

Knowledge and Practice of Prostate Health of Men in the Work Place

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Abstracts

This study was carried out to determine knowledge, attitude and perception of the prostate health among male employees of a College of medicine in a university setting. Findings from a postal questionnaire showed a high level of ignorance about the prostate gland in the body. 45% of the respondents (TR) do not know what the prostate gland is, and 54.4% do not know where it was situated in the body. On the Diet rating: 36.4% of the respondent enjoyed fatty food, 63.6% liked red meat, and 72.7% liked fried food, 36.4% indulged in alcohol and smoking which are not good for the prostate health. On the prostate symptoms score: 11.4% had a severe symptom score, while 56.85% had a moderate symptom score while 31.8% of the respondent had a moderate symptoms. Conclusion: despite widespread prevalence of prostate problems among aging men, many men especially in south-western, Nigeria, had little knowledge of what is called prostate and associated problems among aging men and possible preventive measures available to help. The good side of this finding is that men in this part of the world consume diets which are rich in fiber, which is a good development for the prostate health though many of them has a flare for fatty and fried food.

Key Words: Prostate Health, Knowledge, Diet, Workplace, International prostate symptoms score (IPSS)

1. Introduction

By the age of fifty, about 30% of men will start to experience difficulties with urination related to enlargement of the prostate gland, also known as benign prostatic hypertrophy (BPH). These symptoms often lead to an increased sense of frustration and embarrassment, as well as the disruption of normal activities (1).

Enlargement of the prostate is usually caused by an abnormal overgrowth and /or swelling of the tissue of the prostate, which then blocks the urethra or opening from the bladder. Problems associated with this condition usually worsen with age, increasing in incidence to about 50% of males by the age of sixty, up to almost 80% past age seventy. Most physicians

consider this to be normal consequences of aging (2).

In 1999, approximately 180,000 men in the united state were diagnosed with prostate cancer and 37,000 died of the disease (3). Certain groups have been found to have elevated risk including African American men, with a family history of prostatic cancer and men older than 65years (4).

Screening for prostate cancer is controversial. The two major screening methods are (digital rectal examination) DRE and serum prostate-specific antigen (PSA) which have limitations (5). Positive predictive value have ranged from only 21% to 51% for the DRE and the PSA tests, the DRE and from 32% to 49% the for the PSA test. However, positive predictive values for both the DRE and the PSA test improve when the tests are combined or if either is performed in conjunction with transrectal ultrasound (6).

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The association of knowledge about prostate health screening with getting either prostate cancer or BPH is not clear due to inconsistency in the literature. A study showed that men who chose not to get screened had less knowledge about prostate cancer and a less positive attitude screening than men who chose not to get screened (3).

No randomized studies have yet been completed that demonstrate that screening for prostate cancer reduces morbidity or mortality from the disease. There is also a lack of consensus among agencies and organizations that develop screening guidelines. The American Cancer Society recommends that both the PSA test and DRE be offered annually to men 50 years and older who have at least a 10-year life expectancy and to younger men who at high risk. The society also suggests providing information to patients regarding the potential risk and benefits of screening (7). On the other hand, the national cancer institute has concluded that there is insufficient evidence to establish whether prostate cancer mortality can be reduced with DRE, transrectal ultra sound , or serum markers, including PSA. The USA preventive services task force does not recommend screening for prostate cancer (3).

In this study, we assessed knowledge, attitude, diet, lifestyle, and used International prostate symptoms score (IPSS) to estimate the state of Prostate Health in the Workplace.

2. Material and Methods

A cross section of the employees of the College of Medicine, Igbinedion University, (N=100) in Okada, Edo State, Nigeria received a simple questionnaire. This was designed to be easy to read, inoffensive and informative. On the questionnaire are twelve close ended questions covering diets, knowledge of dietary components, lifestyle/habits (smoking and alcohol drinking), daily exercise, knowledge and position of prostate in the body, and IPSS score for evaluating prostate symptoms, knowledge of PSA and DRE. The questionnaire was administered on non-medics and paramedic staff in the school system. It covers both senior and junior staff in the work force.

3. Results

3.1. Age Distribution (of the respondent-TR): Most of the respondent fell within the age bracket of 31-40 (45.5%), 41-50 (31.8%), while 51 and above (22.7%).

3.2. Knowledge of Diet: Most of TR preferred red meat (63.6%), 77% consumed or ate vegetables regularly and 54.5% of the liked fiber rich food and

36.4 % of them liked fatty food.

3.3. Habit: Here, we considered habits like alcohol and smoking, daily and weekly exercise and knowledge of prostate location in the male body. 45% of the respondents do not know what is called prostate or where it is found in the male system. Less than half of TR, 45.4% do daily exercise, worst still with weekly exercise exposure even less 40.9%. 36.4% of the TR engaged in smoking and taking of alcohol.

3.4. International Prostate Symptom Score (IPSS):

22.7% of the respondent had mild symptoms, most of them fell within the age range of 31-40, while 56.8% of TR had moderate symptoms and 15.9% of TR had severe symptoms.

When considered along the line of the age group 28% of TR within the age bracket 41-50 and 3% of TR 51 and above had severe symptoms.

3.5. Knowledge of PSA, DRE, IPSS: About the knowledge of PSA, DRE and IPSS, only 9.1%, 5.7% and 2% of the respondent (TR) had knowledge of PSA, DRE and IPSS respectively.

3.6. Statistical Analysis:

The test-retest method was used as a pilot study. Ten (10) respondents were selected from the study area that is not part of the sample. After 2 weeks, the instrument was re-filled by the same set of respondents. Pearson correlation statistical analysis was used to calculate reliability coefficients. The results gave the coefficient of 0.85, hence this showed internal consistency, reliability of the instrument.

4. Discussion

Health and vitality energy is what makes living a pleasure. Good nutrition, plenty of exercise and satisfying work balanced with leisure activities sets the stage for enhanced Life. This is one of the best ways to minimize the attack of various ailments that are associated with aging, such as andropause and benign prostatic hyperplasia-BPH (8). 77% of the TR in this study ate lots of vegetable often in irregular manner, a good practice for supporting the prostate.

The MANILA, Philippines which observed that men who eat a lot of vegetable daily, particularly those rich in beta-carotene, lutein and vitamin C, have a significantly reduced risk for BPH (9). Raw spinach, legumes, peaches, cruciferous and other green leafy vegetables are particularly effective, but fruits and vegetables containing lycopene (like

tomatoes) and fruits in general, somehow were found not to affect the risk of BPH. Vitamin C from vegetables was effective but not vitamin C supplements in pills (10).

Most of TR in this study like eating fried food (72.7%), and red meat (3.6%). These are good sources of saturated fats which do not go well with prostate. Diet studies suggest a direct relationship between dietary fat and prostate health, with men whose diets consists of 30-40% or more fat at higher risk. Saturated fats, especially from animal sources are most problematic (11). Some research has attributed this relationship to the effects animal fats have on excess levels of circulating sex hormones. 40.9% of the TR exercises regularly, while 45.9% of TR engaged in irregular exercise. However, regular exercise is one of the factor that have been suggested for maintaining good prostate health. Good circulation is important for the prostate health. Regular walking and Kegel's exercise (a series of contractions of the muscles around the prostate are helpful in improving circulation and tonicity of the genital area (12).

54.4% of the TR like eating fiber containing food. The consumption of diet rich in fiber in this part of the world may be one of the many reasons why the prevalence of prostate enlargement and cancer is low, because dietary fiber binds testosterone, estradiol and other sex steroid and help eliminate excess hormone from the body (13).

36.4% of TR indulged in alcohol and smoking, which are not good for the maintenance of a good prostate health. Alcohol ingestion has been associated with increased secretion of prolactin, which increases both the testosterone and formation of DHT. Alcohol intake has a negative influence on prostate (14). There is a high level of ignorance of the prostate as an accessory organ of reproduction and its location in the body in this study, indicating that a lot have to be done to educate men especially the working class on this organ and its problems (BPH, Cancer, and prostatitis) in aging men. In the present study over 45% of TR in the university setting does not what is the prostate; while 56% don't know where it can be found in the body.

Only a few of the TR presented with moderate symptoms, while 11.4% of TR had severe symptoms which may not necessarily indicate an enlarged prostate or prostate cancer. Men with severe symptoms (score above 20) will always choose treatment. Although if the glands are small or normal sized the symptoms may improve, by avoiding habits, lifestyle or food that may negatively affect the prostate health. Evaluation of symptoms has been

made somewhat easier by the development of the international prostate symptoms score (IPSS). The scoring service serves as benchmark for determining severity (8), men with mild or no symptoms usually choose watchful waiting even if the prostate are enlarged. BPH eventually progresses in about 15% of men with mild symptoms.

A more reliable way of assessing prostate health, is the prostate specific antigen (PSA) and digital rectal examination (DRE) tests. Average cost of PSA alone is about \$34.6 (N4,500) while the other test DRE is costlier. In Nigeria, due to very low income level in Nigeria with majority of the populace falling into lower strata in terms of money earning capability, a test like PSA and or DRE may be not easily embraced by the men, who need it (15). 90.9% of TR did not know or heard about what is called PSA while 93.4% did not know or heard about DRE before. The male folks are seriously in need of education on what prostate is, and how to maintain a good prostate health. IPSS may be a very promising item for assessing prostate health status of men in Africa because of general problem of poverty. A study by Igwe et al¹⁵, 2005 reported that only a very few government owned hospital have facilities for PSA assay. The majority of the lucky tertiary hospitals can only boast of qualitative PSA detection test. Those that have quantitative PSA facility are forced into accumulation of samples for a month or more, to ensure cost effectiveness.

5. Conclusions

The study revealed a low level of knowledge of prostate. Therefore, efforts must be geared towards educating the male folks about the prostate health in Nigeria, especially among those who can read and write, who will then disseminate the knowledge gained to the unlettered men in the society, as this will translate into a better future for the men as they age in Nigeria.

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