NURSING DIAGNOSES IDENTIFIED IN ELDERLY MEN SUBMITTED TO PROSTATECTOMY
DIAGNÓSTICOS DE ENFERMAGEM IDENTIFICADOS EM HOMENS IDOSOS SUBMETIDOS À PROSTATECTOMIA
DIAGNÓSTICOS DE ENFERMERÍA IDENTIFICADOS EN HOMBRES ANCIANOS SOMETIDOS A LA PROSTATECTOMIA

Izadora Silva Dourado¹, Jessica Bastos Nunes², Tatiana de Almeida Bahia Sena³, Anderson Reis de Sousa⁴, Andrey Ferreira Silva⁵, Isabella Félix Meira Araújo⁶, Josias Alves de Oliveira⁷, Álvaro Pereira⁸

ABSTRACT

Objective: to describe the Nursing diagnoses evidenced in elderly men in the postoperative period of prostatectomy. **Method:** this is a descriptive, mixed study with 50 men undergoing prostatectomy surgery in a philanthropic hospital. The following steps were used: individual interview, complete physical examination, reading of the chart, identification of problems of Nursing and evaluation by experts for the survey of Nursing diagnoses. The taxonomy of NANDA International was taken as a basis. The data was organized in NVIVO11 software, presented in figures and tables. **Results:** diagnoses were identified, sedentary lifestyle, risk-prone health behavior, ineffective health control, frail elderly syndrome, risk of infection, impaired dentition, impaired skin integrity, risk of urinary tract injury, risk of impaired oral mucosa, risk of contamination and ineffective sexuality pattern. **Conclusion:** it is suggested the development of specialized nursing interventions aimed at the integral care of elderly men's health in the aging process, focusing on ensuring safety in the surgical process and its complications, urological, affective, sexual, expanded health control. **Descriptors:** Men's Health; Health of the Elderly; Prostatectomy; Nursing Diagnosis; Nursing Care; Urologic Neoplasms.

RESUMO

Objetivo: descrever os diagnósticos de Enfermagem evidenciados em homens idosos no pós-operatório de prostatectomia. **Método:** trata-se de um estudo misto, descritivo, com 50 homens submetidos à cirurgia de prostatectomia em um hospital filantrópico. Utilizaram-se as etapas: entrevista individual, exame físico completo, leitura de prontuário, identificação de problemas de Enfermagem e avaliação por *experts* para o levantamento dos diagnósticos de Enfermagem. Tomou-se como base a taxonomia da NANDA Internacional. Organizaram-se os dados no *software* NVIVO11, apresentando-os em figuras e tabelas. **Resultados:** identificaram-se os diagnósticos, estilo de vida sedentário, comportamento de saúde propenso a risco, controle ineficaz da saúde, síndrome do idoso frágil, risco de infecção, dentição prejudicada, integridade da pele prejudicada, risco de lesão no trato urinário, risco de mucosa oral prejudicada, risco de contaminação e padrão de sexualidade ineficaz. **Conclusão:** sugere-se o desenvolvimento de intervenções de enfermagem especializadas com direcionamento ao cuidado integral da saúde do homem idoso no processo de envelhecimento, com atenção focada na garantia da segurança no processo cirúrgico e suas complicações, atenção urológica, afetiva, sexual, promoção e controle da saúde ampliada. **Descritores:** Saúde do Homem; Saúde do Idoso; Prostatectomia; Diagnóstico de Enfermagem; Cuidados de Enfermagem; Neoplasias Urológicas.

RESUMEN

Objetivo: describir los diagnósticos de Enfermería evidenciados en hombres ancianos en el postoperatorio de prostatectomía. **Método:** se trata de un estudio mixto, descriptivo, con 50 hombres sometidos a la cirugía de prostatectomía en un hospital filantrópico. Se utilizaron las etapas: entrevista individual, examen físico completo, lectura de prontuario, identificación de problemas de Enfermería y evaluación por expertos para el levantamiento de los diagnósticos de Enfermería. Se tomó como base la taxonomía de la NANDA Internacional. Se organizaron los datos en el *software* NVIVO11, presentándolos en figuras y tablas. **Resultados:** se identificaron los diagnósticos, estilo de vida sedentario, comportamiento de salud propenso a riesgo, control ineficaz de la salud, síndrome del anciano frágil, riesgo de infección, dentición perjudicial, integridad de la piel perjudicada, riesgo de lesión en el tracto urinario, riesgo de mucosa oral perjudicada, riesgo de contaminación y patrón de sexualidad ineficaz. **Conclusión:** se sugiere el desarrollo de intervenciones de enfermería especializadas con direccionamiento al cuidado integral de la salud del hombre mayor en el proceso de envejecimiento, con atención enfocada en la garantía de la seguridad en el proceso quirúrgico y sus complicaciones, atención urológica, afectiva, sexual, promoción y control de la salud ampliada. **Descriptores:** Salud del Hombre; Salud del Anciano; Prostatectomía; Diagnóstico de Enfermería; Atención de Enfermería; Neoplasias Urológicas.

^{1,2,3}Nobre de Feira de Santana College / FAN. Feira de Santana (BA). Brazil. ORCID: <https://orcid.org/0000-0002-4498-8423> ORCID: <https://orcid.org/0000-0003-3956-5036> ORCID: <https://orcid.org/0000-0001-9446-0160> ^{4,5,6,7,8}Federal University of Bahia/UFBA. Salvador (BA). Brazil. ORCID: <https://orcid.org/0000-0001-8534-1960> ORCID: <https://orcid.org/0000-0002-1038-7443> ORCID: <https://orcid.org/0000-0002-0631-994X> ORCID: <https://orcid.org/0000-0002-5100-5536> ORCID: <https://orcid.org/0000-0003-1899-7374>

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INTRODUCTION

It is known that the Brazilian demography, with consequent epidemiological transition, has contributed to the increase of the life expectancy and the aging of the population. Based on this scenario, we highlight an important reduction in morbidity due to infectious, parasitic and deficient diseases and a considerable increase in the prevalence of degenerative and neoplastic diseases in the country. However, although there is an increase in the last years of elderly individuals in Brazil, which, due to the predominance of women in the long-lived phase, the demands of men have been forgotten, considering the special conditions of illness and development specific interventions.¹

It is understood from the scientific literature that men seek less and are less expressive in health services when compared to women, especially in actions that focus on health promotion and disease prevention, but this does not mean that they become ill.² It is added, in agreement, that a study conducted in the Federal District, Brasília, Brazil, involving elderly men attending a Basic Health Unit, revealed the absence of promotion measures adopted by the male public, with only the carrying out of examinations and consultations clinics.³

It generates, for this non-prioritization in the search for health care, a significant impact on knowledge and general and specific guidelines that contribute to the expansion of quality of life. In the context of public health care policies for men in Brazil, the National Policy for Comprehensive Health Care for Man was implemented as a way of proposing health care measures and the production of care.⁴

It is observed, identifying the singularities of the elderly men, who are permeated by constructions of gender and masculinities, the importance of the development of investigations on the subject.³ It is described, among these peculiarities, the prostatic hyperplasia, considered a problematic of the aging, being able to entail commitment of the urinary flow and the passage of the urine and, consequently, the well-being and the quality of life and health of men in the stage of the old age.⁵

According to the Cancer Institute, prostate cancer is the second most common among men, with mortality data of 14.06 deaths per 100,000 men in 2013, and expectation of new cases, for the 2018 biennium -2019, of approximately 68,220, corresponding to an estimated risk of 66.12 per 100,000 men, with rates of 98.85 per hundred thousand in the South; 69.83, in the Southeast region; 66, 75, in the Center-West region; 56.17, in the Northeast region and 29.41 in the Northern region.⁶

For prostate cancer, the age of 65 or older is the only well-established risk factor, followed by factors associated with family history, black skin, and the existing lifestyle. Research in the last decade has shown a major advance in prostate cancer studies, such as understanding the family genetic base, which may lead to targeted screening, since there is a high rate of over diagnoses and unnecessary prostate cancer biopsies.⁷

One of the modalities for the treatment of prostate cancer is prostatectomy, a surgical procedure in which the prostate is withdrawn, partially or completely, from the patient. However, it is noted that, related to prostatectomy, repercussions on physical and psychoemotional health have been reported in the literature, causing different disorganizations for the man, in the conjugal and family relationship, thus referring to a differentiated attention on the part of the professionals, especially those of Nursing.

It is possible, with regard to the management and coordination of care, specifically that performed by nurses to patients and their families, to promote a competent, vigilant, resolute and individualized professional job. It is also possible, through the development of a taxonomy composed of defined evidences, to provide a substantial basis for conducting the assistance. As a basis, these assumptions that emerge from the formulation of nursing diagnoses structured and standardized by the *North American Nursing Diagnosis Association (NANDA) Internacional*®.⁸

It is explained that it is from the nursing diagnosis that the clinic expands, making it possible to build quality professional care, avoiding mistakes in practice and ensuring increased work efficiency and nursing safety. In addition, based on the Nursing Process (NP), the Nursing history, nursing diagnoses, planning, implementation and evaluation are systematically structured as a means of integrating care and ensuring decision.⁹⁻¹⁰

Thus, the interest in carrying out this study is justified because of the progressive aging of the Brazilian population and the inexpressiveness of research involving the nursing diagnosis with the focus on elderly men undergoing prostatectomy. Therefore, this issue is very relevant to the health area due to the need to work with the male population for which related studies are still incipient.

It was sought to investigate, in view of the problem presented and considering the need for the development of specialized care in Nursing care for the elderly affected by prostate problems: "Which Nursing diagnoses are identified

in elderly men in the postoperative period of prostatectomy?”.

OBJECTIVE

- To describe the Nursing diagnoses evidenced in elderly men in the postoperative period of prostatectomy.

METHOD

This is a mixed, descriptive study, linked to a matrix project titled "Attention to the health of men in a scenario of the Brazilian Northeast", developed by the Study Group, Research and Extension in Masculinities and Men's Health, of the undergraduate course in Nursing at Noble School of Feira de Santana, Bahia, Brazil.

A public hospital located in the municipality of Feira de Santana, Bahia, Brazil, was set up as a research scenario. The service, as a reference in Urology, Nephrology and transplantation, is exclusive in the treatment of men with uro-oncological problems.

It is reported that 50 men, aged between 65 and 79 years, of race/color self-referenced as black, with a fundamental level of schooling, married and without work activities, since they are already retired, participated in the study. Included were men who were 60 years of age or older and were on the third postoperative day of prostatectomy. Men who had difficulty verbalizing their experience, those who had pain and other hemodynamic or emotional instabilities, and expressing suffering through crying and sadness, were excluded from the researchers visits.

The men in the hospital unit in the preoperative period were informed of the research project, in addition to being invited to participate in the study. A free and informed consent term (FICT) for the signature was accepted, in agreement with the research subjects. Then, the most convenient days and times for the interview were scheduled.

The data collection was developed in four stages: in the first, an individual interview was conducted aimed at contemplating the Nursing history, guided by a script of Nursing Consultation; in the second, a complete physical examination

was performed; in the third stage, the medical records were read carefully and, in the fourth and last stage, the Nursing problems were identified for the survey of Nursing diagnoses, based on the use of the domain and class model for the formulation of diagnoses proposed by NANDA International®.

For the treatment and organization of the data, the support of the NVIVO 11 software was used, from which the categories of analysis were identified. Next was the interpretation based on clinical judgment and critical reasoning for the identification of Nursing diagnoses, which were later classified and organized based on the NANDA taxonomy (2015).

The most frequent nursing diagnoses were submitted to the evaluation by ten expert judges, being five nurses linked to the hospital service, working in the clinical, surgical and oncological hospitalization units and five research nurses, masters and doctors in the field, linked to three higher education institutions, in order to carry out the selection, grouping and validation for the composition of the sample. Finally, a comparison was made between the Nursing Diagnoses obtained through the collection of data with the theoretical reference, which allowed the elaboration of the final text.

The research project was approved by the Research Ethics Committee, under the number 1: 1,251,941, in accordance with the precepts of Bioethics, through the proposals presented in Resolution 466/12 of the National Health Council. , to maintain the rigor of the research, by the study, the criteria proposed by the *Revised Standards for Quality Improvement Reporting Excellence, SQUIRE 2*.

RESULTS

The process of surveying the diagnoses was finalized with a list of 32 Nursing diagnoses identified in the first survey, in the patients submitted to the evaluation, with a mean of 12 per patient.

The Nursing diagnoses that presented the evaluation index presented in table 1 below are listed for the purpose of deepening.

Table 1. Distribution of the general sample of NANDA nursing diagnoses presented in the elderly men submitted to prostatectomy during the evaluations. Feira de Santana (BA), Brazil, 2016.

Class	Nursing Diagnosis	n	%
Health Perception	Sedentary lifestyle	43	86
Health Control	Risk-prone health behavior	42	84
Health Control	Ineffective health control	09	18
Health Control	Ineffective protection	41	82
Health Control	Fragile elderly syndrome	40	80
Health Control	Risk of frail elderly syndrome	10	20
Ingestion	Unbalanced nutrition: less than bodily needs	09	18
Metabolism	Risk of unstable glycemia	09	18
Urinary function	Impaired urinary output	13	26
Gastrointestinal Function	Constipation	12	24
Gastrointestinal Function	Diarrhea	04	8
Sleep/Rest	Impaired sleep pattern	10	20
Activity/Exercise	Impaired transferability	04	8
Activity/Exercise	Impaired walking	15	30
Cardiovascular Responses / Pulmonares	Ineffective respiratory pattern	09	18
Self-care	Deficit of self-care for intimate hygiene	03	6
Cognition	Poor knowledge	03	6
Sexual function	Sexual dysfunction	06	12
Sexual function	Ineffective Sexuality Pattern	45	90
Post-trauma response	Risk of stress syndrome due to change	12	24
Coping response	Anxiety related to death	03	6
Coping response	Ineffective coping	15	30
Infection	Risk of infection	50	100
Physical Injury	Impaired Dentition	47	94
Physical Injury	Impaired skin integrity	50	100
Physical Injury	Risk of injury to the urinary tract	50	100
Physical Injury	Risk of impaired oral mucosa	47	94
Physical Injury	Impaired oral mucosa	10	20
Environmental risks	Risk of contamination	50	100
Physical Comfort	Impaired Comfort	20	40
Physical Comfort	Acute pain	24	48
Physical Comfort	Chronic pain	09	18

From the analysis and validation, in the elderly men submitted to prostatectomy, arranged in figure 1 were identified.

Description of domains	Domain Analysis
01: Health promotion	Rated
02: Nutrition	Rated
03: Elimination and exchange	Rated
04: Activity / rest	Rated
05: Perception / cognition	Rated
06: Self-perception	Not Rated
07: Roles and relationships	Not Rated
08: Sexuality	Rated
09: Confrontation / Stress Tolerance	Rated
10: Principles of life	Not Rated
11: Security / Protection	Rated
12: Comfort	Rated
13: Growth / Development	Not Rated

Figure 1. Distribution of the domains of NANDA nursing diagnoses presented in elderly men submitted to prostatectomy (n = 13). Feira de Santana (BA), Brazil, 2016.

They were evidenced among the classes of nursing diagnoses defined by NANDA and identified in elderly men undergoing prostatectomy: health control; ingestion; metabolism; urinary function; gastrointestinal function; sleep and rest; activity

and exercise; cardiovascular / pulmonary responses; cognition; sexual function; post-trauma response; coping response; response and physical injury, shown in Figure 2, below..

Class description	Class analysis
01: Perception of health	Rated
02: Health Control	Rated
03: Sexual Function	Rated
04: Physical Injury	Rated
05: Environmental Risks	Rated
06: Infection	Rated

Figure 2. Distribution of NANDA nursing diagnosis classes presented in elderly men submitted to prostatectomy (n = 13). Feira de Santana (BA), Brazil, 2016.

Nursing diagnoses selected and expressed through the link with the domains are presented as follows: in domain 1, referring to health promotion, which is defined by NANDA (2015) as the perception of well-being or normality of functions and of strategies used to maintain control and improve this well-being or normality of function, four nursing diagnoses were

identified. One of the diagnoses is related to the health perception class (sedentary lifestyle), and the others are linked to the health control class (risk-prone health behavior, ineffective health control, and frail elderly syndrome), both expressed in table 2, below.

Table 2. Distribution of NANDA nursing diagnoses presented in elderly men submitted to prostatectomy, referring to the domain 01- Health promotion. Feira de Santana (BA), Brazil, 2016.

Class	Nursing Diagnosis	n	%
Perception of health	Sedentary lifestyle	43	86
Health Control	Risk-prone health behavior	42	84
Health Control	Ineffective health control	41	82
Health Control	Frail elderly syndrome	40	80

It was verified, in domain 8, referring to sexuality, defined by NANDA (2015), identified in table 3.

Table 3. Distribution of NANDA nursing diagnoses presented in elderly men submitted to prostatectomy referring to domain 08 - Sexuality. Feira de Santana (BA), Brazil, 2016.

Class	Nursing Diagnosis	N	%
Sexual function	Ineffective Sexuality Pattern	45	90

Safety/protection domain 11, which is defined by NANDA (2015), has been found to be safe from

danger, representing six diagnoses presented in table 4.

Table 4. Distribution of NANDA nursing diagnoses presented in elderly men submitted to prostatectomy referring to the 11-Safety / Protection domain. Feira de Santana (BA), Brazil, 2016.

Class	Nursing Diagnosis	N	%
Infection	Risk of infection	50	100
Physical Injury	Impaired Dentition	47	94
Physical Injury	Impaired skin integrity	50	100
Physical Injury	Risk of injury to the urinary tract	50	100
Physical Injury	Risk of impaired oral mucosa	26	52
Environmental risks	Risk of contamination	50	100

DISCUSSION

It is revealed that the nursing diagnoses evidenced are related, in part, to the aspects closely related to the surgical treatment of prostatectomy, but also include those related to

the health situation and the self care of the elderly men. As a finding, the presence of the Nursing diagnosis was risk-prone health behavior (84%), understood by NANDA as the impaired ability to modify lifestyle and / or actions in order to improve the level of well-being.

This diagnosis can be presented in individuals whose defining characteristics are failure to act in order to prevent health problems and achieve a sense of ideal control, substance abuse, smoking, relating them to insufficient social support, inadequate understanding, presence of stressors and negative perception of the recommended health care strategy. It can be evidenced, according to the taxonomy, in populations at risk, as economically disadvantaged and with family history of alcoholism.⁸

In a study that analyzed risk behaviors for men's health in the southern region of Brazil, a high prevalence was found, associated with sociodemographic factors, related to work, schooling, economic aspects, such as family income and occupational status; as well as factors related to health, such as the presence or absence of a health plan, abusive alcohol consumption, smoking, inadequate diet, inadequate vaccination status, failure to perform routine exams, lack of leisure activities and lack of practice of activity, without considering occupational activities, locomotion or related to domestic work.¹¹

The presence of the Nursing diagnosis was verified in correlation with the diagnosis of risk-prone behavior (82%), which NANDA defines as the standard of regulation and integration into daily life of a therapeutic regimen for the treatment of diseases and their sequelae that becomes unsatisfactory to achieve specific health goals, making economically disadvantaged persons the most affected. For this diagnosis, defining characteristics such as ineffective daily life choices to reach health goals, failure to act to reduce risk factors, and inclusion of treatment regimens in life and factors related to poor knowledge about the regimen excessive demands, family conflicts, feelings of impotence, among others.⁹ The defining characteristics regarding the related factors in the studied target population were verified.

In the case of prostate cancer, the epidemiological study carried out in Paraná, Brazil, which outlined the profile of men with prostate cancer attended at a university hospital, verified the presence of a family history of the disease, the use of health care in primary and tertiary care, requiring therapeutic interventions, such as prostatectomy. The delay in the male search for the service was also revealed by the findings, showing a time greater than one year after the onset of symptoms, such as the symptoms of the lower urinary tract, which supports the difficulty presented by men experiencing cancer of prostate in control of your health.¹²

It can be justified, by this association as the careless health of the men, the fragility in the care with the body, situation that evidenced the

high prevalence of men with the diagnosis of Impaired dentition (94%). It is pointed out, in a study carried out with elderly people in long-stay institutions in Barcelona, Spain and Brazil, for the poor oral health condition, associated to the high prevalence of total and partial tooth loss and the presence of periodontal disease, indicating a higher vulnerability of this public.¹³ It is emphasized that this diagnosis is not directly associated with prostatectomy, but, in the sense of developing comprehensive care, it is necessary for the individual to be analyzed in its entirety.

It is noticed that, as a result of the surgical intervention of resection of the prostate, men can suffer repercussions before the invasive characteristic of the procedure. Nurses diagnosed with prostatectomy: the risk of infection (100%); risk of contamination (100%); Impaired skin integrity (100%); risk of injury to the urinary tract (100%); risk of impaired oral mucosa (94%) and ineffective sexuality pattern (90%), and the latter may be related to both the pre-operative context and the surgical act.

A cross-sectional study carried out in a hospital in Rio Grande do Norte, Brazil, which raised Nursing diagnoses in patients submitted to prostatectomy, found divergent findings, such as impaired walking, self-care deficit in the bath, hygiene intimate and dressing, poor fluid volume, constipation, acute pain, impaired sleep pattern and poor knowledge. Based on the findings found by the study, the fragility of the process of surveying the diagnoses by the professionals, as well as the theoretical deepening to subsidize the interventions.¹⁴

Attention is drawn to the appearance of the diagnoses evidenced in this study for the possibility of complications present in patients undergoing prostatectomy, such as scar tissue blockage, bladder spasms, urinary incontinence, unreduced urethral catheter exit and sexual dysfunction.¹⁵ Urinary incontinence and erectile dysfunction are the main compromising factors in the quality of life of men after radical prostatectomy.¹⁶

It is possible to relate the possibility of the occurrence of these complications with the appearance of the Nursing diagnosis risk of injury to the urinary tract and impaired integrity of the skin, both identified in 100% of the patients in this study. These diagnoses were based on the evidence of the use of peripheral venous catheters, Foley bladder catheter and surgical incision, justifying the diagnosis of infection risk and risk of contamination, also present in 100% of the evaluated cases.

In view of this possibility, measures should be implemented to prevent complications such as encouraging fluid intake, delayed bladder catheterization, bladder irrigation, water control,

pain control and blood clot formation in the urinary tract, perineal exercises, supervision and skin care and invasive devices, as well as drug administration. In this sense, the literature also indicates the need to provide targeted assistance for risk control through the practice of safe communication, control of signs and symptoms of urinary tract infection, surgical dressing, hospital discharge monitoring, which should be implemented in care.¹⁷

The identification of the diagnosis of oral mucosa risk (94%) was related to the risk factors presented in men submitted to prostatectomy, among them: alcohol consumption; smoking; inadequate oral hygiene and inadequate nutrition. It is noted that the presence of this diagnosis is related to the self-care deficit, also associated with the aging process, as evidenced in a study with elderly admitted to a hospital unit in the Mid-West region of Brazil.¹⁸

It is recalled that the choice to perform prostate cancer treatment may depend on risk factors that involve progression, mortality, aspects related to urinary, sexual, basal, and bowel functions, and those linked to patients' preferences, which include perspectives on well-being and quality of life.¹⁷ It is known, as far as prostatectomy is concerned, a therapeutic resource to which the public of this study was submitted, that it is not free from complications, since intraoperative blood loss, lymphocele and reoperation may occur. Patient and family problems are involved in prostate surgery, through the presence of functional, urological and sexual aspects that make it easier to clarify the complications of the postoperative period.¹⁷

In the case of radical prostatectomy, the main complications are related to urethral stenosis, urinary incontinence and erectile dysfunction, with the latter two being the main compromising factors of quality of life after radical prostatectomy.¹⁶

A longitudinal study was carried out with 120 men, in a Urology sector of a public hospital in the State of São Paulo, Brazil, predictors of well-being and quality of life of men undergoing prostatectomy. Based on the findings, surgery time, problem-focused coping and anxiety were subjective, and the emotion-focused coping was positive; pain, anxiety, and depression were shown to be negative quality of life. In this context, conjugal satisfaction was established as a predictor for the variables presented.¹⁹

It is believed, therefore, that, in the possession of this knowledge, nurses should redirect their practice better, seeking to act on the risk factors and the social determinants of health, with a focus centered on male education for adopting more healthy. It is also important to emphasize the need for the nursing team to consciously and

critically perform strategies for the prevention and screening of prostate cancer so that men do not undergo early intervention.

As regards the aspect of male sexuality, as a nursing diagnosis, the pattern of ineffective sexuality (90%) was understood by NANDA as an expression of concern about sexuality itself, which may be characterized by change in sexual activity and behavior and in the relationship with the significant person, with the inclusion of conflict of values, difficulty with activity and change in sexual role, as well as factors related to absence of privacy, conflicts with sexual orientation, variation of sexual preferences, insufficient knowledge about alternatives related to sexuality, impaired relationships, among others.⁸

Social and affective relationships can be altered by the experiences of men with prostate cancer due to the sequelae, mainly the treatment of radical prostatectomy, such as urinary incontinence and sexual dysfunction. Normally, in the first case, situations of embarrassment occur, causing daily changes, such as the use of diapers and the shame that comes from the lack of control of the physiological state of voiding which men say is an embarrassing and stressful situation.²⁰

It can be seen that erectile dysfunction is one of the sequelae that can affect men due to oncological treatment, and ejaculatory dysfunction and decreased libido can occur. It is known that there can be expectation about returning to normal, and the prolonged time of impotence is something referred to as a nuisance factor that causes concern. It is therefore essential to clarify the types of treatment for the patient and the patient's involvement in the decision in order to minimize their anxiety.²⁰

It is believed that it is necessary, in the face of these repercussions, that the nurse demonstrate knowledge available to provide support, reception, encouragement, counseling and clarification of doubts regarding issues related to sexuality. Explanations for possible changes, the nature of erectile dysfunction, guidance on possible problems with erection, modalities and possibilities for treatment of erectile dysfunction, such as the use of phosphodiesterase inhibitors, intraurethral suppositories, penile injection, vacuum devices and the penile prostheses.¹⁷

Nursing interventions for patients submitted to radical prostatectomy may be related to patient support, such as the promotion of discussion of problems with erectile dysfunction, encouraging them to share their concerns with others, family members, friends and health professionals, in support networks or by reinforcing the importance of concerns about sexuality during recovery from surgery.²¹

It is explained that other interventions may be related to the treatment of erectile dysfunction,

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preparation of the environment to approach this patient, respect for individuality, specific care with peers, such as promoting their participation, teaching about the importance of maintaining intimacy and to stimulate the conversation about their feelings and the verbalization on the issues that affect the intimacy. It is also added that nurses can help the patient's decision to seek the medical professional, clarifying misconceptions regarding erectile dysfunction, or causes, duration, treatment and consequences.²¹

It is also necessary to direct assistance for couple therapy as a way to increase the possibilities of satisfaction, teaching and learning about sexuality, increasing the expression of affection and also social support networks, as a strategy to strengthen the inclusion of men in support groups, present in the community, such as the initiatives available in the Family Health Strategy, in Primary Health Care. Marital support has been shown to be an important element for raising quality of life levels, with satisfactory repercussions on physical and mental health, providing a better recovery from prostatectomy. It is ensured by social support strategies, a positive effect on human life, especially in times of difficulty, where there are stressors that need to be recovered from something and, therefore, these must be potentialized.²²

It was also shown about the presence of the impacts generated to the sexuality pattern, in a study carried out with men and their partners on erectile dysfunction after prostatectomy, that there are great challenges to be overcome. Among these challenges are the difficulty of producing dialogue on the subject, as a result of male introspection, estrangement from the couple, concern with age (aging) and fear of being abandoned. In addition, there are situations such as the insecurity of the male public in adhering to the therapeutic measures instituted and intended to contain or to recover the capacity of erection and the fear of having to resort to the rejection of their spouses. The presence of these factors in men is due to the feeling of anguish.²³

It is admitted that men, for the most part, do not seek health services, do not perform prevention, attend health centers when they are ill. In the context of the prevention of prostate cancer, the examination and the perception of men, the feeling of shame in this context is highlighted. It is reported that a factor that interferes in the construction of pejorative concepts triggering resistance is related to the perception of invasion of the rectal touch, since the idea that man must be strong is a socially constructed requirement that makes him postpone preventive treatments and deny the vulnerabilities. It is also seen a cultural mark in the learning of how to care that does not

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stimulate a masculine behavior of self-care, replicating hegemonic models of masculinities.²

It was observed during the investigation of this diagnosis the difficulty of the men in dealing with the subject, mainly, by the presence of their spouses and / or significant persons and / or relatives. A strong connection with the masculinist constructions was noticed, as attributes such as virility, strength and honor were revealed, from the denial of fragility and illness, as well as the possibility of being with some sexual dysfunction and introspection and affective blunting, elements which made it difficult to perform preventive exams, such as rectal examination.

Psychological symptoms such as anxiety and depression were recorded in men undergoing prostatectomy, leading to association with reduced quality of life and well-being, with repercussions that led to increased pain and sensitivity to the symptoms experienced. It can be negatively affected by the presence of these symptoms, the motivation of the men, causing a decrease in energy and coping with the disease and subsequent adherence to treatment and recovery process.²⁴

In view of these impacts on men's mental health, specific nursing care is required, as well as the need to refer them to the support of psychological and sexual health by specialized professionals, as stated by a study carried out with 1001 men with prostate cancer in seven European countries.²⁵

It is necessary, in order to advance on these issues, that the nurse, together with her team, develop a unique assistance to the patients, with a view to contemplating potential and real processes previously within the scope of the preoperative period, extending to the post-operative period of prostatectomy, ensuring that issues related to sexuality are contemplated. In order to improve this organization and individualization of care, it is important to adopt careful practices during the clinical evaluation of patients, followed by planning and implementation with focus on Urology in its process of biopsychosocial, cultural and spiritual integration of those being assisted.

Multidisciplinary commitment is required, in the care of patients with prostate cancer and, in this context, Nursing plays a fundamental role, since it is the professional group that maintains greater contact with the patient and the family. To that end, we need to know the biological, physiological and psychological dimensions of the disease and its impact on the lives of patients and their families.¹⁶

In the men's evaluation, the sedentary lifestyle, a nursing diagnosis evidenced in 86% of the elderly men undergoing prostatectomy, was assessed. It is defined by NANDA as a habit of life characterized

by low level of physical activity, which may be characterized by lack of conditioning, average daily physical activity lower than the recommended age and sex, and preference for activities with little physical activity. The sedentary lifestyle can be related to insufficient knowledge about the health benefits associated with physical exercise, interest, motivation and insufficient resources in physical activities, in addition to insufficient training to exercise.⁸

In a cross-sectional population-based study that analyzed health surveys in São Paulo, Brazil, the prevalence of healthy lifestyle in the population studied was low, being higher among the elderly and significantly lower among the male. Food consumption was the main responsible for the adoption of an unhealthy style, followed by alcohol consumption and physical activity, emphasizing the need to plan new strategies and actions aimed at improving lifestyle and reducing morbidity and mortality due to early causes.²⁶ In a study with Swedish men, physical activity was observed at the lowest risk of developing prostate cancer, and could be considered as a protective factor.²⁷ It is understood that a healthy lifestyle such as not smoking, practicing physical activity on average three hours or more a week and having a balanced diet are strategies to reduce morbidity and mortality for this disease.²⁸

It is associated with the adoption of an unhealthy lifestyle among the elderly population to the progress of the age, in which factors, such as the performance of physical activities, become diminished,²⁹ style observed among the participants of the study, which revealed, in the evaluation Nursing, do not perform physical activities regularly for health maintenance purposes. Health care is thus demanded attention throughout the life cycle, composing the social determinants in the health of the elderly in which sedentarism emerges as an alteration due to factors such as technological development, which brings with it greater ease and inactivity. Other sociodemographic, economic and health factors, such as urbanization and industrialization, difficulties in accessing health services, the appearance of chronic noncommunicable diseases and living conditions at work are also involved. These factors are also related to gender asymmetries, poor education, poverty, lack of entertainment, social exclusion, loneliness, persisting inequalities of income and maintenance of inequities.

By considering lifestyle as a factor that can be shaped by significant determinants, such as social, cultural, economic, historical and political, it is necessary to invest in the health sector in order to implement public policies. It is characterized in Brazil by actions such as the Pact for Health, the Pact for Life, the Health Promotion Policy, the

Health Academy Program, the National Food and Nutrition Policy, the National Tobacco Control Program and the Policy Comprehensive Care in Alcohol and Other Drugs, the development of initiatives to promote changes in this scenario.²⁶

It is seen with regard to aging, given that the target population of this study is composed of elderly men and that were identified with the diagnosis of nursing syndrome fragile elderly (80%), the need for development of actions aimed at healthy aging, through intersectoral initiatives that guarantee the access of this target public to health promotion programs and prevention of prevalent aggravations of the male population in the life cycle. Thus, by investing in actions of this focus, we can directly influence the occurrence of chronic diseases, such as prostate cancer.

NANDA defines the diagnosis of the syndrome of the fragile elderly as the dynamic state of unstable equilibrium that affects the elderly that goes through deterioration in one or more health domains (physical, functional, psychological or social) and leads to an increase in susceptibility to adverse health effects, in particular disability. It can be characterized by the individual who has impaired walking, impaired physical mobility, decreased cardiac output, deficits in self-care for feeding, bathing, intimate hygiene or dressing that present hopelessness, social isolation, fatigue, activity intolerance, memory impairment, among others.⁸

In the study, it was shown that men presented increased fragility patterns in association with the presence of morbidities and patterns of dependence, through clinical evaluation. Therefore, in order to minimize the effects of fragilities and their consequences, and to improve functional capacity, through the development of directional programs of promotion, given the presence of this diagnosis, in the Nursing team, that this is already a major public health problem.

Population aging programs are becoming increasingly necessary and crucial in this regard, and most of these programs are present within the public sphere or linked to university extensions, educational institutions, outpatient services, offering interventions and guidelines based on social practices, Primary Care characteristics that privilege active aging, are directed towards preserved longevity and with functional capacity and autonomy stimulation, configuring an effective strategy for the improvement of quality of life and health.²⁶

CONCLUSION

The following diagnoses stand out due to the results, with a percentile index of more than 80%: sedentary lifestyle; risk-prone health behavior; ineffective health control; frail elderly syndrome; risk of infection; impaired dentition; impaired skin

integrity; risk of injury to the urinary tract; risk of impaired oral mucosa; risk of contamination and ineffective sexuality pattern.

From this finding, it is important to emphasize the importance of a well-prepared nursing diagnosis, requiring continuous knowledge. It is also necessary, in addition, the integral approach to the health of the elderly man, since, in the process of aging, it goes through transformations and reduction of the physiological functions, as well as sociocultural issues of masculinity, that have repercussions in the health-disease process of this individual.

However, from this research, it was observed an evident production gap on Nursing diagnoses identified in elderly men submitted to prostatectomy, that allow the expansion of the directions to be taken by the nurses, from their presentation to the evaluated public.

It is hoped, therefore, that the exposed diagnoses allow a greater direction of the nurse and his team and substantial theoretical basis, to guide the conducts in an effective, safe, singular and comprehensive way, considering the specificities and needs of the male population. It is hoped, moreover, that this study will collaborate to carry out further research in order to fill the gaps on the subject.

REFERENCES

1. Lourenço RA, Lins RG. Saúde do homem: aspectos demográficos e epidemiológicos do envelhecimento masculino. Rev Hosp Univ Pedro Ernesto [Internet]. 2010 [cited 2019 Jan 10];9(Suppl 1). Available from: http://revista.hupe.uerj.br/detalhe_artigo.asp?id=248
2. Moura EC, Gomes R, Pereira GMC. Perceptions about men's health in a gender relational perspective, Brazil, 2014. Ciênc Saúde Colet. 2014 Jan;22(1):291-300. DOI: <http://dx.doi.org/10.1590/1413-81232017221.17482015>
3. Queiroz TS, Rehem TCMSB, Stival MM, Funghetto SS, Lima LR, Cardoso BG et al. How do old men take care of their own health in Primary Care?. Rev Bras Enferm. 2018 Mar/Sept;71(Suppl 1):554-61. DOI: <http://dx.doi.org/10.1590/0034-7167-2017-0131>
4. Ministério da Saúde (BR), Secretaria de Atenção à Saúde, Departamento de Ações Programáticas Estratégicas. Política Nacional de Atenção Integral à Saúde do Homem: Princípios e diretrizes [Internet]. Brasília: Ministério da Saúde;2008 [cited 2018 Aug 09]. Available from: http://www.unfpa.org.br/Arquivos/saude_do_ho_mem.pdf
5. Tonon T, Schoffen J. Prostate cancer: literature review. Rev Saúde Pesqui [Internet]. 2009 Sept/Dec [cited 2019 Jan 10];2(3):403-10.

- Available from: <http://periodicos.unicesumar.edu.br/index.php/saudpesq/article/viewFile/1189/900>
6. Ministério da Saúde (BR), Instituto Nacional de Câncer José Alencar Gomes da Silva. Estimativa 2018: incidência de câncer no Brasil [Internet]. Rio de Janeiro: INCA; 2018 [cited 2018 Feb 02]. Available from: <http://www1.inca.gov.br/estimativa/2018/sintese-de-resultados-comentarios.asp>
 7. Attard G, Parker C, Eeles RA, Schröder F, Tomlins SA, Tannock O, et al. Prostate cancer. The Lancet. 2016 Jan;387(10013):70-82. DOI: [10.1016/S0140-6736\(14\)61947-4](https://doi.org/10.1016/S0140-6736(14)61947-4)
 8. NANDA Internacional. Diagnóstico de enfermagem da NANDA: definições e classificação 2015-2017. Porto Alegre: Artmed; 2015.
 9. Costa AC, Silva JV. Nurses' social representations of nursing care systematization. Referência. 2018 Mar;serIV(16):139-46. DOI: <http://dx.doi.org/10.12707/RIV17069>
 10. Boabventura AP, Santos PA, Duran ECM. Theoretical and practical knowledge of the nurse on Systematization of nursing care and Nursing Process. Enferm Glob. 2017 Apr;16(2):182-93. DOI: [10.6018/eglobal.16.2.247911](https://doi.org/10.6018/eglobal.16.2.247911)
 11. Arruda GO, Marcon SS. Comportamentos de riscos à saúde de homens da região sul do Brasil. Texto contexto-enferm. 2018 May;27(2):e2640014. DOI: <http://dx.doi.org/10.1590/0104-070720180002640014>
 12. Viana M, Martins JT, Maciel AA, Marcon SS, Ribeiro RP. Epidemiological profile of men with prostate cancer attended in a teaching hospital. Cogitare Enferm. 2014 Apr/June;19(2):310-7. DOI: <http://dx.doi.org/10.5380/ce.v19i2.31540>
 13. Pessoa DMV, Pérez G, Marí-Dell'Olmo M, Cornejo-Ovalle M, Borrell C, Piuvezam G, et al. Comparative Study of the Oral Health Profile of Institutionalized Elderly Persons in Brazil and Barcelona, Spain. Rev Bras Geriatr Gerontol. 2016 Sept/Oct;19(5):723-32. DOI: <http://dx.doi.org/10.1590/1809-98232016019.160013>
 14. Saldanha EA, Medeiros ABA, Frazão CMFQ, Silva VM, Lopes MVO, Lira ALBC. Nursing diagnoses in patients undergoing prostatectomy: identification of the significance of its components. Rev Bras Enferm. 2014 May/June;67(3):430-7. DOI: <http://dx.doi.org/10.5935/0034-7167.20140057>
 15. Phillips C, Gray RE, Fitch MI, Labrecque M, Fergus K, Klotz L. Early postsurgery experience of prostate cancer patients and spouses. Cancer Pract [Internet]. 2000 July/Aug [cited 2019 Jan 10];8(4):165-70. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/11898255>
 16. Goulart DMM, Miranzi MAS, Goulart PEN. Quality of life in patients submitted to radical

Dourado IS, Nunes JB, Sena TAB, *et al.*

prostatectomy. *Revr eletrônica enferm.* 2014 July/Sept;16(3):625-34. DOI:

<http://dx.doi.org/10.5216/ree.v16i3.21322>

17. Santos DRF, Lima CAF, Saldanha EA, Fernandes MICD, Medeiros ABA, Lira ALBC. Nursing prostatectomy patients. *UERJ Nurs J.* 2015;23(4):513-9. DOI:

<https://doi.org/10.12957/reuerj.2015.4218>

18. Guedes HM, Nakatani AYK, Santana RF, Bachion MM. Nursing diagnoses identification of the domain security/protection for elderly people admitted in the hospital system. *Rev Eletrônica Enferm.* 2009;11 (2):249-56. DOI:

<https://doi.org/10.5216/ree.v11.46935>

19. Romanzini AE, Pereira MG, Guilherme C, Cologna AJ, Carvalho EC. Preditores Predictors of well-being and quality of life in men who underwent radical prostatectomy: longitudinal study. *Rev Latino-Am Enfermagem.* 2018 Mar;26:e3031. DOI:

<http://dx.doi.org/10.1590/1518-8345.2601.3031>

20. Ferrão L, Berttinelli LA, Portela MR. Men's experiences with prostate câncer. *J Nurs UFPE on line.* 2017 Oct;11(Suppl 10):4157-64. DOI:

<10.5205/reuol.10712-95194-3-SM.1110sup201720>

21. Appoloni EAH, Napoleão AA, Carvalho EC. Nursing interventions for patients with erectile dysfunction after radical prostatectomy: integrative review. *Enferm glob [Internet].* 2016 Apr [cited 2019 Jan 10];15(42):424-39. Available from:

http://scielo.isciii.es/pdf/eg/v15n42/en_revision2.pdf

22. Wittmann D, Northouse L, Crossley H, Miller D, Dunn R, Nidetz J, *et al.* A pilot study of potential pre-operative barriers to couples' sexual recovery after radical prostatectomy for prostate cancer. *J Sex Marital Ther.* 2015 Oct/Jan;41(2):155-68. DOI:

<http://doi.org/10.1080/0092623X.2013.842194>.

23. Azevedo C, Mata LRF, Braga PP, Chavez GM, Lopes MR, Penha CS. The perception of men and wives about erectile dysfunction post radical prostatectomy. *Texto Contexto - enferm.* 2018 Mar;27(1):e4870016. DOI:

<http://dx.doi.org/10.1590/0104-070720180004870016>

24. Novak, JC, Sabino, ADV, Coelho, GG. Psychosocial Effects of radical prostatectomy in patients with prostate cancer. *Arq Ciênc Saúde.* 2015 Oct;22(1):15-20. DOI:

<https://doi.org/10.17696/2318-3691.22.3.2015.65>

25. Cockle-Hearne J, Charnay-Sonnek F, Denis L, Fairbanks HE, Kelly D, Kav S, *et al.* The impact of supportive nursing care on the needs of men with prostate cancer: a study across seven European countries. *Br J Cancer.* 2013 Oct;109(8):2121-30. DOI: <10.1038/bjc.2013.568>

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26. Ferrari TK, Cesar CLG, Alves MCGP, Barros MBA, Goldbaum M, Fisberg RM. Healthy lifestyle in São Paulo, Brazil. *Cad Saúde Pública.* 2017 Jan;33(1):e00188015. DOI:

<http://dx.doi.org/10.1590/0102-311x00188015>

27. Grotta A, Bottai M, Adami HO, Adams SA, Akre O, Blair SN, *et al.* Physical activity and body mass index as predictors of prostate cancer risk. *World J Urol.* 2015 Oct;33(10):1495-502. DOI:

<https://doi.org/10.1007/s00345-014-1464-5>

28. Kenfield SA, Batista JL, Jahn JL, Downer MK, Blarigan ELV, Sesso HD, *et al.* Development and application of a lifestyle score for prevention of lethal prostate cancer. *J Natl Cancer Inst.* 2015 Nov;108(3). DOI: <10.1093/jnci/djv329>

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Corresponding author

Anderson Reis de Sousa

Email: son.reis@hotmail.com

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