



## **SOCIOCULTURAL FACTORS AFFECTING KNOWLEDGE AND RESPONSES OF MEN TOWARDS PROSTATE CANCER IN NIGERIA: A REVIEW OF LITERATURE**

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### **ABSTRACT**

Prostate cancer remains one of the leading causes of morbidity and mortality among men worldwide, yet knowledge and response to the disease vary across different sociocultural contexts. The focus of this review paper is on sociocultural factors influencing men's awareness, knowledge, attitudes, and responses to prostate cancer in Nigeria. Using a literature review approach, the study examines key sociocultural determinants, including educational background, cultural practices, beliefs or religious perspectives, masculinity norms, and socioeconomic status. Feedback or data extracted from wide range of secondary sources examined indicates that there is generally low level of knowledge about prostate cancer among men across several social groups in Nigeria and beyond. Also, stigma and traditional health-seeking behaviors constitute major forms of response, while misinformation tended to contribute to low screening rates and late diagnosis. The paper concludes with recommendations for culturally sensitive interventions to enhance prostate cancer awareness and early detection among men.

**KEYWORDS:** knowledge, responses, men, prostate cancer, sociocultural factors

### **INTRODUCTION**

Prostate cancer is a significant public health concern globally, particularly among men aged 50 years and above. It is the most commonly diagnosed cancer in men and the second leading cause of cancer-related deaths globally (Global Cancer Observatory, 2021). Mayo Clinic (2024) described prostate cancer as the uncontrolled growth of cells in the prostate, a small walnut-shaped gland, below the bladder in the male reproductive system that produces seminal fluid that nourishes and transports sperm. It is cancer that occurs in the prostate.

Regarding cause, Pernar et al, (2018) held that the real cause of prostate cancer is elusive, and noted that ageing, family history and race are considered non-modifiable risk factors. However, Rawla (2019) added that physical inactivity, smoking, alcohol consumption and being overweight are controllable risk factors.

The signs and symptoms of prostate cancer are quite burdensome. Ariom et al, (2023) observed that symptoms of prostate cancer varies from person to person, and includes difficulty to start urinating, weak urine flow or interrupted flow, urination on a regular basis (especially at night),



and difficulty in completely emptying the bladder during urination. There may also be painful urination or a burning sensation (Ariom et al, 2023).

Regarding prevalence, Sung et al (2021), stated that prostate cancer is the third most common diagnosed malignancy in 2020 with 1,414,259 cases worldwide. Also, Global Cancer Statistics (2020) estimated that the disease in 2020 alone caused 375,304 deaths among men of all ages worldwide. However, World Health Organization (WHO, 2021) reported the actual number of deaths recorded worldwide in 2020, due to prostate cancer was about 375,000 deaths. The 2020 death toll was higher than approximately 360,000 deaths which Bray et al (2018) associated to prostate cancer in 2018. Even more worrisome is the fact that as Ugochukwu et al (2019) stated, the global burden of prostate cancer is expected to rise to 1.7 million new cases and 499,000 new deaths by year 2030.

Sociocultural factors refer to social and cultural attributes within which men dwell and uphold. It includes their social norms, beliefs, rites of passage, observances, and rules for conduct etc. These sociocultural landmarks play significant roles in shaping knowledge and responses of men towards prostate cancer. For instance, cultural belief that prostate cancer is an inevitable consequence of aging has been documented in many cultures (Williams & Brown, 2021).

It is against the above worrisome background and statistics that this review paper was undertaken to examine sociocultural factors affecting knowledge and responses of men towards prostate cancer, and to recommend measures to improve awareness and control of prostate cancer in Nigeria.

#### **METHOD OF DATA COLLECTION**

This study employs a literature review approach, analyzing peer-reviewed journal articles, government health reports, and relevant published studies. Secondary sources for review were identified using academic databases such as PubMed, Google Scholar, and Scopus. To meet inclusion criteria for screening, a literature source should relate to Nigerian, African or western societies and focuses on prostate cancer knowledge, attitudes, and responses among men across diverse sociocultural settings.

#### **THEORETICAL FRAMEWORK**

The Health Belief Model (HBM) is the theoretical thrust of this work. The theory was developed by a group of social psychologists, Godfrey Hochbaum, Rosenstock Irwin and Howard Becker, all at the U.S Public Health Services in the 1950`s. HBM is a psychological model that attempts to explain and predict health behaviours by focusing on the attitudes and personal beliefs of individuals. It was developed to help understand why people did or did not use preventive services offered by public health departments in the 1950`s, and has evolved to address newer concerns (Becker, 1971).

Howard Becker (1971) looked at the causes of health seeking behaviour. He explained health seeking behaviour based on belief system. He posits that people`s beliefs shape their health seeking behaviour. These beliefs are in turn shaped by the experiences the people have had in the past, their knowledge system and their socialization. The Health Belief Model (HBM) consists of four



variables namely: perceived susceptibility, perceived seriousness, perceived benefits of taking action and cues to action (Becker, 1971). These variables are briefly explained below:

- i. Perceived Susceptibility: The individual's belief that they are at risk for a disease
- ii. Perceived Severity: The individual's belief that the disease has serious consequences
- iii. Perceived benefits: The individual's belief that taking action will reduce their risk or severity of the disease
- iv. Perceived Barriers: The individual's belief that taking action will be difficult or costly
- v. Cues to Action: The individual's exposure to information or events that motivate them to take action.
- vi. Self-Efficacy: The individual's belief that they can successfully take the necessary action.

Applying Health Belief Model to this study on prostate cancer, we note that older men above 50 year of age are more likely to perceive themselves as at risk due to the increased prevalence of prostate cancer with age. They could perceive prostate cancer as severe due to its potential for causing death and can have significant impacts on quality of their life, including erectile dysfunction, incontinence, and fatigue. On the other hand, for younger men, exposure to information about prostate cancer can motivate them to take action and to perceive early detection as beneficial. Early detection can increase the chances of successful treatment and reduce the risk of death from prostate cancer.

Thus, HBM attempts to predict health-related behaviour by accounting for individual differences in beliefs and attitudes. However, it does not account for other factors equally related to health such as education, economic status etc that also influence the behaviour or responses of members of the public.

### **PREVAILING MODES OF RESPONSES (ATTITUDES, PERCEPTIONS, SCREENING DISPOSITIONS AND TREATMENT CHOICES) OF MEN TOWARD PROSTATE CANCER**

Studies like Olapade-Olaopa et al., (2008) reported some of the common modes of responses among men such as resort to traditional treatment option, delayed screening, stigmatization of patients, tendency to be secretive about the condition considered as a taboo (preference of non disclosure or sharing of prostate cancer situation with others). Other prevailing responses are unwillingness to seek information through health-related websites, journals, or other credible sources; misconceptions about prostate cancer, its diagnosis and treatment; adoption of traditional masculinity norms which foreclose expression of vulnerability and limited desire to participate in screening. Ngugi et al., (2022) also reported that some men who have prostate cancer seek traditional or spiritual healing before considering medical interventions, implying that prayer and faith healing are prioritized over modern medical interventions

Factors which cut across psychological, social, and cultural, inform men's prevailing modes of responses to prostate cancer and their engagement with prostate cancer healthcare services. These factors include poor awareness, inadequate health education, and lack of screening programs for prostate cancer, poverty, poor healthcare facilities and paucity of specialist urological care.



## **SOCIOCULTURAL FACTORS AFFECTING KNOWLEDGE AND RESPONSES OF MEN TOWARD PROSTATE CANCER IN NIGERIA**

Prostate cancer is one of the most prevalent malignancies affecting men worldwide. Despite advancements in detection and treatment, disparities in awareness, screening behaviors, and health outcomes persist, largely driven by socio-demographic and sociocultural factors.

These factors shape individuals' perceptions of the disease, influence health-seeking behaviors, and affect responses to treatment and prognosis. Understanding how socio-demographic and sociocultural factors affect knowledge and responses towards prostate cancer in Nigeria is critical for developing targeted interventions, especially for high-risk older men populations.

Examples of socio-demographic and sociocultural factors which could significantly influence knowledge, attitudes, and responses to prostate cancer among men include level of education, income, cultural practices, beliefs, and peer or community influence etc. How these factors play key roles in shaping individuals' and social group health-seeking behaviors in context of prostate cancer are further examined below.

### **Level of Education, Health Literacy and Access to Information**

Education is a prominent factor that influences knowledge and responses towards prostate cancer among men. Studies have shown that men with higher levels of education tend to be more informed about prostate cancer symptoms, risks, and the importance of screening. This may be linked to greater access to health information and higher health literacy (Patel et al., 2010).

Men with higher levels of education tend to have greater awareness of prostate cancer. This includes knowledge about the risks, symptoms, screening methods, and treatment options. Educated men are more likely to seek information through health-related websites, journals, or other credible sources, which may influence their decision-making process regarding early detection and treatment.

Education can shape a man's attitudes toward prostate cancer screening. Those with lower education levels often harbor fears or misconceptions about cancer diagnosis and treatment, leading to reluctance in undergoing screenings. Conversely, those with higher education usually view screening as a necessary step toward maintaining health.

### **Income and Access to Healthcare**

Economic disparities significantly impact on access to healthcare services, including prostate cancer screening and treatment. Lower-income individuals often face barriers such as the cost of screening, lack of health insurance, and limited access to healthcare facilities, which affects their knowledge and response to the disease (Penson et al., 2010). Additionally, men from lower socioeconomic backgrounds are less likely to have health insurance, making preventive healthcare a lower priority compared to immediate financial needs (Smith & Jones, 2019).

Geographic location further compounds these disparities, with rural populations often having less access to health education and screening services. In rural areas, limited healthcare infrastructure and long distances to medical facilities pose additional barriers to screening and treatment.

According to Rebbeck et al. (2013), men with higher levels of education and income tend to have better knowledge of prostate cancer, including risk factors, symptoms, and the importance of



screening. Studies have consistently demonstrated that men with higher educational attainment and income are more likely to have greater knowledge of prostate cancer and engage in early screening practices.

### **Masculinity Norms and Health-Seeking Behavior**

Masculinity norms play a crucial role in shaping men's attitudes toward health and illness. In many cultures, masculinity is associated with strength, independence, and resilience, discouraging men from expressing vulnerability or seeking medical help (Courtenay, 2018). Studies such as Mahalik et al., (2019) show that men who adhere to traditional masculinity norms are less likely to participate in preventive health measures, including prostate cancer screening (Mahalik et al., 2019). The fear of being perceived as weak or unmanly often prevents open discussions about prostate health, leading to late-stage diagnosis and poor treatment outcomes.

### **Cultural Beliefs, Stigma, Misconception**

Cultural beliefs play a significant role in shaping attitudes toward prostate cancer screening and treatment. In some African and Asian cultures, illnesses are often attributed to supernatural causes, leading individuals to seek traditional or spiritual healing before considering medical interventions (Ngugi et al., 2022).

In many cultures, discussions surrounding prostate cancer and other reproductive health issues are often taboo. This cultural stigma can lead to delays in seeking medical advice or refusing screening due to fear of diagnosis or concerns about masculinity (Breen et al., 2011). In African American and Hispanic communities, where prostate cancer incidence and mortality rates are higher, cultural beliefs about cancer being a death sentence may discourage proactive health behaviors (Maliski et al., 2010).

The stigma associated with cancer, particularly prostate cancer, affects how men perceive and respond to the disease. Many men fear the potential impact of diagnosis on their social status, relationships, and sexual health. The association of prostate cancer with aging and sexual dysfunction creates additional reluctance toward screening and treatment (Williams & Brown, 2021). In some cultures, a prostate cancer diagnosis is viewed as a death sentence, leading to fatalistic attitudes that discourage preventive healthcare practices (Jenkins et al., 2020).

### **Religious Perspectives and Prostate Cancer Awareness**

Religious beliefs can either promote or hinder prostate cancer awareness and health-seeking behavior. Some religious communities advocate for prayer and faith healing over modern medical interventions, leading to delays in diagnosis and treatment (Omondi et al., 2020). Conversely, faith-based organizations have been instrumental in raising awareness about prostate cancer through health campaigns and community outreach programs. Studies suggest that engaging religious leaders in health education efforts can help bridge the gap between cultural beliefs and medical knowledge, encouraging more men to seek screening (Smith & Jones, 2019). Thus, religious leaders can either facilitate or hinder prostate cancer awareness campaigns, depending on their stance on modern healthcare practices.



### **Family and Community Influence**

Sociocultural factors extend beyond the individual, with family and community playing significant roles in shaping health behaviors. Oliver et al., (2011) opine that men who come from families or communities that promote open discussions about health and encourage preventive care are more likely to engage in prostate cancer screening. In contrast, communities that uphold traditional gender roles, where health-seeking is seen as a sign of weakness, may impede men's willingness to seek timely medical advice.

### **AWARENESS AND OTHER FACTORS AFFECTING DISPOSITION TO PROSTATE CANCER SCREENING**

A significant determinant of attitudes toward prostate cancer screening is the level of knowledge men possess about the disease. Men with limited knowledge of prostate cancer symptoms, risks, and the benefits of early detection are less likely to participate in screening. Jones et al. (2021) found that men who had a higher awareness of prostate cancer risks were 50% more likely to undergo screening. A good knowledge or understanding of diseases is generally associated with a better healthcare-seeking attitude and behavior (Kanungo et al., 2015).

Other factors that have been associated with lower prostate cancer screening include lack of prostate cancer knowledge, lower perceived risk and susceptibility to prostate cancer, and poor physician recommendation (Ogunsanya et al., 2016c). Economic factors also contribute to men's attitudes toward prostate cancer screening. The cost of medical consultations, screening tests, and treatments can deter many men, particularly those without health insurance. A recent analysis by Nguyen et al. (2023) revealed that lower-income men are significantly less likely to seek screening due to financial barriers.

Another factor influencing attitudes toward prostate cancer screening and treatment is the level of trust men have in medical procedures, particularly the Prostate Specific Antigen (PSA) test. A survey by Green et al. (2021) found that mistrust in the PSA test's accuracy, and concerns about potential over diagnosis discouraged many men from participating in screening programs. Some studies like Sanchez et al., (2007) found that men's reluctance toward screening was connected to cultural issues within African-American communities, such as lack of trust of the medical system because of racist experiences with health care providers, and a lack of health messages tailored to African American men.

In a similar survey conducted by Obiora et al. (2018), it was reported that only 30% of men aged 40 and above were aware of prostate cancer, and fewer than 20% had undergone screening. A key barrier identified in this research was the absence of organized public health campaigns targeting men, particularly in rural areas where literacy levels are lower, and access to healthcare is more challenging.

In all instances highlighted above, educating men on the accuracy and limitations of the PSA test, as well as advancements in diagnostic tools, can help alleviate these concerns.

### **DISCUSSION**

Data extracted from various reviewed literature confirm that sociocultural factors significantly influence prostate cancer awareness, knowledge disposition, perceptions, access to service and



overall responses among men. Cultural beliefs, masculinity norms, and socioeconomic conditions shape health-seeking behaviors towards prostate cancer, often leading to delayed diagnosis and treatment.

Furthermore, studies reviewed have shown that there is significant gap in knowledge among men worldwide, about symptoms of prostate cancer, risk factors, available screening and treatment services. For instance, a study conducted by Murtola et al. (2016) highlighted how low levels of awareness and knowledge about prostate cancer among men, negatively impacted on their decision-making regarding screening and treatment options in Europe and elsewhere. Alu et al., (2018) similarly held that poor perceptions and low knowledge about prostate cancer and the availability of alternative therapies are the reasons for late presentation. They also argued that low levels of education and older age were directly related to poor knowledge about the disease. On their part, Nwobi and Osuagwu (2018), contended that perceived cost of treatment, fear of diagnosis, cultural beliefs, stigma associated with cancer, and lack of access to healthcare services are major barriers that contribute to late presentation and poor outcomes when care is sought.

The above situations are compounded by misconceptions, among men diagnosed with prostate cancer, about the etiology of the disease. Four most common misconceptions are as follows

- a. Assumption that prostate cancer is linked to a history of sexually transmitted diseases,
- b. Prostate cancer is linked to having multiple sexual partners, and
- c. Involvement or engaging in excessive sexual activities gives rise to prostate cancer
- d. Prostate cancer is an inevitable consequence of aging has been documented in many cultures

Addressing these factors requires targeted interventions, including culturally tailored health education programs, community engagement, and improved healthcare accessibility.

## CONCLUSION

Sociocultural factors play a crucial role in determining men's knowledge and responses toward prostate cancer. Misinformation, stigma, masculinity norms, and economic constraints contribute to low screening rates and late-stage diagnosis. Addressing these barriers through culturally appropriate interventions can significantly improve prostate cancer awareness and early detection rates in Nigeria.

## RECOMMENDATIONS

There is avalanche of literature supporting that sociocultural factors play crucial roles in shaping men's knowledge, attitudes, and responses toward prostate cancer, as well as its screening and treatment needs. Addressing these factors through targeted interventions can improve early detection and health outcomes. Given below are key recommendations put forward based on the position of literature:

1. Community-Based Health Education Program: Health education campaigns should be culturally tailored to dispel myths and raise awareness about prostate cancer risks, symptoms, and screening. Engaging local leaders, religious figures, and community health workers can enhance acceptance and participation. Studies have shown that community engagement improves cancer screening uptake.
2. Health Policy and Government Support: Governments should implement policies that promote routine prostate cancer screening and subsidize diagnostic services for high-risk



populations. Increased funding for awareness campaigns and research is essential for improving prostate cancer outcomes.

3. **Involvement of Spouses and Family Members:** Research suggests that spouses and family members significantly influence men's health-seeking behaviors. Programs should encourage family-centered discussions about prostate health, leveraging the role of wives and children in promoting awareness and screening.
4. **Addressing Cultural Misconceptions and Stigma:** Beliefs that prostate cancer is caused by supernatural forces or that screening leads to impotence contribute to screening reluctance. Health interventions should incorporate culturally sensitive messages that normalize prostate cancer discussions and emphasize the benefits of early detection.
5. **Improving Access to Healthcare Services:** Men in rural and underserved communities often have limited access to prostate cancer screening. Expanding mobile screening units and providing financial support for low-income individuals can improve healthcare access.
6. **Use of Local Language and Media:** Health information should be provided in local languages to improve comprehension. Utilizing radio, television, and social media can help reach a broader audience and enhance awareness.
7. **Integration of Traditional and Modern Medicine:** In African societies, many men consult traditional healers before seeking medical care. Engaging traditional healers in awareness campaigns can help bridge the gap between indigenous beliefs and medical science.
8. **Encouraging Peer-to-Peer Advocacy:** Men are more likely to participate in screening if they hear testimonies from peers who have benefited from early detection. Establishing support groups and engaging male community leaders can enhance trust in prostate cancer interventions.
9. **Encouraging Workplace Screening Programs:** Employers should integrate prostate cancer awareness into workplace wellness programs. Workplace-based screening has been shown to increase early detection rates.
10. **Addressing Religious Beliefs and Fatalism:** Religious beliefs can influence perceptions of prostate cancer, with some men believing that screening is unnecessary because "God will protect them". Collaborating with religious institutions to incorporate faith-based health messages can encourage screening.

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