about it. Thus, the increase in the incidence in our environment may not, after all, be due to an increase awareness about the disease. In addition, those with some knowledge are community health extension workers (CHEW) and pharmacy technicians among the studied population.

Only nine (5.8%) of the respondents have heard about PSA assay for prostate cancer screening. Whereas none of the respondent has ever contemplated screening for prostate cancer in this present report, only three per cent of respondents in the report from Senegal have ever been tested for PSA. However, these findings were in variance from observations in the report by Nwafor et al. who found that increase availability of PSA screening has contributed to the increase incidence of prostate cancer in our environment. The benefit of PSA as screening tool have not been put to maximum use in our environment, we still found ourselves in a scenario of waiting for the patients to present at a late stage of the disease when it can be diagnosed clinically using digital rectal examination (DRE) which was relied upon in majority of the patient in this environment.

All respondents would be willing to screen for prostate cancer at individual expense except for 15.4% of them who will want to be screen for free. These findings suggest that as health provider, we are still lagging behind in sensitizing the public about the menace of prostate cancer if not detected early.

Conclusion

That there is a remarkable unawareness about cancer of the prostate among the native African populace of Nigeria extraction and serum PSA assay for screening is globally unknown among the respondents. Interestingly however, they are ready to submit for PSA screening even at their expense. We suggest that an aggressive and well planned sensitization of the public about cancer of the prostate should be carried out in Nigeria.

REFERENCES