

## To investigate the awareness about prostate cancer among rural populations

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World Journal of Advanced Research and Reviews, 2022, 14(03), 439–442

Publication history: Received on 14 May 2022; revised on 17 June 2022; accepted on 19 June 2022

Article DOI: <https://doi.org/10.30574/wjarr.2022.14.3.0579>

### Abstract

**Aims and objective:** Health awareness and correct planning is very important to avoid any health related problems. The aim of this study is to investigate the awareness about prostate cancer among rural populations.

**Method and material:** A population-based cross-sectional study was conducted over 150 people. A multiple choice questionnaire (MCQ) based questionnaire was followed during the interaction of participants.

**Result:** 65% people participate in this survey know about the prostate cancer. They also know it is life threatening problems in the men. Awareness about the screening is very low in rural communities. The awareness about screening the prostate cancer was very poor, only 12% people aware about screening of prostate cancer and screening.

**Discussion:** Findings of this study indicate that, most of the people in the rural community did not know about the prostate cancer. About 35% people don't have knowledge about prostate cancer in the rural area while about 80% of participated persons did not know about the prostate screening.

**Conclusion:** Prostate cancer is very common in elder age men people. Lack of knowledge and awareness related to prostate cancer leads to major risk in the rural communities.

**Keywords:** Prostate Cancer; Awareness; Knowledge; Rural Community; Population

### 1. Introduction

Prostate cancer (PCa) is the most common type of health problems in elderly men [1]. It becomes a vital health issue world-wide in recent decades. Prostate cancer is the fifth cancer reported globally while second cancer reported in the men [2]. Industrialized world is more affected by prostate cancer, in the 20<sup>th</sup> century. In the North African and Asian countries, every 1-9 persons affecting from prostate cancer out of 100000 persons. [3]. Oceania, Northern America, Northern Europe, Western Europe, and the Caribbean have among the maximum prostate cancer rates globally [4]. Prostate cancer is confirmed in approx. 2000 men everyday globally, while one death is estimated in each two minute [5]. In the Australia/New Zealand, highest rate of cancer is reported. About 104.2 people suffer from prostate cancer out of 100,000 [6]. The mortality rate becomes highest in the economically poor and low income communities [7]. In the Asian countries, very low prostate cancer incidence was found as compare other countries like Australia and New Zealand. has been reported to vary from 3.0/100,000 In the Iran only 3 people out of 100000 reported prostate cancer while the maximum number of prostate cancer is reported in the Philippines, approximately 20.3 people reported prostate cancer among 100000 in the year of 2000 [8]. Due to change in the life style of people and diet, the prostate

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cancer slightly increased in the age-standardized incidence rates of prostate cancer in some Asian countries in last few decades, especially in china, Malaysia, Singapore and in japan [9, 10].

It was thought, that of prostate cancer in India is far lower as compared to the western countries but due to increased migration rate of rural populations toward the urban community, changing their life styles, increased health awareness, and available medical facility, more prostate cancer and it shown that we are far behind the western countries.

The aim of this study is to investigate the awareness about prostate cancer among rural populations. Health awareness and correct planning is very important to avoid any health related problems.

## 2. Material and methods

A population-based cross-sectional study was conducted from April 2021 to August 2021. the age group of the participants was 30-60 years men who were permanent residents of rural community in Begusarai district.

A MCQ based questionnaire was followed during the interaction of participants. Data collection includes the method of face-to-face interaction, telephonically also. Data collected from participants includes socio-demographic characteristics of the respondents, knowledge about the prostate cancer and risk, and screening of prostate cancer. All the questions were developed in Hindi and English both so that there is no difficulty occur during data collection. All the interaction was conducted in Hindi, and local language in which participants was comfortable and understanding. All participants involved in this study provided written informed consent form prior to start the interview. Confidentiality was maintained of all the participants, and there is no names were recorded in the questionnaire form.

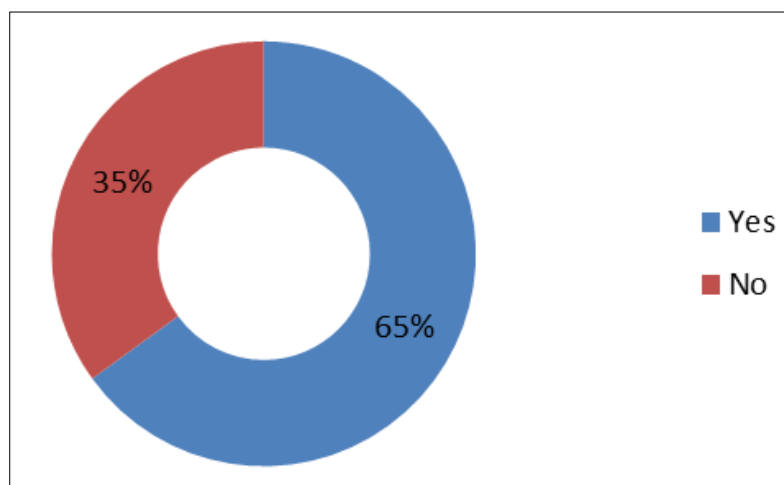
### 2.1. Data Analysis

All the data received from participants was recorded in the Microsoft excel software and analyses accordingly.

## 3. Results

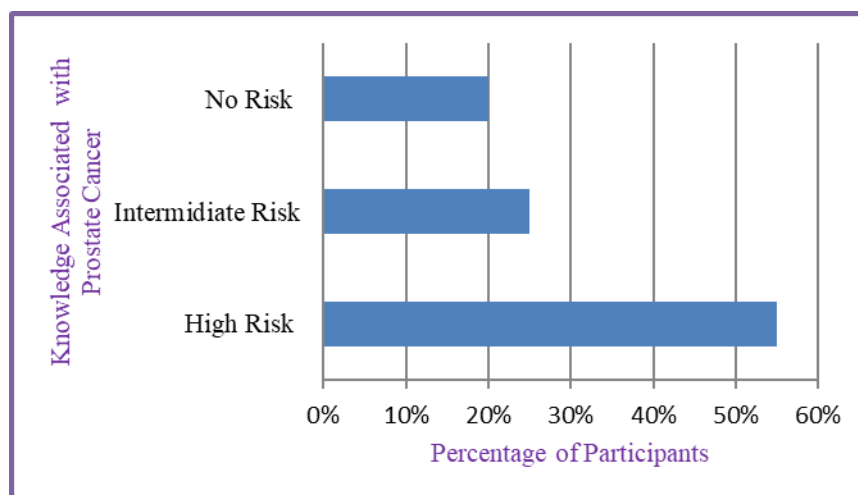
Total number of 150 peoples participates in these studies that are resident of the rural community in Begusarai district. 60% people were working in the metro city while 35% working in home town either in the rural shop or related to agriculture. Some government employees were also involved in this study (retire and working both). Mostly participants were married in this survey.

65% people participates in this survey know about the prostate cancer. They also know it is life threatening problems in the men.



**Figure 1** Knowledge about PCa

When we discuss about the risk associated with prostate cancer 55% said high risk and it can be a life threatening, 25% said intermediate risk, while 20% participants had no knowledge about the prostate cancer. 20% of the people never discuss about the PCa previously, even they didn't hear the term PCa. Also.



**Figure 2** Risk associated with PCa

Awareness about screening is very low in rural communities. The awareness about screening the prostate cancer was very poor, only 12% people aware about screening of prostate cancer and screening, only 2% of participants undergone prostate cancer test after physician advice, while they had some health issue. They did not know about prostate cancer screening.

#### 4. Discussion

The aim of this study is to assess the knowledge and awareness about prostate cancer and prostate among rural communities of age group 30 years to 60 years whose permanent resident of Begusarai district.

Findings of this study indicate that, most of the people in the rural community did not know about the prostate cancer. They have no sufficient knowledge about the health consciousness. Nowadays prostate cancer is the second most cause of cancer globally and most of the people aware about the PCa, while rural people had no awareness. About 35% people don't have knowledge about prostate cancer in the rural area while about 80% of participated persons did not know about the prostate screening. Few peoples are aware about screening of PCs and know about the risk associated with Prostate cancer.

There are many reasons behind the unawareness about prostate cancer screening, such as economically insufficiency, lack of medical and health awareness, lack of medical facility surrounding the rural community etc.

Maximum peoples in this survey belonging from lower class and lower middle class who is financially not much strong. A second thing is the lack of awareness about health. Most of the rural peoples are not aware about the health condition. They never gone hospital or medical facility until unless suffer from any health issue. These problems not only related to rural, but also in urban area.

Third main problems are the lack of medical facilities. There are no medical facilities available in most of the rural community population. In case of any medical or health issue, they need to go city hospital or corporate hospital which very costly and not affordable by normal persons.

Public awareness program has to be initiated by government as well as non-governmental organization (NGO) agencies, to aware the people. Also organize various medical camps to screen the various health problems. Prostate cancer is also related to our lifestyle, healthy life style may be reducing the risk of prostate cancer. Healthy working environment and surroundings are very important to reduce the risk associated with prostate cancer.

#### Abbreviation

Prostate Cancer (PCa), Non-Governmental Organization (NGO), Multiple Choice Questionnaire (MCQ)

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## 5. Conclusion

Prostate cancer is very common in elder age men people. Lack of knowledge and awareness related to prostate cancer leads to major risk in the rural communities. Mostly people was not aware about the PCa in the rural area, they need health awareness programs boost the awareness. Governmental agency can take the initiate about health concept and awareness among rural populations to reduce the risk of prostate cancer.

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## Compliance with ethical standards

### *Acknowledgments*

Thanks to all participants actively involved in this study.

### *Funding*

None.

### *Disclosure of conflict of interest*

No conflict of interest.

### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study along with the questionnaire.

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