

Source Credibility and Attitude of Male Residents of South-East Nigeria to Prostate Cancer Health Communication

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Abstract

This paper examined the credibility and attitude of male residents of South-East Nigeria in relation to prostate cancer health communication. Data from the questionnaire was analyzed using descriptive statistics. Findings show that the majority respondents did not trust the source from which they received prostate cancer health communication. This indicates poor information dissemination by the mass media. The hypothesis indicates that a relationship exists between perceived credibility of source and attitude to prostate cancer health communication. This implies that male folk are more likely to be influenced positively by reinforced interpersonal prostate cancer health communication if they perceive the source of such communication as credible. Findings reveal that the influence of already disseminated prostate cancer health communication on attitude and response to majority of respondents was poor. The study recommends focus on clear, direct and consistent messages to improve prevention and treatment behavioral practices. In the light of the influence of interpersonal communication in reinforcing messages relevant stakeholders should integrate them into all efforts towards combating prostate cancer. There is also urgent need to develop a national policy with the aid of all stakeholders and for help to subsidize costs relating to screenings/diagnosis and treatment on prostate cancer.

Keywords: *Attitude, Credibility, Prostate Cancer, Health Communication.*

INTRODUCTION

Prior to the 1800s, prostate cancer was noted as a rare disease because of its complex attributes. Symptoms of the disease were not differentiated from other forms of urinary obstruction disorder, which was the general term applied to all forms of urological/prostatic ailments (Josef and Karenberg, 2009). It was also believed for a while that only advanced (elderly men) could be diagnosed and treated of this ailment. A typical 70-year-old patient was usually identified late and diagnosed as having metastases to the bone or in the soft tissues with late identification and diagnosis which usually indicated a death sentence (Denmeade 2002). Herr (2006) agrees that in the past, problems associated with prostate cancer include poor knowledge of diagnosis, detection, advocacy, misconceptions, myths, belief systems and poor credible information sources.

The early stages of prostate disease may not have any symptom and 5% of every estimated prostate cancer occurrence is hereditary and there is a 1.3% increased risk factor if there is an affected father which, is increased by a factor of 2.5% if the individual has a brother who has prostate cancer (Agarwal and Waxman, 2002). Without doubt, the onus of informing, educating, entertaining and providing exposition of issues and discussions lies with the media.

McQuail (2010) states that no one can deny the fact that the mass media contributes in shaping our ways of thinking.

Boyd, Barbara and William (1995), note that the mass media in the form of radio, television, internet, magazines and newspapers are an effective way to persuade the target audience to adopt new behavior or to help them recall critical information. Terwase, Asuzu and Mtsor (2014) revealed that the media strategies can play a significant role in communicating prostate disease information among male students.

Asemah (2016) posits that the mass media ordinarily, do not serve as a necessary and sufficient cause for audience effect rather, they function through a nexus of mediating factors and influences. Green and Tones (2010) observe that while readiness for behavior change is highly influenced by the attitude and personal values of the individual, behavior change is influenced by many factors including the prevailing culture and environment.

Moemeka (2000) concurs that the success of the mass media in behavioral change role greatly relies on its ability and willingness to create for the people, access to the media and to induce the people's physical participation in the behavioral change process. Wakefield, Loken and Hornik (2010) posit that the mass media has been employed over past decades to affect different health behaviors of large populations. But whether the media has influence on its audience may be contingent on many factors, which include audience demographics and psychological characteristics (McQuail, 2010).

These points to the facts that the authenticity of media reports rests on their ability to deliver, proper and repeated behaviorally centered messages over time to their targeted audience. People trust social media to have a place in public health campaigns especially in disseminating health information to the public and engaging in supportive actions (National Collaborating Centre for Determinants of Health, NCCDH, 2017). Presently, information is disseminated through highly accessible platforms (web and mobile) that transform people from content consumers to content producers (Gevertz and Greenwood, 2010).

Conversely, a Facebook social media post shared in Nigeria claimed that onion paste mixed with fried palm oil can cure prostate cancer entirely within two weeks, without surgery. In response to this, Paul Ekwere, Professor of urology at the University of Calabar's faculty of medicine in southern Nigeria said concoctions do not cure cancer, (Olurunfemi, 2020). Despite the fact that prostate cancer health communication is available on the Internet, many men are still uninformed or misinformed about prostate cancer (Taylor, Shelby, Kerner, Redd, and Lynch, 2002).

Research Questions

- 1) How do South-East male residents perceive the credibility of prostate cancer health communication sources?
- 2) To what extent has prostate cancer health communication positively influenced the attitude and practices of South-East male residents?

Hypotheses

H₀₁: There exist no relationship between credibility of source and attitude to prostate cancer health communication among South-East male residents.

Health Seeking Behavior

Communication processes possess the ability to interact with the socio-cultural aspect of a nation to bring about well-informed individuals. Fong, Anat and Longnecker (2010) agree that communication helps to regulate patients' emotions; facilitate comprehension of medical information and allow for better identification of patient's needs, perceptions and expectations. Thus, communication serves the purposes of; initiating actions, making known needs and requirements, exchanging information, ideas, attitudes and beliefs, engendering understanding, and/or establishing and maintaining relations (U.S. Office of Disease Prevention and Health Promotion, 2004).

Various individuals and groups have diverse objectives in seeking information in order to improve their health (Fisher, Ardels, Mecheni and Bigdeli, 2019). Consequently, knowledge on information seeking patterns can aid in taking a particular health related decision among available options (Gholami, Khoshnab, Khankeh, Ahmadi, Bagher and Arfaa, 2014). This presupposes that understanding the underlying factors affecting health information seeking behavior of the individual together with ascertaining the models highlighting these behaviors can lend more insight towards improving the information being disseminated and enhancing responses.

Undoubtedly, positive health behaviors are expected to be voluntary. This implies that individuals need to act and react based on their own judgment. The individual's decision occurs when he/she chooses between different available options. Available research indicates that there are more and more scientific evidences that point to some kind of positive relationship between knowledge of personal health and health information seeking behavior, (Weaver, Mays, Weaver, Hopkins, Eroglu and Bernhardt, 2010). Information seeking is a mechanism for dealing with changes, uncertainties, disabilities, crisis and gaining control after health related situations. By knowing the information seeking behavior of patients, one can identify the triggers leading to information seeking and encourage them to seek related information (Lenz, 1984). The more informed a patient is regarding its disease, the easier and faster the adaptation will become, leading to psychological adaptation to the disease (Milewsky and Chen, 2010).

Source Credibility

Credibility of source in health communication is necessary in order to guard against wrong and fake information which can lead to increased mortality rates. Dupas (2011) accepts that information can make a change, but not all kinds of information. This agrees with Walsh-Childers, Odedina, Poitier, Kaninjing and Taylor (2018), who found out that, black men, prefer to receive prostate cancer information through interpersonal or word of mouth channels and that physicians, community leaders, barbers, pastors, family members and friends were also preferred sources.

In determining effective channels or spokesperson used in communicating prostate cancer information, studies indicate that spouses and girlfriends are also effective sources (Luque, Rivers, Gwede, Kambon, Green and Meade 2011). Also Taylor, Davis, Turner, Johnson, Schwartz, Kerner, and Leak (2006), collaborated the efficacy of inter-personal communication in a corresponding research by noting that text-based materials can be of help as a tool especially, if the message is received through a trusted source and/or is circulated in familiar settings such as churches or through 'Black' news media.

They also discovered that both print and video significantly increased knowledge and reduced decisional conflict about PCa screening. The study maintained, that text messaging and e-mail may offer cheaper and easily accessible means of providing prostate cancer information.

In a systematic review of 40 studies by Albada, Ausems, Bensing and van Dulmen (2009), the results indicated that culturally sensitive messages were important. But it noted that tailoring of information is much more effective when information provided has been adapted to include behavioral characteristics, attitudes, intentions and stage of change rather than on risk factors such as cultural characteristics and lineage history. Therefore, prostate cancer health communication would be more effective in increasing knowledge and screening intentions if the information is culturally acceptable to Black men.

The Health Belief Model forms the theoretical framework for this study. HBM theory rests on the fact that health-related behavior rests on the perception and compliance of the individual in question in the following major areas which includes; the severity of the potential disease; the individual's susceptibility to the disease; the gains of carrying out recommended health action, costs and the obstacles in carrying out the recommended health intervention.

MATERIALS AND METHODS

The study adopted the Explanatory Mixed Research Design. Also the quantitative and qualitative data were generated using the questionnaire and the interview guide respectively. The study specifically targets adult males who are 26 and above.

The projected 2024 population of males above 25 years in South-East Nigeria (NBS, 2015) = **6,400,623**. From the above the sample size of 385 was drawn. To calculate for over sampling;

$$385/90\%; N_2 = 385/0.90 = 426.66666666666666 \text{ approximately } 430.$$

Also 10 selected male individuals were interviewed in the study areas. The multistage sampling technique was adopted for this study. The researcher personally conducted the interviews with a recording device.

Face validation and content validation were used in validating of the questionnaire and the interview guide respectively. To ascertain the reliability of the research instrument, the test-retest method was used with 20 copies of the questionnaire and the Cronbach Alpha statistical method returned an internal consistency coefficient of 0.861.

Data organized from the questionnaire and the interview guide was both used for quantitative and qualitative data collection respectively. The researcher used five trained research assistants to distribute the self-administered questionnaire but personally conducted all the interviews with the respondents with a recording device.

Data were analyzed using descriptive statistics of data distribution tables, frequencies, simple percentages, mean and standard deviation. Qualitative data collected through the interviews were analyzed utilizing the explanation-building technique.

RESULTS

Research Question One: How do South-East male residents perceive the credibility of prostate cancer health communication sources?

Table 1: Question 1-4. Perception on credibility of prostate cancer health communication sources

Variables	SA	A	D	SD	\bar{x}	STDV	DECISION
1. Do you agree and believe the information that you have heard or seen about prostate cancer?	44	51	324	11	2.30	0.34	Reject
2. I have heard conflicting information about prostate cancer health communication.	36	44	324	26	2.21	0.34	Reject
3. I believe that majority of people do not really know what to believe about prostate cancer health communication.	60	25	324	21	2.29	0.34	Reject
4. I think that prostate cancer health communication is always being debated.	22	59	324	25	2.18	0.34	Reject

Source: Field Survey, 2024

Table 1, shows a test carried out on male residents' perceptions on the credibility of prostate cancer health communication sources. Estimates were made using Mean Ratings and Standard Deviation. The results equally show that all items were rejected by the respondents because the Mean are below 2.50. The values indicate that the responses of respondents were close to one another and not close to the Mean.

Table 2: Question 5. Which source do you trust most as being credible when receiving prostate cancer health communication?

Response	Frequency	Percentage (%)
Radio	11	2.6
Television	15	3.5
Newspaper/Magazines/Pamphlets	6	1.4
Internet/Social media	19	4.4
Billboards/Posters	0	0
Friends/Family Members	17	4
Healthcare providers	24	5.6
Seminar/Workshops	5	1.2
At the workplace	0	0
No response	324	70.2
Others specify	9	2.1
Total	430	100.0

Source: Field Survey, 2024

Table 2, Question 5 results on the sources respondents trust most as being more credible when receiving prostate cancer health communication are presented in Table 22. The majority 324 (75.3%) of the respondents indicated "No response" to this.

Research Question Two: To what extent has prostate cancer health communication positively influenced the attitude of South-East male residents?

Table 3: Question 6. How willingly are you to be screened for prostate cancer?

Response	Frequency	Percentage (%)
Very often	50	11.6
Often	41	9.5
Rarely	15	3.5
Never	324	75.3
Total	430	100.0

Source: Field Survey, 2024

The findings on Table 3 reveal that majority 324 (75.3) of respondents noted “Never” to being screened for prostate cancer. The distribution and frequency of responses indicate that the majority of the male folk are not willing to go for prostate cancer screening even if such opportunities arise than those who are willing.

Table 4: Questions 7-10. The extent to which prostate cancer health communication positively influenced the attitude of South-East male residents

Variables	SA	A	D	SD	\bar{x}	STDV	DECISION
7. Prostate cancer health communication has prompted me to get screened.	55	24	324	27	2.25	0.34	Reject
8. Prostate cancer health communication has made me to understand how serious the disease is.	67	35	324	4	2.38	0.34	Reject
9. Prostate cancer health communication has made me decide to carry out lifestyle changes.	34	49	324	23	2.22	0.34	Reject
10. Media messages have not been able to make me change my attitude.	28	52	324	26	2.19	0.34	Reject

Source: Field Survey, 2024

In Table 4 above, the table shows that the Mean required level of all 4 items was 2.50 and all of the 4 items were rejected. The standard values on the influence of prostate cancer health communication attitude values ranges from 2.19 to 0.32. 0.34 is the Standard Deviation values on all items. The values indicate that the responses of the respondents are not close to one another and the Mean.

Table 5: Question 11-16. The extent to which prostate cancer health communication has positively influenced the practices of male residents

Variables	SA	A	D	SD	\bar{x}	STDV	DECISION
11. Prostate cancer health communication does not encourage me to respond.	31	59	324	16	2.24	0.34	Reject
12. I am too busy to respond to prostate cancer health communication.	23	48	324	35	2.14	0.34	Reject
13. I lack finance/funds to take care of my needs even when I know what to do.	48	36	324	22	2.26	0.34	Reject
14. I believe that my God/faith is on my side so I don't need to respond to such information.	18	31	324	57	2.02	0.34	Reject
15. It is against my culture and men don't discuss their personal health problems	15	29	324	62	1.99	0.34	Reject
16. I lack access to good hospitals, healthcare providers, affordable screening/treatment, information facilities, etc.	68	24	324	14	2.34	0.34	Reject

Source: Field Survey, 2024

Table 5 above shows that the ‘Mean’ required level of all the 6 items ranges from 1.99 to 2.34 and equally indicates that all items were also rejected. The values indicated that the responses are close to one another but not to the Mean.

H₀: There is no relationship between the credibility of source and the attitude to prostate cancer health communication.

Table 6: Hypothesis 1. Spearman's Correlation analysis on the relationship existing between credibility of source and attitude to prostate cancer health communication

Correlations				
			Which source do you trust most as being authentic when receiving prostate cancer health communication?	What actions have you done on your own to prevent prostate cancer? MA
Spearman's rho	Which source do you trust most as being authentic when receiving prostate cancer health communication?	Correlation Coefficient	1.000	0.168**
		Sig. (2-tailed)	.	0.000
		N	430	430
	What actions have you done on your own to prevent prostate cancer? MA	Correlation Coefficient	0.168**	1.000
		Sig. (2-tailed)	0.000	.
		N	430	430

** . Correlation is significant at the 0.01 level (2-tailed).

The analysis shows that a weak positive correlation exists between the credibility of source and the attitude to prostate cancer health communication ($r = 0.168$; $P = 0.000$). The null hypothesis was therefore rejected and the alternative was accepted. This means that a relationship exist between the credibility of source and the attitude to prostate cancer health communication.

DISCUSSION OF FINDINGS

Research Question One: How do South-East male residents perceive the credibility of prostate cancer health communication sources? The findings indicate that 324 (75.3%) respondents rejected all items in the Standard Deviation analysis. Respondents stated that they heard conflicting information about prostate cancer health communication, that majority of people do not know what to believe and that prostate cancer health communication is always being debated. On the credibility of the information received, the researcher found that the majority 324 (75.3%) respondents had 'no response' on the source they trusted most to receive prostate cancer health communication. This is accepted in the light of the fact that the majority of the respondents had earlier noted that they did not receive any prostate cancer health communication. This shows that respondents generally do not find credible prostate cancer health communication sources because of poor knowledge and poor information dissemination levels through the mass media.

Gaining information from wrong sources may lead to misinformation which can be more dangerous than having no information at all. A good number of the interviewees indicated that the mass media and healthcare practitioners are the two most credible sources of prostate cancer health communication. This is acceptable with the results of Tindana et al (2011) who note that on credibility and trusted sources, the mass media was foremost followed by health care providers and family members. Song, Cramer and McRoy (2015) attest to the fact that

messages disseminated through healthcare providers, peers and female spouses/friends may be preferable in authenticating the credibility of such health communication.

Also, hypothesis 1 on the perceived credibility of sources of prostate cancer health communication, the Correlation Coefficient Sig. (2 tailed test), indicates that a relationship exists between perceived credibility of source and attitude to prostate cancer health communication. This implies that the male folk are more likely to be influenced positively by reinforced interpersonal prostate cancer health communication if they perceive the source of such communication as credible. But as noted, knowledge of health communication does not ensure compliance. Therefore, it is important to harness sources of interpersonal communication through healthcare givers, family, friends, religious bodies, etc. to reinforce existing prostate cancer health communication, (Tindana et al 2011).

Research Question Two: To what extent has prostate cancer health communication positively influenced the attitude and practices of South-East male residents? The findings reveal that the influence of already disseminated prostate cancer health communication on attitude of majority of respondents was poor. The majority 324 (75.3%) respondents expressed unwillingness to be screened for prostate cancer. From the Standard Deviation analysis, majority 324 (75.3%) respondents also rejected the decision that prostate cancer health communication prompted them to get screened, made them to understand how serious the disease is, made them to carryout life style changes and generally made them to change their attitude. Many of the respondents may not have complied or taken any action because of misconceptions about the mortality and morbidity of the disease and not knowing the advantages to be gained from early screening for the disease.

The results from the interview show that the majority of the respondents indicated that they have not been positively influenced by prostate cancer health communication to change their attitude by going for screenings/diagnosis or carrying out any action to inhibit contracting prostate cancer. The results show that most of the respondents above 45 years of age have not even began to make the effort to make lifestyle changes like, consumption of healthy food intake and reduction in alcoholic beverage consumption even as they get older. Also, the majority of those interviewed show that they have not gone through any form of routine testing to aid early detection which can greatly reduce the chances of developing prostate cancer.

To what extent has attitude to prostate cancer health communication positively influenced the practices of South-East male residents? The study reveals that poor attitude to prostate cancer health communication has negatively influenced the majority of the respondents not to carry out any purposive or effective responses/practices. This brings to the fore the issue of decisional conflicts as a fundamental problem in relation to prostate cancer health communication because majority 324 (75.3%) respondents have not carried out any action on their own to prevent prostate cancer. Findings indicate that any prostate cancer campaign that reduces most problems associated with decisional conflict may ultimately and effectively improve the response/call to action among male folks in South-East Nigeria. Theory and practice must necessarily be combined to improve prostate cancer health communication dissemination by using varieties of channels to shape mass media or interpersonal, small groups or community level campaigns to improve response (RHHub, 2020).

The results also relate to the level of cultural barriers and poverty especially as indicated among the rural population of the respondents. The interview also reveals that the majority of the respondents' attitude to prostate cancer health communication has negatively influenced

their practices. This is because among those who indicated influence 41 (9.5%) respondents also agreed that financial/economic factors such as lack of funds and high costs of treatment are the primary factors which militated against their positive practices to prostate cancer health communication. Some also show that socio-cultural factors, personal beliefs, 'religiosity' limits their abilities to effectively carryout appropriate prostate cancer health communication response and practice.

CONCLUSION

The study recommends that prostate cancer health communication should focus on clear, direct and consistent messages across groups of men to improve prevention and treatment behavioural practices. In the light of the influence of interpersonal communication in reinforcing messages and in view of the regard given to healthcare providers, religious bodies, family and friends, relevant stake holders should integrate them into all efforts to aid efforts towards combating prostate cancer. There is also urgent need to develop a national policy with the aid of all stakeholders and for help to subsidize costs relating to screenings/diagnosis and treatment on prostate cancer.

Disclosure Statement

The authors report there are no competing interests to declare. The authors sought and obtained an ethical clearance from the appropriate faculty committee.

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