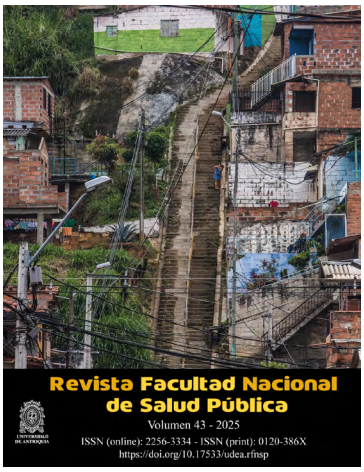

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Prostate cancer and screening tests: experiences and sociocultural beliefs of rural adults*

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Abstract

Objective: To understand the experiences and sociocultural beliefs of rural adults about prostate cancer and screening tests.
Methods: Qualitative study with a focused ethnographic design. The sample was made up of men over 50 years of age, from La Playa village of the municipality of Caldas (Boyacá, Colombia) for the year 2023. The information was collected through in-depth interviews.
Results: Three categories were obtained: experiences and knowledge about prostate cancer and screening tests; sociocultural beliefs about prostate cancer and screening tests; and access barriers to prostate cancer screening. Perception of cancer risk and the importance of screening tests are influenced by previous experiences and sociocultural factors. In addition, barriers such as limited access to medical services, as well as economic and geographic difficulties, complicate testing and follow-up.
Conclusions: Understanding of prostate cancer is conditioned by personal and family history. Although some people recognize certain risk factors, there is still a notable lack of knowledge about screening tests and symptoms of the disease, which complicates early detection. The prostate-specific antigen (PSA) test is the most widely accepted test among men, and knowing of someone close with prostate cancer often encourages screening. However, significant barriers to access persist, especially due to lack of information about available health services and tests.

----------*Keywords:* access barriers to health services, prostate cancer, social representations, adult health, screening

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Cáncer de próstata y pruebas de tamizaje: experiencias y creencias socioculturales del adulto en el contexto rural

Resumen

Objetivo: Comprender las experiencias y creencias socioculturales del adulto sobre el cáncer de próstata y las pruebas de tamizaje.
Método: Estudio cualitativo con diseño etnográfico focalizado. La muestra estuvo conformada por hombres mayores de 50 años, procedentes de la vereda La Playa, del municipio de Caldas, Boyacá, para el año 2023. La recolección de la información se realizó mediante una entrevista a profundidad.
Resultados: Se obtuvieron tres categorías: experiencias y conocimientos sobre el cáncer de próstata y pruebas de tamizaje; creencias socioculturales sobre el cáncer de próstata y pruebas de tamizaje y barreras de acceso en el tamizaje de cáncer de próstata. La percepción del riesgo de cáncer y la importancia de las pruebas de tamizaje están influenciadas por experiencias previas y factores socioculturales. Además, barreras como el acceso limitado a servicios médicos, dificultades económicas y geográficas complican la realización y el seguimiento de estos exámenes.
Conclusiones: La comprensión sobre el cáncer de próstata está condicionada por los antecedentes personales y familiares. Si bien algunas personas reconocen ciertos factores de riesgo, persiste un notable desconocimiento sobre las pruebas de tamizaje y los síntomas de la enfermedad, lo que dificulta su detección precoz. La prueba del antígeno prostático específico es la más aceptada entre los hombres, y el conocimiento de casos cercanos suele incentivar la realización del examen. No obstante, persisten importantes barreras de acceso, especialmente derivadas de la falta de información sobre los servicios de salud y las pruebas disponibles.

----------*Palabras clave:* barreras de acceso a servicios de salud, cáncer de próstata, representaciones sociales, salud del adulto, tamizaje.

Câncer de próstata e testes de triagem: experiências e crenças socioculturais do adulto no contexto rural

Resumo

Objetivo: Compreender as experiências e crenças socioculturais do adulto sobre o câncer de próstata e os testes de triagem.
Método: Estudo qualitativo com desenho etnográfico focalizado. A amostra esteve conformada por homens de mais de 50 anos, procedentes do vilarejo La Playa, do município de Caldas, Boyacá, para o ano 2023. A coleta de informação foi realizada por meio de entrevista em profundidade.
Resultados: Obtiveram-se três categorias: experiências e conhecimentos sobre o câncer de próstata e testes de triagem; crenças socioculturais sobre o câncer de próstata e testes de triagem e barreiras de acesso na triagem do câncer de próstata. A percepção do risco de câncer e a importância dos testes de triagem estão influenciadas por experiências prévias e fatores socioculturais. Além disso, barreiras como o acesso limitado a serviços médicos, dificuldades econômicas e geográficas complicam a realização e o seguimento desses exames.
Conclusões: A compreensão sobre o câncer de próstata está condicionada pelos antecedentes pessoais e familiares. Mesmo que algumas pessoas reconheçam alguns fatores de risco, persiste um desconhecimento significativo sobre os testes de triagem e os sintomas da doença, o que dificulta sua detecção precoce. O teste do antígeno prostático específico é o mais aceito entre os homens e o conhecimento de casos próximos costuma incentivar a realização do exame. Contudo, persistem barreiras importantes de acesso, derivadas especialmente da falta de informação sobre os serviços de saúde e os testes disponíveis.

----------*Palavras-chave:* barreiras de acesso a serviços de saúde, câncer de próstata, representações sociais, saúde do adulto, triagem.

Introduction

Research from the American Cancer Society on prostate cancer's worldwide impact shows that approximately one in nine men globally will be diagnosed with this type of cancer in their lifetime [1]. The World Cancer Research Fund indicates that prostate cancer is the second most common cancer in men, reporting more than 1.4 million new cases of this carcinoma by 2022 [2]. According to the American Society of Geriatric Oncology, this type of cancer is considered more common in older patients, with a higher incidence after the age of 65 years and a higher mortality rate around the age of 75 years. Prognosis is influenced by previous health status, genetic disposition, and nutritional status [3].

According to Schafer *et al.* [4], North America and Northern Europe, Australia, New Zealand, Latin America, and the Caribbean saw the highest rates of prostate cancer and deaths, along with sub-Saharan Africa. In this regard, the Lancet Commission on Prostate Cancer predicts that the incidence of prostate cancer will correspond to about 2.9 million cases per year in 2040 and, consequently, estimates that deaths will increase to approximately 700,000 by the same year [5] due to two facts: (i) the increase in the number of older men because increased life expectancy and (ii) changes in age structure as older people represent a larger proportion of the population.

According to data reported by the Global Cancer Observatory for 2022 in Colombia, prostate cancer was the most frequent type of cancer in men, with 16,479 cases, corresponding to 29.3% of all cancer cases [6]. Between January 2nd, 2022, and January 1st, 2023, 5,793 new diagnoses of this type of tumor were identified in Colombia, equivalent to 9.85% of all cancer cases registered during that time, according to the Colombian Fund for High-Cost Diseases (*Fondo Colombiano de Enfermedades de Alto Costo*). "During the 2023 period, the median age of men diagnosed with this cancer was 70 years. By January 1st, 2024, a total of 65,333 cases of prostate cancer had been registered in the country. 83.14% of these men were 65 years or older, and nearly half of those affected resided in the central region or Bogotá, with 50.43% [7].

In the department of Boyacá, Colombia, the Ministry of Health and Social Protection [8] reported that this disease was responsible for 10.41 deaths per 100,000 men, and noted that this type of cancer, which is usually present between the ages of 65 and 67, has risk factors such as age over 50 years, family history of father or brothers with a history of this carcinoma, in addition to situations related to excessive alcohol consumption, sedentary lifestyle and obesity. However, in the 2021 analysis of the health situation in the municipality of Caldas, Boyacá (using the social determinants of health model), it was identified that for "the general population in the period from 2015 to 2019, in the group of neoplasms, the main cause of mortality corresponded to malignant prostate tumor" [9, p. 40, own translation].

The epidemiological panorama described above reflects the importance of prostate cancer as a crucial problem from a public health perspective, in relation to its morbidity and mortality, affecting men in situations and conditions that determine a greater probability of its occurrence.

Epidemiological studies by Islas *et al.* [10] and Yanes *et al.* [11] state that among the most frequent determinants related to prostate cancer are age after 50 years (as there is a directly proportional relationship with incidence) genetic factors, high consumption of unhealthy foods (e.g., animal fats and processed products), family history of carcinoma, Afro-descendant ethnicity, excessive alcohol consumption, and obesity.

In this context, early detection of prostate cancer is essential to prevent disease progression, adnexal organ involvement, and premature mortality [12]. Despite this, the study by Gutiérrez *et al.* [13] shows that residence in rural areas is recognized as a factor associated with an unfavorable prognosis in the survival of patients with this type of cancer. Individuals living in rural areas have a lower probability of survival, limited access to health services, a higher risk of diagnosis of prostate cancer in advanced stages, and a higher mortality rate. Furthermore, authors specify that geographical location is a relevant indicator for evaluating access to certain health resources and services.

Socio-cultural experiences and beliefs in health are collective constructions that reflect the way people interpret, confront, and manage the processes of health, illness, and medical care, based on experiences, traditions, values, ancestral knowledge, and social norms. For instance, the ingrained idea of masculinity in many South American countries has led to the belief that prostate screening violates the concept of *masculinity* and the power attributed to men, which impacts on the understanding of prostate cancer information, values, and individual perceptions [14]. In this regard, the study on prostate cancer, approached from a gender perspective, shows the interaction between identity factors and social structures that affect preventive practices; in particular, it highlights the influence of male stereotypes related to self-care, sexuality, and body perception, which tend to limit the search for professional medical care until overt symptoms of the disease appear [15].

The research carried out by Almeida *et al.* [16] shows that the cultural component plays a differentiating role with respect to screening, mediated by the meaning given to the male sexual organ as a symbol of virility, in

addition to the feeling of shame associated with machismo in men, since it is believed that they feel vulnerable with the examination and, as a result, they lose their masculinity. Also, teasing inhibits motivation for screening, suggesting that it is more difficult to get screened. Religion is also identified as a cultural expression that acts as a barrier, because of the shame of allowing body penetration, which among men is associated with homosexuality, and in which case, for some believers, having the disease is accepted with resignation [17].

The study by Fajardo *et al.* [14] highlights that men express discomfort, fear, or embarrassment about prostate screening and have misconceptions about the causes of prostate cancer. Their findings identify that those with a lower level of education demonstrate less screening knowledge and usage. Additionally, the perception of susceptibility to developing the disease, the assessment of the seriousness of the situation, the apprehension associated with being screened, disparities in access to health services, the role of the concept of *masculinity*, the lack of knowledge about the issue and its implications are aspects that in general contribute to greater social vulnerability in certain groups and influence the negative decision to carry out early detection tests [18].

Thus, from the context of public health, it is necessary to address the promotion of healthcare among men, through intervention strategies adapted to the particularities of rural collectives; to have information available to timely identify the population with associated risk factors, through the provision of equitable access to health services; to seek early detection of those suffering from prostate cancer, significantly reducing their morbidity and mortality, through access to timely and continuous treatment, and to confer a more favorable prognosis [19]. In this sense, as prostate cancer is a highly preventable malignancy and screening methods are optimized for each particular case, highlighting the benefits of such procedures [11], it contributes to health promotion, disease prevention, the appropriate use of health resources, as well as improving the quality of life and productivity of men, especially in rural areas. Therefore, the objective of this study was to understand the socio-cultural experiences and beliefs about prostate cancer and screening tests of adults from the municipal rural settlement of La Playa, in the municipality of Caldas, Boyacá.

Materials and methods

This is a qualitative study, commonly used in the health sciences to understand the social and cultural reality of population groups in specific and peaceful contexts. Moreover, the study adopts a focused ethnographic design, which represents a contemporary approach focusing on specific sectors of society and the lives of socially and culturally fragmented people. It is oriented towards the study of shared experiences within delimited and particular phenomena, specific to small groups, to understand social problems and the interrelationship between people and the social context in which they develop [20].

The informants were men over 50 years of age, from the municipal rural settlement of La Playa, in the municipality of Caldas, Boyacá. Non-probabilistic convenience sampling was used, which allowed for the selection of cases that were accessible and willing to participate in the research. This choice was based on the proximity of the subjects to the researchers, which facilitated their incorporation into the study [21].

The sample size was determined based on the criterion of data saturation. That is, a thorough investigation of the material collected through interviews was carried out to gain an in-depth understanding of the implications of the phenomenon of interest based on the lived experiences of the participants [22,23]. Saturation of the data was reached from participant number nine onwards, at which point repeated confirmations and recurrence of themes were observed.

To identify the saturation point, constant coding was used, which allowed for a rigorous and in-depth analysis of the information, as the data obtained in the interviews were immediately analyzed and coded. This facilitated early identification of patterns, recurring themes, and emerging categories, as well as tracking progress towards theoretical saturation [24].

To reinforce the criterion of theoretical saturation, data triangulation and validation were applied to strengthen and validate the findings. This procedure reduced biases and increased confidence in the results by cross-checking the data obtained from other researchers or sources. The absence of relevant new insights confirmed the theoretical saturation and strengthened the robustness of the analysis [25].

Sample characteristics

The sample consisted of nine men over 50 years of age from the municipal rural settlement of La Playa, in the municipality of Caldas, Boyacá, who signed the informed consent form and agreed to participate in the study. Men diagnosed with prostate cancer or with health alterations that prevented them from answering the interview questions were excluded.

It is important to note that La Playa is characterized by a rural and traditional socio-cultural context, with an economy based mainly on agriculture and livestock. Community life is characterized by strong social cohesion and a strong sense of collective work, where responsibilities are shared and links between neighbors are strengthened. The community preserves deeply rooted

traditions and customs and maintains a close relationship with nature. Although it is a rural area, La Playa has access to basic services such as education and health; these services have some limitations in terms of coverage and quality [9].

Data collection techniques

Information was collected through an in-depth interview, the structure of which was based on a script organized according to the objective of the study [26].

Before the interview process began, a meeting took place at each of the participants' homes to socialize the objective of the research, the informed consent form, and the audio recording permission, emphasizing data confidentiality. The date, place, and time were agreed upon for the application of the interview, which was carried out in person at the same place as the first meeting, lasting approximately 35 minutes. The information was collected in October 2023.

Analysis of the information

The coding process was carried out through a careful reading of the interviews resulting text to identify ideas, concepts, and patterns relevant to the research. From this review, codes or labels were assigned to represent the emerging themes. Each code was generated based on key terms or phrases present in the data. To speed up and increase the accuracy of the analysis, ATLAS.ti software version 0.8 was used. The selected text fragments were coded, and the codes were then reviewed and adjusted to ensure greater consistency and accuracy in the interpretation of the results.

As for the creation of categories, the process consisted of organizing the related codes into coherent sets. Initially, codes were grouped based on thematic similarities, and when necessary, some codes were divided into sub-codes to establish a more detailed hierarchy. From this structure, new categories were defined, together with their respective sub-codes. Finally, the categories were reviewed and adjusted to ensure internal consistency and improve the accuracy of the analysis [27].

Complementarily, triangulation was used to increase the study's robustness and the quality of the qualitative approach. This technique consists of using multiple methods to address the same phenomenon, which allows for contrasting and enriching the information obtained. In this case, we resorted to the combined use of individual interviews, participant observation, and sources of information related to the socio-demographic and cultural context of the municipal rural settlement of La Playa [25].

#2 Ethical considerations

The research was approved by the Ethics and Bioethics Committee at Universidad de Boyacá, in the minutes issued on August 25th, 2023.

All the principles of Resolution 8430 of 1993, which establishes "the scientific, technical and administrative norms for health research," were considered, guaranteeing the dignity, protection of the rights and well-being of the participants [28].

It is considered a study with minimal risk, being prospective and employing the recording of data through common procedures.

Results

The results of this study emerged from the testimonies of nine adults living in the municipal rural settlement of La Playa, located in the municipality of Caldas, Boyacá. From the analysis of the interviews, three key categories about prostate cancer were identified: (i) experiences and knowledge, (ii) socio-cultural beliefs, and (iii) screening access barriers. The most relevant findings within each category are presented below, providing a detailed understanding of the factors affecting prostate health in this rural community.

Socio-demographic characterization

The sample consisted of nine adult residents of the municipal rural settlement of La Playa in the municipality of Caldas, Boyacá. The age of the informants ranges between 50 and 81 years, with an average of 61 years. Most of them have completed elementary school and live together with their partner (cohabitation) (see Table 1).

From the analysis, 39 codes were identified, interrelated in 14 subcategories that underpin the 3 core categories: (i) experiences and knowledge about prostate cancer and screening tests; (ii) socio-cultural beliefs about prostate cancer and screening tests; and (iii) prostate cancer screening access barriers (see Table 2).

Experiences and knowledge of prostate cancer and screening tests

The analysis of the interviews indicates that previous experiences with cancer and screening tests significantly influence perceptions of disease risk and the importance of regular screening. Furthermore, proximity to prostate cancer in family or friends is associated with increased awareness of the disease, its symptoms, and the benefits of early detection, which in turn increases willingness to undergo screening tests. According to two participants:

Table 1. Demographic characterization of participants

Participant	Age (in years)	Occupation	Schooling	Marital status
N1	81	Agriculture and livestock	Elementary school	Married
N2	54	Agriculture and livestock	Elementary school	Cohabitation
N3	62	Agriculture and livestock	Elementary school	Married
N4	50	Not working	Professional	Single
N5	64	Carpenter	Bachelor's degree	Single
N6	75	Not working	Elementary school	Married
N7	52	Agriculture and livestock	Secondary school	Single
N8	54	Agriculture and livestock	Secondary school	Separated
N9	55	Agriculture and livestock	Elementary school	Cohabitation

Table 2. Categories, subcategories and codes

Category (n = 3)	Subcategory (n = 14)	Codes (n = 39)
Experiences and knowledge about prostate cancer and screening tests	Personal, family, and social history of cancer	Knowing people who have been diagnosed with prostate cancer No personal or family history of cancer
	Perceptions of prostate cancer and its impact on your life	Association of cancer with death Association of cancer with danger Cancer is perceived as a treatable disease Impact of cancer on daily life Impact of cancer in the social sphere
	Basic knowledge of prostate cancer symptoms	Identification of symptoms of cancer: difficulty in passing fluids Identification of cancer symptoms: pain and burning on urination
	Basic knowledge of risk factors associated with prostate cancer	Inadequate sexual habits as a risk factor Heredity and genetics as risk factors Lack of knowledge about signs and symptoms
	Lack of knowledge about prostate cancer	Lack of knowledge about risk factors Lack of knowledge about the disease
	Knowledge about prostate cancer screening tests	Lack of knowledge about screening tests Knowledge about screening tests
Sociocultural beliefs about prostate cancer and screening tests	Social beliefs that hinder the performance of prostate cancer screening	Male chauvinism as a factor hindering screening Belief that screening is not appropriate for their gender
	Social beliefs about prostate cancer	Lack of knowledge about the influence of beliefs on cancer Religion as a non-determinant aspect of screening Perception of increased cancer diagnosis
	Perceptions of prostate cancer screening performance	Acceptance of prostate antigen testing Positive perception of screening Perception of screening as an imposed obligation Importance of screening in cancer prevention

Category (n = 3)	Subcategory (n = 14)	Codes (n = 39)
Prostate cancer screening access barriers	Economic and geographic barriers to accessing care	Insufficient number of medical consultations Economic difficulties in accessing public health services Geographical constraints to screening
	Information channels preferred by the population	Preferred means of receiving information: municipal radio station, audio-visual media
	Information received about prostate cancer	Availability of reliable and understandable information from the health service about the disease Information provided by the health service about screening Information obtained from other available sources, such as the internet
	Absence of health education, infrastructure, and trained personnel	Lack of health education Lack of health promotion and disease prevention programs Insufficient number of health professionals available Insufficient infrastructure to carry out screening
	Knowledge of available health services in the municipality	Knowledge about the supply of health services Lack of knowledge about the health services on offer Perceiving a sufficient supply of medical services

> I had acquaintances who had had this disease and gotten their prostate removed [D5].

> Yes, there is an acquaintance of mine, and he has suffered a lot from it. That is why I had the test [D9].

> Regarding the disease perception, it was identified that previous negative experiences may induce fear and anxiety, which would consequently lead some men to avoid screening for fear of a positive diagnosis or the side effects of the procedures. According to D4: "I think one avoids doing this test due to the fear of the outcome."

The results also indicate that increased knowledge about prostate cancer and screening tests makes it easier to seek medical care and start treatment in a timely manner. In this regard, participants identified factors such as genetics and sexual risk behaviors as contributing to the onset of the disease. However, a lack of awareness of the signs and symptoms of cancer was identified as an obstacle to early detection and treatment, which could negatively impact prognosis. In this regard, some participants point out:

> [regarding bad sexual habits as a risk factor] I also think that bad sexual habits or anything related with the sexual or reproductive part [may be among the risk factors] [D4].

> Well, I think that genetics and heredity can have many consequences [D4].

> I know that it starts as an inflammation in the prostate and affects urination, causing burning, pain, and all that [D5].

If we are unaware of those [risk factors], we don't know what will happen.

Some participants associated cancer with death, perceiving it as a serious and potentially fatal disease. However, despite the discourse emphasizing the threatening nature of cancer as a serious health risk, there was also evidence that men perceive cancer as a treatable disease, recognizing the possibility of a successful approach through early diagnosis and the adoption of healthy lifestyles. Some of the testimonies assert that:

> They say that cancer is bad because it can kill you [D3].

> Just take a look at its name, it is cancer, and everything to do with cancer is dangerous [D2].

> Early diagnosis, combined with good habits and controls, can prevent this serious disease [D4].

In terms of screening tests, participants highlight that Prostate-Specific Antigen (PSA) is a viable and accepted measure for men; however, there is a lack of knowledge regarding the process and its benefits. In this regard, it is important to mention that experience with people close to those who have had prostate cancer motivates others to undergo screening.

> Men would find the blood test more viable [for screening] [D2].

> I imagine that it [blood test] makes a lot of sense, because the physical examination of certain areas of men's bodies is not quite appropriate from a social point of view [D5].

> I understand that there are two types of tests, a rectal test, and a blood test [D4].

Socio-cultural beliefs about prostate cancer and screening tests

The study findings show the influence of socio-cultural beliefs on the perception and acceptance of screening tests for prostate cancer. These beliefs directly impact both the decision to be tested and treatment adherence. Specifically, the association of digital rectal examination with loss of masculinity or uncomfortable experiences is revealed as a key factor in the avoidance of this diagnostic procedure. Two participants point out:

> Machismo has always been dealt with, and men avoid the exam due to fear of consequences and other people's comments [D4].

> I think it affects masculinity, and that makes many people not take the test and let the problem progress [D5].

> The study also revealed that some men perceive screening tests as an obligation linked to their sense of responsibility, although they do not find them comfortable. In addition, religion does not emerge as a factor hindering acceptance and performance of these tests.

> Yes, it would be unpleasant to have that test, because it is not well seen [socially], but if the day comes that one has to do it, then it must be done [D3].

> [...] but if it must be done, then get it done. It is a complex subject; mentally, it is not so acceptable for men [D2].

> My religion does not affect anything [the decision-making process] [D4].

Prostate cancer screening access barriers

Concerning access barriers, the analysis of the interviews reveals the limited availability of medical consultations, insufficient financial resources to travel to the health center for screening tests, as well as geographical limitations.

> There is a lack of staff during weekday hours; patients lose appointments if the attending doctor has an emergency and needs to leave [D2].

> Transport does cost money, and sometimes there are no appointments [D2].

> They sent me to Chiquinquirá to get tested, because there is no way to get tested here [D9].

Most participants reported a lack of information about prostate cancer, available prevention programs, and screening tests. Despite this, they recognized the importance of accessing accurate information through various channels. In contrast, only a minority mentioned having received this information from health professionals.

> They had not given me information, and it would be good if they gave talks [D1].

> They had not told me anything about these tests [D3].

> [...] I think that the local radio station should be used to give this information. People here rely a lot on the radio station [D4].

> [...] I would like them to give the information by video or audio on the mobile phone [D2].

> When I visited the medical center, they informed me about these tests. Back in Bogotá, they gave us a talk about their importance and how they are done [D5].

> I trust the information because it is given by professionals. It gives you a better understanding of the disease [D5].

The study of the texts of the interviews reveals a marked deficiency in health education, promotion, and prevention programs, as well as inadequate physical infrastructure, a shortage of medical personnel, and a deficit of essential equipment and materials for screening tests in first-level health centers. These shortcomings force men to visit more complex facilities, creating a hurdle for test access.

> We do not know what could happen if we are not aware of all this information [D7].

> I am not sure what they offer. I am aware of the medical and dental consultations, but nothing else [D2].

> [...] whenever you need exams, you always have to go to Tunja or Bogotá, and it is very complicated to travel, considering that the population is mostly rural [D4].

> Here in the municipality, there is no infrastructure to carry out the blood test in the town [D4].

> Well, when I had the blood test, they sent me to Chiquinquirá, because here there is no place to do those tests [D2].

Discussion

Socio-cultural experiences and beliefs regarding prostate cancer and screening tests for adults are diverse and represent a fundamental opportunity to develop interventions that are adapted to the rural context, leading to the gradual elimination of barriers, the promotion of men's participation in screening for this type of cancer, timely diagnosis, and the reduction of complications and costs.

In this sense, knowledge and the approach to social and cultural experiences are aspects that play a fundamental role in educating people for the prevention and timely detection of events that represent a risk or affect the health of individuals and communities [18]. In this study, previous experiences of prostate cancer and screening tests indicate the possibility of assuming a favorable or unfavorable behavior in accordance with the family or social experiences they have faced. This finding is consistent with Almeida *et al.* [16], who report that family and friends' experiences of the disease play a role in decisions regarding prostate cancer prevention practices related to screening and procedures. However, the work by Martin *et al.* [29] identified that not all men who participated in the study had had any experience or had heard of a case of prostate cancer, so this situation leads to a lack of immediate interest in having a screening test.

Moreover, the lack of accurate and relevant information leads to unfavorable health care behaviors, as evidenced in this research, and similarly in the study by Hodgson and Kelly [30], who found that men have a general lack of knowledge about the causes, effects and ways to prevent this condition; they do not have educational platforms adapted to different contexts, and the circulation of misconceptions and taboo perceptions around this issue is favored and tends to be maintained or even intensified, given that the source of information is friendships. In fact, Oliveira *et al.* [31] assert that there is still insufficient knowledge about the importance of screening for prostate cancer prevention.

In addition, the presence of a socio-cultural factor such as masculinity, identified in this study and matching the findings of Amaya *et al.* [32], constitutes a significant difficulty in the rejection of screening tests, as they are often associated with feelings of pain, fear, or displeasure. These perceptions make men uncomfortable, as they think that these procedures could undermine their masculinity.

In this regard, the results obtained in this research are consistent with those described in the study conducted by Mbugua *et al.* [33], in the context of a rural community in Kenya, which addresses the importance of sensitizing men to prostate cancer and promoting early detection, and in which it was possible to identify that among the reasons for unwillingness to undergo screening for this disease are the association of cancer with death, masculinity, stigma, discrimination, while situations such as masturbation, having multiple sexual partners, the onset of menopause in women when men are still sexually active, bacteria and divine punishment are perceived as causes of prostate cancer.

Similarly, Adedeji *et al.* [34], in their research in rural Nigeria, highlight that popular beliefs are the basis of knowledge of prostate cancer, which they identify as a threat to men, and that the cultural sense of masculinity is considered as a focus for determining the perception of threat or susceptibility, a result that coincides with the rural context of this study, where it is highlighted that machismo directly affects the perception of masculinity, as there is evidence that is not socially accepted.

Although this study identifies that religion does not influence the decision to undergo screening tests, Amaya *et al.* [32] highlight that religious beliefs influence the intention to undergo cancer screening tests. Therefore, health services highlight and incorporate cultural considerations to expand the coverage of early detection programs.

Therefore, it is evident that socio-cultural beliefs regarding prostate cancer relate to risk factors for health and mortality. However, it is perceived as a treatable disease. Thus, in a country with large differences in access to health services, cultural patterns, and educational levels, ensuring the provision and understanding of information on risks and benefits of screening tests for the timely identification of adverse health events to successfully guide individualized decisions requires the effective intervention of logistical, economic, and administrative barriers [35]. Such a situation was evidenced in this research, in addition to the absence of health promotion and maintenance programs, a shortage of health personnel, and inadequate physical infrastructure associated with the lack of appropriate locations for screening tests.

Thus, as Guizado [36] pointed out, it is worth noting that men living in rural areas encounter barriers to prostate cancer screening access, resulting from their low income and limited healthcare options. These findings suggest the need to implement public policies aimed at improving the living conditions of the population in terms of education, housing, employment, transport, food, among other aspects, as well as the development of a hospital infrastructure that prioritizes primary health care. Furthermore, the results derived from this study constitute a fundamental input that determines the importance of implementing actions for the timely detection of prostate cancer, to significantly reduce morbidity and associated mortality [37]. The application of educational and pedagogical intervention programs adapted to the social and cultural context of rural populations is required in order to promote the availability of adequate knowledge about the disease, which allows the

implementation of preventive strategies and the search for timely medical care [38].

In addition, this research provides relevant elements for the formulation of policies, plans, programs, or projects aimed at positively affecting the factors that trigger situations of social and cultural inequality with a territorial approach, enabling people's self-determination in health and social responsibility for their care. The State is obliged to guarantee the continuous and permanent availability of the minimum and necessary resources for rural health services to ensure the identification and timely intervention of diseases such as prostate cancer, a national and global public health concern. In this regard, Sarı *et al.* [39] state that, as part of strategies to improve the uptake of cancer screening and early diagnosis, men residing in rural areas require individual counseling by health professionals, in addition to increasing literacy through planned and regular health education, as well as implementation of educational strategies to improve awareness and screening behavior [40].

The study has limitations inherent to the qualitative design and ethnographic approach, as the findings lack statistical generalizability, given that the study focuses on a specific context; therefore, these findings are not translatable to other rural populations or settings with different socio-cultural dynamics. Furthermore, the interpretation of the data may be influenced by the subjectivity of the researchers, which introduces possible biases derived from their theoretical and personal perspectives. Additionally, the information collected is based on participants' individual experiences, which are mediated by selective memory and do not necessarily reflect an objective reality. The focus on a single setting restricts the diversity of perspectives, which could limit the comparative analysis with other rural contexts and reduce its interpretative depth.

It is concluded that participants highlight the importance of personal and family history in the occurrence of cancer, and recognize that these aspects influence perception and awareness of the disease. They also have basic knowledge about risk factors and point out that these may be associated with inappropriate sexual behavior. In addition, they acknowledge a lack of information about screening tests and a partial understanding of the signs and symptoms of cancer, which may hinder early detection and treatment, worsening the prognosis. PSA is the most feasible and accepted screening measure. Moreover, meeting people who have had prostate cancer provides a better understanding of the disease, its health consequences, and motivates other men to be screened. Furthermore, access barriers in prostate cancer screening are evident, and these are mainly linked to a lack of information about the availability of and access to health services, and about existing screening tests.

Finally, in terms of equity and public policy, dealing with prostate cancer requires broader service coverage and accessibility, cultural appropriateness, and sustainability. A well-designed state strategy can contribute significantly to reducing associated mortality and morbidity, closing health gaps between different sectors of the population.

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