Prostate Cancer and Racial Equity: Analysis of Barriers to Health Care Access

https://doi.org/10.32635/2176-9745.RBC.2026v72n1.5391EN

Câncer de Próstata e Equidade Racial: Análise das Barreiras de Acesso aos Cuidados de Saúde Cáncer de Próstata y Equidad Racial: Análisis de las Barreras de Acceso a la Atención Sanitaria

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ABSTRACT

Introduction: In Brazil, prostate cancer is the second most common type of cancer among men, being more prevalent in older adults. However, Black men have higher incidence and mortality rates, as well as later diagnoses and reduced access to appropriate therapies, reflecting structural racial, socioeconomic, and geographic inequalities. Objective: To analyze the barriers to health care access for Black men with prostate cancer, exploring the diagnostic process, treatment choices, and adherence to therapy. Method: Integrative literature review based on searches at the databases PubMed, EMBASE, Web of Science, Scopus, and BVS. The descriptors "Prostatic Neoplasms," "Health Services Accessibility," and "Race Factors" were used, combined with Boolean operators, resulting in 32 studies included in the review. Results: The studies were organized into six categories: (1) Epidemiology and racial disparities, (2) Specific risk factors, (3) Access and barriers to early diagnosis, (4) Treatment and clinical outcomes, (5) Psychosocial aspects and quality of life, and (6) Public policies and strategies to reduce inequalities. The analyses revealed systemic inequalities in access to diagnosis, treatment, and psychosocial support, as well as the influence of structural racism and underrepresentation in researches. Conclusion: Health care access for Black men with prostate cancer is limited by complex and interdependent barriers, requiring intersectoral strategies, inclusive public policies, culturally sensitive training, and expansion of oncological equity. Key words: Prostatic Neoplasms/epidemiology; Race Factors/ethics; Health Services Accessibility.

RESUMO

Introdução: No Brasil, o câncer de próstata é o segundo tipo de câncer mais comum entre homens, sendo mais prevalente em idosos. Homens negros, no entanto, apresentam maior incidência e mortalidade, além de diagnóstico mais tardio e menor acesso às terapias adequadas, refletindo desigualdades estruturais de ordem racial, socioeconômica e geográfica. Objetivo: Analisar quais são as barreiras de acesso ao cuidado em saúde para o homem negro com câncer de próstata, explorando desde o diagnóstico, a escolha de tratamento até a autogestão do cuidado relacionado à terapêutica. Método: Revisão integrativa de literatura a partir de buscas nas bases de dados PubMed, EMBASE, Web of Science, Scopus e BVS. Utilizaram-se os descritores "Prostatic Neoplasms", "Health Services Accessibility" e "Race Factors", combinados por operadores booleanos, resultando em 32 estudos incluídos na revisão. Resultados: Os estudos foram organizados em seis categorias (1) Epidemiologia e disparidades raciais, (2) Fatores de risco específicos, (3) Acesso e barreiras ao diagnóstico precoce, (4) Tratamento e desfechos clínicos, (5) Aspectos psicossociais e qualidade de vida e (6) Políticas públicas e estratégias de redução de desigualdades. As análises evidenciaram desigualdade sistêmica no acesso ao diagnóstico, tratamento e suporte psicossocial, além da influência do racismo estrutural e da baixa representatividade em pesquisas. Conclusão: O acesso à saúde para homens negros com câncer de próstata é limitado por barreiras complexas e interdependentes, exigindo estratégias intersetoriais, políticas públicas inclusivas, formação sensível e ampliação da equidade oncológica.

Palavras-chave: Neoplasias da Próstata/epidemiologia; Fatores Raciais/ética; Acessibilidade aos serviços de saúde.

RESUMEN

Introducción: En el Brasil, el cáncer de próstata es el segundo tipo de cáncer más común entre los hombres, siendo más prevalente en los ancianos. Sin embargo, los hombres negros presentan una mayor incidencia y mortalidad, además de un diagnóstico más tardío y menor acceso a terapias adecuadas, lo que refleja desigualdades estructurales de orden racial, socioeconómico y geográfico. Objetivo: Analizar cuáles son las barreras de acceso a la atención en salud para el hombre negro con cáncer de próstata, explorando desde el diagnóstico, la elección del tratamiento hasta la adherencia terapéutica. Método: Revisión integradora de la literatura a partir de búsquedas en las bases de datos PubMed, EMBASE, Web of Science, Scopus y BVS. Se utilizaron los descriptores "Prostatic Neoplasms", "Health Services Accessibility" y "Race Factors", combinados mediante operadores booleanos, resultando en 32 estudios incluidos en la revisión. Resultados: Los estudios se organizaron en seis categorías: (1) Epidemiología y disparidades raciales, (2) Factores de riesgo específicos, (3) Acceso y barreras al diagnóstico temprano, (4) Tratamiento y resultados clínicos, (5) Aspectos psicosociales y calidad de vida, y (6) Políticas públicas y estrategias para reducir desigualdades. Los análisis evidenciaron desigualdades sistémicas en el acceso al diagnóstico, tratamiento y apoyo psicosocial, así como la influencia del racismo estructural y la baja representatividad en las investigaciones. Conclusión: El acceso a la salud para los hombres negros con cáncer de próstata está limitado por barreras complejas e interdependientes, lo que exige estrategias intersectoriales, políticas públicas inclusivas, formación con sensibilidad cultural y ampliación de la equidad oncológica.

Palabras clave: Neoplasias de la Próstata/epidemiología; Factores Raciales/ética; Accesibilidad a los Servicios de Salud.

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INTRODUCTION

Prostate cancer is a condition resulting from alterations in the DNA sequence, which are marked by disordered multiplication, alteration to the morphophysiology of the affected cell, and consequent prostate inflammation¹. Beyond the insidious character of progression, the disease has a multifactorial prognosis due to the plasticity of cancer cells, giving them endurance to the chosen therapy².

In Brazil, prostate cancer is the second most common cancer among men, behind only non-melanoma skin cancer. Its incidence is greater in developed countries due to the intrinsic, directly proportional relationship between high life expectancy and an increase of cancer incidence in elderly men, which makes it an old age cancer. Under this perspective, for the 2023-2025 triennium, 71,730 new cases are estimated for Brazil, while, in terms of mortality, there were 15,841 deaths in 2020, approximately 15 deaths for each 100 thousand men³. These data corroborate the need for screening the asymptomatic population through the prostate-specific antigen (PSA) and the digital rectal examination, and for early diagnosis, to reduce the stage and presentation of the disease⁴.

However, Black men are directly affected by prostate cancer, given the high mortality rates and the more aggressive and early presentation of the disease in comparison to White men. The discrepancy aggravates when the view on the treatment broadens, in which Black people have less access to diverse therapeutic options, as well as face delays in diagnosis and even therapy⁵. According to the World Health Organization Commission on the Social Determinants of Health, racism is included as a factor associated with social vulnerabilities, which are reflected in the difficulty of access to health services, as well as an ideological and multifactorial dimension that underlies the political plan and dictates the power relations in society^{6,7}.

With all that considered, and the complex nature of the subject, this study aimed to analyze what are the barriers to health care access for Black men with prostate cancer, exploring the diagnostic process, treatment choices, and adherence to therapy.

METHOD

Integrative literature review seeking high sensitivity. The review was conducted in six steps, which correspond to: identification of the theme, formulation of research question, descriptors, and databases; establishment of inclusion and exclusion criteria; identification of preselected studies; categorization of the obtained studies;

analysis and interpretation of results; and presentation of knowledge synthesis^{8,9}. The research question was: "What are the main access barriers to health care for Black men with prostate cancer?", structured on the PCC (Population, Concept, Context) acronym, in which "Population" refers to Black men with prostate cancer; "Concept", to the access barriers related to health care; and "Context", to racial and socioeconomic inequalities in treatment and care self-management.

The inclusion criteria were articles that aligned with the research theme and question, were available to read in full, and whose methodology was cognizable and evident. There was no time frame filter; articles that were published anytime were selected as long as they were in line with the research parameters. The exclusion criteria were review articles, meta-analyses, letters, editorials, studies on animals, duplicate articles, and those that did not answer the research question.

The following descriptors were defined: "Prostatic neoplasms" and "Race factors", present in the *Descritores da Saúde* (DeCS), Medical Subject Headings (MeSH), and Emtree. After the definition, the search terms and respective synonyms were applied to the PubMed, EMBASE, Web of Science, Scopus, and BVS databases using Boolean operators AND and OR. From the initial sample, the articles were selected by titles and abstracts. The second part proceeded with a full reading of the text. For this process, we used the Rayyan tool, developed by Qatar Computing Research Institute, which enables exporting articles, applying filters, and optimizing the duplicate removal process. This process was independently conducted by three reviewers.

After article identification, we proceeded to the fourth step, which consisted of recording all the articles selected based on the Ursi instrument, containing title, authors, methodological characteristics, and main results found, to facilitate the production of this review. Next, the articles were categorized by the most recurrent central themes.

It must be emphasized that this work has limitations, like the scarcity of Brazilian scientific publications on the causes of inequality in health care access. Moreover, many articles were excluded for choosing the biological and genetic approach as factors responsible for racial inequality in the context of Black men with prostate cancer.

The flowchart (Figure 1) summarizes how the studies were selected from the databases.

RESULTS

Initially, 14,786 articles were identified, with 2025 being the last searched period. After exclusion of duplicates and reading title, abstract, and full text, 32



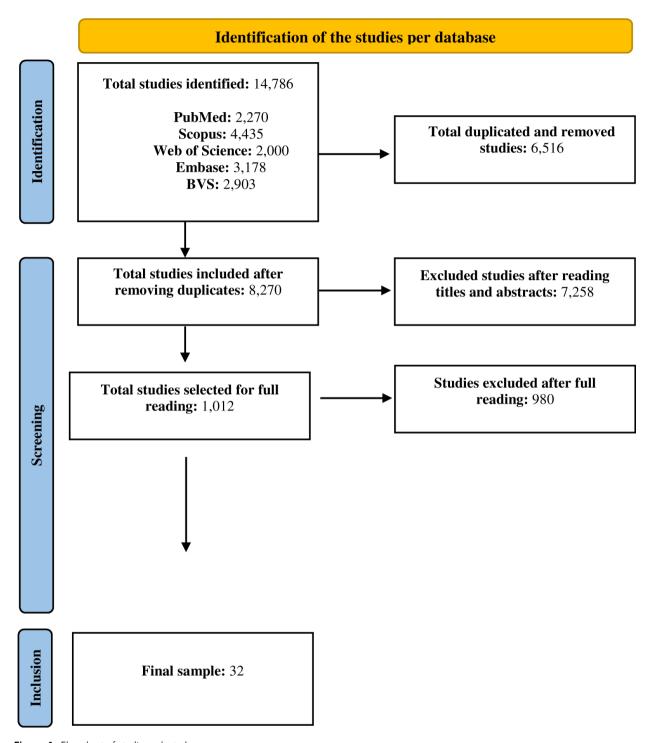


Figure 1. Flowchart of studies selected **Source:** Adapted from PRISMA¹⁰.

articles in English were selected for the present review, allowing the identification of a broad panorama of the barriers faced by Black men in accessing prostate cancer care. From this analysis, the studies were systematized in six thematic categories to facilitate considerations, as follows: (1) Epidemiology and racial disparities, (2) Specific risk factors, (3) Access and barriers to early

diagnosis, (4) Treatment and clinical outcomes, (5) Psychosocial aspects and quality of life, and (6) Public policies and strategies to reduce inequalities (Figure 2).

The category with the largest number of articles was "Epidemiology and racial disparities" (n=14), which approached differences in incidence, mortality, and stages between Black and White men, highlighting the influence

CATEGORY AND AUTHORS

TOTAL OF ARTICLES

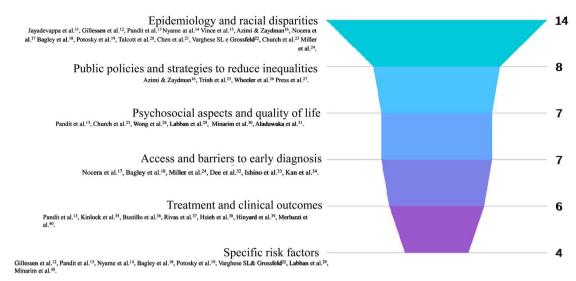


Figure 2. Profile of articles according to thematic categorization of the studies included in the sample

of geographical location, socioeconomic status, and unequal access to health care services. Furthermore, some studies used spatial analysis tools to highlight "health deserts", while others discussed racial inequalities in representativeness in clinical studies and survival after diagnosis.

Likewise, in "Specific risk factors", the results demonstrated the individual and contextual determinants that stood out the most in four articles present in this review, which are associated with increased risk among Black men for aggravated profiles, including: genetics, family history, and age.

The category "Access and barriers to early diagnosis" included articles that demonstrated the obstacles faced in the diagnostic step. In this sense, the following barriers were identified: ignorance of symptoms and signs, stigma involving the masculine, logistical difficulties, financial obstacles, inaccessible doctors, and institutional prejudice. The main problems identified were: delay in medical consultation or scheduling of appointments, identified as the most impactful factor; lack of information and guidance; fear, prejudice, or shame of seeking health care, highlighting cultural and emotional barriers; and few professionals and a lack of urologists, reflecting the insufficiency of specialists available for assistance.

In "Treatment and clinical outcomes", six articles highlighted differences in the type of treatment offered, therapy withdrawal, choice for less invasive options, and delays in starting care. Under this bias, some studies demonstrated that, although there is access to health services in certain cases, factors such as distrust and previous experiences of discrimination contribute to

refusal or delay in the treatment of these patients, as shown in Figure 3.

In this perspective, in the category "Psychosocial aspects and quality of life", seven studies explored the emotional, social, and family repercussions of prostate cancer in Black men. Reports of anxiety, depression, fear of sexual impotence, stigmas, and the feeling of masculine identity loss were frequent. Besides, the lack of appropriate psychosocial support in this context and cultural sensitivity to the demands was pointed out as an important gap in the reality of these patients.

Also, in "Public policies and strategies to reduce inequalities", eight works proposed structural and institutional solutions to mitigate the inequalities, with emphasis on the inclusion of technologies, training of health professionals, campaigns targeting the Black population, greater representativity in clinical trials, and equitable access to information.

DISCUSSION

The studies painted a concerning picture and an urgent need for structural and educational interventions, such as potentially effective tools for changing this panorama and targeting the Black population, since a great part of the evidence suggests persistent inequalities in access, information, and care for prostate cancer. Furthermore, a greater incidence and mortality were identified among Black men, as well as insufficient knowledge on risk factors, relevant barriers to early diagnosis, and limitations in access to appropriate treatment.



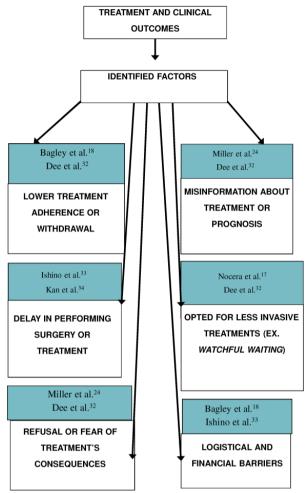


Figure 3. Flowchart of treatment and clinical outcomes

Equitable access to prostate cancer treatment has been a growing discussion in medical literature, especially regarding racial disparities in access to diagnosis, treatment, and follow-up with the disease in question. Black men present higher disease incidence and mortality rates, which raises questions on the factors that impair access to appropriate health care¹¹. Among the main challenges identified are socioeconomic obstacles, cultural and psychological barriers, geographical access difficulties, less participation in clinical trials, and historical distrust in the health care system^{14,36}. In this scenario, it is perceptible that the intersection of these factors strongly contributes to the late diagnosis and greater morbimortality of the Black population regarding prostate cancer.

Another critical factor to be mentioned is the impact of geographical location. Many Black men live in regions with a smaller medical infrastructure, needing long displacements to receive specialized assistance²⁸. The study by Azimi and Zaydman¹⁶ revealed that Black patients have less access to preventive exams due to limitations in transportation options and the distribution

of health care services. Furthermore, the difficulty in obtaining consultations on short notice aggravates the late detection of the disease, compromising the efficacy of the treatment¹³. The geospatial analysis by Vince et al.15 revealed that certain areas inhabited mostly by the Black population present "health deserts", where the lack of specialized services contributes to worse prognoses. In line with this, another geospatial analysis, conducted by Labban et al²⁹, suggested that the unequal distribution of medical services reduces the chances of these patients' receiving assistance in due time. Aladuwaka et al.31, by using the Geographic Information System (GIS) in the State of Alabama, were also able to broaden the discussion about spatial inequality, given that the software provides spatial analysis and shows the distribution of medical assistance, as well as the presence of socioeconomic factors.

A direct correlation between low socioeconomic status and high prostate cancer incidence and mortality rate was perceived, highlighted by the proportional relationship between poverty rate and the number of prostate cancer cases, opposing the result observed in regions composed of people with higher purchasing power, in which there is a lower incidence of prostate cancer. Furthermore, coupled with the low levels of education found in this region, these patients consequently have limited access to early screening, resulting in late diagnoses and poor prognosis of the disease, in addition to the presence of stigmas, linked to low education, in seeking medical care.

The socioeconomic determinants are one of the main barriers to access to health care, with financial inequality being one of the most striking aspects of racial difference in the treatment of prostate cancer. Therefore, Black men are more likely to rely on public health systems and not own private insurance plans, which limits their accessibility to modern therapies and specialized follow-ups^{12,29}. They report that financial difficulties directly affect treatment adherence and contribute to worse clinical outcomes.

Black workers, recurrently, perform duties that do not allow them to be frequently absent to attend medical consultations and procedures, which abjectly impacts these men's continuity of treatment¹⁶. Coupled with that, the lack of information on the rights of patients and opportunities for financial support is another limiting factor, given that many Black men do not seek assistance programs due to not knowing or distrusting the system³³.

From the perspective of the time between diagnosis and the effective start of surgical treatment, according to Ishino et al.³³, it is clear that there is a paradoxical relationship between access and health insurance, since, although both groups with medium and high delays in starting therapy have a high probability of having private health insurance, there is still a delay in seeking care due

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to the high co-payment costs, especially when compared to those with public insurance. Thus, it was observed that Black middle-aged men, despite having health insurance, were less likely to receive surgery, which is concerning, given that most prostate cancer cases in Black men have an advanced character, with surgery being mandatory.

Inequality in access and the consequent increase in mortality of Black men with prostate cancer is not restricted to therapy delay, but also to factors associated with the patient's choice of treatment type, that is, Black men were observed to be more likely to consider recovery time, treatment, and cost as mandatory aspects in decision-making, as opposed to White men⁴¹. However, the analysis by Nocera¹⁷, diverging from the discussion on the impact of ethnicity in access to treatment, demystifies the weight of this factor, given that initially analyzed disparities in treatment rate were not explained by the intrinsic racial bias, but by the socioeconomic and institutional status.

Therefore, the discussion regarding the multifactorial complexity of access barriers is broadened, highlighting that, although racism is a structural phenomenon permeating all social, economic, and political relations – resulting in forms of exclusion and oppression legitimized by the State – racism, by itself, does not explain the difficulties of access.⁴².

The variety of radiotherapy treatment in Black men with prostate cancer is also a condition for giving up on the therapy, given that Dee et al.³² showed a higher rate of non-conclusion of conventional radiotherapy, which is fractionated, while stereotactic body radiotherapy consists of a higher precise dose with less fractionation, associated with costs and logistics of displacement by patients. Regarding treatment adherence, the level of trust among Black patients is directly related to difficulties in access; that is, insecurity is not intrinsic to ethnicity or cultural differences, but to negative experiences lived by Black men related to structural inequalities⁴³.

Mental health is a determining factor in treatment engagement. Black men diagnosed with prostate cancer present high levels of anxiety and depression, which can affect their ability to understand the importance of following the recommended medical protocols⁴⁴. The psychological support offered by institutions is frequently inappropriate, especially in the case of public services, resulting in a possible aggravation of the patient's emotional state²⁴. Black men who face these emotional difficulties associated with the treatment also reported less family and community support, which intensifies even more the psychological barriers to health access¹³.

Moreover, distrust in the health system is a recurring factor, exacerbated by a history of medical abuses against

Black populations, as the infamous Tuskegee study, by Bustillo et al.³⁶, reported. The perception that the health system treats Black men as inferiors lead many patients to avoid seeking assistance at hospitals or refusing treatments suggested by doctors³². Minarim et al³⁰ demonstrated that the perception of discrimination in health is associated with worst clinical results, since these patients tend to delay or avoid necessary treatments.

Rivas et al.³⁷ also pointed out that cultural barriers and beliefs on masculinity affect the disposition to seek help, since the prostate is associated with virility and sexuality, causing discomfort when discussing symptoms. Some studies also report that the lack of Black doctors or health professionals who understand Afro-descendant culture and who are able to convey information sensitive to the cultural specificities of each people negatively affects the quality of assistance and trust in the institution¹⁴.

The quality of care received also differs among racial groups. Even when diagnosed in the same disease stage, Black men are less likely to receive definitive treatments, such as surgery and radiotherapy, in comparison to White men¹⁵. The study by Nyame et al.¹⁴ demonstrated that, when socioeconomic factors are equalized, the outcomes among different racial groups become similar, suggesting that treatment barriers are more related to institutional issues than biological differences.

Furthermore, the limited participation of Black men in clinical trials was noted as another major obstacle in the search for more effective treatments catered to that population. Many clinical trials present underrepresentation of racial minorities, which ends up compromising the ability to develop specific therapies that consider these patients' biological and socioeconomic needs²⁵. The lack of diversification in the clinical samples also impairs the identification of differences in the response to treatments between distinct racial groups²⁵. This wretched panorama of inequality and exclusion reinforces the need for public policies that promote inclusion of under-represented populations in scientific research, ensuring that advancements in Medicine benefit all groups equally.

Moreover, such under-representation panorama resonates as a gap in the specific knowledge of the Afrodescendant people on their condition, an already existing deficit in this segment. The causes for this deficiency affect not only the first moment of prevention, screening, and diagnosis, but also therapeutic choices, their side effects, risks, benefits, and prognoses⁴⁵. In this sense, Black patients, under a less favored socioeconomic framing, become more vulnerable to, from this failure in information accessibility, lower treatment adherence, negative impacts on their personal lives, worse prognoses,



and intake of content not targeted at this demographic, corroborating the aforementioned issues⁴⁵.

Therefore, we notice that equitable access to treatment of this neoplasm in Black patients has several social, economic, cultural, and institutional determining factors, which influence the whole journey of these individuals. In this sense, the barriers found constitute a structure that prolongs inequalities and significantly affects the clinical outcomes of the population in question. The combination of factors, such as absence of targeted policies, invisibility of this social segment in health campaigns, low inclusion in clinical trials, and previous experiences of discrimination in the services, reinforces distrust and promotes their deviation from continuing treatment. Thus, there is an urgent need for specific strategies targeted at facing these social, structural, and cultural impasses.

CONCLUSION

Black men with prostate cancer face a diversity of barriers related to health care, from access to early diagnosis to appropriate treatment and disease follow-up. Moreover, the interconnection of social, economic, geographic, and cultural factors reveals the magnitude and complexity of inequalities this population faces, usually, in their oncological care. Results demonstrated that these barriers are not restricted only to individual aspects but also reflect a lacking health care system in many aspects, still marked by structural racism and several institutional flaws, inserted in a context of racial exclusion and marginalization.

Under this view, it becomes urgent the need for public policies that ensure not only access, but also equity in the care for Black patients with prostate cancer. To achieve this, it is necessary to expand territorial coverage in order to reduce geographic access barriers, invest in training and hire professionals who have the ability to deal with cultural differences, associated with carrying out educational campaigns that are culturally sensitive.

Moreover, it is key that graduation and postgraduation courses in the health field broadly incorporate content on structural racism, social determinants in health, and cultural competencies into their curricula, as well as include in their scientific research agendas the representation of the Black population. Thus, critical education of students and professionals can be stimulated so that members of the academic community are prepared to recognize and deal with racial inequalities, given that such abilities are implicated in the outcomes of health care.

In this perspective, there is also a need for creating spaces for dialog and active listening of the Black

population in health services, enabling the adaptation of clinical practices to the reality experienced by these patients and promoting a more welcoming and reliable environment for them. Therefore, ensuring the integral right to health for Black men with prostate cancer requires a structural transformation in the assistance model, with a focus on social equity and respect for cultural diversity.

We reinforce the need for further investigations that delve more deeply into the relations between prostate cancer and racial factors. These studies will broaden the reach of evidence and strengthen intervention strategies, serving as a reference for new practices and research in the area.

ACKNOWLEDGMENTS

To the collaborators and patients who agreed to participate in this study. To the National Council for Scientific and Technological Development (CNPq) and the Mossoró league of cancer studies and coping (*Liga de Mossoró de Estudos e Combate ao Câncer*) for the funding of this research.

CONTRIBUTIONS

Ana Deborah Leite de Souza, Laura Lira Amorim, and Linda Pietra Gomes Leite have contributed to the study design and planning; analysis and data interpretation; wording and critical review. Ana Beatriz da Silva and Ysabele Yngrydh Valente Silva contributed to the study design and data analysis; wording and critical review. Ekarinny Myrela Brito de Medeiros contributed to drafting and critical review. Ellany Gurgel Cosme do Nascimento contributed to the study design and planning; data acquisition, analysis, and interpretation; wording and critical review. All the authors approved the final version for publication.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interest to declare.

DATA AVAILABILITY STATEMENT

All the contents associated with the article are included in the manuscript.

FUNDING SOURCES

CNPq support.



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Recebido em 28/7/2025 Aprovado em 8/9/2025

Associate editor: Fernando Lopes Tavares de Lima. Orcid iD: https://orcid.org/0000-0002-8618-7608 Scientific-editor: Anke Bergmann. Orcid iD: https://orcid.org/0000-0002-1972-8777

