

Prostate Cancer: Prevention and Diagnosis*Cáncer de próstata: prevención y diagnóstico**Câncer de próstata: prevenção e diagnóstico***Rubens da Silva Ferreira¹**

ORCID: 0000-0002-9935-812X

Eloise Cristiani Borriel Vieira¹

ORCID: 0000-0002-4685-1797

Juliana Gimenez Amaral¹

ORCID: 0000-0001-7701-4097

Mayara Raquel Silva¹

ORCID: 0000-0002-9688-4378

Ana Paula de Sousa Cavalcanti¹

ORCID: 0000-0002-4641-4255

Carla Samara Ferreira da Gama**Kimura¹**

ORCID: 0000-0001-9732-6880

¹Universidade Paulista. São Paulo, Brazil.**How to cite this article:**

Ferreira RS, Vieira ECB, Amaral JG, Silva MR, Cavalcanti APS, Kimura CSFG. Prostate Cancer: Prevention and Diagnosis. Glob Acad Nurs. 2021;2(Sup.2):e178.

<https://dx.doi.org/10.5935/2675-5602.20200178>**Corresponding author:**

Rubens da Silva Ferreira

E-mail: rubens.1237@gmail.com

Chief Editor: Caroliny dos Santos Guimarães da Fonseca

Executive Editor: Kátia dos Santos Armada de Oliveira

Submission: 03-15-2021**Approval:** 04-29-2021**Abstract**

The aim was to report through scientific literature the role of nursing in relation to prevention and early diagnosis of prostate cancer. This is an integrative literature review with a qualitative characteristic. Articles from 2015 to 2019, in Portuguese, available in full, that answered the guiding question were selected. Databases such as BDNF, LILACS, MedLine and SciELO were used. 15 articles were obtained after careful reading. The main results were the difficulties in carrying out early detection and lack of information. It discusses the carrying out of educational and awareness campaigns, warnings about signs and symptoms, early diagnosis, screening, and active search in cases of positive biopsy. Therefore, nursing must carry out education and health promotion measures, as there is still a high mortality rate in these cancer cases due to lack of knowledge and instruction. Therefore, it is important to demonstrate to patients the signs and symptoms, risk factors, predisposition to the disease and how and when these tests should be performed according to history and age.

Descriptors: Neoplasms; Nursing; Medical Oncology; Prostatic Neoplasms; Disease Prevention.**Resumen**

El objetivo fue dar a conocer a través de la literatura científica el papel de la enfermería en la prevención y el diagnóstico precoz del cáncer de próstata. Se trata de una revisión de la literatura integradora con una característica cualitativa. Se seleccionaron los artículos de 2015 a 2019, en portugués, disponibles en su totalidad, que respondieron a la pregunta orientadora. Se utilizaron bases de datos como BDNF, LILACS, MedLine y SciELO. Se obtuvieron 15 artículos después de una lectura cuidadosa. Los principales resultados fueron las dificultades para realizar una detección precoz y la falta de información. Se discute la realización de campañas educativas y de sensibilización, advertencias sobre signos y síntomas, diagnóstico precoz, cribado y búsqueda activa en casos de biopsia positiva. Por lo tanto, la enfermería debe realizar acciones de educación y promoción de la salud, ya que aún existe una alta tasa de mortalidad en estos casos de cáncer por falta de conocimiento e instrucción. Por tanto, es importante demostrar a los pacientes los signos y síntomas, los factores de riesgo, la predisposición a la enfermedad y cómo y cuándo se deben realizar estas pruebas según la historia y la edad.

Descriptores: Neoplasias; Enfermería; Oncología Médica; Neoplasias de la Próstata; Prevención de Enfermedades.**Resumo**

Objetivou-se relatar por meio da literatura científica a atuação da enfermagem em relação a prevenção e diagnóstico precoce do câncer de próstata. Trata-se de uma revisão integrativa de literatura de característica qualitativa. Foram selecionados artigos dos anos de 2015 a 2019, em português, disponíveis na íntegra, que respondessem à pergunta orientadora. Foram utilizadas bases de dados como BDNF, LILACS, MedLine e SciELO. Obteve-se 15 artigos após uma leitura criteriosa. Os principais resultados foram, as dificuldades para realização da detecção precoce e falta de informação. Discute-se a realização de campanhas educativas e de conscientização, os alertas sobre sinais e sintomas, diagnóstico precoce, rastreamento e busca ativa em casos de biópsia positivas. Portanto, a enfermagem deve realizar medidas de educação e promoção de saúde, pois ainda existe uma alta taxa de mortalidade nesses casos de câncer por falta de conhecimento e instrução. Diante disso, é importante demonstrar aos pacientes os sinais e sintomas, fatores de risco, a predisposição à doença e como e quando deve ser realizado esses exames de acordo com histórico e idade.

Descritores: Neoplasias; Enfermagem; Oncologia; Neoplasias da Próstata; Prevenção de Doenças.

Introduction

Cancer is the second most fatal disease in Brazil, thus prostate cancer is one of the cancers that kills the most male patients, representing 10% of cases, second only to non-melanoma skin cancer¹.

It is the fourth most common type of cancer, with a rate of 15,391 deaths in 2017 and an estimated number of 65,840 cases of the disease for 2020¹. However, there are some strategies that, when used, can reduce the mortality rate. About 2 million cases of the disease are registered per year, 12% of the causes of mortality even with prevention methods; however, prostate cancer is recognized as a public health problem, requiring actions for prevention, diagnosis, and treatment, aiming at a greater knowledge of the population about the disease. It is possible to increase cases of early diagnosis, given that there are some tests that facilitate identification, for this it is necessary to actively search for the male population over 50 years of age and to implement prevention strategies².

There is a different behavior in the health/disease process between the male and female population, the latter being the one that most seeks out health networks. Even though this pathology is one of the most common, men have the thought of virility and strength, making the search for the health network limited and discussions about social factors, stereotypes, values and beliefs, hinder access to this population. Health education is necessary to expand the population's knowledge about the main signs and symptoms that should be observed, and if necessary, the individual can go to a basic health unit for preventive and diagnostic tests².

Known risk factors are family histories of first-degree relatives, and in cases of cancer in the family, the percentage of chance of developing the disease increases with age over 50 years and lifestyle. However, some men, even with the diagnosis, refuse to undergo the treatment³.

According to the Brazilian Society of Urology, it is essential that men over 40 carry out preventive exams at least once a year, if there is a family history of the disease. Regarding men who do not have cases of prostate cancer in the family, it is necessary that exams be performed from 50 years of age onwards³.

The Ministry of Health (MS) developed the National Cancer Prevention and Control Policy, and this was due to the increased incidence of cancer. This policy is intended to reduce morbidity and mortality and raise awareness among the population, warning about risks, early detection, and tracking. In Law No. 10,289, it is asked about the national program for the control of prostate cancer, the carrying out of campaigns with the objective of consensus among specialists in the field. This law has partnerships between municipal and state health departments³.

Screening for prostate cancer is important for the prevention and early detection of the disease, thus enabling a lower incidence of cases. Regarding Public Policies that can be used, the blue November campaign stands out, in which the nurse makes an active search, being health education within their competence and attribution, so that these men take the exams⁴.

Non-communicable chronic diseases have changed the epidemiological scenario because of the migration of infectious diseases to complications resulting from sedentary lifestyles, one of the main reasons for new diseases in the population. However, we get sick from diabetes, hypertension, and cancer, but there is still a greater expectation of life if you compare it to the past, like the time of the Spanish flu in 1918, but even with these advances we still haven't learned how to age with quality⁵.

This work is justified by the fact that Prostate Cancer is a disease that in its initial stage does not usually present symptoms or when it does, they are like the benign growth of the prostate, which is better known for being a silent disease, which evolves continuously. The lack of knowledge and early detection makes patients not aware that they have prostate cancer and when it presents some symptoms, it is already in an advanced stage⁶.

It is believed that through health education, nurses can help men to understand the disease, adhere to consultations and identify early, thus reducing cases with advanced diagnoses and providing better quality of life for this population.

This study aims to report through the scientific literature the role of nursing in relation to prevention and early diagnosis of prostate cancer. However, the following research problem was made, what is the role of nursing in the prevention and diagnosis of prostate cancer?

Methodology

Integrative literature review of descriptive characteristic and qualitative approach following the 6 steps that this method proposes. Scientific articles were selected from the BDNF, LILACS, MedLine and SciELO databases, having as inclusion criteria publications between the years 2015 and 2019, available in full, in Portuguese and that answered the research question. For selection of articles, the inclusion and exclusion criteria were used in each database and the terminology in health researched in the Descriptors in Science and Health (DeCS) was used, according to which the descriptors were chosen: "malignant neoplasm", "nursing", "oncology", "prostate" and "disease prevention".

Articles were selected from July to August 2020. Microsoft Word® software was used to construct the table, in which the following variables were selected, such as: author in citation format, article title, source and sample. The objective of this type of method is, through research, to increase knowledge on a certain subject, which will be used in other studies in the proposed period to compose it, must organize and systematize the information in a way that facilitates access to the investigated topic⁷.

Results

When performing an exploratory reading, 42,853 articles were first found available in full. After reading the titles of the articles, 64 articles were selected, after a thorough reading of the abstracts, 31 articles were selected, of which 16 were excluded because they did not meet the inclusion criteria, leaving 15 that answered the problem question. After selection, the articles were organized in the



table below. Therefore, the relevant data of the articles are composed according to the year of publication in which the

Chart 1. Listing of selected articles. São Paulo, SP, Brazil, 2020

Year of publication	Author	Title	Source	Sample
2019	Biondo CS, Santos J, Ribeiro BS, Passos RS, Meira APBN, Soares CJ	Detecção precoce do câncer de próstata: ação da equipe de saúde da família	Jornal eletrônico de enfermagem da costarica	Prostate neoplasm, Men's health, Family health. early detection of prostate cancer, PSA performance
2019	Menezes R, Menezes M, Teston EF, Matumoto S, Faller JW	Conhecimento, Comportamento e Práticas em Saúde do Homem em Relação ao Câncer de Próstata	Universidade Federal do Rio de Janeiro	Beliefs and Behavior on Early Detection Tests, Men's Health, Prostate Neoplasms
2019	Krüger FPG, Cavalcanti G	Conhecimento e Atitudes sobre o Câncer de Próstata no Brasil	Revista Brasileira de Cancerologia	Prostate Neoplasm, Men's Health
2019	Santos ROM dos, Ramos DN, Assis M de	Construção compartilhada de material educativo sobre câncer de próstata	Revista Pan-Americana de saúde pública	Prostate neoplasms; health education, health communication
2018	Araújo JS, Nascimento LC, Zago MMF	Hegemonias corporificadas: dilemas morais no adoecimento pelo câncer de próstata	Revista da Escola de Enfermagem da USP	Prostate Neoplasms, Masculinity in relation to taboos, Oncology Nursing; Men's Health, Culture
2018	Turrisi GS de S, Faro A	Crenças em saúde acerca do exame do toque retal	Arquivos Brasileiros de Psicologia	Health Belief Model, Rectal Exam (DRE), Prostate Cancer
2018	Steffen RE, Trajman A, Santos M, Caetano R	Rastreamento populacional para o câncer de próstata: mais riscos que benefícios	Physis: Revista de Saúde Coletiva	Prostate Neoplasms, Programs of screening, Prostate-specific antigen
2018	Modesto AAD, Lima RLB de, D'Angelis AC, Augusto DK	Um novembro não tão azul: debatendo rastreamento de câncer de próstata e saúde do homem	Interface-Comunicação, Saúde, Educação	Men's Health, Screening programs, Prostate neoplasms prevention
2018	Gonçalves EP, Waichel HW, Milani LZ, Fay AP	Rastreamento do câncer de próstata e o papel das Campanhas de conscientização	Acta médica	Prostate Cancer, Screening, Awareness Campaigns
2017	Czorny RCN, Pinto MH, Pompeo DA, Bereta D, Cardoso LV, Silva DM	Fatores de risco para o câncer de próstata: população de uma unidade básica de saúde	Cogitare Enferm.	Prostate neoplasms, Men's health, Early diagnosis, Health education, Health promotion
2017	Moraes MCL de, Oliveira R da C, Silva M de J	Uma questão masculina: conhecendo possíveis entraves para a realização dos exames de detecção do câncer de próstata	Rev Med Hered	Prevention, Screening, Prostate Neoplasms
2017	Santos F de S, Hamester J, José NM, Reznicek SE, Noronha JAP	Câncer de próstata: uma breve revisão atualizada	Escola de Medicina da PUCRS	Prostate Neoplasms, Prostate Antigen. Specific
2017	Lima AP, Lini EV, Giacomazzi RB, Dellani MP, Portella MR, Doring M	Prevalência e fatores associados à Realização de exames de câncer de próstata em idosos: estudo de base populacional	Rev Brasileira de Geriatria e Gerontologia	Risk Factors, Prostate neoplasms, Men's health, screening
2016	Ludwig GD, Rocha HP, Botelho LJ, Freitas MB	Modelo preditivo integrado para a presença de câncer de próstata utilizando dados clínicos, laboratoriais e ultrassonográficos	Rev do Colégio Brasileiro de Cirurgiões	Men's Health, Prostate Neoplasms, Rectal Exam, Masculinity in relation to taboos
2015	Freitas MEM de, Soares T, Souza LPS e, Deivite Alcântara DDF, Silva CS de O e, Barbosa HÁ	Exame de toque retal: a percepção de homens quanto à sua realização	Rev de enfermagem UFPI	Men's Health, Prostate Neoplasms, Oncology Nursing

Discussion

It is important to emphasize that in most articles the lack of campaigns and demand of the male population in the health area is reported, and the difficulty of performing a preventive exam for prostate cancer because there are beliefs and shame about how they will act or how I will be "considered a man" after that.

Since cancer is one of the chronic non-communicable diseases (NCDs) that most affect men, prostate cancer is the second most frequent in men, it appears silently and often asymptomatic, it is a public health problem for the population male, will become the most prevalent neoplasm in the country, second only to non-melanoma skin cancer⁸⁻¹⁰.

Some obstacles were observed, according to the Ministry of Health, men die earlier than women for not seeking the health system. According to INCA, 60% of people who die between the ages of 20 and 59 are men, with prostate cancer being one of the main culprits, although they are afraid and delay the search and most of the time, they only do it when they are unable to cope. alone with the signs and symptoms of the disease, thus making it difficult to prevent the disease¹¹⁻¹⁴.

Several factors such as sociocultural aspects, such as fear, shame, prejudice, lack of encouragement, even the precariousness of public health services, which limits men's access to health services and the low demand for the service by men, lack of knowledge about the PNAISH, which aims to promote health actions, in order to strengthen and qualify primary care, ensuring health promotion and prevention, ends up leading to barriers such as lack of time to go to health services, considering that when the health centers are open because it is during business hours, most men are working and there are also huge queues, making access to primary care difficult. The lack of dissemination and encouragement in raising men's awareness about self-care^{8,11,12,14}.

Nowadays, prostate cancer is prevalent in elderly men, so the frequency of public awareness and prevention campaigns, having financial stability, that is, being retired increases the probability of having preventive exams, as well as having a partner, ends up taking to a diagnosis of cancer at a more advanced stage, that is, a higher mortality rate, low-income countries are also highlighted as having a higher level of non-communicable chronic diseases. The incidence of prostate cancer is different in various corners of the world, for example in Europe, which ends up suggesting that there is an action of exogenous factors in the incidence of this cancer, such as a diet rich in animal fat, chronic inflammation, and exposure to ultraviolet radiation^{9,15-17}.

Risk factors for prostate cancer are advanced age (over 50 years), ethnicity, specific mutations, including diet, smoking and obesity, the indication for screening proved to be controversial, and it may present difficulty to urinate in its initial phase, it is recommended an annual assessment for men aged 50 years and over, aged 40 years if they have a 1st degree relative with a history of the disease and black people, but in the advanced stage, there may be bone pain,

In one study, 55.3% of the participants considered that they had little knowledge and 21.5% believed they had a lot of knowledge about prostate cancer, because of the self-assessment, using a questionnaire on prostate cancer. Even those who consider having little knowledge got most of the questions right, having fewer right answers related to prevention, the relationship between tobacco and alcohol and prostate cancer, exams and signs and symptoms. With the current lifestyle, some factors such as high-calorie diets, rich in animal fat are factors, some addictions such as smoking and alcohol consumption and obesity and sedentary lifestyle can help to develop the pathology^{14,20}.

The November Blue campaign drew attention to cancer when it was promoted by a non-governmental organization and although the focus of this campaign is prostate cancer, it also covers other issues related to men's health such as changing habits to adopt a healthier lifestyle. There is a divergence of opinions in the debate on screening limits, there is a growth in the blue November campaign in Brazil, which is encouraged to encourage tests for early detection of prostate cancer, which has some gaps that end up limiting the right to informed choice about your health the male population^{16,18,19}.

Screening for prostate cancer must be done through the touch exam together with the PSA and, in the future, the biopsy and histopathological study, but the low specificity of the PSA ends up resulting in a high number of negative biopsies, which ends up leading to an increase in the cost and morbidity, however, the PSA dosage should not be done alone as it did not have a good result in reducing mortality, it has a better use of PSA, when combined with the touch test^{11,12,17,20}.

Screening exams are an important step in the treatment of prostate cancer, as early diagnosis ends up becoming a way to provide a better maintenance of quality of life. The digital rectal exam is a low-cost procedure that allows you to assess the size, shape, and consistency of the prostate. It is generally viewed with prejudice due to the culture and the taboo of performing the exam.^{9,21}

Beliefs among men about the touch test were compared with those who had and those who had not. Those who have already undergone the exam reported that the main beliefs are associated with embarrassment, with the fact that it is invasive, horrible, and embarrassing, but it was said that it was necessary. For those who have not yet made the necessary word, prevention, normal and painful, for them the positive aspects that stand out¹³.

PSA was supposed to be of great help even though it is not prostate specific as it can be found in other glands, it was placed with a tumor marker to detect the recurrence and progression of cancer during treatment. Even so, the test has a low sensitivity and specificity and there is no clear evidence of the threshold to indicate a biopsy. And there are patients who undergo the PSA exam and because they think it is unnecessary to do the digital rectal exam, there is no universally approved minimum cut-off value, but it has an accepted value of 4.0 ng/mL, a reduction cutting to 2.5 ng/dL



combined with the free/total PSA quotient increased the identification of patients with prostate cancer. PSA levels may increase in the presence of other pathologies such as prostatitis or benign prostatic hyperplasia^{10,15,17,20,22}.

Transrectal ultrasound-guided biopsy (TRUS) is a method used to obtain material for anatomopathological analysis of the gland. USTR's primary role is to guide prostate biopsies. Typically, 10 to 121 bilateral samples are retained, from the apex to the base of the gland. This method has a low rate of complications, if care is taken, such as prophylaxis with antibiotics^{17,22}.

Some complications of the procedure can include infection, bleeding, and urinary obstruction. Men who present symptoms, that is, symptomatic or have an increased digital rectal exam, need to be evaluated and, if necessary, referred to biopsy. Most of the time, some men undergoing biopsy do not have prostate cancer because of the low specificity of PSA and the inability to predict the probability of testing positive using only PSA and the physical examination^{17,22}.

According to the MS, it is not recommended to implement screening programs for prostate cancer together with international institutions, such as the American and Canadian task forces, and countries like Australia and the United Kingdom have shown that screening has brought more harm rather than benefits. It was published in 2012 by the United States Preventive Services Task Force recommendations against PSA-based prostate cancer screening for US men of any age. The following year another spoke to the Cochrane Collaboration in a similar way. It was recommended by INCA not to organize screening programs, as a false positive could lead to a biopsy^{18,19}.

In the article, an activity was carried out in which it lasted 3 hours, coordinated by nurses and brought up the main questions about prostate cancer and defining the language to be used to express doubts, the type of illustration to be used and the best format^{18,19}.

In the study, 3 answers were raised for not performing the touch test, which are the doctor never requested, the absence of symptoms and the option to perform the PSA and it is important to emphasize the prejudice with the test, as the PSA is not enough, that is, requiring additional tests such as the touch test and a future biopsy in case of positive. The testimonies collected in the study report feelings of shame, fear, fear, discomfort, and embarrassment. The use of health education to target changes in behavior through information and experiences²¹.

Nurses have education as one of their principles and that they provide the male public with information related to men's health, and that can guide them in terms of disease prevention, risk factors and health maintenance.⁸.

Conclusion

This study is relevant to the health area as it addresses ways to help through the literature, improving knowledge about prostate cancer, in which the importance of carrying out health education and promotion can be observed, as there is currently a high rate of mortality of this population due to lack of knowledge and education on the subject.

However, in the work, the ways of diagnosing the disease were identified, as nursing must be present, carrying out health education and promotion, demonstrating signs and symptoms, risk factors, factors predisposed to the development of the disease, how and when the preventive and diagnostic tests according to the history and age of screening in this population.

Even with public policies in place aimed at men's health, men's difficulty in participating in preventive practices for prostate cancer was observed, despite the solid "Blue November" campaign in Brazil, the male population pays less attention to their health, making early diagnosis difficult.

According to Organic Law No. 808023 of the SUS, which is contained in the Federal Constitution in article 196, it states: "Health is a right for everyone and a duty of the State, guaranteed through social and economic policies aimed at reducing the risk of disease and other grievances and universal and equal access to actions and services for their promotion, protection and recovery".

Thus, it is possible to observe that more laws, programs, and forms of health education should be established, through the tripartite scope. Implying this law as a form of argument showing that everyone has rights and access to health. The subject is gaining more and more space, but it is still necessary that more campaigns and other ways of covering the subject are established and put into practice, as it is still very outdated, the result of which is an increase in the mortality of this population, even though it is recommended to decrease in cases of the disease in 2020, thanks to new campaigns carried out for the benefit of the population.

References

1. Souza LM, Silva MP, Pinheiro IS. Um toque na masculinidade: a prevenção do câncer de próstata em gaúchos tradicionalistas. *Rev. Gaúcha Enferm.* 2011;32(1). DOI: 10.1590/S1983-14472011000100020
2. Moscheta MS, Santos MA. Grupos de apoio para homens com câncer de próstata: revisão integrativa da literatura. *Ciênc. saúde coletiva.* 2011;17(5). DOI: 10.1590/S1413-81232012000500016
3. Barouki E, Pongeluppe M. Rastreamento do câncer de próstata em homens acima de 50 anos através do exame diagnóstico de PSA. *GeS [Internet].* 2012 [acesso em 01 mar 2020];2:425-437. Disponível em: <https://dialnet.unirioja.es/servlet/articulo?codigo=5555768>
4. Amorim VMSL, Barros MBA, Cesar CLG, Goldbaum M, Carandina L, Alves MCGP. Fatores associados à realização dos exames de



- rastreamento para o câncer de próstata: um estudo de base populacional. *Cad. Saúde Pública*. 2010;27(2). DOI: 10.1590/S0102-311X2011000200016
5. Barros C. 2020 veio com uma pandemia para lembrar a sociedade moderna da sua vulnerabilidade. *Glob Acad Nurs*. 2020;1(3):e35. DOI: 10.5935/2675-5602.20200035
 6. Instituto Nacional de Câncer (INCA). Tipos de Câncer: Câncer de próstata [Internet]. Brasília (DF): INCA; 2020 [acesso em 05 mar 2020]. Disponível em: <https://www.inca.gov.br/tipos-de-cancer/cancer-de-prostata>
 7. Ramos AS, Conceição T, Lourenço LFL. Estratégias adotadas pelos serviços de emergência frente à tentativa de suicídio. *Glob Acad Nurs*. 2021;2(1):e85. DOI: 10.5935/2675-5602.20200085
 8. Krüger FPG, Cavalcanti G. Conhecimento e Atitudes sobre o Câncer de Próstata no Brasil: Revisão Integrativa. *Rev. Bras. Cancerol*. 2018;64(4):561-7. DOI: 10.32635/2176-9745.RBC.2018v64n4.206
 9. Lima AP, Lini EV, Giacomazzi RB, Dellani MP, Portella MR, Doring M. Prevalência e fatores associados à realização de exames de câncer de próstata em idosos: estudo de base populacional. *Rev. bras. geriatr. gerontol*. 2018;21(1):53-59. DOI: 10.1590/1981-22562018021.170054
 10. Steffen RE, Trajman A, Santos M, Caetano R. Rastreamento populacional para o câncer de próstata: mais riscos que benefícios. *Physis*. 2018;28(2):e280209. DOI: 10.1590/S0103-73312018280209
 11. Biondo CS, Santos J, Ribeiro BS, Passos RS, Meira APBN, Soares CJ. Detecção precoce do câncer de próstata: atuação de equipe de saúde da família. *Enfermería Actualde Costa Rica*. 2020;(38):32-44. DOI: 10.15517/revenf.v0i38.38285
 12. Araújo JS, Nascimento LC, Zago MMF. Hegemonias corporificadas: dilemas morais no adoecimento pelo câncer de próstata. *Rev. esc. enferm. USP*. 2019;53:e03494. DOI: 10.1590/S1980-220X2018027403494
 13. Turri GSS, Faro A. Crenças em saúde acerca do exame do toque retal. *Arq. bras. psicol.* [Internet]. 2018 [acesso em 17 out 2020];70(2):49-64. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci_abstract&pid=S1809-52672018000200005&lng=pt&nrm=iso
 14. Faller JW, Menezes R, Menezes M, Teston EF, Matumoto S. Conhecimento, Comportamento e Práticas em Saúde do Homem em Relação ao Câncer de Próstata. *R. pesq. cuid. fundam. online*. 2019;11(5):1173-1179. DOI: 10.9789/2175-5361.2019.v11i5.1173-1179
 15. Gonçalves EP, Waichel HW, Milani LZ, Fay AP. Rastreamento do câncer de próstata e o papel das campanhas de conscientização. *Acta médica [Internet]*. 2018 [acesso em 17 out 2020];39(2). Disponível em: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-995897>
 16. Czorny RCN, Pinto MH, Pompeo DA, Bereta D, Cardoso LV, Silva DM. Fatores de risco para o câncer de próstata: população de uma unidade básica de saúde. *Rev. Cogitare enfermagem*. 2020;22(4). DOI: 10.5380/ce.v22i4.51823
 17. Sarris AB, Candido FJLF, Filho CR, Staichak RL, Torrani ACK, Sobreiro BP. Câncer de próstata: uma breve revisão atualizada. *Esc Med PUCRS*. 2018;19(1). DOI: 10.5380/acd.v19i1.57304
 18. Santos, Renata Oliveira Maciel dos, Ramos, Danielle Nogueira e Assis, Mônica deConstrução compartilhada de material educativo sobre câncer de próstata. *Rev Panamericana de Salud Pública*. 2019;42:e122. DOI: 10.26633/RPSP.2018.122
 19. Modesto AADA, Lima RLB, D'AAC, Augusto DK. Um novembro não tão azul: debatendo rastreamento de câncer de próstata e saúde do homem. *Interface*. 2018;022(64):251-262. DOI: 10.1590/1807-57622016.0288
 20. Moraes MCL, Oliveira RC, Silva MJ. Uma questão masculina: conhecendo possíveis entraves para a realização dos exames de detecção do câncer de próstata. *Rev Med Hered*. 2017;28(4). DOI: 10.20453/rmh.v28i4.3222
 21. Freitas MEM, Soares T, Souza LPS, Alcântara DDF, Silva CSO, Barbosa HA. Exame de toque retal: a percepção de homens quanto à sua realização. *Revista de enfermagem UFPI [Internet]*. 2015 [acesso em 17 out 2020];4(4):8-13. Disponível em: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1033826>
 22. Ludwig GD, Rocha HP, Botelho LJ, Freitas MB. Modelo preditivo integrado para a presença de câncer de próstata utilizando dados clínicos, laboratoriais e ultrassonográficos. *Rev. Col. Bras. Cir*. 2016;43(6):430-437. DOI: 10.1590/0100-69912016006004
 23. BRASIL. Lei nº 8.080, de 19 de setembro de 1990. Lei Orgânica da Saúde. Dispõe sobre as condições para a promoção, proteção e recuperação da saúde, a organização e o funcionamento dos serviços correspondentes e dá outras providências [Internet]. Brasília (DF): Brasil; 1990 [acesso em 01 mar 2020]. Disponível em: http://www.planalto.gov.br/ccivil_03/leis/l8080.htm

