

Dissemination of health information by Nigerian newspapers: A correlation analysis on the health behaviours of newspaper readers in Nigeria

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Abstract

In this study, the author examined the correlation between dissemination of health information in Nigerian newspapers and the health behaviours of newspaper readers. The author adopted the survey method to sample the opinions of 770 newspaper readers in Nigeria and found a correlation between dissemination of health information in Nigerian newspapers and an improvement in the health behaviours of newspaper readers. Mass media have been an important component in human society and this is reflected in various functions they perform and how these functions impact on individual members of society and the polity at large. The information, education and entertainment functions of mass media in particular, place several tasks on them and necessitate the coverage of a wide range of human endeavours and subject areas. These subject areas include among others: health, politics, education, sports, science and technology, environment, arts and culture, business and economy, life and style and religion. Through the dissemination of information on these subject areas, mass media shape and influence the thoughts, attitudes and behaviours of media audiences, especially through the use of agenda setting technique. The study, therefore, strongly recommends that health care providers, policy makers, health communication practitioners and other stakeholders should use newspapers more strategically in disseminating health information in order to achieve good health outcomes among members of Nigerian populace.

Key words: Health information, health behaviours, newspaper readers, Nigerian newspapers, mass media, health communication, media effect

Introduction

Over the years, mass media have been an important component in human society and this is reflected in various functions they perform and how these functions impact on individual members of society and the polity at large (Ahuja, 1997, McQuail, 2010, Mujtaba, 2011, Schramm and Lerner, 1976, Lasswell, 1948, Hoijer, 1998). The information, education and agenda setting functions of mass media in particular, place several tasks on them and necessitate the coverage of a wide range of human endeavours and subject areas. These subject areas include among others: health, politics, education, sports, science and technology, environment, arts and culture, business and economy, life and style and religion. In performing these functions, mass media provide information and may sometimes act as a teacher in some cases by educating media audience on important topical issues in society.

The agenda setting function of mass media also confers on them the ability to prioritise issues and events by giving prominence to some (issues and events) over others, thereby setting the agenda for public discussion. The agenda-setting function of mass media is a communication theory that has measured the effect between media and the public. In other words, agenda setting theory holds that mass media emphasise certain issues in such a way that media audiences or members of the public also attribute importance to such issues. This may consequently influence or shape their opinions.

These functions of mass media- information, education and agenda setting, perhaps may enable members of the public to make informed decisions on issues affecting them within their socio-economic environment. Consequently, mass media have been described as a powerful presence in the daily lives of nearly every person on this planet regardless of race, nation, or social-economic class because people watch television, listen to radio, watch movies, read newspapers and browse the web (Rendon, , 2002). Hence, “media construct our reality and help to define who we are and even who we wish to become.” (Kenix, 2011).

Health communication in the media

The perceptions of people about health issues are not only shaped by their direct experiences and the impressions received from other people, but also by news media reports on various health issues (Ahmed and Bates, 2013, Cassell et al., 1998). The media reports on various health issues have overbearing effects and can change the health behaviours of the populace over time (Wakefield et al., 2010). The powerful influence of the media potentially makes them important vehicles through which essential health information and health policy prescriptions are conveyed in a way that affects the health behaviours of members of the public (Hayes et al., 2007). This does not mean that the media disseminate accurate health information at all times. This is because Robertson and Wortzel (1978) have argued that:

“Mass media may also have unintended effects in the sense that the average viewer is exposed to a regular diet of "medical" shows on television and also to large numbers of commercials for proprietary medicines. The learning from such programming and commercials may be in the form of "misinformation" and may not be compatible with good health habits. A national study by the Louis Harris Organization (1973), for example, concluded that mass media were second only to the individual's physician as a source of health information. Furthermore, much of the health information absorbed from television is likely to be under low involvement conditions and, therefore, processed without evaluation.” (p.526)

However, several contemporary studies in health communication have found that health information in newspapers affects the health behaviours of people, especially newspaper readers (see Feeley and Vincent, 2007, Wakefield et al., 2010, Wang et al., 2009).

The powerful nature of mass media makes it possible for them to present prevailing opinions on various issues including health, in ways that influence the larger segments of society (Wang et al., 2009). This resonates with the fact that agenda-setting theory describes the power and influence of mass media to focus public attention on a few key public issues and ascribes importance to the issues in a way that the

public will conceive them as important (McCombs, , 2006, McCombs and Shaw, 1972). It is, therefore, argued that a considerable number of people in society now derive their knowledge about various health issues, including HIV from the media (Chapman and Lupton, 1994). This is similar to the view of Robertson and Wortzel (1978) who aver that “mass media have considerable potential for affecting health behaviour. The pervasiveness of mass media and the exposure levels of broad segments of society suggest that mass media may be an important information source regarding health and a relevant socialization force regarding health attitudes and behaviour.” (p. 252) Bertrand et al. (2006) studied the effectiveness of newspaper messages and HIV/AIDS-related behaviours in developing countries. Their study found that HIV specific communication in newspapers directed members of the public towards acquiring new medical knowledge, increased their knowledge of HIV transmission, and reduced high risk sexual behaviours among the populace. This implies that newspapers and mass media in general have the potential to influence the health behaviours of members of the public. This also resonates with the submission of Ahmed and Bates (2013) who state that:

Any health communicator has a variety of media from which to choose when attempting to influence health beliefs, behaviours, and policies. These media include, but are not limited to, news media, mass mediated advertising, and new communication technologies. For different issues and different audiences, different media may be more or less effective in spreading the desired messages (Ahmed and Bates, 2013: p.5).

Specifically, newspapers have been identified as major sources of health information in the contemporary world (Rice, 2001, Winett and Wallack, 1996). This is connected to the roles of newspapers in shaping the health behaviours of members of the public (Niederdeppe and Frosch, 2009, Pierce and Gilpin, 2001), and their ability to influence public health policies (Asbridge, 2004, Tong et al., 2008). Wakefield et al. (2010) state that newspapers have been effective in media campaigns in affecting various health behaviours in mass population. “Such campaigns have most notably been aimed at tobacco, heart-disease prevention, alcohol and illicit drug use, cancer screening and prevention, sex-related behaviours, child survival, and many other health-related issues” (Wakefield et al., 2010: p. 1261). Wakefield, et al. (2010) reviewed the use of mass media campaigns in changing health behaviours in Australia and the United States within the context of various health-risk behaviours. These health risk behaviours include use of tobacco, alcohol, and other drugs, heart disease risk factors, sex-related behaviours, road safety, cancer screening and prevention, child survival, and organ or blood donation. The authors found newspapers, as well as other mass media, effective in producing positive changes or preventing negative changes in health-related behaviours across large population.

Also, agenda setting studies have found correlations between the frequency, amount of information and editorial emphasis on topical contents, and the salience placed on such topical contents by members of the public (Funkhouser, 1973, Hertog and Fan, 1995). These topical contents include drugs (Shoemaker et al., 1989), and HIV/AIDS (Rogers, Dearing & Chang, , 1991), as well as other local issues that affect the general populace (Smith, 1987). Hertog and David (1995) studied the impact of the press coverage of social beliefs on the transmission of HIV in the United States. The authors identified three routes of HIV transmission, namely: sneezing, insects and toilets, to examine the focus of the study- How Press

Coverage Influences Public Beliefs about HIV Transmission. Using content analysis and survey research methods, the study found a strong correlation and relationship between press contents and public beliefs. The study notes that press coverage of HIV directs the public towards the emerging medical consensus. This study also found that press contents impacted behavioural changes because public beliefs on HIV transmission remain concurrent with a reduction in fear. Further, people showed a willingness to spend their scarce resources in an attempt to prevent further harm and to assist the afflicted in the society. Furthermore, a good number of studies examined media coverage of health-related issues and found behavioural changes among media audiences (see Feeley and Vincent, 2007, Moshrefzadeh et al., 2013, Wang et al., 2009). Other studies have also found newspaper coverage of health related issues influential in shaping the attitudes of the public and policymakers to consider such health issues as important, and to address them for the benefits of members of the public (Walsh-Childers, 1994, Yanovitzky, 2002).

Media effects in health communication

Considering the fact that this study is a health communication research, whose theoretical leaning mostly lies on media effects, this study is, therefore, defined as a media effect study. However, the convergence between health communication and media effects can be underpinned within the conceptual framework of health communication as postulated by many authors. For instance, health communication is defined as a field of theory and practice that seeks to use communication strategies, methods, programs and intervention to inform and influence individuals as well as communities decisions to enhance and affect health behaviours (United States Department of Health and Human Services, 2000). According to Schiavo (2007), health communication is a process of influencing, engaging and supporting individuals, communities, health professionals, special groups, policymakers and the public to champion, introduce, adopt, sustain and influence a behaviour, practice, or policy that will ultimately improve health outcomes.

Conversely, media effects are the overall outcomes that different levels of mass media exposure have on media audiences. These outcomes could be changes or modification in people's behaviours, attitudes, orientation, beliefs or the personality of media audiences. In other words, media effects are defined as the correlation between media exposure and audience behaviours (Signorelli and Morgan, 1992). McQuail (2010) also defines media effects as the consequences or outcomes of exposure to mass media messages whether or not intended. In a comprehensive framework, Bryant and Zillmann (2009) state that:

When scholars talk about media effects, they are considering the social or psychological changes that occur in consumers of the media message systems- or in their social milieu or cultural values as a result of being exposed to, processing, or acting on those mediated messages. Five classes of media effects on individuals are often considered: behavioural, attitudinal, cognitive, emotional, and physiological (Zillman, 2009: p. 13).

Similarly, Valkenburg and Peter (2013) conceptualise media effects as:

The deliberative and non-deliberative short and long term changes in the cognitions, emotions, attitudes, and behaviour of media audiences that result from media exposure and media use. Media use, if not indicated otherwise, is defined as the intended or incidental use of media types (e.g., TV, newspapers), content (e.g., entertainment, advertising), and technologies (e.g., social media) (Valkenburg and Peter, 2013: p.199).

The fact that mass media occupy a high proportion of our leisure time (Livingstone, 1996), and the entirety of our life, consciously or unconsciously, especially in the 21st century, reflects largely the effects of mass media in the lives of every individual on this planet (Rendon, 2002). This is why Kenix (2011) avers that “media construct our reality and help to define who we are and even who we wish to become” (p.1). Baran (2009) states:

Does a fish know it’s wet? Influential cultural and media critic, Marshall McLuhan would often ask. The answer, he would say, is “NO: The fish’s existence is so dominated by water that only when water is absent is the fish aware of its condition. So it is with people and mass media. The media so fully saturate our everyday lives that we are often unconscious of their presence, not to mention their influence. Media inform us, entertain us, delight us and annoy us. They move our emotions, challenge our intellect and insult our intelligence. Media often reduce us to mere commodities for sale to the highest bidder. Media help define us; they shape our realities (Baran, 2009: p. 4).

Furthermore, it should be understood that media effects are constant as media influence on audiences do not end at the point of exposure. This is because the media programme the mental codes of audiences during exposure, which shape how we think and act any time those mental codes automatically run in the conscious or unconscious minds of media audiences (Potter, 2013). It is, however, instructive to note that media effects are dynamic as studies in this domain are on-going, thereby generating different outcomes among media audiences. This consequently led to various paradigms in media effects research at different periods. A number of factors have been identified by scholars to be responsible for the debates around media effects and the question of paradigm shift. The media themselves change over time in terms of technology, contents, availability or access and response to the changing practices of everyday life (Livingstone, 1996). The fact that media focus attention on human beings as commodities who are themselves dynamic and have gone through phases of development also influence the media effects research (Livingstone, 1996).

Interestingly, as cited by Miller (2004), Ball-Rokeach and DeFleur (1989) chart the movement of media effects research from “the age of signs and symbols” to “the age of speech and language” to “the age of writing” and to “the age of printing and technology.” According to the scholars:

These ages, not surprisingly, span thousands of years of human development. However, not until “the age of mass communication” was ushered in by widespread distribution of newspapers (in the 19th Century), by the development and popularisation of motion pictures (at the turn of 20th Century) by the invention of radio and adoption in many households (1920s through 1940s), and

by the invention of diffusion of television (1950s and 1960s) could commentators really see the reach of communication media to mass audience, cited in Miller (2004: p. 236).

Media effects have been of great interest to many groups in this contemporary world. Among them are those who want to reach others with their messages and therefore, want to use the most effective channel to reach their audiences. Others are those who express fears for the negative impacts of the media (McQuail and Windhal, 1993). It is also evidenced that the question of media effects from a broader perspective, involves relationships between media, politics and the public, the use of media for public health campaigns, and educational uses among many other issues (Livingstone, 1996).

Methodology

Considering the fact that this study examines the correlation between dissemination of health information in Nigerian newspapers and the health behaviours of newspaper readers, it defines this thesis as a media effect study. The study, therefore, measures the potential effects of health reporting in Nigerian newspapers on the health awareness, empowerment, orientation, attitudes and the general health behaviours of newspapers readers in the country. Consequently, the choice of survey method was adopted (Bertrand and Hughes, 2005). However, because of the relatively large population of newspaper readers in Nigeria, which is estimated at 26,488,200 corresponding to 20.22 percent of the total population (Dragomir and Thompson, 2012), questionnaire as a survey instrument was chosen to reach the selected respondents (Popper, 2002). Furthermore, with the use of questionnaire, the study was able to gather a large amount of information from the respondents within a short period of time with relative low cost and few research personnel (Ackroyd and Hughes, 1981).

Population, sample and sampling technique

As stated above, available statistics in Nigeria put the estimate of newspaper readers in the country at 26,488,200 (Dragomir and Thompson, 2012). In this study, 770 respondents were surveyed as the sample out of the total population of 26,488,200 newspaper readers in Nigeria. This is the highest sample size that can be selected from the population of 26,488,200, while the lowest sample size that can be selected in the population is estimated at 385 respondents. The researcher arrived at this sample size using an online sample size calculator, at 95 percent confidence level and 5 percent margin of error. In selecting the respondents and to ensure adequate representation, the population of newspaper readers in Nigeria was regionally stratified into the north, south and west (Bertrand and Hughes, 2005). In each region, however, the most populated state that best represents the major characteristics and ethnic features of each region was further selected and in this case, their state-capital was focused. Therefore, in the north, Kano State was selected as it is the most populated state and the commercial nerve in the north and Kano city being the state capital was selected. In the east, River State was selected as it is the most populated state in the east and Port Harcourt as the capital city and the commercial centre that readily draws major ethnic subjects of this region was selected. Lagos State was

selected in the west being the most populated state in the west and the commercial centre of the country at large.

With this stratification, the selection of respondents in each of the three states was proportionately distributed based on quota and in according to the percentage of newspaper readers in each geographical region (Ross, 1988). The available statistics show that newspaper readers in the north is 34 percent of the national population, 30 percent of the national population are newspaper readers from the east while 36 percent of the country's population are newspaper readers from the west (Dragomir and Thompson, 2012). Therefore, the 770 sample size was proportionately distributed by calculating the percentage of the newspaper readers in each region against 770. Therefore, the following number of respondents was chosen from each selected state: Lagos: 277 respondents, Kano: 262 respondents and 231 respondents from Port Harcourt.

The study further adopted a purposive sampling technique by specifically selecting literate residents in each of the selected states. The researcher adopted a convenience sampling method to administer questionnaires in places such as institutions of higher learning, government ministries, private firms and organisations and university teaching hospitals. This is because most of the individuals working in such establishments possess literacy capability to read and understand newspaper messages.

Survey research instrument (Questionnaire)

This study used a self-administered questionnaire as a research instrument to sample the opinions of the respondents or to collect data from the respondents in the sample. According to Wolf (2008), a self-administered questionnaire simply refers to a questionnaire specifically designed to collect data from respondents without the intervention of the researcher. It is also referred to as a stand-alone questionnaire. It is usually sent to respondents through postage, hand distribution, e-mail or web survey (Wolf, 2008). In designing the questionnaire, the researcher put the research hypothesis into consideration. This, therefore, determined the nature and type of survey questions that were asked from respondents.

Validity and reliability

The questionnaire was designed with simple, familiar and unambiguous words, and clear instructions (Zechmeister et al., 2012). The author also avoided double-barrelled questions- where two questions were asked at once, and grouping questions by topics to avoid switch back and forth from topics in the questionnaire design (Tourangeau and Rasinski, 1988) to achieve the reliability and validity of the study. The researcher conducted a pre-test exercise as a further step to ensure the reliability and validity of the study. The pre-test survey sampled the opinions of a few respondents in the population who were not part of the sample that was eventually surveyed (Forsyth & Lessler, 1991). Specifically, the author carried out the pre-test exercise among 77 respondents, which is 10 percent of the sample size (770). In doing this, pre-test respondents were asked to complete the questionnaire as they would actually do in

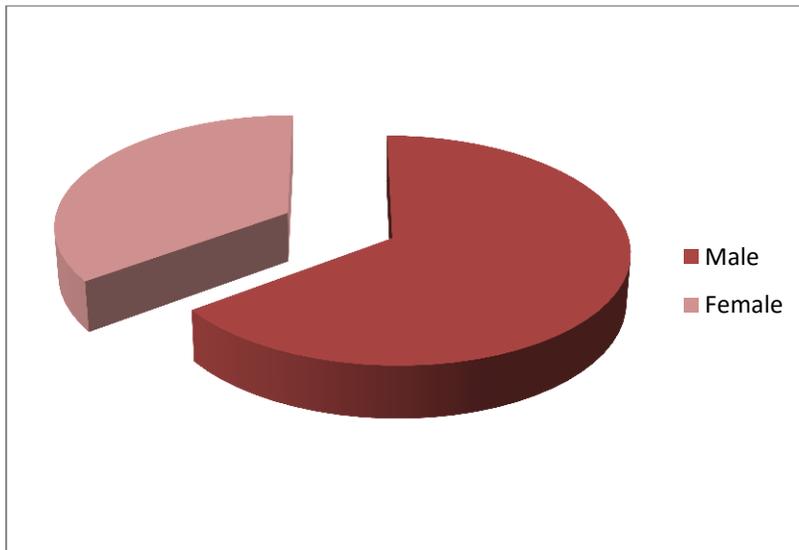
any data collection process that involves them. Thereafter, the author interviewed 15 of them to know their experiences in the process of completing the questionnaire. Consequently, the author was able to improve the quality of the final version of the questionnaire based on the general feedback from the pre-test survey and the comments of those that were interviewed among the pre-test respondents. Pre-testing is particularly important in this case since data was collected through self-administered questionnaires. In other words, the fact that the author was not available in most cases to clarify issues with the respondents necessitated pre-testing. In the actual survey, 748 copies of questionnaire were returned out of 770 distributed, representing 97 percent of the sample size. This was a very s high return rate, which should be capable enough to generate adequate data to represent the entire population of newspaper readers in Nigeria

Findings

Demographic variables of survey respondents

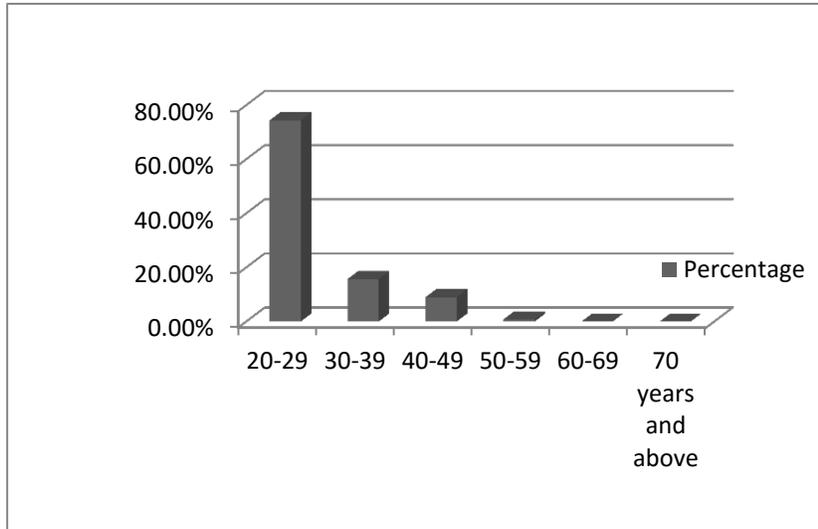
The gender distribution of the survey respondents indicates that male readers were more than female readers in this study with about 65% and 35% respectively (Figure 1).

Figure 1: Gender distribution of respondents



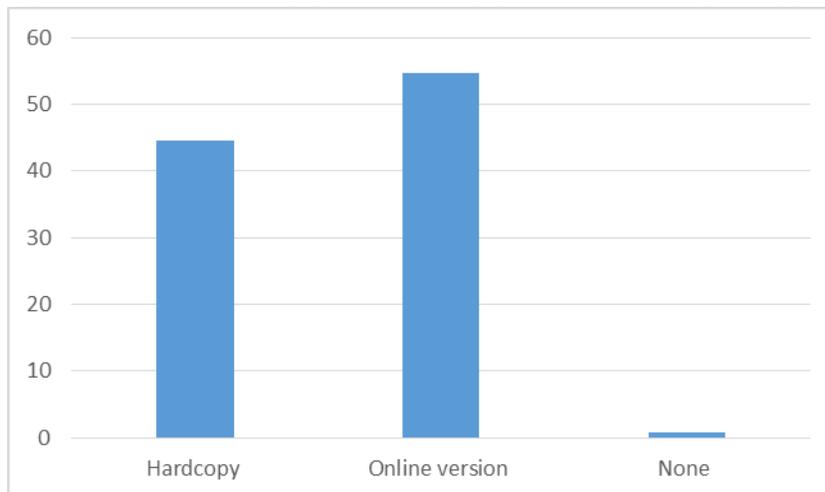
This study found that the age range of the survey respondents influenced the mode of newspaper (online or hardcopy) through which they seek health information in Nigeria. The majority of the survey respondents belong to 20-29 age group while people of ages 30-39 rank next (Figure 2).

Figure 2: Age distribution of respondents



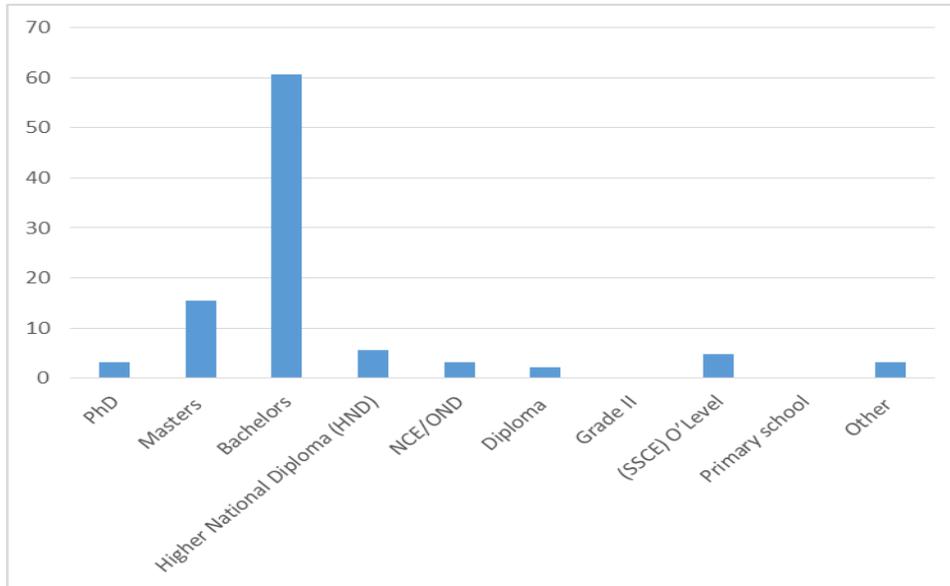
This implies that the largest proportion of the survey respondents was of the active young age, which may be why the online newspaper was more preferred among them than hardcopy version (Figure 3).

Figure 3: Mode of newspaper readership preference among study participants



The educational demography of the survey respondents further confirms the relationship between their age group and why the choice of online newspaper was more popular among them than the hard copy (Figure 4). In other words, most of them were Bachelor Degree holders, who by virtue of their literacy level, are characteristically fond of exploring the Internet through their mobile phones, I-Pads, and laptops.

Figure 4: Education status of survey respondents



Study hypothesis

- i. H0: Perceived dissemination of health information by Nigerian newspapers will not be related to the self-reported health behaviours of newspaper readers in Nigeria.
H1: Perceived dissemination of health information by Nigerian newspapers will be related to the self-reported health behaviours of newspaper readers in Nigeria.

It is important to note that the author tested the study hypothesis directly from a comparison of questions asked in the questionnaire. The study found that 742 survey participants responded to these two questions and then compared them via statistical correlation to see if they were related. The result is as shown in the SPSS table below

Table 1: Correlation coefficient value for study hypothesis

Correlations

		At what degree would you agree that newspapers disseminate information on various health issues?	At what degree would you agree that access or seeking health information from newspapers has improved your general health behaviour?
At what degree would you agree that newspapers disseminate information on various health issues?	Pearson Correlation Sig. (2-tailed) N	1 748	.343** .000 742
At what degree would you agree that access or seeking health information from newspapers has improved your general health behaviour?	Pearson Correlation Sig. (2-tailed) N	.343** .000 742	1 742

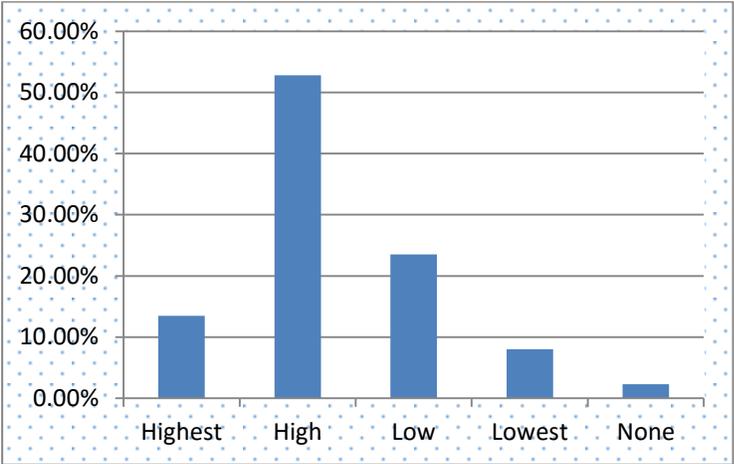
** . Correlation is significant at the 0.01 level (2-tailed).

With a correlation coefficient value of .343 calculated using SPSS and a significance value (p) .000 which is less than 0.5 ($P = .000 < 0.5$), it shows there was a medium, positive correlation between the two variables [$r = .343, n = 742, p = .000$]. This implies that the researcher found a correlation between the perception of dissemination of health information by Nigerian newspapers and the perception that those people believe health information improves their own health behaviours. Further suggests that individuals (newspaper readers) who perceive that newspapers are disseminating health information also perceive that such health information is a benefit to their health behaviours. Such a finding is an indication that those who attend to health information in newspapers (survey respondents) and notice the existence of such health information also tend to think that health coverage in newspapers is beneficial.

Furthermore, the study suggests that when newspaper readers perceive that Nigerian newspapers disseminate health information, they also perceive such health information as a means of improving their health orientation and general health behaviours. The figure below depicts the level of agreement

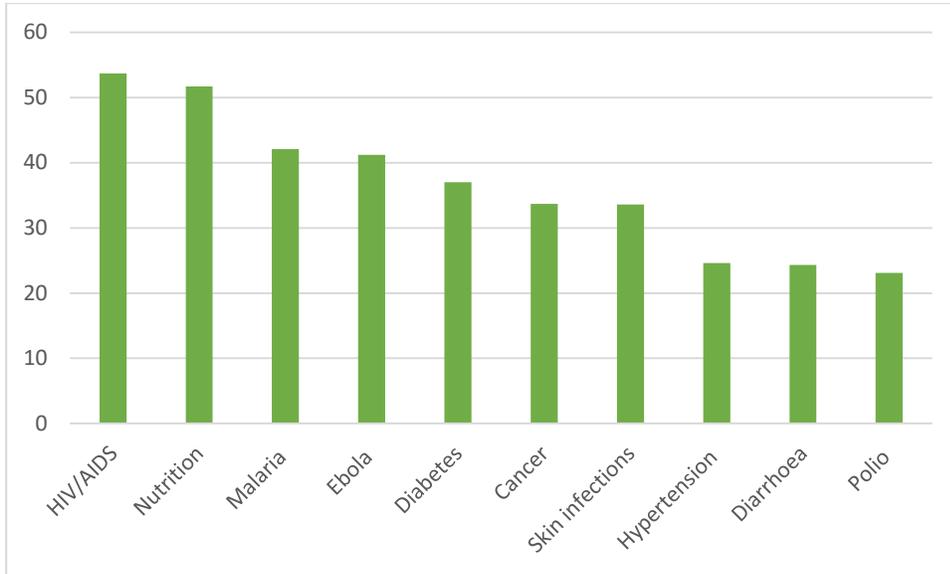
that seeking health information in Nigerian newspapers by survey respondents is a means of improving their health behaviours (Figures 5).

Figure 5: Degree of agreement that seeking health information from newspapers is a means of improving the general health behaviours of survey respondents



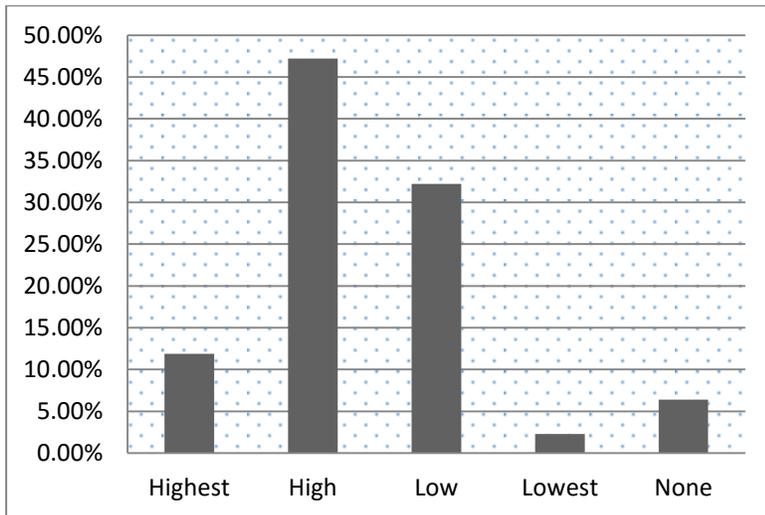
Having found a correlation between the perception of newspaper readers in Nigeria (survey respondents) and the health information disseminated in Nigerian newspapers, this study further found that HIV/AIDS, nutrition, malaria, ebola (there was an outbreak of ebola in Nigeria when this survey was conducted), diabetes, cancer, skin infection, hypertension, diarrhoea and polio are the top ten health issues that survey respondents mostly seek information about in Nigerian newspapers (Figure 6).

Figure 6: The top ten health issues survey respondents mostly seek information about from Nigerian newspapers



Moreover, this study found that about 59% of survey respondents did not only seek health information in Nigerian newspapers, they also share such health information with other people (Figure 7). This may imply that because survey respondents perceive health information in Nigerian newspapers as beneficial and a means of improving their health behaviours, they, therefore, share such health information with other people.

Figure 7: Degree of discussing health information accessed from newspapers with friends, family members, colleagues in office and other



Discussion of findings

The findings of this study further corroborate previous studies in health communication research within a newspaper context. This study shows that survey participants seek health information from Nigerian newspapers in order to improve their health behaviours. This is in line with the study of Gasher et al. (2007), Gollust and Lanzt (2009), and Westwood and Westwood (2009). These authors state that people seek health information from newspapers to improve their perception of the risks and benefits of health intervention. Furthermore, previous studies have noted that the perceptions of people with regards to health issues are not only shaped by their personal experiences and interactions with others, but also by newspapers and other news media (Ahmed & Bates, 2013, Cassell, Jackson and Cheuvront, 1998). Newspaper as a medium of mass communication has been identified as a major source of health information in shaping the health behaviours of members of the public (Niederdeppe and Frosch, 2009, Pierce and Gilpin, 2001). This is further confirmed by this study as dissemination of health information by Nigerian newspapers correlated with an improvement in the health behaviours of newspaper readers in the country.

This study also confirms the findings of Bertrand et al. (2006) who studied the effectiveness of newspaper articles on HIV/AIDS-related behaviours in developing countries. These authors found an increase in the knowledge of HIV transmission and a reduction in high-risk sexual behaviours amongst people. Furthermore, Hertog and David (2005), who studied the impact of press coverage on social beliefs regarding the transmission of HIV in the United States, found a strong correlation between press contents and the public belief. Moreover, the authors note that press coverage of HIV not only directed the public towards the emerging medical consensus, it also impacted on the behavioural changes of the American public in terms of HIV transmission. Studies by Bertrand et al. (2006) and Hertog and David (2005), as also demonstrated by this study, show how dissemination of health information by newspapers can influence the health beliefs and behaviours of members of the public. This is further maintained that:

Any health communicator has a variety of media from which to choose when attempting to influence health beliefs, behaviours and policies. These media include, but not limited to, news media, mass mediated advertising, and new communication technologies. For different issues and different audiences, different media may be more or less effective in spreading the desired messages (Ahmed and Bates, 2013: p.5).

The results of this study further support the work of Wakefield et al. (2010) who assert that newspapers can affect various health behaviours amongst a large population. These researchers reviewed the effect of mass media campaigns in changing the health behaviours of people in Australia and the United States. They reviewed heart disease risk factors, sexual-related behaviours, cancer screening and prevention amongst other health issues. The authors found newspapers, as well as other mass media, effective in influencing positive health behaviours and preventing negative ones across large populations.

Furthermore, this study indicates that Nigerian newspapers create awareness about health issues in Nigeria because the survey respondents confirmed that they seek health information in general in Nigerian newspapers and mostly about HIV/AIDS, nutrition, malaria, diabetes, hypertension, diarrhoea, polio. This is similar to the work of Torwel and Rodney (2010) who investigated the newspaper coverage of health issues in Nigeria and found Nigerian newspapers as disseminating information about HIV/AIDS,

malaria, hypertension, nutrition, diabetes and polio. This finding also resonates with the study of Okidu (2013) who studied the newspaper coverage of HIV/AIDS in Nigeria and found that HIV/AIDS was frequently reported by Nigerian newspapers.

It is also essential to note that this study has confirmed that media audiences further subject mass media contents to interpersonal discussion, which according to Robinson and Davis (1990), may facilitate long-term memory and retrieval of information from those media contents. This view is also supported by Southwell and Yzer (2008), who aver that “interpersonal communication about the actual media content in question could also reinforce memory for that content.” (p. 445) Southwell and Yzer (2008) argue further that interpersonal communication has the potential to extend the reach and frequency of the media contents or messages and influence the thought of media consumers. According to the authors, “for example general conversation in an interpersonal setting about the specific public health dangers of hurricanes, flooding or earthquakes, could reinforce or amplify memory for connected materials gleaned from mass media reports on those topics.” (p. 445) It may then be argued that survey respondents who seek health information from Nigerian newspapers may have shared such health information with those who are educationally disadvantaged, thereby extending the reach and benefits of health information to them.

Essentially, the demographic data of this study further confirm how individual differences or characteristics such as age, education and gender influence newspaper readership, though there may be variances from countries to countries (Elvestad and Blekesaune, 2008, Fourie, 2001). In this study, it was found that male newspaper readers were more than female newspaper readers and this is similar to previous studies, which found that men read newspapers than women (see Hallin and Mancini, 2004, Lauf, 2001, Weibull, 2005). Furthermore, this study has confirmed that higher education is one of the major characteristics for newspaper readership because the majority of the survey respondents have Bachelor degree and most of them fall within the age bracket of 20-39. This resonates with the findings of previous studies, which also found that people of higher education tend to read newspapers than those with less education (see Fourie, 2001, Schoenbach et al., 1999, Vaage, 2006). The age range (20-39) and level of education (Bachelor degree) of the dominant group of newspaper readers among the survey respondents correlate to their choice of online newspaper over and above the traditional newspaper or hard copy. This finding is similar to the work of Faure (1998 cited in Fourie 2001) who found that 90% of people who read e-newspaper have had tertiary or university education and they are mostly of young age. This is because the old people according to Fourie (2001) are technophobia while the younger generation seems to be inclined to the Internet and other electronic media.

Conclusion and Recommendations

This study further confirms that mass media messages in general have effects on media consumers. One of the major information needs of people is health and the media are noted for conveying important health information to the public, which makes people of all ages to rely on the media for health information in order to achieve good health outcomes. This study, therefore, may conclude that Nigerian

newspapers set agenda on health issues, which consequently influences the priority or the level of importance attributed to those health issues by members of the Nigerian public. This assertion is premised on the correlation or relationship between dissemination of health information from Nigerian newspapers and the perception of newspaper readers that health information in newspapers is a means of improving their health behaviours. In view of this, the author posits that newspapers, like other mass media, are powerful in setting health agenda to influence the health behaviours of individual members of the public and the health sector at large.

Importantly, this study has shown that newspapers are important channels in disseminating health information to improve the health beliefs and behaviours of members of the Nigerian public. As such, the author strongly recommends that health care providers, policy makers, health communication practitioners and other important stakeholders should focus consistent attention on the use of newspapers in communicating health information in order to achieve good health outcomes among members of the Nigerian public. This is because achieving good health outcomes among members of the public is connected to the overall health status of a nation or society. This recommendation is important considering the fact that there is possibility of health information in Nigerian newspapers to reach those who are not literate through social, family and other platforms of relationship with newspaper readers.

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