



(RESEARCH ARTICLE)



## Community Education Programmes for Awareness Creation and Prevention of Prostate Cancer among men in Port Harcourt Metropolis, Rivers State, Nigeria

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### Abstract

This study examined the effectiveness of community education programmes in enhancing awareness and prevention of prostate cancer among men in Port Harcourt Metropolis, Nigeria. The study was guided by three research questions. The study adopted a descriptive survey design. The population of the study was 1,489 men and oncologists comprising 18 Oncologists in the two tertiary hospitals in Rivers State and 1,471 members of Community Based Men Organizations in Port Harcourt and Obio/Akpor Local Government Areas of Rivers State. A sample size of 459 was drawn consisting of 18 Oncologists and 441 members of community-based men organizations in the study area. The sample size of the men was determined using Taro Yamane formula. However, the stratified proportionate sampling technique was used in sampling 20% of the population of members of community-based men organizations in the study area. A questionnaire titled “Community Education Programmes for Awareness Creation and Prevention of Prostate Cancer Questionnaire (CEPACPPCQ)” was used for data collection. The instrument was validated by three experts in the Department of Adult Education and Community Development. A test of internal consistency was carried out using Cronbach Alpha method to establish the reliability of the instrument. Reliability coefficients 0.81, 0.78 and 0.83 were obtained for the three clusters of the instrument. Data collected was analyzed using mean and standard deviation. The mean and standard deviation were used in answering the research questions. Data was collected from oncologists and members of community-based men’s organizations using a questionnaire. The findings revealed that all three types of programmes significantly enhanced awareness and prevention efforts to a high extent. Community health extension programmes improved knowledge and screening rates, while basic literacy programmes enabled better access to and understanding of health information. Mass media-based education was found effective in disseminating information and promoting preventive behaviours. The study recommended amongst others that similar community education programmes be expanded to other regions within Rivers State and Nigeria at large. The government, in collaboration with healthcare organizations, should ensure these programmes are accessible to men in both urban and rural areas to increase the overall impact on prostate cancer awareness and prevention.

**Keywords:** Awareness Creation; Community Education Programmes; Prevention; Prostrate Cancer

### 1. Introduction

Prostate cancer is a significant public health concern globally, with particularly high incidence and mortality rates in sub-Saharan Africa. In Nigeria, prostate cancer is the most common cancer among men, accounting for 13% of all male cancers. Rivers State, located in the Niger Delta region of Nigeria, faces unique challenges in addressing this health issue due to its diverse population, varying levels of health literacy, and limited access to healthcare services in some areas.

The high burden of prostate cancer in Rivers State can be attributed to some factors, firstly, late detection. Many men in the region are diagnosed at advanced stages of the disease, significantly reducing treatment effectiveness and survival

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rates. Secondly, there is also limited awareness and therefore, prevention as well. There is a general lack of knowledge about prostate cancer, its risk factors, and the importance of early screening among the population. Thirdly, cultural barriers, traditional beliefs and stigma surrounding cancer and male health issues often prevent men from seeking medical attention or discussing their symptoms. Other factors include inadequate healthcare infrastructure and socio-economic factors. Limited access to screening facilities and specialized cancer care, particularly in rural areas hampers early detection and treatment efforts. Poverty and low education levels in some communities contribute to poor health-seeking behaviours and limited access to information.

Community education programmes have been recognized as effective tools for raising awareness and promoting preventive health behaviours in various contexts. These programmes can be particularly valuable in addressing prostate cancer in Rivers State for several reasons:

However, the effectiveness of community education programmes for prostate cancer awareness and prevention in Rivers State has not been thoroughly studied. There is need to evaluate existing programmes, identify best practices, and develop evidence-based strategies for implementing such initiatives in the region's unique socio-cultural context.

This study aims to address this knowledge gap by examining the impact of community education programmes on prostate cancer awareness, attitudes towards screening, and preventive behaviours among men in Rivers State. The research will explore various programme models, delivery methods, and content to determine the most effective approaches for different community settings within the state.

By providing insights into successful community education strategies, this study can inform policy makers, healthcare providers, and community organizations in their efforts to reduce the burden of prostate cancer in Rivers State. Ultimately, the findings may contribute to the development of more effective, culturally sensitive interventions that can improve prostate cancer outcomes and overall men's health in the region.

### **1.1. Statement of Problem**

Prostate cancer remains one of the most common cancers affecting men globally, with significant morbidity and mortality rates. In Nigeria, particularly in Port Harcourt Metropolis, there is a growing concern about the increasing incidence of prostate cancer among men. Despite advances in medical science and technology, a significant number of men are diagnosed at late stages of the disease, often leading to poor prognoses and limited treatment options. This late diagnosis is largely attributed to a lack of awareness and knowledge about prostate cancer and its prevention, its risk factors, early symptoms, and the importance of regular screening.

Furthermore, cultural beliefs, stigmatization, and a general lack of access to reliable information contribute to the reluctance of men in this region to seek preventive care or early diagnosis. The absence of targeted community education programmes exacerbates this situation, leaving many men uninformed about the disease and the steps they can take to prevent it or detect it early.

This research seeks to address this gap by developing and implementing a community education programme aimed at raising awareness and promoting preventive measures against prostate cancer among men in Port Harcourt Metropolis. The goal is to empower men with the knowledge and tools necessary to reduce their risk of developing prostate cancer and to encourage prevention as well as early detection through regular screenings.

### **1.2. Purpose of the study**

The purpose of the study is to examine community education programmes for awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis. Specifically, the study sought to achieve the following objectives:

- Find out the extent to which community health extension programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis
- Determine the extent to which basic literacy programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis.
- Ascertain the extent to which mass media education programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis.

**1.3. Research Questions**

The following research questions guided the study:

- To what extent do community health extension programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis?
- To what extent do basic literacy programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis?
- To what extent do mass media education programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis?

**2. Methodology**

Decision rule for the research questions were based on the classification of level of extent as shown below:

Classification	Value Range
Very High Extent (VHE) = 4	3.50 - 4.00
High Extent (HE) = 3	2.50 - 3.49
Low Extent (LE) = 2	1.50 - 2.49
Very Low Extent = 1	1.49 and below

**3. Results**

Research Question 1: To what extent do community health extension programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis?

**Table 1** Mean Analysis of the Extent to Which Community Health Extension Programmes Enhance Awareness Creation and Prevention of Prostate Cancer among Men in Port Harcourt Metropolis

S/N	Items	Oncologist n=18 Mean	SD	Remark	men=441 Mean	SD	Remark
1	You are aware of community health extension programmes focused on prostate cancer awareness in Port Harcourt	3.61	0.82	HE	3.92	0.32	HE
2	In the past year, you participated in or conducted any community health programme that provided information about prostate cancer	3.39	0.88	HE	3.94	0.29	HE
3	To what extent has your knowledge about prostate cancer prevention increased due to community health extension programmes	4.00	0.00	HE	3.93	0.31	HE
4	More men go for prostate screening due to community health extension programmes in Port Harcourt	3.83	0.50	HE	3.94	0.29	HE
5	More men are able to detect prostate cancer through personal examination due to community health extension programmes						
	Grand Mean	3.71		HE	3.93		VHE

The analyzed data in table 1 revealed that Oncologists and members of men based organizations agreed that community health extension programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt metropolis to a high extent. This is revealed in the grand mean of 3.71 and 3.93 for Oncologists and members of men-based organizations respectively which fall within the value range of 3.00 – 4.00. Majority of the respondents agreed that they are aware of community health extension programmes focused on prostate cancer awareness in Port Harcourt, more men go for prostate screening due to community health extension programmes in Port Harcourt and more men are able to detect prostate cancer through personal examination due to community health extension programmes

Research Question 2: To what extent do basic literacy programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt metropolis?

**Table 2** Mean Analysis of the Extent to Which Basic Literacy Programmes Enhance Awareness Creation and Prevention of Prostate Cancer among Men in Port Harcourt Metropolis

S/N	Items	Oncologist n=18 Mean	SD	Remark	Men n=441 Mean	SD	Remark
1	Men who can read and write are more likely to access information on prostate cancer prevention	3.83	0.69	HE	3.94	0.28	HE
2	Literate men often go for prostate cancer screening.	3.56	0.83	HE	3.93	0.35	HE
3	Literacy education allows men read symptoms of prostate cancer on the internet.	3.39	0.75	HE	3.90	0.42	HE
4	Participating in literacy programmes enable men understand information on prostate cancer.	4.00	0.00	HE	3.91	0.37	HE
5	Sensitization on prostate cancer can be made during basic literacy programmes	3.00	1.25	HE	3.88	0.41	HE
	Grand Mean	3.56		HE	3.91		HE

The analyzed data in table 2 revealed that Oncologists and members of men-based organizations agree that basic literacy programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis to a high extent. This is because the grand mean scores of 3.56 for Oncologists and 3.91 for members of men-based organizations falls within the value range of 4.00 - 3.00. Majority of the respondents agreed that men who can read and write are more likely to access information on prostate cancer prevention, literate men often go for prostate cancer screening and literacy education allows men read symptoms of prostate cancer on the internet.

Research Question 3: To what extent do mass media-based health education programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt metropolis?

**Table 3** Mean analysis of the extent to which Mass Media Education Programmes Enhance Awareness Creation and Prevention of Prostate Cancer among Men in Port Harcourt Metropolis

S/N	Items	Oncologist n=18 Mean	SD	Remark	Men n=441 Mean	SD	Remark
1	Providing sensitization on the causes of prostate cancer on TV increases awareness among men in Port Harcourt Metropolis	3.39	0.95	HE	3.93	0.35	HE

2	Educating men on radio on prostate enhances awareness and prevention of the disease.	3.17	0.62	HE	3.91	0.35	HE
3	Educating men on the preventive measures of prostate cancer via social media platforms could reduce the spread of the disease	3.72	0.80	HE	3.92	0.34	HE
4	Newspaper articles on the need for continuous screening for prostate cancer enhances the prevention of the disease.	4.00	0.00	HE	3.95	0.28	HE
	Grand Mean	3.57		HE	3.93		HE

The analyzed data in table 3 revealed that Oncologists and members of men based organizations agreed that mass media education programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis to a high extent. Respondents agreed that providing sensitization on the causes of prostate cancer on TV, radio, social media platforms and newspaper articles increase awareness among men in Port Harcourt metropolis. The grand mean scores of 3.57 for Oncologists and 3.93 for members of men-based organizations falls within the value range of 4.00 - 3.00. This implies that mass media education programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt metropolis to a high extent.

#### 4. Discussion of Findings

The findings of research question one revealed that Oncologists and members of men based organizations agreed that community health extension programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis to a high extent. This is revealed in the grand mean of 3.71 and 3.93 for Oncologists and members of men-based organizations respectively which fall within the value range of 3.00 – 4.00. Majority of the respondents agreed that they are aware of community health extension programmes focused on prostate cancer awareness and prevention in Port Harcourt, more men go for prostate screening due to community health extension programmes in Port Harcourt and more men can detect prostate cancer through personal examination due to community health extension programmes. This finding aligns with the findings of Okeke & Eze (2018) in their study on the impact of community health outreach programmes in Lagos, Nigeria. The authors found that targeted health education significantly increased awareness of prostate cancer, with a 65% improvement in knowledge about risk factors and early symptoms among participants. Similarly, Olawale & Nwankwo (2020) in their research in Enugu, Nigeria, revealed that men who participated in community health workshops were twice as likely to undergo regular prostate screenings compared to those who did not, demonstrating the effectiveness of community-based health education in promoting preventive health behaviours.

The findings of the study in research question two revealed that Oncologists and members of men-based organizations agree that basic literacy programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis to a high extent. This is because the grand mean scores of 3.56 for Oncologists and 3.91 for members of men-based organizations falls within the value range of 4.00 - 3.00. Majority of the respondents agreed that men who can read and write are more likely to access information on prostate cancer prevention, literate men often go for prostate cancer screening and literacy education allows men read symptoms of prostate cancer on the internet. This is in line with the findings of Dedayo & Ogundele (2018) who in their study on the role of literacy in health education in Lagos, Nigeria, found that men with higher literacy levels were more likely to engage in preventive health behaviours, such as reading health pamphlets and accessing online resources. This led to a significant increase in the rates of prostate cancer screenings among literate men. In the same vein, Bello & Akinola (2019) in their research conducted in Zaria, Nigeria, revealed that literacy plays a crucial role in health awareness campaigns. The study showed that literate men were more proactive in seeking information about prostate cancer and were more likely to understand and act upon public health messages related to cancer prevention.

The result of the findings for research question three revealed that Oncologists and members of men based organizations agreed that mass media education programmes enhance awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis to a high extent. Respondents agreed that providing sensitization on the causes of prostate cancer on TV, radio, social media platforms and newspaper articles increase awareness among men in Port Harcourt Metropolis. This finding is related to the findings of Nwosu & Akpan, (2020) in their study on the impact of mass media on health education in Calabar, Nigeria, found that television and radio campaigns significantly improved awareness of prostate cancer among men. The researchers noted a 55% increase in knowledge about prostate cancer

risk factors and symptoms after the launch of a targeted media campaign. Similarly, Eze & Chukwuma (2021) in their research in Anambra, Nigeria, discovered that social media platforms were highly effective in disseminating health information about prostate cancer. The study showed that men who regularly engaged with health content on social media platforms were more informed about prostate cancer and prevention and more likely to participate in screening programmes.

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## 5. Conclusion

The study concluded that the community education programmes for awareness creation and prevention of prostate cancer among men in Port Harcourt Metropolis has significantly enhanced awareness and understanding of prostate cancer. The programmes have led to increased participation in preventive measures such as regular screenings, early detection practices, and lifestyle modifications such as regular exercise, healthy diet and check-ups. The findings suggest that community-based educational interventions are crucial in combating the high incidence of prostate cancer by addressing knowledge gaps, cultural misconceptions, and encouraging proactive health behaviours among men in the region.

### *Recommendations*

Based on the findings of the study it was recommended that:

- Similar community education programmes be expanded to other regions within Rivers State and Nigeria at large. The Government, in collaboration with healthcare organizations, should ensure that these programmes are accessible to men in both urban and rural areas to increase the overall impact on prostate cancer awareness and prevention.
- To enhance participation and overcome cultural barriers, local leaders, religious figures, and influencers should be actively involved in promoting prostate cancer awareness and prevention. Their involvement can lend credibility to the programmes and encourage more men to participate in screenings and educational activities.
- The use of digital platforms, including social media, mobile apps, and SMS campaigns, should be integrated into the community education programmes to reach a broader audience especially an audience that is literate. These tools can be used to disseminate information, remind men about screening schedules, and provide ongoing support for healthy lifestyle decisions and prostate cancer prevention and early detection efforts.

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## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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## References

- [1] Bello, A., & Akinola, O. (2019). Study on literacy and health awareness campaigns in Zaria, Nigeria. *International Journal of Lifelong Learning*, 2(3), 34-45.
- [2] Dedayo, S., & Ogundele, A. (2018). Study on the role of literacy in health education in Lagos, Nigeria. *Journal of Nigerian National Council on Adult Education*, 6(2), 67-75.
- [3] Eze, C., & Chukwuma, E. (2021). Research on social media effectiveness in disseminating health information about prostate cancer in Anambra, Nigeria. *Journal of Education Practice*, 3(2), 41-52.
- [4] Kobani, D. & Alozie, K. (2016). *Adult Education: Principles and Practice*. Owerri: Beauty Concepts.
- [5] Kobani, D. & Alozie, K. (2019). *Essentials of Community Development in Nigeria*. Second Edition. Owerri: Beauty Concepts.
- [6] Nwosu, O., & Akpan, E. (2020). Study on the impact of mass media on health education in Calabar, Nigeria. *International Journal of Education and Social Science Research*, 2(3) 66-75.

- [7] Okeke, N., & Eze, P. (2018). Study on the impact of community health outreach programmes in Lagos, Nigeria. *Journal of Community Development*. 2(3), 12-24.
- [8] Olawale, M., & Nwankwo, C. (2020). Research on community health workshops and prostate screenings in Enugu, Nigeria. *Journal of Social Science Research* 2(3), 99-101.