

THE PREVALENCE OF NEOPLASMS IN MEN: A DETAILED ANALYSIS OF THE MAIN CAUSES, RISK FACTORS AND TREATMENTS

A PREVALÊNCIA DAS NEOPLASIAS EM HOMENS: UMA ANÁLISE DETALHADA DAS PRINCIPAIS CAUSAS, FATORES DE RISCO E TRATAMENTOS

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ABSTRACT: Neoplasms are a serious public health problem and the second leading cause of death worldwide. Among the male population, the prevalence of these tumours has increased significantly in recent years. In view of this, the aim of this article is to carry out a detailed analysis of the main causes, risk factors and treatments for neoplasms in men. To achieve this objective, a bibliographical survey was carried out, based on scientific articles, books and official documents on the subject. The methodology used was a systematic literature review, selecting studies that addressed epidemiological data, causes and risk factors of neoplasms in men. The results of this research showed that the main types of neoplasms affecting men are prostate, lung, colon and stomach cancer. Among the most common risk factors for developing these tumours are advanced age, smoking, excessive alcohol consumption, obesity, exposure to chemical agents and genetics. With regard to treatment, there are various options available, with surgery, chemotherapy and radiotherapy being the most commonly used. However, each type of neoplasm requires a specific treatment, depending on the stage and characteristics of the tumour. Therefore, given the prevalence of neoplasms in men, it is essential to raise awareness of the importance of prevention and early diagnosis. In addition, it is necessary to invest in public health policies aimed at educating the population and providing access to information and treatment in order to reduce the incidence of these diseases and improve patients' quality of life.

958

Keywords: Prevalence. Neoplasms. Men. Treatment.

RESUMO: As neoplasias são um grave problema de saúde pública, sendo a segunda maior causa de mortalidade em todo o mundo. Dentre a população masculina, a prevalência desses tumores tem aumentado significativamente nos últimos anos. Diante disso, este artigo tem como objetivo realizar uma análise detalhada das principais causas, fatores de risco e tratamentos das neoplasias em homens. Para alcançar esse objetivo, foi realizada uma pesquisa bibliográfica, com base em artigos científicos, livros e documentos oficiais sobre o tema. A metodologia utilizada foi a revisão sistemática da literatura, selecionando os estudos que abordavam dados epidemiológicos, causas e fatores de risco das neoplasias em homens. Os resultados desta pesquisa mostraram que os principais tipos de neoplasias que afetam os homens são o câncer de próstata, de pulmão, de cólon e de estômago. Entre os fatores de risco mais comuns para o desenvolvimento desses tumores estão a idade avançada, tabagismo, consumo excessivo de álcool, obesidade, exposição a agentes químicos e genética. Em relação aos tratamentos, existem diversas opções disponíveis, sendo a cirurgia, a quimioterapia e a radioterapia as mais utilizadas. Porém, cada tipo de neoplasia requer um tratamento específico, dependendo do estágio e das características do tumor. Portanto, diante da prevalência das neoplasias em homens, é fundamental a conscientização sobre a importância da prevenção e do diagnóstico precoce. Além disso, é necessário investir em políticas públicas de saúde que visem a educação da população e o acesso à informação e tratamento, a fim de reduzir a incidência dessas doenças e melhorar a qualidade de vida dos pacientes.

Palavras-chave: Prevalência. Neoplasias. Homens. Tratamentos.

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INTRODUCTION

The incidence of neoplasms in men is a topic that has aroused great interest in the scientific community and society in general, due to its high prevalence and impact on men's health. According to Woods, Rachet and Coleman (2021), neoplasms are a group of diseases characterised by the uncontrolled growth of malignant cells in the body's tissue.

The World Health Organisation estimates that each year around 18.1 million new cases of cancer are diagnosed worldwide, with approximately 9.6 million of them developing in men (Stein and Moreira, 2021). The aim of this article is to carry out a detailed analysis of the main causes, risk factors and treatments for neoplasms in men, based on recent scientific studies.

To this end, we will question the prevalence of neoplasms in men and how this issue can be effectively addressed. In addition, the main factors that contribute to the development of these diseases will be addressed, as well as the most effective treatments available. The relevance of this topic is evidenced by its high incidence and impact on men's health.

According to Girardon-Perlini and Ângelo (2022), neoplasms are the second leading cause of death among men worldwide, which demonstrates the importance of understanding the main causes and risk factors of these diseases for prevention and appropriate treatment. In addition, studies show that men tend to be more likely to develop neoplasms compared to women (Coppetti, Dalmolin and Girardon-Perlini, 2020).

For this reason, there is a need for a better understanding of the factors that influence this gender difference. The bibliographic methodology used to prepare this article consisted of a systematic literature review, based on scientific studies published in the last five years. Articles in Portuguese and English were selected from the Scopus and PubMed databases, using the descriptors "neoplasms", "men" and "prevalence". By analysing and selecting the studies, it was possible to identify the main causes and risk factors for neoplasms in men, as well as the treatments currently used.

The results obtained through this research indicate that neoplasms in men are mainly caused by genetic and environmental factors, such as exposure to carcinogens, smoking, excessive alcohol consumption and inadequate diet (Woods, Rachet and Coleman, 2021). In addition, age and pre-existing health conditions are also important factors to consider. According to Girardon-Perlini and Ângelo (2022), the most common male neoplasms are prostate cancer, lung cancer, colon cancer, bladder cancer and melanoma.

With regard to treatments, Stein and Moreira (2021) emphasise that the appropriate therapy should be defined based on the type and stage of the neoplasm. The most commonly used treatment options include surgery, radiotherapy, chemotherapy and specific target therapy for certain types of cancer. However, it is essential to emphasise that prevention is still the best way to combat the development of neoplasms in men, by adopting healthy lifestyle habits and controlling risk factors.

In conclusion, the high prevalence of neoplasms in men is a public health problem that requires a multidisciplinary and continuous approach. It is necessary to raise awareness about risk factors and the importance of prevention in order to reduce the incidence of these diseases. In addition, it is essential that effective health policies are adopted and that there are advances in research for more accurate and effective diagnosis and treatment.

MATERIALS AND METHODS

The literature review is a fundamental stage in the development of scientific research, as it provides a broad and up-to-date view of the subject of study. In this sense, this article uses the literature review methodology to address the prevalence of neoplasms in men, focusing on the main causes, risk factors and treatments. The first step in the literature review methodology is to establish selection criteria for the studies to be included in the analysis.

960

For this article, we considered studies published in the last 5 years, in Portuguese and English, which addressed the prevalence of neoplasms in men. In addition, only studies with samples representative of the male population and with results relevant to understanding the topic were included. Information sources were identified by searching electronic databases such as PubMed, Scopus and Google Scholar.

To ensure broad coverage of the topic, different search terms were used, such as "neoplasm", "cancer", "prevalence", "risk factors" and "treatment". In addition, bibliographical references of previously selected articles were also consulted in order to identify other relevant studies. Once the sources had been identified, the search strategy was carried out, which consisted of combining the search terms using Boolean operators (AND, OR) in order to obtain more precise and relevant results.

In addition, searches were limited to original articles, systematic reviews and meta-analyses, excluding other types of publications such as case studies and experience reports. Inclusion and exclusion criteria were then applied to select the studies to be included in the

review. Only studies that presented data on the prevalence of neoplasms in men, their main causes and risk factors, as well as those that addressed available treatment options were included.

Studies that referred to other diseases, such as infections, were excluded, as were those that did not present relevant data for understanding the topic. The screening process consisted of reading the titles and abstracts of the articles identified in the searches and applying the inclusion and exclusion criteria. The articles that met the inclusion criteria were then read in full to ensure that they met the article's objectives.

Data was extracted from the selected articles using a previously prepared form containing relevant information on the prevalence of neoplasms in men, their causes and risk factors and treatment options. The data was organised and analysed systematically to facilitate understanding and the subsequent synthesis process. The analysis and synthesis of the data collected made it possible to identify the main causes and risk factors associated with the prevalence of neoplasms in men, as well as the treatment options available.

Gaps in knowledge and the need for more in-depth study of certain aspects related to the subject were also identified, making it possible to propose future research. Finally, the quality of the selected studies was assessed using previously established criteria. Aspects such as the design of the study, the representativeness of the sample, the suitability of the statistical methods and the clarity of the results presented were assessed.

RESULTS

The data collected in our research on the prevalence of neoplasms in men indicates that this is an extremely important issue for public health. According to Allemani et al (2023), neoplasms are the second leading cause of death among men worldwide, with an increase of 9.2 million cases and 4.4 million deaths in 2020. This represents a 60 per cent increase on the figures for 2000.

Among the most common types of cancer, prostate cancer is the most prevalent in men, followed by lung, colorectal and bladder cancer (Boing and Antunes, 2021). These data highlight the importance of a detailed analysis of these neoplasms, identifying patterns and trends that can contribute to an effective approach to these diseases. When analysing the risk factors for the development of neoplasms in men, Swinkels et al (2019) highlight obesity, smoking and a sedentary lifestyle as some of the main risk factors.

This scenario is corroborated by Langner and Furstenberg (2020), who point to poor diet and a sedentary lifestyle as determining factors for the development of chronic diseases, including some forms of cancer. From this perspective, it is important to highlight the need for preventive and health promotion measures, which include behavioural changes and the adoption of healthier lifestyle habits, as a way of minimising the risk of developing these diseases.

Another important aspect to consider is age as a risk factor for the development of neoplasms in men. According to the results obtained during the research, Wild et al (2020) identified that age is a significant risk factor for the development of neoplasms, since most cases occur in advanced age groups.

This can be explained by the fact that, with ageing, cellular changes occur and the immune system weakens, making the body more susceptible to the development of malignant tumours (Fantin, Ulloa and Barbosa-Solis, 2020). In this context, early detection is essential for the successful treatment of neoplasms in men. According to Allemani et al (2023), early identification and treatment can increase the chances of cure and reduce mortality by up to 20 per cent.

It is therefore essential that preventive examinations are carried out regularly, such as PSA for early detection of prostate cancer and colonoscopy for colorectal cancer, for example. It is also important to raise awareness among the male population about the importance of these examinations and to break down cultural barriers that often prevent men from seeking preventive medical care. When analysing the treatments available for neoplasms, we see that the therapeutic approach can vary according to the type and stage of the disease.

In general, the most common treatments include surgery, radiotherapy, chemotherapy and hormone therapy (Boing and Antunes, 2021). However, it is important to note that the effectiveness and choice of treatment can be influenced by factors such as age, type and location of the tumour, as well as the patient's general health. Discussing the practical implications, it is important to emphasise the importance of a multidisciplinary approach in the treatment of neoplasms in men.

Fantin, Ulloa and Barbosa-Solis (2020) point out that studies show that cure and survival rates are higher when there is a multi-professional team involved in the patient's treatment, including doctors, nurses, psychologists and other professionals. This is because

patients need specialised support not only in terms of medical treatment, but also in relation to emotional and social issues that may arise during the treatment process.

Another important practical implication is ensuring access to healthcare for all men. Wild et al (2020) point out that the male population often postpones or even avoids seeking medical attention, which can lead to late diagnosis and, consequently, more difficult and less effective treatment. In this sense, it is essential to have public policies aimed at raising awareness and access to healthcare for all men, especially those in vulnerable communities, thus ensuring a more effective approach to neoplasms.

In view of the results presented, we have identified the need for future research that addresses not only the risk factors for neoplasms in men, but also the cultural and social issues that influence men's health. Furthermore, it is important that these studies consider the diversity of men, since factors such as race, ethnicity, social class and sexual orientation can also influence the risk and approach to these diseases.

Finally, the data collected in our study highlights the importance of a detailed, multidisciplinary approach to neoplasms in men, taking into account risk factors, prevention, early detection and available treatments. In addition, they emphasise the urgency of public policies aimed at men's health, thus ensuring an effective and equitable approach to neoplasms in this population. We hope that our results will contribute to raising awareness and the search for preventive measures to reduce the incidence and mortality of neoplasms in men.

DISCUSSIONS

As observed during the research, the incidence of neoplasms in men is an issue of great relevance in the health area, since the prevalence of these diseases in this gender is evident throughout the world. According to Souza et al (2021), neoplasms are characterised by being diseases that result from deregulation in cell growth and proliferation and can affect different organs and tissues. It is therefore essential to understand the causes and risk factors that contribute to the development of these diseases in men, as well as the treatments available to combat neoplasms.

According to Kim, Lee and Moon (2023), one of the main factors that can lead to the development of neoplasms in men is age. This is because, with ageing, genetic and molecular changes occur that can favour the formation of abnormal and malignant cells. In addition, lifestyle can also play a significant role in the development of these diseases, as stated by

Mackillop et al (2020). Harmful habits such as smoking, excessive alcohol consumption and poor diet are proven risk factors for the development of various neoplasms in men.

Batista (2020) also highlights genetics as an important risk factor for neoplasms in men. Studies indicate that individuals with a family history of cancer are more likely to develop the disease. This is because genetic inheritance can increase the likelihood of mutations that can lead to malignant cells. In this sense, it is important to highlight the importance of genetic counselling to identify possible predispositions and to adopt preventative measures.

In addition to the factors already mentioned, Enewold et al (2019) point out that exposure to carcinogens can also increase the risk of neoplasms in men. These agents can be present in various professional activities, such as exposure to solar radiation in the case of outdoor workers, or to chemicals used in industries. In addition, infections by viruses such as HPV and HIV are also risk factors for neoplasms in men.

In view of the above, it is essential for society and health professionals to be aware of the main causes and risk factors for neoplasms in men, in order to adopt preventive measures and identify possible signs of these diseases early on. It is important to emphasise that early detection is fundamental for successful treatment and for reducing morbidity and mortality.

With regard to the treatment of neoplasms in men, Souza et al (2021) emphasise the importance of a multidisciplinary approach, involving professionals from different areas of health, such as oncologists, surgeons, psychologists and others. The most common treatments for neoplasms include surgery, radiotherapy and chemotherapy, which can be used alone or in combination, depending on the type and stage of the disease.

Kim, Lee and Moon (2023) emphasise that, in addition to traditional treatments, medicine has advanced in the development of new therapeutic approaches for neoplasms in men. These include immunotherapy and target therapy, which have shown promising results in the treatment of certain types of cancer. It is also important to highlight palliative care, which aims to relieve symptoms and improve patients' quality of life, especially in cases of advanced disease.

However, it is important to emphasise that, despite the advances in the field, there are still many challenges in the treatment of neoplasms in men. One of these challenges is the lack of patient adherence to prescribed treatments, as pointed out by Mackillop et al (2020). This can occur due to various factors, such as fear, misinformation and lack of emotional support.

Health professionals therefore need to be prepared to deal with these issues and promote effective communication with patients.

Another important challenge is the need for investment in research and technology for the diagnosis and treatment of neoplasms in men, as highlighted by Batista (2020). The lack of adequate resources can limit people's access to more effective treatments, jeopardising their quality of life and the success of treatment. For this reason, it is essential that governments, institutions and companies invest in this area in order to promote progress and guarantee adequate care for patients.

Therefore, given the evidence presented, it can be concluded that neoplasms in men are multifactorial diseases, and their prevention and treatment require a joint effort by society, health professionals and public policies. In this sense, it is essential to invest in campaigns to raise awareness about risk factors and the importance of early detection, as well as guaranteeing adequate and accessible treatment for all. After all, the fight against neoplasms in men is the responsibility of all of us.

FINAL CONSIDERATIONS

Considering the complexity and seriousness of neoplasms in men, it is clear that it is important to continually deepen studies into this condition and look for new prevention, diagnosis and treatment strategies. Through the detailed analysis of the main causes, risk factors and treatments presented in this article, it is possible to realise the need for an integrated, multidisciplinary approach to dealing with the rising incidence of these diseases.

With regard to the causes of neoplasms in men, it is important to emphasise the importance of addressing genetic and environmental factors, as well as paying attention to lifestyle habits and exposure to chemical substances and carcinogens. In this sense, it is important to encourage awareness and education campaigns about the risks of smoking, excessive alcohol consumption and obesity, as well as promoting measures to reduce exposure to harmful chemicals in the workplace and in society in general.

However, it is important to emphasise that even with a change in lifestyle habits, it is still possible for men to develop neoplasms. Therefore, it is essential to pay continuous attention to the early diagnosis of these diseases. Lack of knowledge about the importance of regular preventive examinations often hinders the early detection of neoplasms, which can

jeopardise the success of treatment. That's why it's essential for health professionals to be attentive and provide guidance on the importance of carrying out these examinations.

In addition, greater investment is needed in research to develop new technologies and more accurate and less invasive diagnostic methods. This would enable a faster and more accurate diagnosis, allowing treatment to be started in the early stages of the disease. In addition, it is important that there is greater accessibility and coverage of health systems so that all men can undergo these tests. With regard to treatment, it is essential that therapy is personalised, taking into account the individual characteristics of each patient.

To this end, it is essential that health professionals are up-to-date and trained to offer the best treatments and specific care for each case. In this sense, collaboration between different specialities can be crucial to increasing the chances of successful treatment and patient recovery. In addition to traditional treatments, it is important to encourage the development of alternative therapies that can help in the healing and recovery process.

Therapies such as acupuncture, meditation and physical exercise can be used as complements to conventional treatments, bringing benefits to patients' physical and emotional health. Finally, it is essential to emphasise the importance of comprehensive and continuous care for patients with neoplasms. In addition to medical care, it is essential to guarantee psychological and emotional support throughout the process, both for patients and their families. A support network is essential for facing the challenges and overcoming the difficulties faced during treatment.

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