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

Al Kayum Ahmed[1], Karishma Parveen[2*], Pooja[3], Rashi L[4], Saba Khanum[5], Rowinea Fernandez[6], Rinkumathappan[7]

[1,2,4-7]III Pharm.D (students), [3]Pharm.D(student), Dept. of Pharmacy Practice, Gautham College of Pharmacy, Affiliated to RGUHS, Bangalore, Karnataka, India

Corresponding Authors: Karishma Parveen
Email: karishmaparveen10@gmail.com

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%) has 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 anuncontrolled (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 world wide 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 diseaseís 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 every10,000 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 above50years of age were considered in to the study (N=139Patients)**.**
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 toJanuary2020.
Study site: The present study was conducted inESI 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

study. 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.	Perception of personal health status		
	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	

Physician	64(46.04%)
Friends/Relatives	17(12.23%)
News paper	12(8.63%)
Health care workers	46(33.09%)

Table 3: Common misconceptions and etiology

Misconceptions	**Yes**	**No**
1. Disease only affects older men	117(84.17%)	22(15.82%)
2. Poverty	97(69.78%)	42(30.21%)
3. Positive history of STD	125(89.92%)	14(10.07%)
4. 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' know	96(69.06%)
2. Is family history is 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 he screening test for proatate 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	

Yes	41(29.49%)
No	5(3.59%)
Don't know	93(66.90%)
5. Is It important to perform prostate examination regularly	
Yes	37(26.61%)
No	16(11.51%)
Don't know	86(61.87%)
6. Willingness to undergo PSA test	
Yes	87(62.58%)
No	13(9.35%)
Don't know	39(28.05%)

Table 6: Practices regarding prostate cancer screening

No Questions	No (%)
1.Did any physician recommended you PSA test	
Yes	106(76.25%)
No	33(23.74%)
2.Did you ever performed prostate examination	
Yes	92(66.18%)
No	47(33.81%)
3. 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%)
4.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%)

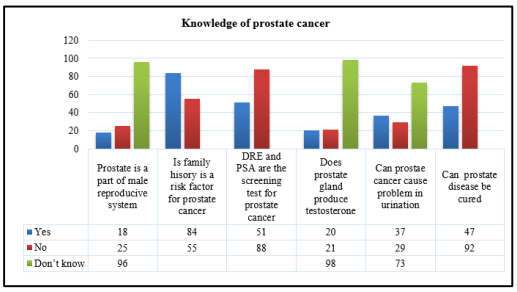

Fig. 1: Knowledge of prostate cancer

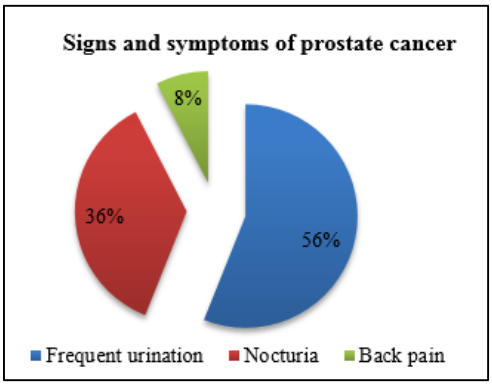

Fig. 2: Signs and symtoms of prostate cancer

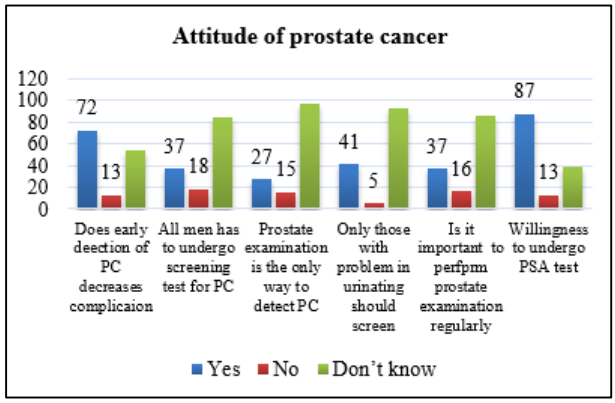

Fig. 3: Attitude of prostate cancer

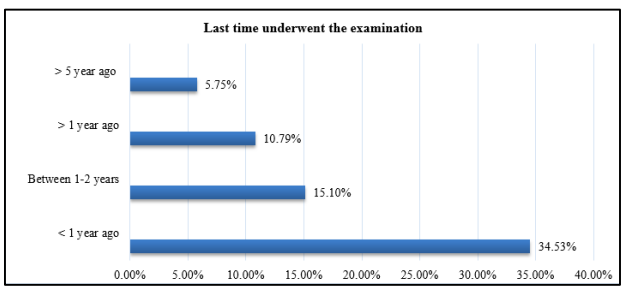

Fig. 4: Last time underwent the examination

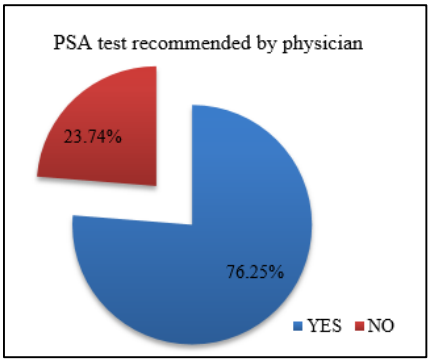

Fig. 5: PSA test recommended by physician

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 questionaire, 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%.[5] and 11.4%(6)of the participants knew the symptoms of prostate cancer[7] 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 Nigeria[8] 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 men,[9] 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.

Source of Funding

None.

References

1. Torre LA, Bray F, Siege 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. MinistÈriodaSa˙de(BR).SecretariaNacionaldeAssistÍncia˙Sa˙de .Instituto Nacional do C¸ ncer.Coordena Á„o de prevenÁ„ o e vigil¸ ncia.C¸ ncer de prÛstata: consenso. Rio de Janeiro: INCA; 2003magniude-prognosis.
3. NettoJ˙nior NR. Urologiapr˙tica: tumor daprÛstata. 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, Semugabo C, KittengoA, 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 males attending a 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 Q J Hosp Med*. 2006;20(2):94-6.
9. Nakandi H, Kirabo M, Semugabo 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.

How to cite: Ahmed AK, Parveen K, Pooja, Rashi L, Khanum S, Fernandez R, Rinkumathappan. A study on screening of knowledge attitude and practices regarding prostate cancer among men in Bangalore. *IP Indian J Libr Sci Inf Technol*. 2021;6(1):40-4.