

Quality of sleep and quality of life of men undergoing treatment for prostate cancer

Qualidade de sono e qualidade de vida de homens em tratamento para câncer de próstata

Calidad del sueño y calidad de vida de los hombres sometidos a tratamiento para el cáncer de próstata

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RESUMO

Objetivo: analisar a produção científica em relação à qualidade de sono e de vida de homens em tratamento para câncer de próstata. **Método:** Trata-se de uma revisão bibliográfica realizada no período de setembro a outubro de 2022 na biblioteca eletrônica Scientific Electronic Library e nas bases de dados Literatura Latino Americana e do Caribe em Ciências Sociais e da Saúde. Para a busca, foram utilizadas as palavras-chave: Câncer de próstata, Qualidade de vida de homens com câncer de próstata, importância do sono em homens com câncer de próstata, prevenção e tratamento do câncer de próstata. **Resultados:** Foram encontrados 56 artigos na busca inicial nas duas bases. Desses, 25 foram excluídos pelos critérios de elegibilidade, restando 23 artigos como amostra final de revisão. Após a leitura na íntegra e extração dos dados, os resultados foram agrupados em 4 categorias para melhor compreensão do assunto: Câncer de próstata- Conceitos e incidência no Brasil e no mundo; Diagnóstico e Tratamento do Câncer de Próstata; Qualidade de vida dos pacientes com diagnóstico de Câncer de próstata; Importância do sono em pacientes com câncer de próstata. **Conclusão:** Portanto verifica-se que o estudo qualidade de sono e qualidade de vida de homens em tratamento para câncer de próstata é de extrema importância para garantir o bem estar desses indivíduos, e que se faz necessária a busca por medidas mais eficazes de detecção, prevenção e tratamento dessa doença, com o objetivo de promover melhorias na saúde física e mental dos pacientes.

Descritores: Câncer de próstata; Qualidade de vida; Qualidade do sono.

ABSTRACT

Objective: to analyze the scientific production in relation to the quality of sleep and life of men undergoing treatment for prostate cancer. **Method:** This is a bibliographic review conducted from September to October 2022 in the Electronic Library Scientific Electronic Library and in the Databases Latin American and Caribbean Literature on Social sciences and Health. For the search, the keywords were used: Prostate cancer, Quality of life of men with prostate cancer, sleep importance among men with prostate cancer, prevention and treatment of prostate cancer. **Results:** We found 56 articles in the initial search in both databases. Of these, 25 were excluded by the eligibility criteria, leaving 23 articles as the final sample of review. After reading in full and extracting the data, the results were grouped into 4 categories to better understand the subject: Prostate cancer- Concepts and incidence in Brazil and worldwide; Diagnosis and Treatment of Prostate Cancer; Quality of life of patients diagnosed with prostate cancer; Importance of sleep-in patients with prostate cancer. **Conclusion:** Therefore, it is verified that the study of sleep quality and quality of life of men undergoing treatment for prostate cancer is extremely important to ensure the well-being of these individuals, and that it is necessary to seek more effective measures for the detection, prevention and treatment of this disease, with the objective of promoting improvements in the physical and mental health of patients.

Descriptors: Prostate cancer; Quality of life; Quality of sleep.

RESUMEN

Objetivo: analizar la producción científica en relación a la calidad de sueño y vida de los hombres en tratamiento para el cáncer de próstata. **Método:** Se trata de una revisión bibliográfica realizada de septiembre a octubre de 2022 en la Biblioteca Electrónica Científica y en las Bases de Datos Literatura Latinoamericana y del Caribe sobre Ciencias Sociales y de la Salud. Para la búsqueda, se utilizaron las palabras clave: Cáncer de próstata, Calidad de vida de los hombres con cáncer de próstata, importancia del sueño en hombres con cáncer de próstata, prevención y tratamiento del cáncer de próstata. **Resultados:** Se encontraron 56 artículos en la búsqueda inicial en ambas bases de datos. De estos, 25 fueron excluidos por los criterios de elegibilidad, dejando 23 artículos como muestra final de revisión. Después de leer en su totalidad y extraer los datos, los resultados se agruparon en 4 categorías para comprender mejor el tema: Cáncer de próstata: Conceptos e incidencia en Brasil y en el mundo; diagnóstico y tratamiento del cáncer de próstata; Calidad de vida de pacientes diagnosticados con cáncer de próstata; Importancia del sueño en pacientes con cáncer de próstata. **Conclusión:** Por lo tanto, se verifica que el estudio de la calidad y calidad de vida del sueño de los hombres sometidos a tratamiento para el cáncer de próstata es extremadamente importante para garantizar el bienestar de estos individuos, y que es necesario buscar medidas más efectivas para la detección, prevención y tratamiento de esta enfermedad, con el objetivo de promover mejoras en la salud física y mental de los pacientes.

Descritores: Cáncer de próstata; Calidad de vida; Calidad del sueño.

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Introduction

Prostate cancer (CaP) is considered the second most common type in men, with the most frequent diagnosis in 87 countries, being the fifth leading cause of cancer death. It is estimated that approximately one million men worldwide were diagnosed with CaP in 2012, corresponding to 15% of cancers in men, of which about 70% of cases occurred in the most developed regions.¹⁻²

The prostate is a single gland with secretory function present in men. The prostatic fluid has basic pH, being important in the process of vaginal alkalization and conferring the milky aspect of the semen and its characteristic odor. In addition, it is possible that it alkalizes the other male seminal fluids, improving sperm mobility performance.³⁻⁵

The risk factors identified for the disease are age-related, with 62% of new cases in men over 65 years of age; heredity in approximately 25% of individuals with a family history of CaP; and ethnicity, being 1.6 times more common in blacks compared to whites.⁴

Aspects related to age, race, family history, ingestion of red meat and fats are some factors considered at risk for the development of the disease, which, in advanced stages, is related to the act of urination such as, difficulty in urination, polaciuria, dysuria and nicturiuria, which may cause bone pain, generalized infection or renal failure.⁴

Prostate neoplasia is a disease with a high incidence in men being of slow evolution and, in most cases, could be avoided by an early diagnosis. Often, these neoplasms have an impact on the multiple dimensions of health-related quality of life (HRQoL). In the case of cancer which is a multifactorial disease, it can provoke a range of organic and emotional reactions, triggering feelings and imbalances that impact on the reduction in HRQoL of people with cancer. Recently, studies have analyzed HRQoL in cases of prostate cancer in order to provide the best possible information about the consequences that treatments and diagnoses can cause, but despite the problems that the disease can cause, little attention is focused on the psychological well-being of patients affected by this neoplasm.⁶

The term quality of life (QoL) refers to a general concept, while in the quality of life related to health (HRQoL) is focused on the implications and aspects more directly associated with diseases, is the perception of the individual about his own state of health. Thus, the need for health professionals to develop a comprehensive care strategy for these individuals in overcoming this painful trajectory emerges, enabling access to treatments and care that minimize injuries, reflecting a higher quality of life for patients.⁷

Thus, this study aims to analyze the scientific production in relation to the quality of sleep and life of men undergoing treatment for prostate cancer.

Method

The methodology used to elaborate this work was the literature review. This comprises a survey of all bibliography already published in the form of books, magazines, newspapers, monographs, theses, single publications and cartographic material. Its purpose is to put the researcher in direct contact with everything that has been written on a given subject.

Data were collected between September and October 2022 in the Electronic Library Scientific Electronic Library Online (SciELO), Google Scholar and in the Nursing Databases (BDENF). For the search, the following Keywords were used: Prostate cancer, Quality of life of men with prostate cancer, importance of sleep in men with prostate cancer, prevention and treatment of prostate cancer.

Articles published in Portuguese (Brazil) were included, available online and in full. Those published in English and irrelevant with the theme were excluded.

Initially, an exploratory reading of the titles and abstracts was carried out to recognize the articles that met the eligibility criteria. Then, the previously selected articles were read in full, and they were resubmitted to the inclusion and exclusion criteria.

After the selection of the final sample, the following variables were extracted from the publications and gathered to the sinoptic table of this review: year of publication, webqualis of the journal, journal.

Results and Discussion

Fifty-six publications were found, 15 of which were eliminated by the initial reading of the titles. In the reading of the abstracts of the 41 remaining articles according to the inclusion/exclusion criteria, 10 articles were eliminated: 3 studies because the preoperative nursing visit was not applied, 2 studies conducted by health professionals other than nurses, 2 studies because they had no direct relationship with the theme and 3 studies were outside the time frame. The remaining 31 articles were read in full and kept in the final sample of this review.

Prostate Cancer: Concepts and Incidence in Brazil and worldwide

Prostate cancer is the most common malignancy among men, according to the National Cancer Institute (INCA), which in its 2014 estimate pointed out 68,800 new cases of prostate cancer. In some individuals, for reasons not well known, the prostate grows faster, in others the increase is slower and from 50 years on this growth is more accelerated in the early stages tumors are generally asymptomatic and discovered due to the elevation of the Psa Specific Prostate Antigen, altered rectal touch (indispensable) or incidentally after surgical treatment of prostatic hyperplasia.⁹

It is known that the prostate is a gland that is part of the male reproductive system. It is located below the bladder, involving the

urethra and in front of the rehest. The prostate gland has the function of eliminating urine that accumulates in the bladder and is also responsible for the production of sperm that conducts sperm through the urethral canal during sexual intercourse.¹⁰

Prostate cancer is the fifth most prevalent in the world in both sexes and the second in men, behind only skin cancer. Developed countries have the highest incidence rates compared to underdeveloped countries and as the countries with Asian populations will be approached ahead.¹² In Brazil, prostate cancer is also the most common, disregarding the skin cancer. The National Cancer Institute (INCA) estimated that in 2016, there were almost 62,000 new cases of this type of tumor, corresponding to approximately 23% of all cancers diagnosed in men in the country. In comparative terms, the South and Southeast regions have the highest number of cases, with a rate of 90 new cases per 100,000 inhabitants.¹¹

In terms of mortality, it is the second leading cause of cancer death. According to INCA, in 2013, there were 13,772 deaths due to prostate câncer.¹¹ Since the beginning of the application of PSA (Prostate Specific Antigen) in the 1980s, as a form of early diagnosis, the numbers have been falling, especially in the older age groups. In addition to early diagnosis, more incised treatment has contributed greatly to these numbers. The rate dropped from 31 deaths per 100,000 men in 1975 to 23 deaths in 2005. Overall, the mortality rate is also higher in developed countries, especially in the American continente.¹²

Diagnosis and Treatment of Prostate Cancer

In the initial phase of prostate cancer, it arises silently, sometimes asymptomatic, and may present as benign growth of the prostate and as a symptom only difficulty when urinating. However, in the advanced stage, cancer may reveal bone pain, difficulty urinating or, at worst, characterized by generalized infection or renal failure.¹³

For the World Health Organization (WHO), the strategy for early detection includes early diagnosis, when it presents initial signs of the disease, and that which does not present any symptoms, which is screening. The best methods for investigation are rectal examinations and Prostate-Specific Antigens (PSA).¹³

The main diagnostic methods for the identification or screening of PC are the performance of digital gland touch examination, specific prostatic antigen (PSA) dosage, transrectal ultrasound, biopsy and histopathological study.² Rectal touch together with psa dosage may show evidence of the disease, thus showing pelvic ultrasound, or transrectal prostatic ultrasound; the results will indicate whether or not there is a need for a transrectal prostatic biopsy.¹ Biopsy is advised when PSA levels exceed 4 mg/ml. However, the diagnosis is only made after confirmation by means of a histopathological study performed with the tissue sample obtained by prostate biopsy.¹⁴

Studies show that prostate cancer manifests itself mainly above 50 years of age and, with increased life expectancy, is considered very important in the data presented on mortality among men, representing a serious public health problem. It is believed that the incidence growth also occurs due to a better quality in the identification of subclinical cases and the ease currently of performing the diagnostic test of Prostate Specific Antigen (PSA). However, the simultaneous increase in mortality indicates that the increase in incidence cannot be accurately explained by a bias induced by the increased proportion of new cases diagnosed early.¹⁵

Appropriate treatment against prostate cancer should be individualized for each patient and takes into account the tumor stage, age, prostate size, histological degree, comorbidities, life expectancy, patient longings and available technical resources.¹⁶

Among the options, we have surgery, radiotherapy, hormone therapy and combinations of these. Chemotherapy is not so common. Prostate cancer, in some patients, has a practically "innocuous" growth, that is, that will not lead the patient to death. In some of these cases, one can choose not to treat and only monitor tumor development over time.¹⁷

Quality of life of patients diagnosed with Prostate Cancer

Since a long time cancer is a disease that brings a feeling of death sentence for those who receive the diagnosis but today with the advances of science and technology, we can provide a higher quality of life than the past, so patients who undergo treatment and rehabilitation of prostate cancer can rather exceed the expectations of society as a whole and live a totally normal life, more what advances provide the cancer patient is not only more years his life, but the quality of life tied to them. There are several definitions for health-related quality of life (HRQOL), and what draws the most attention is the consensus of the definition established by the World Health Organization (WHO), which refers to quality of life (QR) as the perception of the person himself in the cultural context and sense of values in which he is inserted.²⁹

More like we can establish systematic criteria for a research in this item, the first observations were described in 1970 and were evaluative instruments for (QoL), since then the instruments have been improved for better evaluation and reliable data collection, being generic instruments and instruments. Generic instruments assess general aspects of life, and can be used in people with fully healthy lives and people with morbidity or pathologies already established, while specific instruments are aimed at evaluating people with specific diseases, thus having a more specific direction of the same (QoL), also covering the treatment and the individual's own prognosis.³⁰

Despite the high incidence of cases of prostate cancer and the high mortality caused by cancer, it has been taking its place in areas of research and development of mechanisms that enable its diagnosis and early treatment recently, but it is important to highlight that

technology has been bringing more alternatives for resolution of problems involving prostate cancer, such as less aggressive medications, this evolution contributes significantly to the daily well-being of cancer patients. Prostate cancer is a slow-growing tumor that often cause only discomfort in the urinary tract causing pain or burning when urinating, weak or intermittent urinary jet, dripping urine after urination, excessive urination at night, presence of blood in the urine or semen, algia (pain) during ejaculation are some signs and symptoms that should light the warning signal, mainly in patients over 65 years of age.³¹ Thinking that symptoms can be normal, prostate cancer patients tend to seek medical attention only when symptoms become more severe, when they begin to drastically affect their quality of life and well-being in everyday life. This attitude can hinder treatment, decrease the chances of cure and make prognosis more complex. Thus, it is important to raise awareness about the importance of male health, so that there is effective health promotion, prevention and rehabilitation of injuries in a timely manner for patients with (CaP).²⁸ Therefore it is so important to perform preventive tests periodically for early detection of the tumor, which can increase the chance of cure by up to 90%, increase the perspective of life and provide quality of life to these patients.³¹

The tests recommended for the detection of prostate cancer are respectively, rectal examination and prostate-specific antigen (PSA) examination, if there is alteration of the (PSA) two other tests being them, imaging as ultrasound to enable visualization of the prostate and biopsy examination that allows the collection of fragments of the prostate gland to be analyzed by laboratory.²⁹

The diagnosis of Cancer is always accompanied by fear, prejudice and stigmas, all this leads the patient to a state of anger, discouragement and anxiety causing him to feel inadequate to live in group, family and society, causes his vision of himself to be modified by lowering his self-esteem and thus can affect from his ability to perform simple tasks of his day-to-day to his capacity for sexual attraction.¹⁸

We can see that the diagnosis of Cancer directly affects the life of those who receive it, but with a trained and prepared multidisciplinary team we can provide patients diagnosed with Prostate Cancer with quality of life and physical and emotional well-being.¹⁸ Firstly, the multidisciplinary team involved in the treatment should understand a little more about their feelings regarding the diagnosis, this will allow us to draw a specific line of care for each patient, second step is to use for the patient their values, beliefs and culture¹⁹, because research indicates that all these aspects can positively influence quality of life and bring well-being to cancer patients, another aspect to be addressed is the importance of strengthening family bonds during the treatment process.²²

Recent research shows that it is entirely possible to provide QoL for patients undergoing prostate cancer treatment, whether localized or metastatic, what the research points out is basically the difference of this QoL, because patients who are in the advanced stage of the

disease are mostly recommended hormone therapy, which makes indispensable a differentiated approach with regard to qoL of these specific patients, because hormone therapy in the advanced phase of the disease has the palliative purpose, that is, it improves the quality of life and relieves pain. We should point out that hormone therapy can bring various symptoms, being associated with hot flashes, weight gain, fatigue, sleep disorders and sexual dysfunction.¹⁸

Thus, the choice of treatment has been based not only on the disease and its possible prognosis, but also on the quality of life of the patient while using these chemotherapies.²⁴

An important issue when it comes to the quality of life of patients diagnosed with prostate cancer is Faith/Religiosity²⁰, studies indicate that most patients have Faith and cling to it so that there is a cure or even the relief of pain, in any case, the health professional needs to be able to respect this spirituality, because everything that is good for the patient should be taken into account during the treatment, recovery and rehabilitation of the same.²¹

Importance of sleep in patients with prostate cancer

When we talk about prostate cancer, we first need to understand that this type of cancer is one of the ones that cause the most deaths in the male population, 1.1 million new cases in 2012, this data can be explained by the difficulty that Public Health encounters in the face of screening of possible cases, which is performed with rectal touch and Prostate Specific Antigen (PSA), as already mentioned.²⁵

In the other way, life expectancy increases dramatically when diagnosed in a timely manner for the initiation of treatment, also raising the chance of improvement in the evolution of the patient's clinical condition. Other aspects that should be taken into account are the risk factors for prostate cancer, being them, family history, age, black race, ethnicity, high protein diet, sausages and lifestyle.²⁷

Studies conducted with elderly with metastasis showed that 62% of this population had some sleep-related disorder, both to initiate it and to maintain it.²⁷ When we looked at international research that evaluated sleep disorder with 861 patients undergoing prostate cancer treatment with radiotherapy, brachytherapy or radical prostatectomy, we realized that those who received radiotherapy had high levels of depression, fatigue, insomnia and a worse quality of life. These data get even worse when it comes to patients with stage III or IV prostate cancer which makes it more difficult to maintain a satisfactory quality of life during treatment.²⁶

Final Considerations

Through the research conducted, it was observed that prostate cancer is the second most common type of cancer in men over 50 years of age in Brazil and requires interventions capable of preventing and detecting it effectively in the initial phase. Improving the quality of services, such as reducing waiting times for care, different schedules

for workers and respect for privacy are some of the strategies that should be used in order to capture this population for prostate cancer prevention.

Further studies should be conducted on how to increase men's support for educational groups and remove sociocultural barriers and existing prejudices regarding this disease in this population group, so that prostatic changes can be diagnosed early, following the appropriate treatment and preventing prostate cancer from progressing and causing greater harm.

Therefore, it is concluded that further studies are still needed on this theme, in order to bring a better understanding of the aspects involved in this disease, thus enabling a more effective prevention, contributing to the reduction of the costs of treatment of the disease, seeking to bring more and more improvements in the quality of life of men affected by this disease.

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