A study on screening of knowledge attitude and practices regarding prostate cancer among men in Bangalore

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Abstract

Background: Prostate cancer is the most commonly diagnosed cancer among men and the second most common cause of death from cancer in men worldwide.

Aim and Objectives: The aim of the study was screening of knowledge attitude and practice regarding prostate cancer among men in Bangalore.

Materials and Methods: It is A Hospital-based, Prospective, cross-sectional and observational study.

Results: The study reveals that age group < 50 (73.38%) were the risk group for prostate cancer with (40.28%) uneducated and (30.21%) primary education. While (70.50%) had no family history of prostate cancer and (30.93%) were unemployed. In this study (60.43%) participants were unaware of the term prostate disease and high level of fallacious misconceptions about the disease. An, about (61.87%) of the participants knew that early detection of prostate cancer decreases the complications. In our study, amongst the men that had underwent PSA-test, about half were recommended by a physician (76.25%). The major sources of information about the PSA-test were physicians (28.05%).

Conclusion: This study concludes the need for providing awareness regarding etiology of prostate cancer and highlights misconceptions regarding etiology of prostate cancer. The study recommends well-designed health education programs, widespread public health campaigns using the mass media, hospitals and religious centres. Leading to early detection and cure. Thereby reducing the morbidity and mortality rates.

Keywords: Prospective, Cross-sectional, Prostate cancer.

Introduction

The prostate is the walnut-sized gland in men located below the bladder and in front of the rectum, surrounding the urethra which produces the seminal fluid that nourishes and transports sperm. The prostate cancer is marked by uncontrolled (malignant) growth of cells in the prostate gland. Prostate cancer is the most common malignancy occurring in men, particularly, it is the second most common of all diagnosed cancers and represents the sixth leading cause of cancer death worldwide with 1,111,700 new cases of prostate cancer diagnosed and 307,500 deaths in 2012.¹ The magnitude of prostate cancer is reflected by statistics published by the National Cancer Institute. The number of new cases estimated for Brazil in 2005 was 100creasing rates, it is relatively low, partly reflecting the good disease's prognosis.² Regarding early prevention, risk factors are, most of the times, unknown and inevitable, hindering more specific prevention measures for prostate cancer. However, two risk markers are recognized as important: age and family history. Regarding age, the likelihood of prostate cancer in men younger than 39 is one for every 10,000 men; one for 103 men aged between 40 and 59 and one for 8 men aged between 60 and 79 years old.³ Routine screening for cancer prostate can lead to early detection of the disease, thereby reducing negative outcomes, but the engagement in screening practices differ from one population to the other. A study carried out in USA have identified that lack of access to health care, socio-economic status, fear, patient provider communication, distrust of the medical profession and aversion to digital rectal exam are possible barriers to PC screening.⁴

Aim and Objectives

The aim of the study was screening of knowledge attitude and practice regarding prostate cancer among men in Bangalore.

Methodology

Study sample: 139 Male patients aged >50 and above50 years of age were considered in to the study (N=139 Patients).

Study Design: It is A Hospital-based, Prospective, cross-sectional and observational study.

Study Period: The present study was conducted for a period of 6 months from August 2019 to January 2020.

Study site: The present study was conducted in ESI Hospital, Indira Nagar, and Bangalore.

Study criteria

Inclusion criteria

Male patients aged >50 and above 50 years of age. All outpatients especially men who are willing to participate in the study.

Exclusion criteria

Patients who were ill to respond the questions. The patients who are not willing to participate were excluded. In patients were excluded.

Source of Data

Method of collection of data

All the patients satisfying the inclusion criteria were selected after explaining the study to the subjects then included in the
Tool of data collection. Structured interviewing questionnaire was designed to collect data. It consisted of demographic details of patient, age, gender, Awareness, knowledge, attitude and practice of prostate cancer screening. **Statistical tools:** Data were collected from the patient’s chart and was subjected to analyze by performing descriptive statistics. The obtained data tabulated and analysed in terms of objectives of the study, by using inferential and descriptive statistics.

### Results

Table 1: Basic demographic details of the patient

| S. No | Demographic details | Number | Percentage |
|-------|---------------------|--------|------------|
| 1. Age | <50 | 102 | 73.38% |
| | >50 | 37 | 29.61% |
| 2. Education | Nil | 56 | 40.28% |
| | Primary | 42 | 30.21% |
| | Secondary | 23 | 16.54% |
| | Tertiary | 18 | 12.94% |
| 3. Employment status | Employed | 96 | 69.06% |
| | Unemployed | 43 | 30.93% |
| 4. Marital Status | Married | 120 | 86.33% |
| | Unmarried | 19 | 13.66% |
| 5. Has children | Yes | 98 | 70.50% |
| | No | 41 | 29.49% |
| 6. Drinking Alcohol | Yes | 81 | 58.27% |
| | No | 58 | 41.72% |
| 7. Perceived personal health status | Yes | 38 | 27.33% |
| | No | 101 | 72.66% |
| I. Personal history of prostate cancer | Yes | 38 | 27.33% |
| | No | 101 | 72.66% |
| II. Family history of prostate cancer | Yes | 41 | 29.49% |
| | No | 98 | 70.50% |

Table 2: Awareness and source of information about Prostate Diseases

| Question | No (%) |
|----------|--------|
| 1. Do you know about Prostate Diseases | Yes 55(39.56%) |
| | No 84(60.43%) |
| 2. Did you ever heard about Prostate Cancer | Yes 97(69.78%) |
| | No 42(30.21%) |
| 3. Did you heard about Prostate cancer screening | Yes 66(47.48%) |
| | No 73(52.51%) |
| 4. Did you heard about PSA screening | Yes 106(76.25%) |
| | No 33(23.74%) |
| 5. Source of information |
Table 3: Common misconceptions and etiology

| Misconceptions                                | Yes                  | No                  |
|-----------------------------------------------|----------------------|---------------------|
| Disease only affects older men                | 117 (84.17%)         | 22 (15.82%)         |
| Poverty                                       | 97 (69.78%)          | 42 (30.21%)         |
| Positive history of STD                       | 125 (89.92%)         | 14 (10.07%)         |
| Positive history of multiple sexual partners   | 120 (86.33%)         | 19 (13.66%)         |

Table 4: Knowledge of prostate cancer

| Questions                                                                 | No (%)             |
|---------------------------------------------------------------------------|--------------------|
| 1. Prostate is a part of male reproductive system                          |                    |
| Yes                                                                       | 18 (12.94%)        |
| No                                                                        | 25 (17.98%)        |
| Don’t know                                                                | 96 (69.06%)        |
| 2. Is family history a risk factor for prostate cancer                     |                    |
| Yes                                                                       | 84 (60.43%)        |
| No                                                                        | 55 (39.56%)        |
| 3. Signs and symptoms of prostate cancer                                   |                    |
| Frequent urination                                                        | 37 (26.61%)        |
| Nocturia                                                                  | 24 (17.26%)        |
| Back pain                                                                 | 5 (3.59%)          |
| 4. DRE and PSA are the screening test for prostate cancer                  |                    |
| Yes                                                                       | 51 (36.69%)        |
| No                                                                        | 88 (63.30%)        |
| 5. Does prostate gland produce testosterone                               |                    |
| Yes                                                                       | 20 (14.38%)        |
| No                                                                        | 21 (15.10%)        |
| Don’t know                                                                | 98 (70.50%)        |
| 6. Can prostate cancer cause problem in urination                          |                    |
| Yes                                                                       | 37 (26.61%)        |
| No                                                                        | 29 (20.86%)        |
| Don’t know                                                                | 73 (52.51%)        |
| 7. Can prostate disease be cured                                           |                    |
| Yes                                                                       | 47 (33.81%)        |
| No                                                                        | 92 (66.18%)        |

Table 5: Attitude of prostate cancer

| Questions                                                                 | No (%)             |
|---------------------------------------------------------------------------|--------------------|
| 1. Does early detection of prostate cancer decreases complication          |                    |
| Yes                                                                       | 72 (31.79%)        |
| No                                                                        | 13 (9.35%)         |
| Don’t know                                                                | 54 (38.84%)        |
| 2. All men has to undergo screening test for prostate cancer              |                    |
| Yes                                                                       | 37 (26.61%)        |
| No                                                                        | 18 (12.94%)        |
| Don’t know                                                                | 84 (60.43%)        |
| 3. Prostate examination is the only way to detect prostate cancer         |                    |
| Yes                                                                       | 27 (19.42%)        |
| No                                                                        | 15 (10.79%)        |
| Don’t know                                                                | 97 (69.78%)        |
| 4. Only those with problem in urinating should screen                     |                    |
Table 6: Practices regarding prostate cancer screening

| No Questions                                                                 | Yes (%) | No (%) |
|------------------------------------------------------------------------------|---------|--------|
| Did any physician recommended you PSA test                                  | 106(76.25%) | 33(23.74%) |
| Did you ever performed prostate examination                                 | 92(66.18%) | 47(33.81%) |
| Last time you undertaken the examination                                     |         |        |
| < 1 year ago                                                                | 43(30.93%) |        |
| Between 1-2 year                                                             | 25(17.98%) |        |
| >1 year ago                                                                  | 14(10.09%) |        |
| >= 5 year ago                                                                | 10(7.19%) |        |
| Last time you undertaken the PSA                                             |         |        |
| < 1 year ago                                                                | 48(34.53%) |        |
| Between 1-2 year                                                             | 21(15.10%) |        |
| >1 year ago                                                                  | 15(10.79%) |        |
| >= 5 year ago                                                                | 8(5.75%) |        |

Fig. 1: Knowledge of prostate cancer

Fig. 2: Signs and symptoms of prostate cancer

Fig. 3: Attitude of prostate cancer

Fig. 4: Last time underwent the examination
Discussion
The study was based on screening of knowledge, attitude and practice regarding prostate cancer among men in Bangalore with sample size (N=139). In this study Only 66(47.48%) men agreed with the three sign and symptoms stated in the questionnaire, frequent urination (26.61%), nocturia (17.26%) followed by low back pain (3.59%). This was parallel with the result of two different study where only 10.3% and 11.4% of the participants knew the symptoms of prostate cancer4 While the low levels of awareness of prostate diseases (39.56%), prostate cancer (69.78%) and prostate cancer screening (47.48%) among the participants in this study are parallel with the finding of the study conducted in urban population in Nigeria5 which reported that 78.8% of participants have never had any information on cancer of the prostate, and only 5.8% had heard of prostate specific antigen (PSA) test. In our study only(36.69%) knew about DRE and PSA are the screening test for prostate cancer and only (66.18%) underwent through the examination and (33.81%) has never undergone the test which was consonance with the study conducted among Ugandan men9 only 9% and 9.5% of respondents knew PSA and DRE respectively as screening tests for prostate cancer. In our sample, only (66.17%) had received a PSA-test. This finding is similar to another study conducted in South Africa where men who had received a PSA-test were only 28.3(10). An about 62.58% of participants expressed their willingness to receive a PSA-test. This intention was consonance when compared with another study conducted in Spain (57.9%).11 Therefore, a global public health education is consequential using mass media, hospitals and religious centres to encourage early diagnosis of men suffering from prostatic diseases.

Conclusion
Beliefs and attitudes plays important role in detection and prevention of any disease. The results of the present study suggests that the level of awareness about prostate disease remains low among men in Bangalore. It also highlights misconception of positive sexually transmitted diseases regarding etiology of prostate disease. The study recommends well-designed health education programs, widespread public health campaigns using the mass media, hospitals and religious centres.

Limitations of the study
Relatively lesser number of patients were enrolled into the study. Furthermore the study would have been elaborated to assess and compare. Therefore further studies with large group of men at different geographical areas, which could include more cultural factors and their impact on early prostate screening is recommended.

Conflict of Interest
The authors declare that there are no conflicts of interest in this paper.

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References
1. Torre LA, Bray F, Siegel RL, Ferlay J, Lortet-Tieulent J, Jemal A et al. Global cancer statistics, 2012. CA Cancer J Club. 2015;65:87-108.https://doi. Org/10
2. MinistErioSa de(BR).SecretariaNacionaldeAssistências de .Instituto Nacional do C, ncerCoorden A,o de prevenA,o e vigil, ncia.C, ncer de prÚstata: consenso. Rio de Janeiro: INCA; 2003
3. NettoJºnior NR. Urologiap-tica: tumor daprÚstata. 4aed. S,o Paulo: Atheneu; 1999 risk factor- years old.
4. Reynolds D. Prostate cancer screening in African American men: Barriersand methods for improvement. Am J Mens Health. 2008;2(2):172-7.
5. Nakandi H, Kirabo M, Senugabo C, Kittengo A, Kitayimbwa P, Kalungi S et al. Knowledge, attitudes and practices of Ugandan men regarding prostate cancer. Afr J Urol. 2013;19(4):165-70 .
6. Mofolo N, Betshu O, Kenna O, Koroma S, Lebeko T, Claassen FM et al. Knowledge of prostatecancer among male pu urology clinic, a South African study. Springer Plus. 2015;4(67).
7. Oranusi CK, Mbieri UT, Oranusi IO, Nwofor AME. Prostate cancer awareness and screeningamong male public servants in Anambra State, Nigeria. Afr J Urol. 2012;18(2):72-4.
8. Ajape AA, Babata A and Abiola OO. Knowledge of prostate cancer screening among native African urban population in Nigeria. Nig J Hosp Med. 2006;20(2):94-6.
9. Nakandi H, Kirabo M, Senugabo C, Kittengo A, Kitayimbwa P, Kalungi S, et al. Knowledge, attitudes and practices of Ugandan men regarding prostate cancer. Afr J Urol. 2013;19(4):165-70 .
10. Robinson SB, Ashley M, Haynes MA. Attitudes of African Americans regarding screening for prostate cancer. J Natl Med Assoc. 1996;88(4):241-6.
11. Fritzell J, Rehnberg J, Bacchus Hertzman J, Blomgren J. Absolute or relative, a comparative analysis of the relationship between poverty and mortality. Int J Public Health. 2015;60(1):101-10.

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