Exposure and Attitude towards Media Messages on Cardiovascular Diseases (CVDS) among Men in Rural Niger State

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Abstract
Cardiovascular diseases have raised a lot of concern as a major cause of mortality and morbidity among adult populations in sub-Sahara Africa. Media messages and medical solutions are used to address the menace of cardiovascular diseases. This study investigated exposure to, and attitude towards media messages on cardiovascular diseases among men in rural communities in Niger State, Nigeria. The study focuses on three local government areas in Niger State-Lapai, Suleja and Kontagora. The survey method was adopted to conduct the study. The Australian Sample Size Calculator was used to draw a sample of 539 respondents while the multi-stage sampling technique was adopted as the sampling approach for the study. Data were analyzed using simple descriptive statistical tools such as frequency tables and percentages. The study revealed that the level of exposure to general CVD messages was (66.5%). Men in Rural Communities in Niger State have a high level of exposure to media messages on CVDs. The research recommends that the knowledge level needs to increase to match the level of awareness and exposure. Also the media, government and health professionals should take in to cognizance the socio-economic and cultural factors in designing media messages on CVDs in Niger State.
Keywords*:* Attitude, Cardiovascular Diseases, Exposure, Media Messages, Rural

Background to the Study

Cardiovascular diseases (CVDs) are one of the health maladies currently challenging efforts to achieve the fundamental objectives of the United Nations Sustainable Development Goals (SDGs) such as good health and wellbeing for all by 2030. Cardiovascular diseases as serious health concerns also cause substantial dislocation of social wellbeing and are sources of debilitating disability among adults. Cardiovascular diseases are not distinct health conditions; rather they are disorders, which affect sensitive parts of the human body such as the heart and blood vessels (Adewole & Rufus, 2005). In essence, cardiovascular diseases are a general term credited to all conditions or problems that attack and affect the heart or blood vessels. According to Ike (2020), cardiovascular diseases include any form of disorder, abnormality, or failure to function well, relating to the heart and blood vessels or circulation. As diseases, they present in the form of hypertension, coronary heart disease (CHD), stroke, heart failure, arrhymias, cardiomypathies, valvular heart diseases and congenital heart diseases. These diseases are often seen as serious due to the sensitive nature of the body parts they affect, and the suddenness of their attack.

Over the past two decades, cardiovascular diseases have accounted for over 80% of deaths, illnesses and disabilities in high, middle and low-income countries (Ike, 2002; Hadiza, 2018). In 2005 alone, cardiovascular diseases killed 17.5 million people around the world (Alikor & Pedro, 2018). Just over a decade later, Hadiza (2018), reported that non-communicable diseases accounted for more than 36 million deaths in 2018 with cardiovascular diseases (CVDS) responsible for 48 percent of death cases. Though preventable, cardiovascular diseases are projected to kill another 23.6 million people by 2030 (Hadiza, 2018). This figure is expected to double within the next two decades unless urgent measures are taken to stem the risk profile of adults in both developing and

developed countries (Kumar, 2017, WHO, 2020).

Over time, the risk profiles and susceptibility of people to CVDs have been aggravated by migration of rural dwellers to urban cities and towns, and consequent adoption of lifestyles peculiar to industrialized nations. In addition, social measures to protect people from risk factors are either weak or non-existent. Where they exist, attitudes, the measures are discouraging either due to the force with which the risk factors are glamourized as attractive or because the risk factors are a way of life (Alikor and Pedro, 2018). Smoking and poor diet fit well into these descriptions, with government only banning media advertising on tobacco without proscribing its production. Rising cost of food predispose low-income people to poor eating habits, and there is confusion with the advent of the social media on what proper nutrition and dieting entails (Alikor and Pedro, 2018).

In addition, men are accused of not showing significant interest in protecting themselves against the risk factors of CVDs and other diseases due to cultural and gender-related factors associating men with higher degree of smoking, drinking and stress levels (Ejaz, Afzal, Hussain, Sarwa & Amir, 2018). The corollary of the foregoing is the need to ascertain how men respond to information on CVDs. Alikor and Pedro (2018). In Nigeria, CVDs are said to kill at least 11% of over 2million NDC deaths in Nigeria annually, leaving high burden of morbidity and mortality, others either in critically ill or in disability (WHO, 2019). Unfortunately, scholars lament that the impact of cardiovascular-related diseases on mortality rate in Nigeria has been sparsely studied and information on it is rarely found in the news media(Ajuluchukwu, Adegoke & Awolola, 2018).

One of the most important, though saddening issues about CVDs is that they are highly preventable even with the worrying levels of prevalence, mortality (deaths) and morbidities (sicknesses) (WHO, 2008; Mayer, 1995; Alexander, 2005; Thorson, 2006). This is not to say that no effort has been made or can be made to fight CVDS. There have been efforts in the media and health information fields to address CVDs prevalence, causes, risk factors, types and treatments (Misbau, 2010). Studies have also looked at the presentations of the syndromes Lavisa, Tedesco and Angelollo, 2015; Ejaz, Afzal, Hussain, Sarwa and Amir, 2018). The present study makes its empirical inquiry from the point of view of responses to information on CVDs among men. Key emphases are on exposure and attitude to information on CVDs. Mass media as an institution plays an indispensable function in the dissemination of information and setting of opinions or views for discourse in the society. Cohen and Tsfati (2013) identified that people who are exposed to information about the world by the news media of information shapes their opinions about the world, attitudes towards an issue and general acceptance or rejection of the matter.

In the light of the assertion, knowledge and information can be an antidote to lackadaisical attitude towards cardiovascular diseases by families, schools, markets, churches and mosques in Nigerian society. Asemah (2011) also notes that the whole essence of communication is to affect behaviors, exchange of ideas, values, beliefs, expectations, information and knowledge. Denis (2009) affirmed that it is through communication that the society is informed, entertained, educated, socialized, mobilized, motivated, integrated and sensitized even about the health issues. Communication remains a link to humanity and sine qua non for healthy living. In a nutshell, people cannot but communicate. It is incumbent to emphasize that for people to see the great light of the day and have a positive mind set, there is need to be exposed to vital information.

This is essentially true because lack of information on any deadly disease affecting a group of people will rather exacerbate the situation since people do not know where to seek for medical attention or treatment (Cohen, Tsfasti 2005, Denis 2009& Ike 2020). Mass media are vital tools in mobilizing people to fight against cardiovascular diseases. Regrettably, in Niger State, the north central zone of Nigeria, there is a paucity of information on the trend of cardiovascular diseases. Therefore, this situation demands

sufficient information and exposition in order to educate the public on the impact of cardiovascular diseases or else it will continue to weaken the socio-economic, political and health status of the State.

Various measures and sources such as health communication through the media have been applied in the attempt to stem CVDs (Asemah, 2011). The mass media are awash with programmes promoting healthful eating habits and avoiding the risk factors of CVDs and other health conditions. It is widely held that the media have considerable influence on the opinions and attitudes of people to important social and health issues (Ajuluchukwu, Adegothe & Awolola, 2018). Cohen and Tsfati (2013), note that people who are exposed to information about the world by the news media of information shape their opinions about the world, attitudes towards an issue and general acceptance or rejection of the matter. The foregoing attests to the role of information, awareness and knowledge of the risk factors to any effort to address CVDS, hence the present study.

Statement of the Problem

Cardiovascular diseases are currently ravaging the health of people in different parts of the world. The mortality and morbidity rates in many geographical areas across the globe are alarming. The World Health Organization fact sheet (2017), notes that every year cardiovascular diseases account for 31% of deaths globally. Worse, the disease may be a silent killer owing to poor access to the right information as well as negative attitudes towards health messages on the disease.

Expectedly, the prevalence and mortality rates of the diseases are reasons for many efforts to curtail it. This present study shows that there is paucity of research efforts on the heath communication of, and uses of information on cardiovascular diseases. The situation may be more intense in Niger State of North Central Nigeria due to common problems of heath literacy, access to correct information, credibility of information and proper use of health information. These are indices so far identified in the studies on health communication generally as the most virulent causes of the spread of many health conditions. Thus, the media continue to be utilized in the efforts to address this issue. But, despite all efforts made to provide useful information through the various media channels, the CVDs are still on the increase. The present study thus focuses on these indices as it explores the exposure and attitude of men to media messages on cardiovascular diseases in rural communities in Niger State of North Central Nigeria.

Objectives of the Study

In general, this study seeks to evaluate the exposure and attitude towards media messages on cardiovascular diseases among men in rural communities in Niger State. Specially, the study seeks to:

- Determine the level of exposure to media messages on cardiovascular diseases among men in rural communities in Niger State.
- Ascertain the knowledge of health information on cardiovascular diseases among men in Niger state.

Research questions

As corollary to the foregoing the following research questions are developed to guide the study.

- What is the level of exposure to media messages on cardiovascular diseases among men in rural communities in Niger State?
- What is the knowledge level of health information on cardiovascular diseases among men in Niger State?

Review of Related Literature

Media Programmes on Cardiovascular Diseases: The mass media as an institution plays a central role in informing the public about health and medical issues to achieve positive preventive outcomes on cardiovascular diseases (Denis, 2009; Ejiofor, Beth, 2018; Meyer, 1995, Alexander, 2005; Thorson, 2006).

The mass media are diversified media technologies capable of reaching a large heterogenous audience simultaneously with messages. They include the broad areas of electronic and print media, such as radio, television, newspapers, magazines, books,

pamphlets and the internet (Ekwueme, Okoro & Ukonu, 2012; Wogu, 2018) while the mass media have an edge in reaching a vast number of people, they oculd be used to cover issues such as health, music, fine art, crime, sports and political events (Meye, 2002; Soola, 2004; Wogu, 2018). The media have the capacity to create awareness and knowledge about issues of national interest. Valdivia, Tsfati and Cohen (2012) note that people who are exposed to information are able to have informed opinions about the world. Equally, It is widely held that the media have considerable influence on the opinions and attitudes of people with regard to important social and health issues such as cardiovascular diseases prevalence, causes, risk factors, types and treatments (Ajuluchukwu, Adegothe &Awolowo, 2018; Misban & Asemah, 2011).

Expectedly, Nigerians are exposed to a plethora of programmes promoting healthy lifestyles both by foreign and local media. A BBC commercial once depicted the effects of smoking and second hand smoking. It portrayed the dangers of smoking such as death, cancer and other cardiovascular disease related complications. This commercial showed graphic images of polluted blood flowing through the body in an attempt to urge smokers to quit (BBC, 2013; Olugbenga, Owolabi, Ezika & Cross, 2016).

Channels Television in Nigeria runs a programme called Health Matters. The programme is a live phone in show. It uses interviews from health and medical practitioners to promote healthy lifestyles among the adult population. For n, the programme encourages adults to engage in the recommended 30 minutes moderately-intense aerobic physical activity, making effort to accommodate the exercise within their work schedule (Olugbenga, Owolabi, Ezika, Lewih and Cross (2006). The programmes are based on self-efficacy reflecting the degree of confidence people have in maintaining their desired positive health behavior change in circumstances that often trigger relapse. The programme emphasizes the need to maintain positive reinforcement as a way to adopt healthier behaviours. Apart from general health programmes, Radio Nigeria regularly broadcasts national and international health messages on CVDs, especially during international days for CVDs. For instance, Radio Nigeria and other private stations in Nigeria have been used to communicate a WHO initiative called Hypertension Control Initiative aimed at providing a robust database on the prevalence of hypertension and fine tune standard protocols for the treatment of the disease (Radio Nigeria, 2020). Similarly, the Nigeria Television Authority runs Health line, a television clinic that attends to all patients with diverse ill health.

The social media of WhatsApp and Facebook also carry regular skits, comments and health advice on CVDs. Pieces of health advice and comments are based on the need to have five (400g) portions of fruits and vegetables every day. One such health advise, known as ‘five a day’ is predicated on the advice from the WHO, which 161 recommends that eating a minimum of 400g of fruits and vegetables a day lowers the risk of serious health problem, including health disease, stroke, type 2 diabetes, and obesity (Olugbenga, Owolabi, Ezika, Lewitt, & Cross, 2016).

Another programme available to Nigerians is Unite for Sight, 2000-2013, which is available online. According to Olugbenga, Owolabi, Ezika, Lewitt, & Cross (2016) the programme demonstrates that high impact health communication catalyzes behavioral changes on a societal level. It shows how entire communities can be galvanized into action to live health lifestyles by taking the necessary measures to prevent disease and to protect, maintain and improve their own health by promoting good nutrition, regular exercise, and smoking cessation.

Moreover, the use of community media, such as radio, newspapers and viewing centers can provide alternative channels through which people’s needs and interests can be articulated (Wogu, 2018). These rural media have great potentials for stimulating literacy that can pave away for positive development and integration of the rural dwellers into national life. CVDs conditions can be published in the forms of news reports, articles, drama and editorials base on the rural situations for proper understanding,

the needed information and knowledge in the rural areas for the prevention of CVDs.

Besides, the content of the community media programmes originate from the local community people who reflects the needs and interests of the community. These local media programs can be used to educate people about the nature, causes, and consequences of CVDs in Nigeria. Wogu (2018) in Onabanjo (2003) noted community viewing center is a controlled theater for imparting knowledge and a rallying point for people in rural areas and to adequately serve as a platform for showing documentary programmes aimed at creating awareness cardiovascular diseases. The magnitude of the threat posed by CVDs in ravaging the health of people in different parts of the world is quite alarming if not curtailed. Various theories and models of health communication and media messages are some of the stand-out measures, in addition to the medical solutions to stem the menace of cardiovascular disease.

Community sources such as pubs, hospitals, stadia, religious centers, schools and community centers are other small and large group interpersonal media used to reinforce mass media messages. Such channels, which circumvent the barriers of modern modern media access, power problems and literacy challenges, have been successfully used to raise awareness on the health risks of CVDs. For example, through participatory process at the local community level, community members are empowered on how to interpret food labels in order to identify healthier options (Ejiofor, Beth & Moira, 2018).

Theoretical Framework

The Health Belief Model (HBM), developed in the 1950s by Hock Baum, Rosen Stock and Kegels gives details and predicts health behaviours based on the attitudes and belief of individuals. It is designed to explain the nature of individual preventive health actions (Okpoko, 2013). The Health Belief Model recognizes media campaigns as one of the environmental cues to action (Wogu, 2018). The Model assumes that the tendency to health behavior depends on the perceived threat associated with an action such as the decision to seek information or to engage in risky behavior. In other words, the model is based on the assumptions that people are more likely to act to protect their health if they believe that they are susceptible to a disease, that the diseases is serious, that the benefits of acting outweigh the costs, and that they are capable of taking effective action.

The HBM is a relevant theoretical framework for this study because it helped to explain how exposure to media messages about cardiovascular diseases could influence men's attitudes towards these diseases and their likelihood of taking steps to protect their health. The HBM suggests that men in North Central of Niger State, Nigeria who are exposed to media messages that emphasize the seriousness of CVDs and the benefits of taking preventive action are more likely to believe they are susceptible to these diseases and that taking action is worthwhile. This can lead to changes to their attitudes towards CVDs and their likelihood of taking steps to protect their health, such as changing their diet, exercising more, or getting regular checkups.

Data and Method

The study was conducted across three out of the twenty five local government areas of Niger State in North Central, Nigeria based on the zonal system adopted by the state government in 1999. The study sample represents the three geo political zones. This include Zone A (Lapai), Zone B (Suleja) and Zone C (Kontagora). The study made use of the survey research method. The sample size for the study was 385 respondents. Due to expected instrument mortality, (EIM), the sample size was marked up by 40% (Wimmer and Dominick, 2010). Going by 40% advised by Wimmer and Diminick, EIM = 40%100*385=154. Therefore, 385+154= 539 copies of the questionnaire were administered out of which 520 copies were retrieved. The local government areas were purposely selected to ensure the addition of rural perspective to the study three wards were selected through the simple random sampling technique from the official list of electoral wards in the state. The convenience sampling technique was used to select the respondents in each study area. A structured questionnaire, containing both open-ended and closed-ended

questions, was used to collect data from the 520 respondents. Questionnaire items were measured with likert-type items grouped as follows: to a very low extent, to a low extent, to a moderate extent to a very large extent and never to examine exposure and attitudes of men towards messages on cardiovascular diseases in Niger North Central on cardiovascular diseases. The major independent variable for this study was exposure to mass media campaign message on cardiovascular diseases. The respondents were asked, the level of exposure to mass media messages, there message recall and knowledge level of information on CVDs among men in North-Central Nigeria. The media message was derived from the following channels: radio, television, newspaper/magazine, internet and interpersonal media. The socio-demographic variables included in the study are 1.Age (36-45; 46-55; 56-65 and above 65), marital status (Never married, married, widowed, and divorced), education (no academic qualification, primary, secondary and tertiary); occupation (civil servant, unemployed/student, farmer/business man, and artisan (crafts); income level (below 30,000-100,000,101,000-170,000,-240,000 and above 241,000); place of residence (Lapai, Suleja and Kotangora).

Descriptive and inferential statistics were used in analysis of data for the study. Among the descriptive statistics, simple percentages and frequency counts were used to describe the study population and exposure to cardiovascular diseases.

The results of these descriptive analyses were presented in tables. Inferential statistics of chi-square test was used to investigate the extent to which demographic variables and independent variable predicted exposure and attitude towards media messages on cardiovascular diseases among men in Niger North-central, Nigeria. All analyses were done with the use of the statistical package for the social science (SPSS).

Data Presentation and Analysis

A total of 539 men were sampled but only 520 questionnaire were completed and returned revealing a 96.5% return rate. In other words, out of the 539 copies of the questionnaire administered, 520 copies were retrieved and used for analysis. Data generated from the questionnaire were conducted using simple descriptive statistical tools such as frequency tables and percentage.

Table 1: Exposure to media messages

Level of exposure	Very large extent	Large extent	Moderate extent	low extent	Very low extent	Low never
I have seen media messages on CVDs	193(37.1%)	153(29.4%)	103(19.8%)	47(4.0%)	11(2.1%)	13(2.5%)
I have seen media messages on hypertension	115(22.1%)	109(21.0%)	123(23.7%)	79(15.2%)	54(10.4%)	40(7.7%)
I have seen media messages on stroke	111(21.1%)	107(20.6%)	115(22.1%	79(15.2%)	52(10.0%)	56(10.8%)
I have seen media messages on heart diseases	102(19.6%)	136(26.2%)	110(21.2%)	74(14.2%)	48(9.2%)	50(9.6%)
I have seen media messages on arrhymias	108(20.8%)	101(19.4%)	126(24.2%)	83(16.0%)	61(11.7%)	41(7.9%)

Level of exposure	Very large extent	Large extent	Moderate extent	low extent	Very low extent	Low never
I receive most information from social media	23(4.4%)	24(4.6%)	153(29.4%)	193(37.1%)	103(19.8%)	24(4.6%)
I receive most information from ordinary discussions with family and friends	40(7.7%)	76(15.2%)	109(21.0%)	123(23.7%)	115(22.1%)	54(104%)

Source: **Field Survey 2024**

Table 2 displays exposure levels to CVD media messages and primary information sources. Most respondents had high exposure to general CVD messages (66.5%). However, exposure to media messages on specific CVD risk factors were low for hypertension (45.8%), stroke (41.9%), heart diseases (45.8%), and arrhythmias (40.2%) on their sources of CVD information, 9.9% of the respondents receive most of their CVD information from social media, and 22.9% receive their CVD information from ordinary discussions with family and friends. This suggest that respondents major sources of CVD information lie away from social media and interpersonal communication and therefore they do not rely on them for CVD exposure to specific CVD risk factors is low. This result also underscores the importance of interpersonal communication sources like family and friends in providing CVD information even though majority do not use them as primary sources of information.

Table 2: knowledge on CVDS

Knowledge Level	Very large extent	Large extent	Moderate extent	low extent	Very low extent	Low never
I know about CVDS on Health – matter on channel TV	111 (21.3%)	107(20.6)	115(22.1%)	79(15.2)	52(10.0%)	56(10.8%)
I know about CVDs Health-line on Radio Nigeria	102(19.6)	136(26.2)	110(21.2%)	74(14.2)	48(9.2%)	50(9.6%)
I know at least one united nations day devoted men related diseases	102(19.6)	101(19.4)	133(25.6%)	84(16.2)	61(11.7%)	13(2.5%)
I know about other programmes on CVDs	160(30.8)	143(27.5)	124(23.8%)	60(11.5)	20(3.8%)	39(7.5%)
I hear about CVDs in media mainly on international days	97(18.7)	97(18.7%)	120(23.1%)	91(17.5%)	65(12.5%)	52(10.0%)

Source: Field Survey 2024.

Table 3 presents data on CVD knowledge across media programmes. Analysis showed that 41.9% of the study participants' knowledge of CVDs is through "Health Matter" programme on Channels TV. 45.8% indicated that what they know about CVD comes from "Health Line" programme on radio Nigeria. While 39% are aware of at least one United Nations day devoted to men related diseases, 37% have heard about CVDs in the media mainly on international days. Finally, 58.3% of the study participants know about other programmes on CVD. Therefore, it is evident that majority of the study participants are aware of other programmes on CVD. However, results indicate that there is a low to moderate level of awareness and knowledge about CVD across the study participants.

Findings

The findings revealed that the level of exposure to general CVD messages was (66.5%). Men in rural communities in Niger State have a high level of exposure to media messages on CVDs. It was also revealed that, aside the Social media, traditional media, including television, radio newspaper and magazine remain the primary sources of CVD-related information dissemination.

The results further revealed the effectiveness of certain media channels in disseminating information about CVDs. Specifically, Health-matter channel TV and CVDs Health-line on Radio Nigeria which have generated more media outlets to reach a broader audience and improved CVD awareness.

Recommendations

The research recommends that the media, government and health professionals should take cognizance of the socio-economic and cultural factors in designing media messages on cardiovascular diseases in rural communities in Niger State.

Health educators need to integrate interpersonal source of information to aid radio and television where it is considered essential in information dissemination.

Emphasis should be given to media messages on CVDs in rural communities in Niger State.

Conclusion

Men in Niger State have a high level of exposure to media messages on CVDs as evident from the findings. The health Belief Model used in this study by implications predicts that when people perceive a health threat and see themselves as vulnerable to the threat, there is likelihood that they will adopt a positive behavior. However, knowledge level needs to increase to match level of awareness and exposure where cardiovascular disease prevalence levels are high. This condition presents a lot of challenges to the media in developing appropriate media messages on CVDs. Messages should take into consideration the socio-cultural factors and risk factors, which exacerbate CVDs in rural communities in Niger State. Such factors include the influence of peers, family members and personal beliefs.

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