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COMMUNICATION MEDIA AND CARDIOVASCULAR HEALTH PROMOTION AS FACTORS FOR SUSTAINABLE DEVELOPMENT IN NIGERIA

Toyosi Olugbenga Samson Owolabi, School of Communication, Lagos State University, Nigeria.

Ejiofor A. Ezika, School of Health, Nursing and Midwifery, University of the West of Scotland, UK

Moira Lewitt, School of Health, Nursing and Midwifery, University of the West of Scotland, UK

Beth Cross, School of Education, University of the West of Scotland, UK

Abstract:

This study adopts Meta-synthesis as its research methodology. This involves theories, grand narratives, generalisations, and interpretive translations produced from the integration or comparison of findings from past qualitative studies. It enlarged the interpretative possibilities of findings and constructed larger narratives. In all, this study discovered that though the communication media possess considerable power to inform, educate and influence behaviour change, this power is limited in a heterogeneous nation like Nigeria where the populations are diverse along ethnicity, culture, religion, language and political lineage. Limiting people's access to cardiovascular health information could expose them to risk factors which often resulted in high mortality rate and heighten health-care cost with grave implications on sustainable development. The youths who should have contributed to development process can be lost to CVD while resources that could aid infrastructural upgrading goes into the health care budget. The study concludes that to achieve effective mass media campaign against unhealthy habits that contribute to CVD prevalence in Nigeria, community media is the way forward.

Keywords: Communication Media, Cardiovascular Health, Agenda Setting, Attitude Change, Health Communication, Inter-sector Collaboration, Sustainable Development

BACKGROUND

Within the past decades, media campaign efforts have been directed towards influencing large numbers of people on their attitudes and behaviours towards various health challenges in the society. Communication media, good health behaviour and sustainable development according to Wakefield, Loken and Hornik (2010) are believed to collaborate in nation building and sustainable development. Aluko (2004) also observed that the process of development in many developing countries has had detrimental effects such that significant part of the population is left poor, vulnerable and uncared for. Going by the above identified elements, sustainable development is perceived as meeting the people's basic necessities of life. For sustainable development as a product of good governance to be guaranteed in any nation the mass media must be seen as active participants (Adepoju and Adelabu, 2011).

The media (prints and broadcast) are central to the generation of ideas and images with which to interpret and understand a great deal of everyday experience. Apart from the four traditional functions of mass media (information, education, entertainment and watchdog), new responsibilities of increasing understanding of health and development issues have been entrusted upon the media. These include building up solidarity to achieve common goals and enlarge the people's capacity to control their development needs (Lanihun, 2008). The communication media are also known to possess the ability and tools to bring salient issues to the public domain through its agenda setting power. It is against this backdrop that Folarin (2005, p.95) remarks that communication media predetermine what issues are regarded as important at a particular time in the society and any issue not brought up in the public domain rarely form part of the agenda for public discourse. Audiences not only learn about an issue through the media, they also understand how much importance should be attached to such issue based on the importance the media place on it.

Over the years, cardiovascular disease (CVD) has become a major global concern among health professionals as well as the governments of many nations, including Nigeria. This is because it is known to be a major cause of high mortality rate and a leading contributor to soaring health-care costs in many countries (Pomerleau, et al 2005; Matson-Koffman, et al 2005). Although the media in Nigeria have made significant contributions in different phases of her social, economic and political developments, it is not clear whether it has given adequate attention in coverage and prominence to the issue of CVD to the extent it can engender expected behavioural and attitudinal changes across heterogeneous populations. This explains why this study "Communicating cardiovascular health promotion as a factor in sustainable development in Nigeria" seeks to achieve the following objectives.

a. To explore the collaborations of the media and public health practitioners in promoting good health habit among Nigerians through cardiovascular disease (CVD) prevention initiatives
b. To identify the enablers and barriers to health communication
c. To discover how communication media can be strengthened for effective cardiovascular health promotion in Nigeria
d. To explore the implication of CVD on sustainable development efforts

THEORETICAL FOUNDATION

This paper is anchored on two theories; the Agenda-setting theory of the mass media in the shaping of public opinion by McComb and Shaw was propounded in (1972) while the Ego-Defence and Attitude Change by Katz, Sarnoff and McClintock was propounded in 1956.

The concept of agenda setting is used to refer to the perceived power of the press to influence the coverage of issues and events in the society. The mass media is believed to possess the ability to set agenda for the public "by presenting certain issues frequently and prominently with the result that large segment of the public will come to perceive those issues as more important than others" (Coleman et al 2009, p.147).

Folarin (2005, p. 95-96) also maintains the position when defining agenda setting as "the powers of the media to predetermine what issues are regarded as important at a given time in a society". While expatiating further on agenda setting, Folarin (2005, p. 95-96) identifies four interdependent elements which include

> the amount or regularity of reporting; status given to the reports through positioning of stories, headline display, picture exhibition and page layout in newspapers and magazines; as well as timing on radio and television; the extent of argument generated in the reports and; the aggregate of media specific effects over time.

This means that the more attention in space and time given to an issue in the media (prints or electronics), the more the people's attention will be directed at such issue. It also means that editors and programmers can use their journalistic skills to select what the media disseminate to the public through increase in the depth and frequency of report. This explains why the media are believed to have power to determine what they (public) think about.

Some early researchers in mass communication for instance, Camel et al., (1996) cited the Spanish elections of 1995, and Takeshita (1993) in his work on the Japanese mayoral election of 1986, believe that agenda setting can only be related to elections and political matters. However, Coleman et al., (2009, p.149) have debunked this notion. They provided credible proofs to show that agenda setting occurred in several other matters of public concern such as 'economy' (Hester and Gibson, 2003), 'environmental matters' (Chan, 1999); and 'health-related issues, including HIV/AIDS (Prat, Ha & Pratt, 2002).

Concerning attitude change theory according to Katz et al (1956), the assumption is that attitude formation and change can be interpreted correctly when the roles of attitudes in individual are spelt out. As the fact that this role varies so also do the conditions and techniques of attitude change and formation. Katz et al (1956, p16) defines an attitude as "a predisposition to respond cognitively, emotionally or behaviourally to a particular object, person or situation in a particular way". The cognitive component has to do with beliefs; the emotional component concerns the feelings and evaluations while the behavioural component consists of ways of life towards a person or situation.

Attitudes are formed in different ways. These could be by replicating parents' attitudes; it could also be through classical conditioning using incentives as often done by advertisers who pair a product with an additional gift. For example, toothpaste can be sold by including a toothbrush in the pack. Attitudes are also formed through direct experience. It is a known fact that the more exposed one is to media programs whether it is songs, style, culture or religion, the more one's attitude will be positively disposed to it.

To provoke attitudinal change in somebody therefore, there must be overwhelming social influence that will prevail on the attitude and opinion earlier held. Katz et al (1956) therefore suggests that a customised persuasive message should be targeted at the incentive base for which an attitude is held.

It is against this background that communication scholars argued that for health-related campaigns intended to change behaviour to achieve their stated objectives, such campaigns must not only make the media a part of its planning and implementation process but must also adopt the right communication model to be effective.

Severin and Tankard (2001, p.121) define a model "as a structure of symbols and operating rules which is supposed to match a set of relevant points in an existing structure or process and is used for understanding the more complex processes". Models are derived from a simplified version of theory and can be used to guide the development of health promotion programs. Models according to Trifiletti et al (2005, p.299) are useful in planning, implementing and evaluating interventions for instance in health campaign program. This is because they possess customised experience, principles and framework for explaining complex health-related issues and how to communicate attitudinal change messages that can engender desired change in the intended audience.

SMCR Model

There are different methods of modelling the process of communication for better understanding. According to Berlo's SMCR model cited in Anaeto et al (2008, p.27) there are two models: the linear and interactional which we are considering in this study.

According to the linear model, Berlo identified four steps. A source (S) transmits a message (M) through a channel (C) to a receiver (R). In this model, both the source and the receiver are affected by personal attitude, prior knowledge, socio-cultural background and other intervening factors in the communication process. The second model is interactional and it emphasizes a two-way exchange of communication. It portrays communication as role exchange. Person "A" (source) sends a message to person "B" (receiver). In an attempt to give response to the message, "B" transforms a message by way of reply to "A" who now becomes a receiver. If that communication exchange continues, the two people will keep swapping roles as sender and receiver. However, for the sender and receiver to play their roles well, they must have shared knowledge and experience that will enable them to encode and decode messages intelligibly. That is what is referred to as a two-way communication process.

The implication of the above models is that both can be used to illustrate communication process at different range. Linear model is however limited in scope because few human communications actually occur one way. An instance would be a boss passing instruction to the subordinate(s) which may not require any feedback other than to carry out the instruction. Most every day conversation is interactional. This is why the interactional form of communication will be used here to explain the process of communicating cardiovascular health promotion to others to achieve success.

As with any promotional goals, health professionals intending to communicate cardiovascular health-related messages must indicate what target audience is to be reached, with what message, using which channel, and what response (measurable effects) are expected over time.

As emphasised in the introductory part of this study, CVD as a leading cause of death globally is attributed to tobacco use, high blood pressure, radiation therapy, high blood cholesterol concentration, poor nutrition intake, physical inactivity,

obesity, stress, excessive alcohol intake, poor sleeping habit, among others which researchers have argued are linked to bad habits cultivated over the years (Shea and Bach, 1990). Health communication scholars therefore believed that to reduce the burden of CVD, there is the need for health campaign that can significantly influence the health attitude and behaviours of a great number of the population (Trifiletti et al (2005). It is important to mention that though health campaigns are critical and necessary for the reduction of cardiovascular health burdens and guaranteeing economic sustainability in Nigeria however, the media must be seen as an active development partner in the crusade.

Health Belief Model

To further deepen our understanding of health behaviour as it affects CVD, these authors propose that the Health Belief Model (HBM) can also be used (Resource Centre for Adolescent Pregnancy Prevention, (ReCAPP), (2007 - 2015). HBM is a framework for motivating individuals to take positive health actions that uses the desire to avoid a negative health consequence as the prime motivation (ReCAPP, 2007 – 2015). Glantz, Rimer and Lewis (2002) explains that HBM is predicated on four constructs, including perceived susceptibility (one's opinion of chances of getting a health condition), and perceived severity (one's opinion of how serious a health condition and its consequences are). Others are perceived benefits (one's opinion of the usefulness of a new behaviour in decreasing the risk of getting a disease), and perceived barriers (one's opinion of obstacles in adopting a new behaviour). These constructs were proposed based on people's readiness to act. The evidence further explains that an added construct 'cues to action' would activate that readiness and stimulate overt behaviour (Glantz, Rimer and Lewis, 2002). Cue to action are events, people or things that move people to change their health-risk behaviour. A recent addition to the HBM is the construct of 'self-efficacy' or one's confidence in the ability to successfully perform an action. The last construct was added by Rosenstock and others in 1998 to help the HBM better fit the challenges of changing habitual health-risk behaviours such as sedentary lifestyle, smoking, unhealthy diet and physical inactivity (Glantz, Rimer and Lewis, 2002).

Under the construct of 'perceived susceptibility', for example, the public health sector should partner with the media practitioners to use nationwide or regional multi-component campaigns that deliver messages by using various means and channels of communication to reach large and undifferentiated audience. The media channels such as television, radio, newspapers, magazines, and new media may be considered. In addition, media tools such as advertising, advocacy, publicity, news conferences and press release may be used to ensure that the health education intervention permeates every nook and cranny of the society. The health education intervention will focus on preventing modifiable risk factors that contribute to CVD such as tobacco use, physical inactivity, and unhealthy diets. Other health education interventions will focus on the need for routine checks for blood pressure, cholesterol level, body mass index, and blood glucose level. In order to address the construct of 'perceived severity', the collaborators will specify the consequences of inadequate physical activity, smoking, and unhealthy diets via media channels. The relationships between these variables and other risk factors such as obesity, hypertension, high cholesterol level, and diabetes as it affects CVD should be explained via multi-media outlets. The populace that is having these risk factors may be invited and enlightened in cardiovascular health programs. Risk factors to cardiovascular events such as cardiac arrest, strokes and heart failures will be discussed in such fora.

Under the construct of 'perceived benefit,' cardiovascular health should be promoted by educating Nigerians via different media channels on the need to change their health-risk behaviours and the benefits of adopting healthier ones. For example, Nigerians should be informed of the need to have five (400g) portions of fruits and vegetables every day. The health promotion campaign known as 'Five a day' should be adopted and it is predicated on the advice from the WHO, which

recommends that eating a minimum of 400g of fruits and vegetables a day lowers the risk of serious health problem, including heart disease, stroke, type 2 diabetes, and obesity (Kenny, 2013). Moreover, Nigerians should be educated that a diet rich in fruits and vegetables minimises the risk of dying from cardiovascular disease (Willey, 2013).

Under the construct of 'perceived barrier', the collaborators should identify and minimise barriers via reassurance, incentives, and assistance. For example, some working class Nigerians may not be able to embark on recommended 30 minutes moderately-intense aerobic physical activity per day due to their work schedule. In this case, negotiating the various options they can use to overcome the challenges posed by a busy work schedule may be helpful. Furthermore, in order to address the construct of 'cue to action', the collaborators should provide how-to information, for example, through participatory processes at the local community level, the community members should be empowered on how to interpret food labels in order to identify healthier options. Finally, self-efficacy reflects the degree of confidence people have in maintaining their desired positive health behaviour change in circumstances that often trigger relapse (Pro-change Behaviour system, 2014). Maintaining positive reinforcement might be very helpful in keeping Nigerians motivated in adopting healthier behaviours.

RESEARCH METHODOLOGY

Meta-synthesis is the research methodology underpinning this study. It involves theories, grand narratives, generalisations and interpretive translations produced from the integration or comparison of findings from qualitative studies (Sandelowski et al, 1997). It entails enlarging the interpretive possibilities of findings and constructing larger narratives or general theories (Sandelowski et al, 1997). Walsh and Downe (2005) agree with this submission and point out that meta-synthesis deepens the understanding of the contextual dimension of healthcare. This approach is fit for this study in that it gives a new meaning to the set of studies under consideration (Noblit and Hare, 1998; Kepreotes, 2009).

For the purpose of this study, there is the need for inter-sector collaboration which is defined as a dynamic process of establishing partnerships that share ideas, resources and power via mutual respect and negotiations to achieve common objectives. Collaborations involve the partnering of organisations and community members to solve communal problems (Porche, 2004). Inter-sector collaborations may be horizontal or vertical (Danaher, 2011). Horizontal collaboration occurs across sectors that are related or similar in nature (Public Health Agency of Canada, 2007). For example, sectors within health such as hospital, public health, community health centres, home care agencies, and a range of community agencies that delivers programmes and services. Horizontal collaboration may also occur between health and non-health sectors including social sciences, mass media, education, housing, environmental groups, justice, libraries, business, transportation among many others. It may also take place across divisions, ministries, or departments within the governments establishments (Danaher, 2011).

Vertical collaboration takes place at different levels; for instance, between different levels of government e.g. federal, provincial or municipal level. Vertical collaboration may be described in terms of geography; for example, collaborations between local, regional or provincial administrations. Nevertheless, vertical collaboration occurs within organisations between senior and junior administrative levels of service (Danaher, 2011). This study is more concerned with horizontal than vertical collaboration as an approach to promoting sustainable development in Nigeria via CVD prevention. Collaborations require more than just working together. It involves commitment to share resources, power, and talent with no single individual or organisations point of view dominating (Keast et al, 2004). Decision-making authority and task

delegation should reflect the blending of inter-sector contributions (Keast et al, 2004). In light of the principles of inter-sector collaborations discussed above, the authors of this study propose collaborative networking between health sector and media practitioners in Nigeria in order to promote and protect CV health.

UNDERSTANDING CARDIOVASCULAR DISEASE PREVENTION MESSAGES

In developing economies like Nigeria, it is very challenging to disseminate information to the public due to the fact that many live in areas that are difficult to reach and also because communication channels are usually limited (World Bank, 2011). Other challenges encountered in disseminating health information in developing countries are getting the people to pay attention, understand it and take necessary action (World Bank, 2011). Freimuth and Quinn (2004) maintain that the prerequisite for eliminating health inequalities is for public health professionals to expand their use of health communication strategies with the aim of affecting individual, community, organisations and policy formulations. This approach can effectively address the multiple determinants of health that give rise to (cardiovascular) health inequalities (Freimuth and Quinn, 2004).

In addition, health information dissemination that considers audience segmentation, which entails the development of an intervention framework for a specific population taking into account of the characteristics shared by the population such as age, sex, race, ethnicity, spoken language, tends to be more effective for the target group (USDHHS, 2013). Freimuth and Quinn (2004) posit that the complexity of culture should be understood before intervention in order to inculcate cultural variables into health communication efforts. Nevertheless, the CDC (2011) maintains that understanding the health needs of the target audience is essential in order to determine the channels that will be employed to reach them. Every channel is different and has different engagement, content, and community norms (CDC, 2011).

Investment in prevention is the key sustainable solution for the CVD epidemic (WHO, WHF, WSO, 2011). A combination of population-wide and individual health-care strategies is required in order to prevent and control CVD. The total risk approach for controlling cardiovascular risk factors is more cost effective than a single risk factor approach (WHO, 2015). Evidence indicates that population-wide primary prevention and individual healthcare approaches go hand-in-hand to minimise the population burden of CVD (WHO, 2011c). The total cardiovascular risk needs to be reduced by lowering all modifiable risk factors. For the last 20 years, while deaths from CVD has declined in developed countries due to a combination of prevention and controlled measures, deaths are increasing rapidly in developing economies (WHO, WHF, WSO, 2011). It is demonstrated that CVD risk distribution of the population can be reduced via national health policies targeting the whole population as well as those at high risk (WHO, 2015). Individuals at high risk need to be identified and targeted via health systems using integrated risk assessment and management approaches that are cost effective (WHO, WHF, WSO, 2011).

CARDIOVASCULAR DISEASE AS THREAT TO SUSTAINABLE DEVELOPMENT

According to the WHO (2002), the goals of sustainable development cannot be achieved when there is high prevalence of debilitating illness. The report further explains that irrespective of undoubted health advances in many areas of public health, poor health continues to be a constraint on development efforts. The CVD is a key determinant of death around the world (WHO, 2013). In the light of this assertion, WHO (2013) posits the view that more people die from CVD than from

any other cause. In support of these postulations, WHO (2011) has estimated that 17.3 million individual died from CVD in 2008, representing 30% of the global deaths. Of all these deaths, an estimated 7.3 million occurred as a result of coronary heart disease while stroke was responsible for 6.2 million deaths (WHO, 2011[b]).

Worryingly, WHO (2011[a]) asserts that the number of individual who die from heart disease and stroke will increase to reach 23.3 million by 2030. Against the above backgrounds, Mathers and Loncar (2006) posit that CVD remains the single leading cause of death. In furtherance of this discussion, the World Heart Federation, (WHF, 2013) claims that the majority of CVD is caused by risk factors that can be controlled, treated or modified. The World Health Organisation WHO, World Heart Federation WHF, and World Stroke Organisation WSO (2013) argue that there are other factors that contribute to CVD including, unhealthy diet, air pollution and poverty (WHO, WHF, WSO, 2011). However, the WHF pointed out that certain risk factors cannot be modified such as age, gender and family history.

Hypertension is called 'a silent killer' due to the fact that it does not present warning signs or symptoms and many people don't realise they have it until they suffer cardiovascular complications (CDC, 2013). Evidence posits that hypertension is responsible for 7.5 million (13 %) of global deaths, tobacco use accounts for 9%, whereas raised blood glucose, and physical inactivity are attributed to 6% each (WHF, 2013). The same evidence further explains that overweight and obesity are responsible for 5% of global mortality rate while diabetes is responsible for 1.3 million deaths around the world (WHO, 2010). Raised cholesterol is responsible for 2.6 million (4.5%) deaths and 29.7 million (2%) of total Disability Adjusted Life Years (DALYs) around the world (WHO, 2009a).

Hypertension is the leading cause of CVD globally (CDC, 2013) and the key causes of high mortality rate around the world (WHO 2011[c]). It has been revealed that the complications of high blood pressure accounts for 9.4 million deaths globally every year (Lim et al, 2012). In addition, high blood pressure is responsible for at least 45% of deaths due to heart disease and 51% of deaths resulting from stroke (WHO, 2011[d]). In line with this enquiry, WHO (2011c) claims that approximately one billion people are hypertensive. Of these, two-thirds are in developing countries (WHO, 2011[d]) of which Nigeria constitute substantial population. The study pointed out that the figure will increase to 1.56 billion adults in the year 2025.

WHO (2012) estimates that 40-50% of adults in Africa are hypertensive. However, the study points out that most of these people remain undiagnosed, although many of these cases could be treated with low-cost medications, which would significantly minimise the risk of death and disability from heart disease and stroke. Evidence indicates that CVD is responsible for 7-10% of all adult's medical admissions to healthcare facilities in Africa, with heart failure contributing 3 -7% (Mocumbi, 2012). It is estimated that CVD accounts for more deaths in low income countries than infectious diseases, including HIV, AIDS, tuberculosis and malaria; maternal and prenatal conditions as well as nutritious disorders combined (Beaglehole and Bonita, 2008). Consequently, CVD is currently the largest single contributor to global mortality rate and in the foreseeable future (WHO, 2009[b]). The highest number of deaths resulting from chronic diseases and illnesses now occur in developing countries (U.S. Department of State, 2013). Currently, about 8million Nigerians suffer from high blood pressure whereas 4million have diabetes every year in Nigeria (Health Reform Foundation of Nigeria, HERFON, 2011).

Elevated dietary intakes of saturated fat, trans-fat cholesterol and salt, as well as, low intake of fruits, vegetables and fish are associated with CVD risk (WHO, 2007). It is estimated that 16million (1.0%) DALYs and 1.7 million (2.8%) of deaths globally are associated with low fruits and vegetable consumption (WHO, 2009[b]). The burden of diet and nutrition related

chronic diseases are on the increase globally (WHO, 2002). The trend is heightened by the dynamism in the global food economy which reflects in changing dietary pattern. For instance, there is an increased consumption of energy-dense diet that has high fat content, especially saturated fat, and low in unrefined carbohydrate (WHO, 2003). The trend is associated with a decline in energy expenditure that is linked with a sedentary life style, motorised transport, labour saving devices in the home and a fall in the physically demanding manual labour in the work place (WHO, 2003). As a result of new trend in dietary and lifestyle patterns, including tobacco use, harmful use of alcohol and physical inactivity (World Medical Association, 2013), CVD risk factors such as obesity, diabetes mellitus, and hypertension are becoming increasingly significant causes of disability and premature deaths in developing countries (WHO, 2003).

It is a common axiom that health is wealth. An unhealthy individual is more of liability than asset to the state as he cannot make any productive contribution to the development process. Going by the above statistics, a nation that witnesses such high mortality rate can hardly guarantee sustainable development because the work force would have been greatly decimated. It is also important to mention that the direct costs of managing and treating CVD can be very expensive for the country in terms of annual health budget as well as indirect cost such as incalculable man hour loss; all of which could have been channelled into infrastructural upgrading and socio-economic development of the state (Tulchinsky and Veravikora, 2014).

COMMUNICATING CARDIOVASCULAR HEALTH MESSAGES IN NIGERIA

Health communication is the process of promoting health by disseminating messages through mass media, interpersonal channels and events. It may include diverse activities such as clinician-patient interaction (Health Communication Unit, 2009). Health communication is relevant for every aspect of health and well-being including, disease prevention, health promotion and quality of life. Unite for Sight (2000-2013), for example, highlight that high impact health communication catalyzes behavioural changes on a societal level. In addition, it galvanises entire communities into action, prompting them to live healthy 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. Put differently, health communication can elevate an audience's awareness of health problems and solutions, influence perceptions and beliefs, prompt action, demonstrate healthy behaviours, and reinforce existing knowledge or behaviour (Freimuth and Quinn, 2004).

Health communication is relevant in a number of contexts including, health professional-patient relations, use of health information, and individuals' adherence to clinical recommendations and regimens. Other examples include the construction of public health messages and campaigns, risk communications, images of the health in the mass media and the culture at large, the education of consumers about how to gain access to the public health and health care systems, and the development of tele-health applications (Healthy People, 2010). Culture affects how people communicate, understand and respond to health information (USDHHS, 2007). Consequently, health communication should recognise the cultural beliefs, values, attitudes, traditions, language preferences, and health practices of diverse populations and apply that knowledge to produce a positive health outcome (USDHHS, 2007).

CHALLENGES OF CARDIOVASCULAR HEALTH COMMUNICATION IN MULTICULTURAL SETTING

Labspace (2010) suggests that a breakdown can occur at any point in the communication process, resulting in the misunderstanding or distortion of message. As a result of many communication hurdles including, language barriers and socio-cultural differences, health workers sometimes have difficulty in transmitting vital health information to the patients. In view of this submission, Unite for Sight (2000-2013) observes that one of the barriers to effective health communication is low literacy level. To propagate health information in Nigeria, it has been argued that the traditional mass media, prints (newspapers and magazines) and electronics (radio and television) cannot achieve hundred percent successes because of Nigeria's multi-ethnic and multi-lingual make-up (Owolabi & O'Neill, 2013b, 2004). For example, the print media is elitist in culture and content and as such may not make as much impact among the largely illiterate rural dwellers that constitute about 57% of the populations unless they are printed in the indigenous language. The pertinent question is in how many languages the media will publish approximately 250 languages let alone over 5000 dialects. The same is for television and radio which often suffer from erratic power supplies in the rural community where about 70% of the people live without electricity. Although radio is believed to be more efficient in carrying health information than other media because it is more affordable to the masses and can be operated at minimal cost. It also has its shortcoming in that it cannot broadcast in all the languages and dialects.

Television is another media channel reputed for added advantage of reinforcing messages through pictures and images. This can be incorporated into cardiovascular health promotion messages intended to bring home very clearly the full impact of unhealthy habits and behaviour (Eastbourne, 2007). In recent times, television advert on smoking in the developed nations especially in the United Kingdom (UK) have clearly depicted the effect of smoking and second hand smoking through graphic images warning the public on the dangers of smoking ranging from death, cancer and other CVD-related complications. For example, a new advertising campaign uses graphic images of polluted blood flowing through the body in an attempt to urge smokers quit (BBC News, 2013).

It needs be emphasised that in view of several obstacles identified above, there is no media channel that can guarantee a hundred percent successes in carrying development messages to the grassroots level. This is why Lanihun (2003) and Akinleye (2003) argue that when disseminating health message, as a way of enhancing mass effect, communicators may incorporate indigenous media into the traditional media production process. For instance, eloquent and influential market women, charismatic opinion leaders and prominent religious head, school teachers, theatre and mobile cinema group are powerful informal communication channels that can be used to reach the informal settings where people regularly congregate to discuss religion, socio-cultural, economic and political issues (Wilson, 1997; Kalejaye et al, 2006).

Also worthy of mention is the widespread shortage of manpower among developing countries and this oftentimes constitutes hindrance to health workers especially while attempting to communicate with multiple patients at a time.Germane to shortage of manpower as limiting factor to effective health communication in Nigeria is what Owolabi (2014) refers to as dearth of specialised health reporters in the newsrooms. The exodus of seasoned reporters, producers and presenters from the newsroom to other ancillary professions such as public relations, advertising and marketing communication has within the last two decades become a matter of concern in the media industry. Job insecurity, lack of motivation and poor condition of service are fallout of economic distress the media industry has witnessed in recent times. Journalism in general, and the health beat in particular, are now left with greenhorns most of whom are neither committed to nor experienced in the job (Anyanwu, 2015). There was an instance in 2014 during the outbreak of Ebola fever in Lagos

when a sensitization program meant to educate the people was wrongly slated. How does a television station justify the broadcast of a serious health program between 10a.m and 12noon, a time when most intended audience are expected to be busy in their places of work and commercial activities? It would have been more appropriate if such important program is slated for the evening time (5pm-9pm) when most people will be relaxing at home. The media proprietors are also not helping matters as they are disinclined to retraining their reporters for fear of losing them to the corporate world after committing resources to their capacity building. It could be perceived that health reporting suffers in the hands of novice and by extension; the nation is unable to realize her sustainable development goals.

The era of privatisation and commercialization is also believed to constitute a serious challenge to health communication in Nigeria. It is pertinent to mention that the private investors' entrance into the media industry has fuelled news commercialization which is another risky trend in media operation and management (Oso, 1991; Soola, 2003). Under the commercialized arrangement, health communication does not attract special attention more than any other news as news coverage generally is now on the basis of cash and carry. Before this period, the broadcast media were owned and funded by the owner governments and were used freely for information dissemination but a private media outfit cannot afford to carry development news freely at all times somebody has to pay for it. This is why Soola (2004) argues that this condition may cause the media to be tempted to pay greater attention to personalities rather than issues. This also presupposes that news like commercial products will flourish only when a large segment of the audiences with purchasing power are delivered to the advertiser (sponsor of news) leaving the poor rural communities and their development activities to their fate. It is against this backdrop that Folarin (2005, p.27) opines that giving premium attention to financial gains at the expense of social services may vitiate the noble ideals of social responsibility theory that says media should reflect the society's plurality, giving access to diverse views and granting voice to the voiceless (McQuail, 2005; cited in Anaeto, et al.,2008 p.57). The press may also become a push around by the advertisers and boardroom governors while it remains urban-centric in its event coverage to the disadvantage of the rural communities. If the imbalance in news reporting subsists, the rural communities might suffer neglect in health information dissemination.

Despite abundant health information available on the internet; it is still not within the reach of those in resource poor settings. In certain communities, even in the developed world, internet access is somehow costly, or generally unavailable; thus constituting a barrier to health communication (Unite for Sight, 2000 -2013). Due to the usefulness of internet in disseminating vital health information, Unite for Sight (2000 - 2013) recommends that there should be increased effort to bring internet access to rural communities and the developing world. In particular, this effort should involve both the public and private sectors, namely the government agencies and the technology corporations. According to Unite for Sight (2000-2013) the proliferation of low quality healthcare information on the internet is another barrier to health communication. As the volume of internet content increases on a daily basis, health information users need help to evaluate the reliability of the information they accessed. Many people around the globe use the internet for health-related reasons. As a result, the potential harm from inaccurate information and inappropriate services is simply huge.

STRENGTHENING THE MEDIA TO PROMOTE CARDIOVASCULAR HEALTH IN NIGERIA

In the preceding sections, factors that constitute major drawback to media effectiveness in health information dissemination have been identified. If the media are to be catalyst and not a drag in the wheel of health development, it must be sufficiently equipped and well positioned to function at its best despite manifold constraints.

To overcome the hurdle of socio-cultural differences and language barriers that often characterise the use of print media, for which illiterate/semi-literate often cannot access the messages. Unite for Sight (2000-2013) suggests that health information should be custom-made for each target audience and be published in indigenous language

The same is said for the electronic media (radio and television) that have the limitations of not able to reach the target audiences most of whom are resident in the rural communities where, apart from linguistic differences, there is no regular electricity to power their receivers. The advent of GSM technology appears to have mitigated the problem associated with radio broadcast in that most mobile phones today have an in-built transistor radio through which people can listen to news and receive health information in different languages. Apart from the indigenous broadcast media springing up in various parts of the country which carry messages to the grassroots, most government radio stations in different states also broadcast in major languages of their states.

For health information broadcasting to be effectively transmitted on television, the way forward is for the state and local governments to assist the local communities where there is no electricity to have television viewing centres where people can gather together to watch programs. Government could provide each viewing centres with a portable power generator and a television set and announcement could be made regularly as to when health issues will be discussed so that people can be mobilised to watch it.

As we think of a New World Order and the media's participation in ensuring even dissemination of health information, we need to put in perspective the rural-urban information imbalance with regard to Nigeria's linguistic and cultural diversity. If the developing nations are complaining about world information imbalance at the international level, there is a greater need for as much agitation to maintain balanced information flow at the national level.

Over the years, most of the local areas have been neglected both in news coverage and development programs despite that they were those the political class often relied upon when canvassing for electoral vote during general election. For example, between August and October 2013, there was an outbreak of bird flu, which affected several poultry farms in the Northern part of Nigeria. The resultant effect of this is the killing of over 2million birds in about 37 farms in eleven states of Nigeria (The Sun Newspapers, March 31, 2015). Most of these poultry farmers have accused the government of not sending the warning signal to them when it sensed bird flu outbreak in the year. Although the government claimed to have sent early warning to the states, but the message was only disseminated in the urban centres where most of the media are domiciled and it never got to the rural communities where the larger population of poultry farmers are based. This is an indication that Nigeria urgently needs true community media. National or regional media as are operated have been found incapable to cater for the health information needs of Nigeria's sharply divergent urban-rural populace. The way out of this lopsidedness in information sharing is the establishment of community media which should be sited in, owned and managed by the community.

SUMMARY AND CONCLUSION

Going by the above discussions, Mass media are believed to possess the capacity to influence changes in health-related behaviours across large heterogeneous populations. However, experiences in media campaign research on cardiovascular health promotion with reference to Nigeria's complex ethnic configuration have pushed us to draw the following conclusions.

The traditional media alone have been found to be unable to make sufficient impact in the dissemination of cardiovascular health information in Nigeria. The reason is because the country is heterogeneous and the populations are diverse in terms of ethnicity, culture, religion, language and political lineage. As a result of this, it is difficult for needed health information to get to the grassroots through the traditional mass media.

For mass media to make appreciable impact in health messages dissemination there is urgent need to establish true community media that can cater for the development and health information needs of Nigeria's sharply divergent urban-rural populace. The traditional media (national or regional) as are presently structured have been found to concentrate their reports on urban centres to the disadvantage of rural communities.

It is pertinent to also note that many of the countries having complex heterogeneity globally are observed to have similar problem as Nigeria in attempt to formulate and implement national development and health policies. The preponderance of poverty and diseases in a plural-ethnic society is therefore not unexpected because in our opinion, every policy put in place to foster development however good, are usually misinterpreted on the ground of society's diversities and in most cases, good policies are likely to have been sacrificed on the altar of ethnic parochialism.

Given that cardiovascular disease shares the same behavioural risk factors (tobacco use, physical inactivity, poor diet) with some other chronic diseases, the Nigerian government and policy makers should not only implement laws to control smoking and other bad habits that can make people to be predisposed to cardiovascular health risk but also enforce it with zero tolerance to guarantee CVD-free society.

The Nigerian government and the media must collaborate as active partners to effectively communicate cardiovascular health information to its heterogeneous populace through news reporting, editorials and analysis, feature stories, documentaries and entertainment.

References

Adepoju, T and Adelabu, O. (2011). Mass Media and Governance Issues in Contemporary Nigeria. In Oso, L and Umaru, P (eds.) *Mass Media and Society in Nigeria*, Lagos: Malthouse.

Aluko, M.A.O (2004). Sustainable Development, Environmental Degradation and the Entrenchment of Poverty in the Niger Delta Area of Nigeria, Kamla-Raj Journal of Humanity, 15, (1), p.63-68.

Anaeto, S.G, Onabajo, O.S and Osifeso, J.B (2008) *Models and Theories of Communication,* USA: African Renaissance Books Incorporated.

Anyanwu, F.O (2015) "Media Coverage of Lagos State Schools during the Spread of Ebola Virus in Nigeria", Being a Project Submitted to the Department of Journalism, Lagos State University, for the Award of Bachelor's Degree.

British Broadcasting News (2013) Graphic Anti-Smoking Ad uses scare tactics [Online] Available: https://www.youtube.com/watch?v=ecdhYZcTZS4 [Accessed: 20 May 2016]

Beaglehole, R., Bonita R. (2008) Global public health: a scorecard. Lancet [Online] Vol.372 (9654), pp.1988-1996 [Accessed: 22 December 2013]

CDC (2011a) The health communicators social media toolkit [Online] Available: www.cdc.gov/socialmedia /tools/guidelines/pdf/socialmediatoolkit_bm.pdf [Accessed: 07 November 2013]

CDC (2013) High Blood Pressure [Online] Available: http://www.cdc.gov/bloodpressure/ [Accessed: 20 December 2013]

Chan, K. (1999). The Media and Environmental Issues in Hong Kong (1983-85). *International Journal of Public Opinion Research,* 11(2), p.135-151

Chapman, E.N (1960). *Attitude: Your Most Priceless Possession,* 2nd Ed. Los Altos, CA: Crisp Publication.

Coleman, R., McCombs, Shaw, D. and Weaver, D (2007). Agenda Setting. In Wahl-Jorgensen, K and Hanitzsch, T. (eds.). *The Handbook of Journalism*, New York: Rutledge.

Cohen, A.R (1964). *Attitude Change and Social Influence*, New York: Basic Books

Eiser, J.R (1986). Social Psychology: Attitudes, Cognition and Social Behaviour, New York: Cambridge University Press.

Folarin, B. (2005). Theories of Mass Communication: An Introductory Text, Ibadan: Bakinfol Publications.

Freimuth, V., S. and Quinn, S., C. (2004). The Contributions of Health Communication To Eliminating Health Disparities. *American Journal of Public Health.* [Online] Vol. 94 (12), pp. 2053-2055 [Accessed: 07 November, 2013]

Glantz, K., Rimer, B., K., and Lewis, F., M. (2002) Theory at a Glance: A guide for Health Promotion practice. San Francisco: Wiley & Sons

Health Communication Unit (2009) Overview of Developing Health Communication Campaigns Toolkit [Online] Available:www.thcu.ca/resource_db/pubs/754356559.pdf [Accessed: 27 September 2014]

Health Reform Foundation of Nigeria (HERFON) (2011) Diabetes to top cause of death in 2015 [Online] available: http://www.vanguardngr.com/2011/10/diabetes-to-top-cause-of-death-in-2015-health-group/ [Accessed: 15 December 2013]

Healthy People (2010) Health Communication [Online]Available:www.projectsline.org/sites/default /files/health%20communication.pdf [Accessed:22 September.

Katz, D (1960). The Functional Approach to the Study of Attitudes, *Public Opinion Quarterly* (24), p.163- 204
Katz, D. Sarnoff, I, and McClintock, C. (1956). "Ego-Defense and Attitude Change," *Human Relations,* 9, p.27-45.

Kepreotes, E. (2009) The Meta-Synthesis: Reducing the Isolation of Qualitative Research [Online] Available: journals.3fu.ca/hneh/index.php/

Labspace (2010) Health education, advocacy and community mobilization HEAT module [Online] Available: labspace.open.ac.uk/mod/ouconten/view.php?id=45281&section=97.6 [Accessed: 30 September 2014]

Laninhun, A. (2003). Communicating for Development Purposes: Gender Perspectives. In Soola, E.O (ed.), *Communicating for Development Purposes.* Ibadan: Kraft Books Ltd.

Lim S., S., Vos T., Flaxman A., D., and Danaei, G. (2012). A Comparative Risk Assessment of Burden And Disease and Injury Attributable to 67 Risk Factors and Risk Factors Clusters in 21 Regions, 1990- 2010: A Systematic Analysis of The Global Burden of Disease Study 2010. Lancet [Online] Vol.380, pp 2224 -60 [Accessed: 20 November 2013]

McCombs, M. E. Shaw D. L. (1972). The Agenda-Setting Function of Mass Media. *Public Opinion Quarterly*. 37. (2).

Matson-koffman, D.M, Brownstein, J.M, Neiner, J.A, Greaney, M.L (2005). A site-specific Literature Review of Policy and Environmental Intervention that Promote Physical Activities and Nutrition for Cardiovascular Health: what works? *Annual Journal of Health Promotion*, Vol.19, p.167-193.

Mathers, C., D. and Loncar, D. (2006) Projections of global mortality and burden of disease from 2002 2030.PLOS Medicine. [Online] Vol. 3(11), pp. 442

Mocumbi, A, O. (2012) Lack of focus on cardiovascular disease in sub-Saharan Africa. Cardiovascular Diagnosis & Therapy. [Online] Vol.2 (1), pp.74-77 [Accessed: 22 December 2013]

Noblit, G. and Hare, R., D. (1998) *Meta-ethnography: synthesizing qualitative studies.* London: Sage.

Pomerleau, J. Lock, K. Knai, C. Mckee, M. (2005). Intervention Designed to Increase Adult Fruits and Vegetable Intake Can be Effective: A Systematic Review of the Literature, *Journal Nutrition* Vol.135, p.2486-95

Pratt, C.B., Ha, L., and Pratt, C.A. (2002). Setting the Public Health Agenda on Major Diseases in Sub-Sahara Africa: African Popular Magazines and Medical Journals, 1981-1997. *Journal of Communication*, 52(4), p.889-905.

Prezi Inc. (2014) Communication barriers [Online] Available: https://prezi.com/ahiyqpikw4th/communication-barriers/ [Accessed 04 December 2014].

Risk Factors World Bank (2011) Information dissemination. [Online] Available: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTHSD/0,,contentMDK:20190815~menuPK:438809~pagePK:148956~piPK:216618~theSitePK:376793,00.html [Accessed: 06 November, 2011].

Sandelowski, M., Docherty, S., Emden, C. (1997) Focus on Qualitative Methods, Qualitative Meta-Synthesis: Issues and Techniques. *Research in Nursing and Health* [Online] Vol. 20, pp. 365 – 371.

Severin, W.J and Tankard,J.W (2001). *Communication Theories: Origins, Methods, and Uses in the Media*, 5th Ed. New York: Longman.

Shea, S. Basch, C.E (1990). A Review of five Major Community-based Cardiovascular Disease Prevention Programs, *Am J Health Promotion*, (4), p.279-287

Takeshita, T. (1993). Agenda Setting Effects of the Press in a Japanese Local Election. *Studies of Broadcasting*, 29, p.193-216.

Tulchinsky, T and Varavikova, E. (2014) *The New Public Health.* 3rd ed. Amsterdam: Academic Press

Unite for Sight (2000-2013) Health communication strategies [Online] Available: www.uniteforsight.org/health-communication-course/module1. [Accessed:25 September 2014]

USDHHS (2007) Quick guide to health literacy [Online] Available: www.health.gov/communication/literacy/quickguide/quickguide.pdf [accessed: 24 September 2014]

USDHHS (2013a) Communication and Dissemination Strategies to Facilitate the Use of Health And Healthcare Evidence. *Research Review*. [Online] Vol. 2, pp. 1-25 [Accessed: 6 November, 2013]

U.S. Department of State (2013) Diplomacy in action [Online] Available: http://www.state.gov/e/oes/intlhealthbiodefense/id/# [Accessed: 22 December 2013].

Wakefield, M.A, Loken, B and Hornik, R.C (2010). Use of Mass Media Campaign to Change Health Behaviour, *the Lancet*, Vol.376, p.1261-1271

Walsh, D., Down, S. (2005) Meta-Synthesis Method for Qualitative Research: A Literature Review. *Journal of Advanced Nursing* [Online] Vol. 50 (2), pp. 204 – 211.

WHO (2002) Health and sustainable development: meeting of senior officials and ministers of health. [Online] Available:www.who.int/mediacentre/events/HSD_plaq_02.7def1.pdf [Accessed: 05 December 2014]

WHO (2003) Diet, Nutrition and the Prevention of Chronic Diseases: Report of Joint WHO/FAOexpertconsultation.[Online],available:http://web.ebscohost.com/ehost/ebookviewer/ebook/ nlebk_102433 [15 October 2013]

WHO (2007) Prevention Of Cardiovascular Disease: Guidelines for Assessment and Management of Cardiovascular Risk.[Online]Available:http://whqlibdoc.who.int/publications/2007/9789241547178_ eng.pdf?ua=1 [Accessed: 14 November 2014]

WHO (2009a) *World Health statistics 2009* [Online] Available: http://www.who.int/gho/publications/ world_health_statistics/EN_WHS09_Full.pdf [Accessed: 22 December 2013]

WHO (2009b) *Global Health Risk: Mortality and Burden of Disease Attributable to Selected Major Risks*[Online]Available:http://www.who.int/healthinfo/global_burden_disease/GlobalHealth Risks_report_Front.pdf [Accessed: 21 December 2013]

WHO (2011a) *Global Atlas on Cardiovascular Disease Prevention and Control*. [Online] available:http://www.paho.org/hq/index.php? option=com_docman&task=doc_view&gid=21049&Item id= [Accessed: 01 December 2013

WHO (2011b) *Global Status Report on Non-Communicable Diseases.* [Online] Available: http://www.who.int/nmh/publications/ncd_report_full_en.pdf [Accessed: 01 December 2013].

WHO (2011c) *Hypertension: Factsheet* [Online] Available: http://www.searo.who.int/entity/Noncom municable_diseases/media/non_communicable_diseases_hypertension_fs.pdf [Accessed:20 November 2011

WHO (2011d). *Causes of Death 2008: Data Sources and Methods* [Online] Available: http.who.int/healthinfo/global_burden_disease/cod_2008_sources_methods.pdf [Accessed: 20 November 2013]

WHO (2012) *New data highlight increases in hypertension, diabetes incidence* [Online] Available:http://www.who.int/mediacentre/news/releases/2012/world_health_stati stics_20120516/en/. [Accessed: 20 November 2013]

WHO (2013) *Cardiovascular Diseases* (CVD_s). [Online] Available: http://www.who.int/mediacentre/factsheets /fs317/en/ [Accessed: 03 November 2013]

WHO (2015) Cardiovascular diseases (CVDs) [Online] Available: who.int/mediacentre/factsheet/fs317/en/ [Accessed: 18 May, 2016]

WHF (2013) *Cardiovascular Diseases: Risk Factors.* [Online] available: http://www.world-heartfederation.org/fileadmin/user_upload/documents/Fact_sheets/2012/PressBackgrounderApril 2012.

World Health Organisation (WHO), *World Health Federation (WHF) and World Stroke Organisation (WSO) (2011) Global Atlas On Cardiovascular Disease Prevention And Control* [Online]Available:http://whqlibdoc.who.int/publications/2011/97892415643 73_eng.pdf [Accessed: 21 December 2011]

World Heart Federation (2013) *Cardiovascular Diseases: Risk Factors*. [Online] available: http://www.worldheartfederation.org/fileadmin/user_upload/documents/Fact_sheets/2012/Press#Backg

rounderApril2012RiskFactors.pdf [Accessed: 19 November, 2013].

World Medical Association (2013). Non-communicable Diseases. [Online] Available: http://www.wma.net/en/20activities/30publichealth/10noncommunicablediseases/ [Accessed: 15 December 2013.

Zimbardo, P.G (1991). *The Psychology of Attitude Change and Social Influence;* Philadelphia: Temple University Press.

ABOUT THE AUTHORS

Toyosi Olugbenga Samson Owolabi is a Lecturer at the School of Communication, Lagos State University, Nigeria.

Ejiofor A. Ezika, is a Doctoral Research Student at the School of Health, Nursing and Midwifery, University of the West of Scotland, Paisley, United Kingdom.

Moira Lewitt, is a Professor of School of Health, Nursing and Midwifery, University of the West of Scotland, Paisley, United Kingdom.

Beth Cross, is a lecturer at the School of Education, University of the West of Scotland, Paisley, United Kingdom.