Knowledge and attitude to prostate cancer screening in a discrete population of doctors in the middle belt region of Nigeria

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Abstract

Background: Screening for prostate cancer is fraught with controversies. The lack of agreement makes it imperative for the physician to be equipped with requisite knowledge and attitude towards screening, since it is essential for their patients' informed choice. We evaluated the knowledge and attitude of doctors to prostate cancer screening in the middle belt region of Nigeria.
Methods: Self-administeredquestionnaires were distributed to all physicians at a continuing medical education (CME) workshop organized by the Benue State Chapter of the Nigerian Medical Association in October, 2011.
Results: Out of the 68 questionnaires distributed, only 44 were returned. Majority of respondents (79.5%) believed that prostate cancer is a major health problem in Nigeria, 54% believed prostate cancer screening should begin at 40yrs and 59.1% encourage their patients to routinely undergo screening. Serum prostate specific antigen (PSA) and digital rectal examination (DRE) were considered effective screening tools by 90.9% of respondents. Most of the male respondents (92.1%) will subscribe to a screening test but only 5.3% have had any screening. All the female respondents said they would advise their spouses to take a screening test.
Conclusion: Since it is generally agreed by this cohort of physicians that prostate cancer is a public health problem; guidelines are needed to harmonize the divergent views on screening for prostate cancer.

Keywords: Attitude, Knowledge, Prostate Cancer, Screening.

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Introduction

Prostate cancer is the most prevalent malignancy among African men[1, 2]. The introduction of the prostate specific antigen (PSA) assay has led to increased detection of this cancer especially in the early stages. Screening for prostate cancer is however fraught with controversies. While some medical organizations like the American Urological Association (AUA) recommend screening for men that meet the criteria[3], some agencies like the United States preventive services task force recommend against screening.[4] The lack of agreement makes it imperative for the physician to be equipped with requisite knowledge and attitude towards screening. It is however recommended that Healthcare Providers should give their patients adequate information regarding the potential benefits and risks of screening and then of early detection and treatment to enable them make an informed choice.[3, 4, 5.]

To the best of our knowledge, no guidelines exist in Nigeria for screening for prostate cancer. Therefore this study was undertaken to determine the knowledge and attitude of doctors to prostate cancer screening in the middle belt region of Nigeria, as background information.

Materials And Methods

The research design was a cross sectional questionnaire survey utilizing a self-administered questionnaire. This questionnaire was administered to all participants at the continuing medical education (CME) workshops organized by the Benue State Chapter of the Nigerian Medical Association in October, 2011.

All physicians present at the CME workshop by the Benue State Chapter of the Nigerian Medical Association were included in the study. A fourteen item questionnaire was self-administered by the participants. The items were subdivided into bio data, knowledge and attitude. The information obtained was analyzed using the SPSS software. The response rate was 66%.

Results

Out of the 68 questionnaires distributed, fourteen questionnaires were not returned while ten questionnaires had insufficient data and so were

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unsuitable for analysis. This leaves 44 questionnaires for analysis; a response rate of 66%.38.6% of participants were aged between 31 - 40 years while 29.5% of participants were within the age range of 41 - 50years. Two of the respondents were more than 60 years of age. Thirty six (81.8%) of respondents were males while 18.2% were females.More than two thirds of respondents (77.3%) practice in public institutions while 22.7% were in private practice. Half of respondents practice in tertiary health institutions while 38.6% and11.4% practices at the secondary and primary levels respectively.

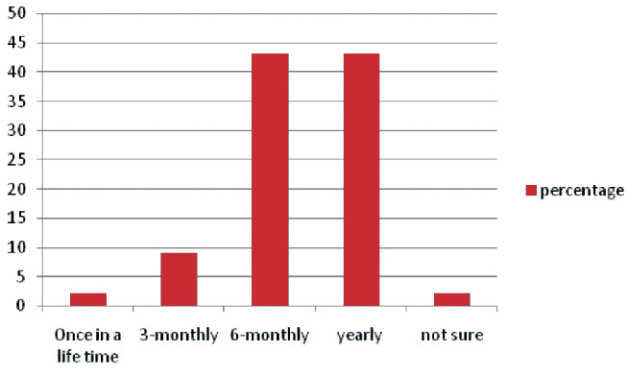

Figure1.Respondents knowledge of frequency of PSA testing

Majority (79.5%) of respondents believe that prostate cancer is a major health problem in Nigeria while 9 (20.5%) respondents did not see prostate cancer as a major health problem. About half (54%) of respondents believe prostate cancer screening should begin at 40 years of age while 34.1% believe it should begin at 50 years of age. A few others; 4.5% and 6.8%, respectively, believe screening should commence at 30 years and 50 years.More than half (59.1%) of the respondents encourage their patients to routinely undergo screening while 40.9% do not. Performing a PSA test and a DRE are the effective screening tools that 54.5% strongly agree to while 36.4% agreed; and 4.5% were not sure. Almost all (97.7%) respondents agreed that screening is beneficial.

A PSA range of 5 - 10ng/ml was considered abnormal by 59.1% of respondents while 27.3% consider PSA of more than 10ngml as abnormal. PSA of 4ng/ml was considered abnormal by 13.6% of respondents. PSA screening should be done every 6 months in the opinion of 43.2% of respondents while 43.2% believe it should be done every year. 2.3% believe it should be done once in a life time while 2.3% are not sure. Some respondents (9.1%) believe it should be done every 3 months (Figure 1).Although majority (92.1%) of male respondents say they will subscribe to a screening test only 5.3% have had screening for prostate cancer, while 7.9% say they do not want to take a screening test. All female respondents said they would advise their spouse to take a screening test.

Discussion

The response rate to these questionnaires was 66%, which is in between those of Sladdenet al[6] and Arafa et al[7] who had response rates of 82% and 54.7% respectively, to similar questionnaires. Prostate cancer is a major health problem in Nigeria according to 79.5% of respondents. This assertion has been made by previous researchers in Nigeria[8-10]. It is the second leading cause of cancer death in the USA and Canada.[11,12]The opinion of 54% of respondents is that screening should be commenced at 40 years. This is in keeping with AUA recommendation in areas where there is a high prevalence of the disease or first degree relations of patient.[3]

It is generally recommended that men 40 years and above patients undergo screening at least once a year[3] but 43.2% of respondents agree with this while 43.2% of respondents are of the opinion that screening should be done every six months. Prostate cancer is rare in men younger than 50years of age but the incidence increases significantly with age[13]. The median age at diagnosis of prostate cancer is 71yrs [14] and the incidence is 60% higher and the mortality rate is twofold higher in black men than in white men[15.] Performing a PSA test and DRE are adequate screening tools according to 54.5% of respondents. Prostate screening is done using PSA or DRE alone or PSA and DRE combined.PSA is however organ specific but not disease specific[16] PSA reference range is 0-4ng/ml. There is no PSA value below which a man can be assured that he has no risk of prostate cancer. Sensitivity in the range of 70% has however been reported [17] while specificities of up to 85.4%has been reported.[18] DRE alone is now rarely used as a screening modality since the advent of PSA but rather in combination with a PSA test[11].A positive predictive value of a palpable nodule being malignant in 29% of cases has been reported by Chodaket al.[19] A combination of PSA and DRE tends to give higher positive results.[20, 21]

Even though majority (97.7%) of respondents believed that screening is beneficial, only 59.1% of physicians routinely encourage their patients to undergo screening. This is in keeping with the findings of Sladdenet al[6] amongst general practitioners. Arafaet al[7] in Saudi Arabia found that 54.7% of general practitioners counsel and screen their patients. This is probably because of the absence of clear and precise evidence based guidelines.The benefits of early detection are uncertain [22]. There is a potential to over diagnose slow growing tumours that may never present as a problem[23.] Reported falls in mortality in the United States have been attributed to screening[24] but issues of length bias and lead time bias have also been raised.[23]

In spite of the controversies however, Screening

has been shown to increase the detection of early cancer.Earlier detection could mean earlier stage of presentation with treatment options aimed at a cure.[24]The effect on the clinical course as well as the prognosis are however controversial due to lead time and length biases [25].There is therefore the need in environment to educate physicians on the potential benefits as well as the potential harms of screening. Guidelines are therefore needed.

Since it is generally agreed by this cohort of physicians that prostate cancer is a public health problem in Nigeria, guidelines are needed to harmonize the divergent views on screening for prostate cancer. More education is therefore needed in this regard.

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