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Knowledge and attitude of men (50 years and above) about prostate cancer in Umugolo, Ehime Mbano L.G.A Imo state

Abstract

The knowledge and attitude of men (50 years and above) towards prostate cancer in Umugolo Ehime Mbano L.G.A, Imo State, was studied. Four research objectives were utilized by the researchers. Four research questions were generated to answer the research questions by the respondents. A survey method was used for the study, and simple random sampling technique was used to select study sample size of 223. Data collection was through structured questionnaire and analyzed using descriptive statistics of frequency distribution table and percentages. Findings from the study revealed that, most respondents are within the age group of 60-69 years (42.8%), married (70.3%) with primary level of education dominating (47.8%) and most are civil servants (31.1%). 88.7% of the men were aware of prostate cancer with information mostly obtained from health workers/practitioner 51%, 44.6% respondents are knowledgeable about risk factors of prostate cancer. 62.2% know that surgery can be performed for the treatment of prostate cancer, the respondents have positive attitude towards prostate cancer. They are also aware of preventive measures of which 75.2% have undergone screening with digital rectal examination (DRE) being the most preferred 42.3% and magnetic resonance imaging (MRI) the least preferred 15.3%. Efforts should be directed towards sustaining knowledge of prostate cancer among men, as early detection is the key to good prognosis.

Keywords: knowledge, attitude, prostate cancer

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Abbreviations: DRE, digital rectal examination; PSA, prostate specific antigen; MRI, magnetic resonance imaging

Introduction

Prostate is a leading cause of cancer related to morbidity and mortality in elderly male population. The number of cases of prostate cancer has been on increase around the world and also can be seen in developing countries like Nigeria. This increase can be attributed to lack of in depth knowledge regarding the risk factors, symptoms, treatment and poor attitude towards screening for prostate cancer.[1] Prostate cancer has become the number one cancer in men with increasing incidence and morbidity in men of black African ancestry.[2] American cancer society,[3] also asserted that prostate cancer is the most common cancer in men (not counting skin cancer), it is also one of the leading cause of cancer death among men. However, Ebuehi & Otumu[4] ascertained that prostate cancer is the second most common male cancer and the second leading cause of cancer related death in the world. In Nigeria, it is the most common male cancer constituting 11-12% of all male cancer. In the developing world, the probability of being diagnosed with cancer is more than twice as high as in the developing countries. However, lower mortality rate is reported in developed countries. Most cancer victims are diagnosed with late stage, in curable tumors, pointing to the need for better detection programmes.[1]

More than 70% cases of Aden carcinoma of the prostate occur in men over the age of 65years (Centres for disease control, 2010). A man in his life time has about 16% chances (1 in 6) of being diagnosed with prostate cancer and 3% (1 in 33) chance of dying of prostate cancer in the USA. The estimated life time risk of being diagnosed with the disease is 17..6% for white and 20% for African Americans. The life time risk of death from prostate cancer is 2.8% and 4.7% respectively.[5]

In the UK, it is one (1) in twenty-six (26) while in Nigeria, the prostate cancer risk was 2% of all patients based on a pool of11,000men. Consequently, prostate cancer is likely to impact the life of men that are alive today.[4] Baade et al.[6] stated that prostate cancer contribute 6% of the entire global cancer burden internationally. It is the second most commonly diagnosed among men (behind lung cancer) and the leading cause of death.

The incidence of prostate cancer in USA is second to lung cancer as stated by Seer,[5] and it is also now the most common cancer in men in the UK as affirmed by cancer research UK.[7] It accounts for nearly a quarters (24%) of all male cancer diagnosed non-cutanous cancer and the second most common cause of cancer mortality in Australian men. It is the most common cause of cancer in Latin America and the Caribbean.

In Nigerian analysis of adult male cancer examined every decade since independence confirmed that prostate cancer is the number one cancer in men and constitutes 11-12% of all male cancer,[4] as also reported by Osegbe in 1997 on a prospective study of Nigeria men aged 45years older with prostatic symptoms. He suggested that the incidence was 127/1000 men. The Globacon (2002) data base estimated that 6.236 new cases of prostate cancer would occur that year and also WHO in 2002 provided data for prostate cancer in Nigeria estimating that the age standardized incidence would be 96/100,000.[4]

In sub-Saharan Africa, Nigeria ranked first, with democratic republic of Congo and Uganda. Prostate cancer is one of the most common cancer affecting the male population globally. In Nigeria,

quite a few studies have been done on knowledge, attitude and practices of prostate cancer screening, these studies report a low level of awareness of prostate cancer and prostate cancer screening. Death recorded from prostate cancer cases in Nigeria, has been complicated by under reporting and by cases not being diagnosed due to poor knowledge on the part of individuals with the condition and probably lack of structured guidelines to deal adequately with this health challenge that has emerged in the health care system. At Imo State University Teaching Hospital, most male patients are unaware of existence of prostate cancer among them and their attitude towards the issues is poor leading to late diagnosis of the condition.

World cancer research fund international,[8] stated that prostate cancer is the most common cancer in male in 84 countries occurring more frequently in the developed world, rates have also been increasing in the developing world, and as a result of the large number of cases of prostate cancer will overtake lung cancer as the most common form of cancer in men around the globe. In Nigeria, like other developing countries in Sub-sahara Africa, there is no national cancer mortality database or active screening programme which makes it difficult to assess the true burden of prostate cancer. However, studies in Nigeria emphasize the increasing prevalence of the disease and most cases are diagnosed late patient are likely to receive curative therapy and the commonest mode of therapy is androgen deprivation (Oranusi & Nwofor, 2013).

The present study was undertaken to fill the missing gap and provide baseline data for healthcare providers in Imo State and Nigeria as whole, so as to address the problem of prostate cancer adequately in the area.

Materials and methods

Study area

This study was carried out in Umugolo, Ehime Mbano Local Government Area, Imo State, south eastern Nigeria.

Imo State lies on latitudes 5^0 29'N and 6^03^1 North equator and longitude 7^010^1 and 7^034^1 East of Greenwich meridian. It comprises of 3 senatorial zones namely, Owerri, Orlu and Okigwe. It occupies a land space of about 5100 square kilometers with a teaming population of 3,934,899 people engaged in all walks of life: students, civil servants, artisans, farmers and traders, distributed in 27 Local Government Areas. (National Bureau of Statistics, 2006).

Imo State has 2 tertiary hospitals: Federal Medical Centre and Imo State University Teaching hospital, situated in two geo – political zones. There are 27 General Hospitals and many primary healthcare centres located in different communities in all the Local Government Areas. Apart from these Government Health institutions, there are many private hospitals and health institutions owned by Churches, individuals and co-operate organizations in different communities within the Local Government Areas. There are 2 Government Universities, 2 Polytechnics, a College of Education, many Schools of Nursing and Midwifery, Schools of Health Technology as well as 3 Private Universities and several other institutions. Literacy level in the State is high. The official language of people living in the State is English, however, in some areas with high population of native people, Igbo and English languages are spoken.

The major religion in the State is Christianity with few traditional religious people in different communities and very few Moslems among Hausa/Fulani and Yoruba alien communities in a few Local Government Areas.

Study design

Survey research design was used for this study, to seek information required to investigate the knowledge and attitude of men (50 years and above) about prostate cancer in Umugolo, Ehime Mbano in Imo State.

Eligibility

Male individuals aged 50 years and above, living in Umugolo, Ehime Mbano are legible to participate in this study. Female individuals are not legible. Male individuals who visited for a short while and new residents who have not lived in the area for upto one year are not legible to participate.

The men were approached by person to person contact ant the objectives of the study were explained to them. Their willingness to participate in the study was sought for. Those indicated willingness were recruited for the study.

Operational definition

For purposes of this study, the following key words used, shall be understood to mean:

Men

Adult male individuals aged above 25 years. However, only those aged 50 years and above are legible to participate in the study. Those below 50 years are excluded from the study.

Knowledge

Knowledge in the context of this study shall mean, to be aware of something. Relating it to Prostate Cancer, having heard of prostate cancer before, or seen someone suffering from the ailment, or having read about it or studied it, shall be considered as knowledge of it.

Attitude

Attitude in the context of this study means reaction or feeling towards prostate cancer.

Tools used for analysis

The tool used for collection of data used for analysis in this study was a structure questionnaire.

Data collection

Data collection for this study was through the use of questionnaires. This lasted for a week. The men were approached during their age grade meetings and the objectives of the study were explained to them. A total of 250 men indicated interest to participate in the study. Questionnaires were administered to them and 235 returned their completed questionnaires. Of this number, 223 were filled appropriately.

Method of data analysis

Data collected were analyzed using descriptive statistics of frequencies, percentages, tables and chart.

Ethical consideration

Ethical permit for this study was obtained from, the Ethical committee, Imo State University Teaching Hospital, Orlu.

Results

Socio demographic data analysis

The age group, marital status, educational level and occupation of the respondents are summarized in Table 1.

As shown, most of the respondents (42.8%) are within 60-69years, followed by those within 50-59 (23.9%) and the least (11.3%) was

those within the age of 80years and above. Majority of the respondents (70.3%) are married, followed by widowers (13.5%), divorced (8.6%) and single (7.7%). Their educational background showed that majority (47.8%) completed primary school. Those that completed secondary school were the least (11.3%). Occupational related prevalence of the respondents showed that civil servants were the highest (31.1%), followed by farmers (16.2%) retired civil servants (14.8%) and traders (10.8%).

Table 1 Socio – demographic distribution of respondents

Items	Frequency(f)	Percentage (%)
Age group		
50-59	58	23.9
60-69	95	43.8
70-79	49	22.1
80 and above	25	11.3
Marital status		
Single	17	7.7
Married	156	70.3
Divorced	19	8.6
Widowed	30	13.5
Educational level		
No formal education	48	21.6
Primary education	95	47.8
Secondary education	54	24.3
Tertiary education	25	11.3
Occupation		
Civil servant	129	31.1
Farming	36	16.2
Trading	24	10.8
Retired civil servant	33	4.8

The knowledge of prostate cancer among the respondents are summarized in Table 2. As shown, 88.7% of the men admitted to have heard of prostate cancer while 11.3% lack knowledge of it. Regarding source of information most of them sourced relation/friends 18.5% mass media 12.6% with least source of information obtained from church/pastor/reverend/priest 68%.

Table 2 Knowledge of prostate cancer and sources

Awareness of prostate cancer	Frequency	Percentage
Yes	197	88.7
No	25	11.3
Source of information		
Mass media (TV, radio, newspaper)	28	12.6
Health workers/practitioner	113	51.0
Relation/friends	41	15.5
Church/pastor/reverend/priest	15	6.8

Knowledge of risk factors of prostate cancer is summarized in Table 4. As shown, majority of the men (54.5%), identified smoking as a predisposing factor to prostate cancer, 49.1% attributes if to increasing age, 39.2% identified obesity as a contributing factor, 38.3% said it runs in the family, 35.6% attributed prostate cancer to infection of the prostate vasectomy, 21.2% said it is a product of gene mutation, while 17.6% affirmed chemical exposure can lead to prostate cancer. Summarily, 88 (39.5%) know the risks factor of prostate cancer.

Table 3 Knowledge of the meaning of prostate cancer

Options	Frequency	Percentage
A form of tumor that attack gland in the male	99	44.6
Inability to gain and maintain erection	43	19.4
Inability to impregnate a woman	67	36.2
Weakness of the penis	13	5.8

n=223

Table 4 Knowledge of risk factors of prostate cancer

Option	Frequency	Percentage
Hereditary (its run in family)	87(39.2)	135(60.8)
Increase age	121(54.5)	101(45.5%)
Obesity	96(432)	126(56.8)
Race/ethnicity	109(49.1)	113(50.9)
Smoking	127(25.2)	95(42.8%)
Gene change (mutation)	47(212)	175(78.8)
Infection of the prostate	85(38.3)	137(61.7)
Chemical exposure	39)17.6)	183(82.4)
Vasectomy	79(35.6)	143)64.4)
Grand total	790	1208
Average/mean	88(39.5)	134(6.3)

Table 5 Knowledge of treatment option of prostate cancer

Option	Yes	No
Surgery	138(622)	81(37.8)
Hormonal therapy (use of hormone)	53(23.9)	169)76.1)
Radiation therapy (use of x-ray)	29(21.1)	173(77.9)
Cryosurgery	26(11.7(	196(88.3(
Chemotherapy	97(34.7)	145(63.3)
Grand total	343	
Average / mean	69(30.7)	153(19.3)

Table 6 showed that majority of men 62.2% are knowledgeable that prostate cancer can be treated through surgery, 34.7% indicated that chemotherapy (use of drugs) is one of the choices of treatment, 23.9% admitted that hormonal therapy (use of drugs) can be used as treatment options, 21.1% indicated radiation as method of treatment. Summarily 69(7%) on the respondents know differences of prostate cancer.

Table 7 show that 68 respondent strongly agree to undergo screening for prostate cancer, 95 agree, 20 disagree while 39 strongly disagree with mean value of 2.9 on acceptance of treatment as regarding prostate cancer if importance were imminent, 78 strongly agree 57 agree 45 disagree while 42 strongly disagree yielding a mean value of 2.8

Table 6 Attitude of respondents towards prostate cancer

Response	SA	A	D	SD	Mean(x)	Decision
I will go for prostate cancer screening	68	95	20	39	29	Positive
I will accept treatment of prostate cancer if importance were a possibility	78	57	45	42	28	Positive
I will accept any treatment option chosen by my doctor to treat prostate cancer despite any side effect that may occur	73	35	58	56	26	Positive
I will encourage friends and relatives to embrace screening and treatment for prostate cancer	80	42	59	41	27	Positive
Grand total	**299**	**299**	**182**	**178**		
Average mean	**75**	**57**	**46**	**428**		

Table 7 Measures used for screening prostate cancer

Options	Yes	No
Digital rectal examination (DRE	94(42.3)	128(57.7)
Prostate specific antigen test	83(37.4)	139(62.6)
Biopsy	53(23.9)	169(76.1)
`CT-scan	73(32.9)	149(87.1)
Magnetic resonance imaging (MRI)	34(15.3)	188(84.7)
Grand total	**337**	**773**
Average/mean	**67(30.4%)**	**155(69.6%)**

On willingness to accept treatment choice by the doctor, 73 strongly agree, 35 agree, 58 disagree, while 56 strongly disagree, with mean value of 2.6 furthermore, 86 strongly agree to encourage friends and relatives to undergo screening for prostate cancer 42 agree, 59 disagreed while 41 strongly disagree yielding a mean value of 2.7 summarily, the respondents have positive attitude towards prostate cancer screening.

Table 8 showing that 43.2% of respondents had digital rectal examination (DRE) performed on them, 37.4% had prostate specific antigen (PSA) test done 23.9% had biopsy, 32.9% had CT-scan done while 15.3% said that magnetic resonance imaging (MRI) was done on them as screening measures for prevention of prostate cancer. Summarily, 67(30.4%) of the respondents adopted all the outlined prostate cancer screening measures (Tables 1−7).

Discussion of findings

This chapter discusses the major findings of the studying in relation to the research questions as shown by tables and descriptive statics in the analysis of data and related with reviewed literature. In addition, implication for nursing, summary/conclusion and recommendation/ suggestion for further studies were highlighted.

The discussion of findings based on the research questions of the study as stated in chapter one and presented in chapter four.

Socio-demographic data of respondents showed that most 42.8% are within the age range of 60-69 with least value of 11.3% representing those 80 years and above, majority are married 70.3% while 77% are single, those with primary level of education dominated with 47.8% followed by secondary education 24.3% informal education having the least value of 11.3% regarding occupation of respondents, civil servant are highest with 31,1% followed by farmers 16.2% traders 10.8% with retired civil servant being the least 4.8%.

The study has shown that 88.7% of the respondents are aware of prostate cancer as against 11.3% who are unaware and obtained their information mostly from health worker/practitioners 51% relations/ friends 18.5% and church/ pastor/ reverend/ priest with least value of 5.8%. The men are knowledgeable in risk factors of prostate cancer as many attributed to smoking 57.2% increasing age 54.5% and chemical exposure being the least implicated 17.6% yielding an average score of 88(39.5%).the findings is inconsistent with findings of Agugui, Obar Isagbon, Nwajei, Osigbove et al (2013) who stated that depth knowledge of prostate cancer regarding its risk factor, symptoms, treatment and screening practice is low. This findings from the study however can be as a result of high level of literacy that exist among respondents of high as well obtained information about prostate cancer from health workers.

Studies on the knowledge of treatment options for prostate cancer among men (50 years and above) in Umugolo Ehime Mbano showed that most of the men know that surgery is a choice for treatment of prostate cancer. Many respondents indicated that chemotherapy is one of the treatment options and some others admitted that hormonal therapy can be utilized. A reasonable number indicated radiation therapy as a choice of treatment. Some respondents have knowledge of cryosurgery as a method of treatment for prostate cancer.

This findings is in line with American cancer society (2016) who in its affirmed that, depending on the situation the treatment options for men with prostate cancer might include surgery, radiation therapy, cryotherapy hormone therapy, chemotherapy, vaccine treatment. The treatment options varied among discussion with their individual doctor on choice of prostate cancer treatment.

This study aimed at ascertaining the attitude of men 50years and above, of Umugolo Ehime Mbano L.G.A Imo state towards prostate cancer. The findings showed that the men have positive attitude towards prostate cancer. This contrasts with the findings of Atulomah,[9] which stated that the attitude and screening for prostate cancer was low leading to poor diagnosis and treatment of diagnosed prostate cancer cases in developing countries like Nigeria.

Majority of the respondents had undergone screening for prostate cancer, and many had digital rectal examination performed on them, some had magnetic resonance imaging (MRI) performed on them. These findings agree with Australia (2014) who asserted that several tests can lead to diagnosis of prostate cancer examples, digital rectal examination (DRE) and a prostate specific antigen (PSA) test. In another study, CDC (2016) suggested that biopsy should be done to confirm diagnosis.

Nurses should utilize the findings of this study and related ones to formulate patients teaching plans with regards to prostate cancer. Student nurses can as well be lectured during clinical rounds fso that they will have in depth knowledge of prostate cancer.[10–14]

Conclusion

This study was embarked on to assess knowledge and attitude of men, 50 years and above, on prostate cancer in Umugolo Ehime Mbano Imo state. The findings showed that, most of the men are aware of prostate cancer and also knowledgeable on the fact that prostate cancer is a form of tumor that attack gland in the male reproductive organ. They are conversant with various treatment options for prostate cancer and the fact that surgery is the major treatment option. Positive attitude towards prostate cancer exists among the men. They are also aware of preventive measures to combat prostate cancer.

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Conflicts of interest

The authors declare that there is no conflicts of interest.

References

1. Agbugui JO, Obarisiagbon EO, Nwajei CO, et al. Awareness and knowledge f prostate cancer among men in Benin city, Nigeria. 2013;12(2).
2. Akinremi TO, Ogo CN, Olatunde AO, et al. Review of prostate cancer research in Nigeria. *Infectious Agents and Cancer*. 2011.
3. American cancer society. Prostate cancer. 2016.
4. Ebuehi OM, Otumnu IU. Prostate screening practices among male staff of the university of Lagos. *African Journal of Urology*. 2011;17(4):122−134.
5. Surveillance epidemiology and end results. SEER stat fact sheet. Prostate. 2010.
6. Baade PD, Youlden DR, Krnjacki LJ. International epidemiology of prostate cancer geographical distribution and secular trends. Mo. *Nutr Food Res*. 2009;53(2):171−184.
7. Cancer research UK prostate Cancer statistics. 2011.
8. World cancer research fund international/American institute for cancer research continuous update project report. Diet, Nutrition, physical activity and prostate cancer. 2014.
9. Atulomah NO, Motunrayo FO, Ademola MA, et al. Level of awareness, perception and screening behaviour regarding prostate cancer among men in a rural community of Ikeme local government area, Nigeria primary prevention insights. 2010;2:11−20.
10. Ajape AA, Babata A, Abola OO, et al. Knowledge of prostate cancer screening among native African urban population in Nigeria Nig Qt. *Hospital.Med*. 2019;20(2):94−96.
11. Cancer research UK Cancer statistics on prostate cancer. 2014.
12. Grummer J. Prostate cancer diagnosis. Andrology Australia, what every man needs to know. 2014.
13. Hinkle JL, Cheever KH. Brunner and Suddarths textbook of medical surgical nursing. 13th ed. Wolters Kluwer India Pvt. Ltd; 2014.
14. Terwase JM, Asuzu CC, Mtsor JA. Knowledge, attitude and screening behaviour of Benin state university male students towards prostate cancer awareness. *Int J Cancer Clin Res*. 2014;1(1):006.