



FALSE BELIEFS ABOUT PROSTATE CANCER IN ELDERLY – A TERTIARY CARE HOSPITAL BASED STUDY, NORTH INDIA

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ARTICLE INFO

Article History:

Received 11th January, 2021

Received in revised form

20th February, 2021

Accepted 10th March, 2021

Published online 24th April, 2021

Key Words:

Prostate, False Belief,
Cancer, BPH, Chandigarh, India

ABSTRACT

Objectives: To assess the false beliefs and myths about prostate cancer in elderly. **Methodology:** The cross sectional study was conducted in Geriatric Clinic run by Department of Community Medicine, Government Medical College & Hospital, Chandigarh from July to December 2019. Systematic random sampling was done. Every 5th patient visiting geriatric OPD was included as a study participant. Information was sought using a pretested and prestructured questionnaire. The sample size comprised of 567 elderly males. Data so collected was entered and analyzed using SPSS version 20. **Results:** Of the total, 46% had heard of the prostate cancer. Most of the participants, 69.8% were unaware of any kind of examination for prostate cancer detection. 97.3% said that men with urinary symptoms should get screened for the malignancy. 93.1% of our subjects were advised by some health provider for getting screened. **Conclusion:** Many elderly have beliefs which are not correct regarding prostate cancer. Hence efforts must be done to increase awareness about this cancer among elderly.

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Citation: Puri, S., Choudhary, K., Saini, J., Sharma, K. and Pranav. "False beliefs about prostate cancer in elderly – a tertiary care hospital based study, North India", 2021. *International Journal of Current Research*, 13, (04), 16923-16926.

INTRODUCTION

The modern, luxurious lives we lead today are besieged with lifestyle diseases and among them, cancer is all set to become the next flu of the 21st century. Of all the malignancies, Prostate cancer ranks 2nd globally among men¹. Further, its peak incidence rises dramatically in men who are half way past the sixth decade of their lives. It's basically a cancer of the elderly². There are further variations on the basis of socio-demographics³. A plethora of incorrect beliefs and information which people have regarding this cancer. It's a common perception that nocturia, intermittent urination etc., also suggestive of prostate cancer after sixty. Actually, lower urinary tract symptoms (LUTS) are very common in geriatric males and are not usually indicative of prostate cancer risk⁴.

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One moot point which sticks out like a sore thumb in case of prostate cancer is – screening; when to be done, on whom all and if at all! The benefits which are thought to be coming from putting an elderly male undergo a screening test are still uncertain and not supported by sufficient scientific evidence. Instead it is seen that there are psychological repercussions on the quality of life of the person after the treatment⁵. As per American Cancer Society (ACS) and American Urologic Association (AUA) screening guidelines men more than 50 yrs with an expected life expectancy of more than 10 yrs should get themselves investigated for PSA and rectal examination. And hence many urologists don't advocate screening men older than 70 yrs or opt for less aggressive therapy if needed taking into consideration their life span less than 10 yrs⁶. But many differ in their opinions like Just et al⁴, who felt that the cons of screening clearly outweigh the pros. And in India too no particular screening guidelines for prostate cancer are being followed. In fact screening for prostate cancer is currently overused in elderly men. Hence is the ubiquitous practice of

Prostate Specific Antigen (PSA) testing correct? The evidence from Scientific studies have proven that screening of men for PSA, does not save lives from prostate cancer⁷. Further in men complaining of lower urinary tract symptoms (LUTS), PSA testing the ratio of benefits to harms in getting PSA investigation is at best unclear. Rather it jeopardizes the men for over diagnosis (4). Since there is paucity of studies addressing any such false beliefs, this study would be of great help in assessing the behavior of elderly regarding the disease which is diagnosed in 1 out of every 5 men over 75⁸.

MATERIAL AND METHODS

Study area: The present study was conducted in Geriatric Clinic run by Department of Community Medicine, Government Medical College & Hospital, Chandigarh.

Study design and Study period: The present cross-sectional study was done among geriatric patients (age 60 years and above). It was conducted over a period of six months (July 2019 to Dec 2019).

Inclusion Criteria: All the patients presenting with who had been diagnosed with BPH too were included in the study. The patients excluded from the study include those who were not willing to participate because of time constraint or referred to some other out-patient departments and those who were very sick.

Sampling Technique: Systematic random sampling was done. On an average around 55-60 patients visit the geriatric OPD every day. Every 5th patient visiting geriatric OPD was included as a study participant. Non response rate was found to be 10%.

Sample size and data collection: A total of 567 elderly men constituted the study sample. The permission for study was taken from the competent authority. Informed consent was taken from participants prior to data collection and their confidentiality was assured. A prestructured pretested study instrument was used for collection of information on sociodemographic profile, awareness of varied aspects of prostate cancer like sign/symptoms, treatment modality, their attitude and belief regarding this disease etc. The study subjects were recommended to undergo USG (ultrasonography) abdomen for assessing prostate size and PSA (prostate specific antigen) wherever desired in view of their presenting features.

Statistical analysis: Data was entered and analyzed in SPSS version 20.

RESULTS

Sociodemographic profile of the elderly is shown in table no.1. A quarter of the subjects (25.3%) were in the age group of 61 to 65 and another quarter (26.9%) in 71-75. There were only 11% illiterates, while a third of them (33.15%) were educated up to secondary level. 25.92 graduates and 11.11% post graduates were part of the study. 66% of the subjects were from urban areas (66.67%) and most of them (91.53%) didn't have any family history of prostate cancer. Majority of elderly were nonsmokers (89.95%) and non-alcoholics (63.49%). The

results of our study pertaining to awareness regarding various factors associated with prostate cancer are depicted in table no.2.

While 46% had heard of the prostate cancer, 46.9% reported media (T.V, newspaper and radio) and 42.1% reported health personnel to be the source of their information.

Table 1. Sociodemographic Profile of Elderly

Variable	Number (N = 567)	Percentage
Age		
<60 Yr	12	2.1
61-65	144	25.3
66-70	114	20.1
71-75	153	26.9
76-80	96	16.9
81-85	42	7.4
86-90	6	1
Education		
Illiterate	66	11.6
Primary	24	4.2
Middle	36	6.3
Secondary	188	33.1
Senior Secondary	43	7.5
Graduate	147	25.9
Postgraduate	63	11.1
Area		
Rural	189	33.3
Urban	378	66.6
Family History of Prostate Cancer		
Yes	42	7.4
No	519	91.5
Don't Know	6	1
Smoking		
Yes	57	10
Alcohol		
Yes	207	36.5
No	360	63.4

Table 2. Awareness of various factors associated with PC in Elderly

Variable	Number	Percentage
Heard of Prostate Cancer (n = 567)		
Yes	261	46
No	306	53.9
Source of Information (n = 567)		
Friend	25	4.4
Relative	37	6.5
T.V	134	23.6
Health Centre and Workers	239	42.1
Newspaper	96	16.9
Radio	36	6.3
Aware of any kind of examination for Prostate cancer detection (n = 261)		
Yes	79	30.1
No	182	69.8
If yes what examination (n = 171)		
PSA	26	15.2
USG	71	41.5
Rectal	14	8.1
PSA+USG	24	14
PSA+ Rectal	16	9.3
PSA+ Rectal+ USG	20	11.7
Approximate Age of getting Prostate examination done (n = 171)		
<40yrs	11	6.3
40-50	14	8.4
50-60	32	18.3
>60 yrs	85	49.9
Don't Know	29	16.9
PC Incidence increases by age (n = 261)		
Yes	161	74.7
No	75	18.1
Don't Know	25	7
Genetic element a predisposing factor for PC (n = 261)		

Yes	85	32.8
No	150	60.3
Don't Know	26	7.4
Sign and Symptoms suggestive of PC (n = 261)		
1. Weak urination		
Yes	113	43.3
No	116	44.9
Don't Know	32	11.6
2. Low backache		
Yes	60	23
No	172	66
Don't Know	29	11
3. Frequent Nocturia		
Yes	76	30
No	154	58.7
Don't know	31	12
4. Painful urination		
Yes	91	34.9
No	140	53.9
Don't Know	30	11.1
Surgery is only treatment of PC (n = 261)		
Yes	54	20.6
No	172	66.1
Don't know	35	13.2

Table 3. Beliefs and Practice in regards to PC in Elderly

Variable	Yes n (%)	N=261	No n (%)
Men with urinary symptoms should get screened for PC	254(97.3)		7(2.7)
Asymptomatic above 60yrs should always get screened for PC	256(95.9)		5(1.9)
Its imp to perform prostate examination regularly after 60yrs	119(45.6)		142(54.4)
Raised PSA means prostate cancer	247(94.6)		14(5.4)
Practices	Yes n (%)	N=261	No n (%)
1. Any health provider advised to get screened for PC	243(93.1)		18(6.9)
2. Ever undergone prostate examination other than usg	105(40)		156(60)
3. Ever got PSA investigated	183(70)		78(30)
3. Reason for getting examined for PC:			
Urinary complaint	218(83.5)		43(16.5)
Family history	42(7.4)		219(83.9)
Suggested or self-investigated	257(98.4)		4(1.5)

Most of the participants (69.8%) were unaware of any kind of examination for prostate cancer detection. Among those who knew mostly said it to be ultrasonography. 16.9% didn't know of any age to get the examination done. 74.7% knew that the cancer increases with age and 32.8% knew that it has got a genetic component to it.

Weak urination, low backache, frequent nocturia and painful urination were known to be the symptoms by 43.3%, 23%, 29.3% and 34.9% respondents respectively and 20.6% said surgery to be the only treatment Table no.3 shows the results pertaining to respondent's beliefs and practices regarding prostate cancer.

While 97.3% said that men with urinary symptoms should get screened for the malignancy, 95.9% were of the opinion that asymptomatic above 60 should get screened. About half (45.6%) were in favour to get prostate examination regularly after 60 years and most (94.6%) equated raised PSA to cancer. 93.1% of our subjects were advised by any health provider for screening. A total of 256 participants had ever undergone prostate examination other than ultrasonography. 241 of our subjects had got their PSAs investigated. The reason for getting examined by prostate cancer was family history (7.4%), urinary complaints (83.5%) and self-investigation (98.4%).

DISCUSSION

In our study only 1-3rd of the respondents were aware of some kind of examination for prostate cancer detection, compared to 50% in general public in Schulman et al study⁹. The variation could be due to the social and educational differences of the people residing in European countries. Arafa et al¹⁰ concluded that media was the major factor in disseminating health information regarding prostate cancer. Similarly, in our study 46.9% of the elderly had heard of the disease from T.V, radio or newspapers. In our study 42.15% had heard of the disease from health service personnel, while its 54.4% in the Italian men study by Morlando et al⁵. 32.8% of our study subjects knew that the disease has a genetic component. A mirroring response (32.3%) was got in a 2015 study by Mofolo et al (11). In our study 74.78% was the knowledge that the incidence increases with age. Likewise, Ojewala et al¹² reported that 3-4th of their respondents knew the same. Urological symptoms were said to be the symptoms of prostate cancer by the majority of our subjects (nocturia-30%, painful urination – 34% etc). Similarly, 40% identified only urological symptoms to be raising any alarm for the disease in Arafa et al study¹⁰. In fact, this belief was held by as high as 86% of the subjects in Schulman et al study⁹. This is one mindset which definitely needs to be addressed. There is an array of literature which clearly concludes that there is no conclusive link between LUTS and increased risk of prostatic cancer nor prostate specific mortality^{13,14}. The tenet is that LUTS are not predictors of advanced nor non-indolent diseases. The requirement is to stress on the point that in early prostatic cancer it's unlikely to have any symptoms and in most of the cases, LUTS is due to causes other than prostate malignancy⁴.

1-5th of our participants said that surgery is the only treatment. Arafa et al¹⁰ also concluded lack of knowledge regarding management of prostate cancer. They found total correct knowledge score was 10:28, indicating poor knowledge. 17% subjects said that prostate cancer is associated with diet. Horwood et al¹⁵ in their qualitative study for dietary prevention of prostate cancer also found that men reported uncertainty about the role of diet in the cancer's prevention. Among our subjects, a mere 2.7% of the aware elderly believed that the disease could be in asymptomatic patients as well. Similar was the finding in Schulman et al study where only 1% had this belief. Majority of the aware subjects (93.1%) were advised by a physician to screen for prostate cancer. In Morlando et al study⁵ half of the respondents said so. This shows the lack of media generated awareness or a little awareness in public, generally, in this part of the Indian subcontinent. Further 40% our participants had ever performed a prostate examination, corresponding to the figure of 35% in the study conducted by Morris et al⁶. Many (70%) of our aware study subjects had undergone a PSA test. In Morlando et al study⁵. 30% of the men were such. The higher number in our study could be due to the exclusion of all the younger men. Now it's important to underline here that easy and over reliance on PSA testing is resulting in over diagnosis. The 2013 Cochrane review¹⁶ has already stated that use of such tests in asymptomatic leads to detection of indolent prostate cancer that would have not gone to cause harm to a man in all his lifetime! Also in case of men presenting with symptoms, PSA testing may lead to detection of a cancer that would not have gone to cause harm. This rather may lead to overtreatment, consequently side effects and psychological distress⁴.

CONCLUSION

It's evident from the study that many elderly have beliefs which are not correct regarding prostate cancer. Any kinds of urinary symptoms ring a bell to them for the disease. Most often, they have this paranoia to undergo PSA testing to allay their fears. It's been cautioned time and again, not to go for PSA testing as an early detection method for prostate cancer. The international society of geriatric oncology has recommended management of elderly patients according to their fitness and personal preference, rather than chronological age⁸. However, in the absence of an alternative to PSA testing, the scene doesn't seem to be changing anytime future. The onus therefore lies on the health personnel to spread the correct awareness among elderly, who already are ridden with much other morbidity and anyways have a waned out performance and nutritional profile, and on the treating physicians to probably discuss with the geriatric men about the harms and benefits of their screening/diagnostic modality.

Conflict of Interest: Nil

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