

THE PREVALENCE OF PROSTATE CANCER DIAGNOSTIC TESTS IN A RURAL COMMUNITY

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ABSTRACT: This descriptive study with a quantitative approach aimed to identify the prevalence of preventive tests for prostate cancer in men aged over 40 years old, resident in the community of Videira in the interior of the State of Santa Catarina. The whole population of the community was mapped, totalling 210 individuals; of these, 70 men met the inclusion criteria. The data were collected using a questionnaire. It was determined that 61.8% of the men knew about the tests for preventing prostate cancer; 41.1% had undertaken the tests and 58.9% had not, stating the cause to be lack of knowledge, not considering it to be necessary, and not presenting symptoms. It was possible to outline a plan of educational actions in the community regarding prostate cancer, suggesting greater attention in the approach to the health of the male population.

DESCRIPTORS: Prostate cancers; Early diagnosis; Men's health.

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INTRODUCTION

Prostate Cancer (PC) is frequent in almost all the regions of Brazil, and over the years, a tendency has been observed for an increase in new cases⁽¹⁾. Considering that this is a neoplasia which progresses slowly, the mortality can be avoided with early diagnosis and treatment⁽²⁾. In the last worldwide estimate, undertaken in 2012, PC was mentioned as the second most frequent cancer among men, with 75% of the cases diagnosed occurring in developed countries⁽³⁾. In Brazil, there are a number of factors which explain the increase in rates of incidence over recent years, such as the increase in life expectancy, the improvement and evolution of diagnostic methods and the quality of the information systems⁽³⁾.

All men over 45 years old should undertake a preventive check-up; those who have a family history of prostate cancer should initiate prevention after the age of 40. The preventive prostate evaluation makes it possible to detect localized prostate tumors in an initial phase of development, offering the patients real chances of a cure⁽⁴⁾.

Age is the only well-established risk factor for the development of PC, as well as race/ethnicity, family history, diets rich in animal fat, red meat, processed foods and calcium, obesity, and metabolic syndrome, characterized by resistance to the hormone insulin⁽³⁾.

The incidence of PC is highest in the South-East region (78/100,000) and North-East region (43/100,000) of Brazil. Not considering non-melanoma skin tumors, it is also the most frequent in the Center-West (75/100,000), South (68/100,000), and North (30/100,000) of the country. In the State of Santa Catarina (SC), 1617 new cases per 100,000 inhabitants were estimated for 2012, while in the capital, Florianopolis, the figure was 70 new cases per 100,000 inhabitants, in accordance with rates of incidence and primary location⁽³⁾.

With the increase of the statistics in Brazil of mortality from neoplasias, the National Cancer Prevention and Control Policy was developed by the Ministry of Health, with the objective of reducing the incidence of, and mortality from, cancer, aimed at actions for raising the awareness of the population in regard to risk factors, promoting the early detection of cancers, and also providing quality treatment throughout Brazil⁽⁵⁾.

In this regard, Law N. 10,289, of 20th of September 2001, instituted the National Program for the Control of Prostate Cancer (PNCCP), which includes activities

such as campaigns clarifying what prostate cancer is and how it may be prevented, and – in partnership with the Municipal and State Health Departments – making tests for preventing PC available for men aged over 40 years old⁽⁶⁾.

The development of the Brazilian National Policy of Men's Health Integral Care (PNASH) aims to promote the improvement of this population's health conditions throughout Brazil, aiming to reduce morbidity and mortality, confronting the risk factors and facilitating the male population's access to actions and services of comprehensive health care⁽²⁾. It also seeks to guide the health actions and services directed at the male population, such that there may be change in the current paradigms, integrating the execution of the present policy into the other policies, programs, strategies and actions of the Ministry of Health⁽²⁾.

Increasing life expectancy, reducing morbidity and mortality from avoidable causes, promoting and encouraging the practice of care for male health and implementing the goals established by PNASH are challenge for the managers of the health policies proposed⁽⁷⁾.

The shortage of studies addressing specific characteristics of male health, particularly focusing on PC, has already been indicated. There is a need for further research to be undertaken to assess men's knowledge about the tests for tracking PC and to ascertain under which circumstances these tests are carried out⁽⁸⁾.

Considering the importance of the issue in question, the following question was made: "What is the prevalence of men aged over 40 years old, resident in a rural community of the municipality of Videira in Santa Catarina, who periodically undertake the diagnostic tests for prostate cancer?".

The study aims were to identify how many men over the age of 40 undertake, periodically, the diagnostic tests for prostate cancer, how many do not undertake them, and what the factors are which stop them; and to undertake an educational intervention for the research participants using a workshop.

METHOD

This is a descriptive study-intervention with a quantitative approach, undertaken in a rural community in the interior of Videira in the State of Santa Catarina in February – August 2008. First of all, the locality was mapped, identifying the resident population. The target public was men aged over 40 years old, residents in the

area under study. Those who were institutionalized or who could not give coherent responses were excluded as study objects.

In a population of 210 male individuals, 70 men met the inclusion criteria, of whom 68 agreed to participate in the study, signing the Terms of Free and Informed Consent. The data collected were recorded in individual files containing data on age, knowledge of the diagnostic tests for PC, factors which impede the tests or make them difficult to do, the frequency with which they were undertaken, and the presence or not of signs or symptoms characteristic of prostatic changes, as well as exposure to risk factors for the development of neoplasias.

The participants had access to the results of the research through a consciousness-raising workshop in the community itself, in which the diagnostic tests for PC were addressed, along with the importance for men's health of undertaking the same.

The research was undertaken in accordance with the ethical aspects, involving human beings, and was approved under Opinion CEP SH/UNOESC/HUST N. 148/2007.

Regarding the statistical analysis, the data were entered in a Microsoft Excel spreadsheet, received statistical treatment, and the categorical variables were represented through absolute numbers.

RESULTS

After the data was tabulated, it was determined that 44.2% (n=30.05) of the participants in the research were between 40 and 49 years of age; 33.8% (n=22.9) were between 50 and 59 years of age; 14.8% (n=10.06) between 60 and 69 years of age and 7.2% (n=4.8) were aged between 70 and 84 years old.

When questioned about what tests are indicated for the early diagnosis of PC, 61.8% stated that they knew. Regarding specific knowledge of the blood test for the level of Prostate Specific Antigen (PSA), 57.3% (n=38.9) answered that they knew. When asked about the digital rectal examination (DRE), 75% of the participants stated that they knew.

The research identified that 58.9% had never had the examinations and 41.1% had already undertaken one or more examination for diagnosis of PC. Of 28 men who had undertaken one or more examination for early diagnosis of PC, 12 had undertaken the PSA and the DRE; 10 had only undertaken the PSA and six had only undertaken the DRE.

According to data given in the collection instrument, the men who had never undertaken examinations for early diagnosis of PC explained themselves by mentioning not being bothered, lack of encouragement, lack of knowledge, not thinking it is necessary, lack of interest, being too young and because of lack of publicising of the examinations, in addition to not presenting any symptoms; when these men were questioned as to whether they still thought about undertaking them, 94.2% (37) answered affirmatively.

These participants recognize that the PSA and DRE examinations should be undertaken for the early diagnosis, even when they do not do them. Regarding how long it had been since the last examination was undertaken, 1.4% had undertaken various diagnostic examinations in 1986; 1.4% in 1997; 1.4% in 2004; 1.4% in 2005; 9% in 2006; 17.7% in 2007 and 10.3% in 2008. 57.4% had never undertaken the examinations.

The research indicates that 50 people do not undertake the checkup with a neurologist annually and indicates lack of motivation, not being bothered, not having a reason, or not presenting any symptom.

DISCUSSION

Worldwide, 62% of the identified cases of PC affect men aged over 65 years old, and in 2015, with the increase in lifespan, a growth of 60% of new cases of PC is expected⁽³⁾. Another study indicates that the incidence of PC increases significantly after 50 years of age, and that more than 70% of cases occur in men aged over 65 years old⁽⁹⁾.

Among the preventive examinations for PC, the PSA test and the DRE are the most indicated in early diagnosis. These diagnostic methods, like the rectal touch and the serum PSA are indicated annually, as in addition to being low-cost, they have specificity and sensitivity⁽¹⁰⁾.

PSA is a glycoprotein which originates in the prostate, and when its level rises in the bloodstream it is considered a biological marker for some prostatic diseases, including cancer. The rectal touch evaluates the size, the shape and the consistency of the prostate, the objective being to determine the presence of nodules⁽⁷⁾. If on the one hand such practices are recommended as measures for early detection of PC, on the other, there is evidence that the level of markers such as PSA, when used as a means of tracking patients, is not linked directly to a reduction in mortality; for this reason, various men have received unnecessary surgery⁽¹¹⁾. The PSA test also has

some limitations, in particular its low specificity. Benign prostatic hyperplasia, infection and chronic inflammation can raise the level of PSA, leading to a false-positive result⁽¹⁾.

Many are frightened of having the rectal touch exam, which raises concern, as lack of diagnosis, or late diagnosis, have caused the death. Men aged over 50 years old, undertaking the PSA is essential for the early tracking of PC, it also being observed that the rectal touch, concomitantly with the PSA, can also confirm the detection of cancer⁽⁸⁾.

The participants in one study had doubts regarding the main test for prevention of PC; the rectal touch was mentioned by the majority, followed by those who considered the rectal touch and PSA tests done concomitantly to be necessary, while some participants believed the PSA test alone to be sufficient⁽¹²⁾. In the present study, it was determined that the interest in these tests was not significant, considering that less than half of the participants had undertaken tests for the early detection of PC.

One study indicates the causes of not undertaking the rectal touch exam to be the fact that the doctor has never requested it to be done, the sample considering themselves to be healthy, neglect/forgetfulness, lack of time, confidence in the PSA test, and fear⁽¹²⁾. In a study undertaken with 88 traditional Gaúcho males, 83% had undertaken one of the preventive tests for PC at least once⁽¹²⁾. In the State of São Paulo⁽⁷⁾, an analysis was made of the data of 992 men aged 50 years old or over, which verified that nearly half of the population studied had never undertaken the preventive test.

It may be perceived that there is insufficient clarification regarding the tests for early diagnosis for the participants, given that these become confused when questioned regarding the issue. It is not enough for there to be a National Program for the Control of Prostate Cancer, considering that on its own this is not being efficacious.

One of the factors responsible for the disease's late diagnosis is the population's lack of information, as well as the inexistence of specific, sensitive procedures capable of detecting the tumor in the microscopic phase, and the difficulty of implanting broad, organized routines in the health services, favoring early detection⁽⁴⁾.

It may be perceived that undertaking the check-up for health promotion purposes is not routine, meaning that professionals in the area are only contacted when there is real manifestation of abnormal signs and symptoms. The results evidence the non-implementation

of the National Program for the Control of Prostate Cancer, which aims to provide clarification on what PC is, as well as making tests available for the early detection.

Emphasis is placed on the importance of educational campaigns, promoting actions, including with the health professionals, with the purpose of encouraging knowledge through illustrated educational materials which facilitate the understanding and raising of awareness among the target public, as a means of health promotion⁽⁴⁾. The biggest challenge in PC is promoting early diagnosis, while the cancer is restricted to the prostate alone, and is curable. The earlier it is diagnosed and treated, the greater the possibilities of cure, because as well as the treatment being less aggressive and cheaper when compared to treatment in more advanced stages or when there is metastasis⁽⁵⁾.

The promotion of the population's health as a primary healthcare action assists in the process of early diagnosis. It is the role of health professionals to be alert and verify whether the service users are of the age to initiate the tests for early detection of cancer and other associated diseases, as well as to encourage them and make them aware in regard to the importance of men learning about the maintenance of health as a whole⁽⁴⁾.

With encouragement and the publicizing of information, perhaps the response regarding the undertaking of the PSA and DRE tests for early diagnosis of PC could be unanimous.

CONCLUSION

This study evidenced that only 41% of the participants had undertaken the diagnostic tests for PC at any time. The men who had not undertaken the tests explained this as being due to lack of knowledge, judging the tests to be necessary, or not presenting any symptoms. That said, a gap may be perceived in the implementation of public health policies which aim to prevent these threats to men's health.

In relation to the means of early diagnosis of PC, it may be asserted that the demand for the DRE and PSA tests is not very significant, with more than half of the participants knowing the DRE than the PSA, but not undertaking either of them, in spite of there being scientific evidence that undertaking them assists in early diagnosis.

In spite of the National Program for the Control of Prostate Cancer having been instituted in 2001, little is known about the present condition of Brazilian men's

health, in particular regarding their knowledge about prevention and the undertaking of tests for the early diagnosis of PC, which opens perspectives for further studies for extending knowledge of the issue.

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