ABSTRACT

Objective: to analyze the scientific production of Brazilian nursing about prostate cancer. Method: integrative review from the question: “what is the scientific knowledge produced by nursing on prostate cancer in Brazilian journals?” By means a searching in the Virtual Health Library, and consultations in the database of LILACS and SciELO. Eleven studies were eligible, then categorized and analyzed with basis on the instrument elaborated; they were grouped, summarized and integrated to the discussion of review. Results: it was found that the discussion of this thematic in nursing is a recent fact and it is concentrated, mostly, in the Southeast of Brazil. According to the thematic approach, the most discussed topics were: knowledge of the male population about the prostate cancer and the barriers of adherence to screening examinations. Conclusion: the scientific production of the Nursing about prostate cancer is in recent development, therefore, should gain more prominence in national publications, in order to contribute to the production of knowledge as a support for the improvement of care. Descriptors: Prostatic Neoplasms; Prostatectomy; Nursing; Publications for Science Diffusion.

RESUMO


RESUMEN

Objetivo: analizar la producción científica de la enfermería brasileña sobre el cáncer de próstata. Método: revisión integradora de la literatura, a partir de la cuestión: “¿cuál es el conocimiento científico producido por la enfermería en el cáncer de próstata en los periódicos brasileños?”; en la Biblioteca Virtual en Salud con consulta a la base de datos LILACS y colección SciELO. Resultados: se encontró que la discusión de este tema en la enfermería es una reciente y se concentra principalmente en el sudeste. De acuerdo con el enfoque temático, los temas más discutidos fueron: el conocimiento de la población masculina en el cáncer de próstata y las barreras de la adherencia a las pruebas de detección. Conclusión: la producción científica de enfermería sobre el cáncer de próstata es un fenómeno reciente, por lo tanto, debe ganar más notoriedad en publicaciones nacionales con el fin de contribuir para la producción de conocimiento con base para la mejora del cuidado. Descriptores: Neoplasias de la Próstata; Prostatectomía; Enfermería; Publicaciones de Divulgación Científica.

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INTRODUCTION

The profile of morbidity and mortality due to prostate cancer (PC) has changed in Brazil as in other countries. According to the Brazilian National Institute of Cancer - Instituto Nacional do Câncer (INCA) the increase in incidence rates of PC can be explained by the evolution of diagnostic methods to identify the problem in early form. Despite the high incidence rates, the mortality from PC has a low magnitude, being considered as a cancer of good prognosis when it is diagnosed and treated early.¹

In Brazil, prostate cancer is the second most common cancer among men, losing only to non-melanoma skin cancer, and this type is considered cancer of the elderly, because its incidence is very common in people older than 60 years.¹ It is estimated that in 2012, 60,180 new cases are registered. These values correspond to the estimated risk of 62 new cases for every 100,000 men, and the Southeast Region of Brazil has a proportion of 78 cases for every 100,000 men. The increase in life expectancy, the improvement and development of diagnostic methods and the quality of the information systems of the country may explain the increased number of the incidence rates.²

Some evidences suggest that the prostate cancer is closely related to the genetic factor, and the first-degree relatives are more closely related to the risk that can be eight times higher. Like other risk factors, we emphasize that it is regard with a diet rich in fats, red meat, low intake of vitamins and selenium. In the social sphere, the risk factors which are considered are: the low socioeconomic level, contact with multiple sexual partners and occupations with exposure to chemical substances and heavy metals, as well as reduced exposure to solar radiation and, consequently, decreased levels of vitamin D.³

As a means of early diagnosis of this disease, the screening step consists in a complete anamnesis with identification of data (information) that can be risk factors for the arising of the disease, such as age; race; presence of prostate cancer among first-degree relatives, and previous history of PC, including benign or malignant problems. It is also fundamental there is a questioning about the use of medications and lifestyle habits such as feeding and physical exercise. In continuity to the anamnesis, the clinical examinations are executed which consist of physical examination for screening some signs such as weight loss, edema of the lower limbs and lymphadenomgalies, and digital rectal examination (DRE). Finally, the laboratory tests: Prostate Specific Antigen (PSA) and prostate biopsy can be performed.⁴

By opting for a certain treatment of the prostate cancer, the health professional must take into account patient age, co-morbidities, access to treatment, stage and grade of the tumor. The treatment options are radiotherapy, brachytherapy, hormonal therapy, chemotherapy, radical prostatectomy and cryosurgery.⁵

Faced with the complexity that surrounds this pathology, it is crucial a multi-professional approach in providing assistance, including especially nurses, oncologists, psychologists and social workers.⁵

It is necessary the presence of nurses throughout the health-disease process: diagnostic hypothesis, diagnostic confirmation, control of risk factors, management of the signs and symptoms, the provision of care for each type of treatment, and rehabilitation. A well-structured knowledge to work in all of these steps provides the establishment of trust with the patient and, consequently, a higher probability of success in achieving the goals of care.

In short, the nurse is the professional most qualified and available to support and guide the patient and its family in the experience of the disease process, treatment and rehabilitation, providing better quality to the future life of the sick, since it actively participates in the planning and implementation of preventive actions and care against the cancer in Brazil.⁶

In order to identify the nursing knowledge about prostate cancer, analyze the main issues studied on this thematic and identify knowledge gaps that exist, this present study aimed to analyze the scientific production of Brazilian nursing about the prostate cancer (PC). It is believed that the results will produce a reasoned knowledge for nurses, reducing obstacles to the use of scientific knowledge and making more accessible the results of the researches on PC.

METHOD

It is an integrative literature review, with exploratory and descriptive method, which allows the researcher to make a critical assessment of theoretical and empirical literature and, subsequently, elaborating the synthesis of the assessment of a systematic and orderly way. This method aims to define concepts and deepen knowledge on the certain
issue, and point out flaws and gaps, showing the need for further studies, becoming it a support for the improvement of clinical practice.\(^7\)

For implementation of the review method, we followed the basic steps to ensure understanding and comprehension of a well-structured new knowledge: identification of the theme and formulation of a guiding question; search and selection in the literature; categorization and assessment of the included studies; analysis of results; discussion and presentation of the results of the review.\(^8\)

The first step consisted of the formulating the research question: *What is the scientific knowledge produced by nursing on prostate cancer in the Brazilian journals?* Faced with this questioning, we decided go to the second stage whose purpose was to select the publications that could constitute the sample.

To identify the studies, we performed an online search through the Virtual Health Library (VHL) in the database from Latin American and Caribbean Health Sciences (LILACS) and in the Scientific Electronic Library Online collection (SciELO).

For a survey of the articles, we used the Medical Subject Headings (MeSH) and the Boolean operator “OR”, resulting in the combination “prostate” or “prostatectomy”. We chose do not doing combinations with the controlled descriptor “nursing”, aiming to promote the widespread search for articles, since by using this descriptor, the number of found studies would be reduced. The criteria used for selection of the sample were: articles that addressed the thematic “prostate cancer”; researches conducted in Brazil, and which had among the authors at least one nurse researcher. It was not defined a range of years for the search, thus, the search covered all papers published until July 2011.

Initially, we read the titles and abstracts to see if they addressed the research question of this present investigation, and, later, we sought to academic formation of the authors, which when it was not described in the article, was identified through the curriculum lattes in the site http://lattes.cnpq.br/.

In the LILACS database, the search was carried out by means of a simple form with as limitations the type of publication “article” and language “Portuguese”, which resulted in 499 studies of which seven that fitted the inclusion criteria were selected. In Scielo, 191 studies were identified, being listed seven and excluded three because of duplicity. So, we totaledized, therefore, a sample of11 articles.

In the third step, the data extraction was performed from an instrument completed for each article of the final sample of the review. The instrument contains the following information: title of publication, title of journal, author, headquarter institution of the main author (hospital, university, and community), year of publication, and distribution of publications by region, type of scientific magazine, objective, research design, results, and conclusions.

In the fourth step, the analysis of the results was performed based on its content, by means of the descriptive statistics and, in critical way, in search of explanations for the different or conflicting results between the studies.

Finally, in the fifth and in the sixth step, the data were compared with findings of international literature and presented by means of comparative table according to the distribution of contents, which makes it understandable to synthesize the knowledge of each research.

### RESULTS AND DISCUSSION

Of the 11 articles which were selected, one was published in 2005, one in 2007, two in 2008, one in 2009, three in 2010, and three in 2011. We can note that the publication of the Brazilian nursing in relation to the prostate cancer is a recent fact, which can be justified by the increase in incidence rates by PC over the past ten years, therefore, it became like a target to the attention of health professionals.\(^2\)

With respect to the origin of the studies, most were performed in the Southeast Region of Brazil; we found a total of seven articles (63.6%), five in the state of São Paulo and two in the State of Minas Gerais. We did not identify any publication produced in the North and Midwest Regions of Brazil. The greater number of researches in the Southeast Region may be related to the largest concentration of graduate and post-graduate programs in the nursing area, which corresponds to 43% of all nursing courses in the country.\(^8\)It is relevant consider that, in relation to the headquarter institution of the main author, the majority (81.8%) is comprised by educational institutions and just two of the 11 studies analyzed are resulting of dissertations or theses.

Regarding the type of scientific magazine, eight studies (72.7%) were published in journals of general nursing and three (27.3%)
in journals on collective health. The journals that published more articles on the thematic in question were the *Acta Paulista de Enfermagem* and the *Ciência & Saúde Coletiva* with two articles published in each one.

In analyzing the research designs in our sample, we found that among the primary studies, eight have quantitative methodological approach, and all of them are non-experimental and just one has a qualitative approach, which used the method of phenomenology. We still identified a secondary study that used the integrative review method, and one study of reflection.

The themes approached in the studies were: knowledge about prostate cancer (PC), barriers to screening PC, nursing diagnoses, nursing interventions, risk factors and prevention and profile of patients with PC.

The Figure 1 presents the synthesis of studies included in this Research Paper, to get a better comparison of the contents and results.

<table>
<thead>
<tr>
<th>Content</th>
<th>Authors</th>
<th>Objective/method</th>
<th>Results</th>
<th>Conclusion</th>
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<tr>
<td>Knowledge about prostate cancer.</td>
<td>Paiva, E.P. et al.</td>
<td>Assess the knowledge, attitudes and practices in relation to the PC of men aged between 50 and 80 years. - Quantitative approach, non-experimental design</td>
<td>Of the 160 men interviewed, 63.8% demonstrated proper knowledge; 40.6%, proper attitude (men who considered like very important to perform annual screening tests of PC) and 28.1%, proper practice (men who underwent digital rectal examination and / or ASF test less than a year of day of the interview).</td>
<td>Prevention and early detection are key strategies for the control of the PC and have as the essential requirement a set of constants educational activities which must prioritize changes in the behavior of men, and services, especially, regarding the promotion of screening tests.</td>
</tr>
<tr>
<td>Knowledge about prostate cancer.</td>
<td>Lima et al.</td>
<td>Identify the knowledge about the prevention of PC from workers of a private university. - Quantitative approach, non-experimental design</td>
<td>The respondents had little or no knowledge about prostate cancer, and they did not perform exams and those who did (22.9%), mostly, did it a year ago or more.</td>
<td>The study emphasizes that an institution should give importance to the health of their employees, and actions of health education should be implemented, as well as an extended health care in a more holistic way.</td>
</tr>
<tr>
<td>Knowledge about prostate cancer.</td>
<td>Vieira et al.</td>
<td>Identify the knowledge about the prevention of prostate cancer from users of a health service of secondary care on hypertension and diabetes. - Quantitative approach, non-experimental design</td>
<td>Of 100 men interviewed, 65% had no knowledge about the prevention of PC. Of these, nine (13.8%) were examined for prevention. The study shows that 35% of men were told about the test for prevention of PC and of these, around 50% underwent this type of examination.</td>
<td>The high rate of non-performance is attributed to three factors: lack of sanitary education from the user; of performance information from professionals focused on the user’s health problems and difficult access to health services.</td>
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<tr>
<td>Barriers to screening prostate cancer.</td>
<td>Souza et al.</td>
<td>Check the adhesion of the traditional “gaúchos” to the preventive examinations of prostate cancer and analyze which variables influence in the adherence process to digital rectal examination. - Quantitative Approach, non-experimental design</td>
<td>Of the 88 respondents, 83% had at least once a preventive examination. Of these, almost 60% had digital rectal examination and ASF; 28.7% only had ASF and 13.7% had only rectal examination. Those who had preventive examination had greater schooling and income, and made he consultations at the particular institutions. There was less demand for preventive exams by those who have lived most of his life in the countryside.</td>
<td>The “Gaúcho” Traditionalism does not appear to influence in the adherence to preventive exams of PC, therefore, we identified a likeness of adherence related to the national studies (Brazilian). However, variables such as income, schooling and access to health services are associated with adherence.</td>
</tr>
<tr>
<td>Barriers to screening prostate cancer.</td>
<td>Paiva et al.</td>
<td>Describe the barriers on screening of prostate cancer. - Quantitative approach, non-experimental design</td>
<td>Main barriers which were referred to hinder the execution of these screening tests: “the doctor never requested the examination” (33,8%); they men are “afraid to take the exam” (16,9%); “they prefer never know if they are sick of the prostate cancer” (15%), and “I never developed symptoms” (15%).</td>
<td>It is necessary that the educational activities using behavior change strategies, both by men and health services, in order to stimulate the performance of screening tests.</td>
</tr>
</tbody>
</table>
Barriers to screening prostate cancer
Nascimento et al.¹⁵
Understanding the reasons why men performing or not the digital rectal examinations and ASF for early detection of PC, and understand characteristics of men related to the actions involving the execution of these tests.
- Qualitative Approach, Phenomenology

Nursing diagnoses
Santana et al.¹⁸
Establish a profile of nursing diagnoses in patients undergoing prostatectomy, in the immediate postoperative period (until 24 hours), using the Taxonomy II of NANDA-I
- Quantitative approach, non-experimental design

Nursing diagnoses
Napoleão et al.¹⁷
Identify nursing diagnoses in prostatectomy patients, in order to provide support for elaboration of care plans for hospital discharge.
- Quantitative approach, non-experimental design.

Nursing Interventions
Mata et al.¹⁸
Identify nursing interventions, in the nursing literature, with a view to prepare the prostatectomy patient for hospital discharge.
- Integrative review.

Risk factors and prevention
Medeiros et al.⁴
Talking about risk factors and prevention measures on the PC.
- Article of reflection.

Profile of patients with prostate cancer.
Gonçalves et al.¹⁹
Identify the demographic and epidemiological characteristics of patients undergoing the treatment of prostate cancer.
- Quantitative approach, non-experimental design.

Reasons for performing the exams: the appearance of clinical signs, information about the severity of prostatic diseases, medical indication and the simplicity of the ASF. Reasons for not performing: lack of information and knowledge about the ASF, examination, resistance in relation to the health professional and prejudice.

The existence of subjects who had never performed the ASF and/or digital rectal examinations points to the continuing need for educational activities about the PC and its early detection tests, focusing mainly on the elderly.

There was a positive correlation between the defining characteristics and risk factors identified in the study with those described in the NANDA-I. The nursing diagnoses are a relevant theoretical tool for clinical practice.

The results achieved may support the elaboration of protocols and/or individualized care plans, or specific to benefit the performance of nurses in clinical practice. Provide information to patients by nursing professionals minimizes anxiety, specially, regarding urinary incontinence and sexual dysfunction.

The nurse is the agent active in health promotion and early detection of diseases, in the sense to educate them (patients) about risk factors and prevention measures related to PC.

The most of patients search for the service when there are already symptoms, this fact signals the lack of guidance from men with regard the incidence of disease and age related to prostate cancer as risk factors.

Figure 1. Synthesis of publications included in the integrative review, according to the contents of the study, the authors,
Based on the analysis of the selected material, it was possible to point and identify issues related to the relationship of nursing with the PC, passing through the various aspects involved in this context.

Regarding the studies of the thematic knowledge of the PC, the majority (66.7%) reveals a lack of knowledge of men on the PC. Some authors attribute this fact for the lack of sanitary education, the limitation of health professionals in the face of acting centered in health problems and poor access to health services.

Performing educational interventions aimed at increasing the knowledge of men about the disease, showing, mainly, the relation of mortality rates with non-performance of periodic screening tests and the asymptomatic characteristic of prostate cancer in its early stages, is essential for understanding the severity of this pathology, which helps in decision making of individuals to carry out preventive actions. The development of such interventions should always be based on cultural beliefs of a certain population to its greatest effectiveness.

In the thematic focus Barriers to screening prostate cancer, the studies aimed to identify the variables that influenced in the adherence to diagnostic examinations. The main reasons pointed for not performing the examinations were: the fact that the doctor did not request the examination; the respondents consider themselves like healthy; lack of time; carelessness / forgetfulness, and the fear of discovering the disease. These data reflect the problem related to the lack of information from the male population in the face of health problems and point to the need for responsibility and commitment for the planning of preventive actions.

With regard to the reasons for the performance were: onset of clinical signs (main reason), knowledge about disease severity and medical indication. It is relevant to note that respondents reported a greater acceptance for the implementation of screening method of ASF, if if it is compared to the DRE method, due to the simplicity of the examination, unlike the second one which implies fear, embarrassment and prejudice.

In the same perspective, the international studies report that the reasons for the execution of the exams are larger or more relevant when compared to the barriers that hinder their realization. However, some issues are cited as difficult grounds in the process of making a decision to carry out the diagnostic examinations, such as “machismo”, invulnerability, hesitation and fear of invasion of privacy, especially, regarding the DRE in which is more evident the fear of intervene in the masculinity.

In this context, the nursing plays a critical role in the development of educational activities, in order to provide to men and their families a greater knowledge about the disease, and, subsequently, encouraging their adherence to screening tests.

With respect to the thematic on Nursing Diagnoses (ND), we identified two descriptive studies, and one of them listed the main ND in immediate postoperative period and the other one in the late postoperative period of prostatectomy patients, in order to provide support for the elaboration of care plans during the internment and hospital discharge. The main nursing diagnoses Identified in the immediate postoperative period were: “Risk of Infection”, “Ineffective peripheral skin tissue perfusion” and “Insufficient fluid volume” and in the late postoperative period were the following: “Risk of Infection”, “Acute pain” and “Anxiety”.

Both studies refer to the ND as a relevant tool for nursing care and suggest that the nursing process must be introduced into routine of the care to patients with prostatectomy. In this sense, for that the implementation of the nursing process to be effective, it is necessary to have a theoretical commitment, methodological and practical from nurses, seeking clinical judgment for the elaboration of DE, which can furnish the basis for the establishment of results and interventions, and, consequently, enhances and validates the nursing care.

It is relevant to emphasize the need to view the patient as a person and not link it to a series of diagnoses chosen in a book, that is to say, the care must be individualized. Thereby, that it is possible to establish a care plan directed to the real needs of each patient.

Regarding the thematic on Nursing interventions, the focus of the review study was to identify nursing interventions aimed at preparation of patients undergoing prostatectomy for home care. The use of written information associated with the oral enhance was appointed as the main strategy to facilitate the execution of self-care after surgery. The authors also highlight that the act

Mata LRF da, Izidoro LCR, Alves MGP et al.
of providing information to patients and their families can minimize anxiety during recovery in the post-surgery period, especially, in relation to sexual dysfunction and urinary incontinence.

It is possible to perceive that since the internment (hospitalization), in some situations, the time of hospital discharge is the most expected by the patient and its family. Often, the concern with the day to return to home becomes larger than the expectation of the execution of the own surgical procedure.

The nurse’s role in relation to the preparation for discharge of these patients is highlighted in the medical literature. Studies with patients undergoing radical prostatectomy reported that problems that may occur, even temporarily, such as psychological symptoms, intestinal and urinary function and those related to sexuality should be the focus of attention of nurses.

Regarding The risk factors for develop the prostate cancer, a study of reflection states that these factors are not well determined and considers that the main are: ethnic origin, with a higher incidence in black men, heredity and advanced age. They also mentioned the nutritional factors which may be potentially influencing to the development of disease, such as: red meat, diets high in animal fat, milk and calcium. However, there are nutritional agents with protective effect such as: greens, fruits, vegetables and cereals. It is relevant to note that there are also preventive behavioral factors such as: regular physical activity.

In this sense, health behaviors associated with decreased risk of PC include a balanced diet with fruits and vegetables, practice of physical activity and periodic execution of diagnostic examinations. In addition to the preventive care, the practice of a healthy lifestyle generates a beneficial effect in preventing recidivism of PC, beyond to prevent other comorbidities.

Finally, in the thematic - Profile of patients with prostate cancer, it is valid to point out some characteristics identified that are confirmed by other studies such as the prevalence of patients aged between 64 and 73 years, low schooling and lack of guidance on the CP.

Confronting with the fact that most men in the study is white, an international research indicates that African-Americans men have a higher chance of developing prostate cancer, and present themselves as an ethnic group with the highest incidence of prostate cancer in worldwide level. In contrast, men with PC of other countries also present themselves, in general, with average age of 70 years, and little information regarding the disease.

FINAL CONSIDERATIONS

Given the above, it is observed that scientific production of the Nursing about prostate cancer is in recent development, in the face of the concentration of publications in the last seven years. The studies indicate that the discussion of PC in the Nursing ambit has covered several areas of knowledge and activity, especially in relation to the need to increase the knowledge of men about risk factors and prevention strategies, and health education with patients and their family. This fact shows the concern of professionals in giving visibility and importance to this theme, as this pathology has high incidence rates, and its control and good prognosis are directly related to early diagnosis and treatment.

The use of the integrative review method enabled us to identify some knowledge gaps such as lack of further studies aimed at identifying the profile of the Brazilian man with prostate cancer in the different Regions of Brazil, studies of experimental designs related to nursing interventions on behavioral change within prevention of risk factors and the adherence to regular screening tests, as well as intervention studies aimed at stimulating self-care after surgical treatments of prostate cancer. Faced with all aspects that guided the discussions in this Research Paper (article), it is worth noting that this issue should gain more prominence in national publications of Nursing, which contributes to the production of knowledge as a support for the improvement of care.

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