

Newspaper Coverage of Health Issues in Nigeria:

The frequency of reporting malaria, HIV/AIDS and polio and the effect of seeking health information on the health behaviours of newspaper readers

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DEDICATION

To God, the source of my little knowledge

My mum, Mrs Abibat Bello, the like of whom is rare. A mother and a *father*

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ABSTRACT

The prevalence of various health problems in Nigeria and their devastating consequences on the socio-economic status of the nation is such that seems to have defied all logics. The Nigerian government at various levels and many international health and funding agencies continue to make efforts to improve the health status of the individual members of Nigerian society and the health sector at large. However, scholars have continued to identify and emphasise the strategic position and the need to use the media as a complementary approach to advance the health sector and to achieve good health outcomes among members of society. This study, therefore, examines the coverage of health issues by Nigerian newspapers, emphasising the degree of attention given to HIV/AIDS, malaria, polio and the northern region. The study further examines the relationship between dissemination of health information by Nigerian newspapers and the health behaviours of newspaper readers and the challenges being encountered by health reporters in the field of health reporting in Nigeria.

With a comprehensive literature review underpinning priming and framing within the framework of agenda setting theory; and a triangular methodological approach of content analysis of 844 editions of four national newspapers from 2010-2013, survey and in-depth interviews, the study finds a moderate coverage of HIV/AIDS, malaria, polio in Nigerian newspapers in relation to other diseases studied. These three diseases are also reported in relation to northern Nigeria more than other regions included in this study. But in general, Nigerian newspapers have not given prominent coverage to health issues in their leads, editorials and other important pages. This finding suggests that Nigerian newspapers appear to give prominent attention to other issues which, as noted by health reporters interviewed, include politics and economy, over health issues. Given that Nigerian newspapers have not given prominent coverage to health issues, this suggests that Nigerian newspapers may have less influence in directing the attention of the Nigerian government towards making health a

top priority in the government agenda. The study also shows that dissemination of health information by Nigerian newspapers correlates with an improvement in the health behaviours of newspaper readers in the country. Furthermore, interviewed 13 newspapers health reporters across the national newspapers in Nigeria and find that health reporters generally face a wide range of challenges due to the specialised and technical nature of health reporting. Health reporters who were trained in health and sciences demonstrate better expertise and skills in health reporting in Nigeria than health reporters who were trained in the arts and social sciences. This finding suggests that health and science training has a major influence in health reporting in Nigeria. The finding may further imply that health and science background may be considered important in employing health reporters for the field of health reporting given the technical nature and some degree of health and science expertise required for optimal job performance in the field.

LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---------------|---|
| AIDS | Acquired Immune Deficiency Syndrome |
| APC | All Progressive Congress |
| APHA | American Public Health Association |
| CBN | Central Bank of Nigeria |
| CBSM | Community Based Social Marketing |
| CDC | Centres for Diseases Control and Prevention |
| CECCR | Centre of Excellence in Cancer Communication Research |
| CHC | Coalition for Health Communication |
| CMS | Church Missionary Service |
| CNN | Cable Network News |
| FCT | Federal Capital Territory |
| GAVI | Global Alliance for Vaccines and Immunisation |
| GDP | Gross Domestic Product |
| GFFATM | Global Fund to Fight AIDS, Tuberculosis and Malaria |
| GHRI | Global Health Research Institute |
| GMAP | Global Malaria Action Plan |
| GNP | Gross National Product |
| GVAN | Global Vaccine Action Plan |
| HCIRB | Health Communication and Informatics Research Branch |
| HDI | Human Development Index |
| HIV | Human Immune Deficiency Virus |
| HWAN | Health Writers Association of Nigeria |
| ICTs | Information Communication Technologies |
| IMF | International Monetary Fund |

| | |
|----------------|--|
| KAP | Knowledge Attitudes and Practice |
| MDGs | Millennium Development Goals |
| NAFDAC | National Agency for Food and Drug Administration Control |
| NAS | Nigerian Academy of Science |
| NCHM | National Centre for Health Marketing |
| NEPC | Nigerian Export Promotion Council |
| NIMER | Nigerian Institute of Medical Research |
| NIPRD | Nigerian Institute for Pharmaceutical Research and Development |
| NMA | Nigerian Medical Association |
| NMCD | Nigerian Medical and Dental Council |
| NPC | Nigerian Press Council |
| NYM | Nigerian Youth Movement |
| ODPHP | Office of Disease and Prevention and Health Promotion |
| OPEC | Organisation of Petroleum Exporting Countries |
| PAHO | Pan American Health Organisation |
| PGEI | Polio Global Eradication Initiative |
| RBM | Roll Back Malaria |
| SciPICH | Science Panel on Interactive Communication and Health |
| SPM | Society for Participatory Medicine |
| SPSS | Software Package for Social Science |
| UN | United Nations |
| UNICEF | United Nations Children’s Education Fund |
| USAID | United States Agency for International Development |
| UNDP | United Nations Development Programme |
| UNPF | United Nations Population Fund |

CHAPTER ONE

1.1 Introduction

Newspapers have consistently remained useful resources in society since their emergence in the 17th century (George, Curran, & Wingate, 1978; Tom, 2012; J. Weber, 2006). As a medium of mass communication, newspapers serve as tools for shaping thoughts, and means of controlling economic and political powers (Copeland, 2003). Newspapers also provide an essential forum for public discussion and debates, thereby providing guidance for society (Copeland, 2003). Newspapers are regarded as courtrooms, where judgements are passed against societal ills through editorials. The information, education and entertainment roles of newspapers further make them agents of socialisation (Stephens, 1988). Newspapers socialise members of the public by inculcating the values and norms of society in them (Stephens, 1988). In fulfilling these basic functions in society, newspapers, like other channels of mass communication, have always devoted attention to the coverage of various aspects of human endeavours. These include, but not limited to, politics, education, sports, business and economy, religion, arts and culture, entertainment and health.

This study, therefore, investigates newspaper coverage of health issues in Nigeria to determine the level of attention given to HIV/AIDS, malaria and polio, which are described as the three global scourges (United Nations Children's Education Fund, n.d.). This is to further determine their level of coverage in Nigerian newspapers in relation to other diseases given the fact that HIV/AIDS, malaria and polio are prevalent in Nigeria. The Nigerian nation is broadly divided into three regions, namely: north, east and west. The north accounts for 53.4 percent of the country's population (National Population Commission, 2006 cited in National Bureau of Statistics, Nigeria, 2011) with 19 states out of the 36 states of the federation. Abuja- the Federal Capital Territory, is also situated in the north. The population

profile of northern region (53.4 percent) is greater than the combined population of the two other regions. Consequently, the state of affairs in the north has overbearing effects on the socio-political and economic status of the country at large. The region is, however, noted for communicable diseases caused by high temperatures and has the highest number of malaria cases in the country¹ (Federal Ministry of Health, 2008; Amoran, 2013). This is because *Plasmodium falciparum*, the dominant species of malaria parasites, which are responsible for the most severe forms of the disease, and *Anopheles gambiae* (complex *A. gambiae* s.s.), the dominant malaria carrier are both found principally throughout the northern region (Federal Ministry of Health, 2012).

Furthermore, the northern region has the highest prevalence rate of the three global scourges- malaria, HIV/AIDS and polio in Nigeria (see Tran, 2013; Federal Ministry of Health, 2010; Renne, 2012; Federal Ministry of Health, 2009a; Renne, 2010). In Nigeria, statistics show that Benue State, a state from the north central geopolitical zone, has consistently recorded the highest prevalence rate of HIV/AIDS in the country (Federal Ministry of Health, 2012). The entire north accounts for 49.5 percent of the total prevalence of HIV/AIDS in Nigeria. Moreover, the north has the highest prevalence rate of polio cases in the country (Federal Ministry of Health, 2012). Studies have also shown that more than 95 percent of all polio cases occur in the eight northern states where the disease is most endemic. The eight northern states include Borno, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe and Zamfara (Renne, 2010; Tran, 2013).

In addition to having the largest population in the country, northern Nigeria is also noted for the highest level of illiteracy (Lamido, 2013; United Nations Education, Science and Cultural Organisation, 2012), which has been variously associated with health problems in society (Hayes et al., 2007; Ishikawa & Kiuchi, 2010; Nutbeam, 2008; R. M. Parker,

¹ Federal Ministry of Health in this thesis refers to the Federal Ministry of Health in Nigeria.

2000). It is also instructive to note that the north has the highest poverty rate in Nigeria (National Bureau of Statistics Nigeria, 2011). Diseases by nature, are often corollaries to poverty (Agbonifo, 1983) although information campaigns and newspaper attention have been found to mitigate the prevalence of disease in many countries throughout the world (Ahmed & Bates, 2013; Picard & Yeo, 2011; Rimal & Lapinski, 2009; Wakefield, Loken, & Hornik, 2010; Westmaas, Gil-Rivas, & Siver, 2007). In view of this, this study investigates the rate to which Nigerian newspapers focus attention on the northern region of the country in the coverage of health issues with particular reference to malaria, HIV/AIDS and polio.

Studies have also shown that people generally seek health information from newspapers for health awareness (Ahmed & Bates, 2013), to avoid health risks (Rachul, Ries, & Caulfield, 2011) and to live a healthy life (Gollust & Lantz, 2009). These studies show that newspapers are an essential channel of mass communication through which members of the public can improve their health orientation and general health behaviours. This thesis, further investigates the degree to which Nigerian newspaper readers seek and gain health information from newspapers to determine their perception on the health information accessed from Nigerian newspapers on their general health behaviours.

Furthermore, in newspaper coverage of health issues, the importance of health reporters cannot be overemphasised. This is because health reporters cover health issues and make them readily available in a readable format in newspapers to the general populace. However, studies have found that health reporters in general face several challenges in their professional duties because of the technical nature and scientific expertise involved in reporting health issues (Caulfield, 2004; MacDonald & Hoffman-Goetz, 2002; Milazzo & Ernst, 2006; Sharma, 2013). In view of this, this study also investigates the general challenges newspaper health reporters in Nigeria encounter and the influence of health and science training in the field of health reporting in Nigeria.

1.2 Research gaps

In Nigeria, many scholars have conducted several studies on mass media coverage of health issues within health communication field (see Uwom & Oloyede, 2014; Towel & Rodney, 2010; Amobi, 2008; Babalola, Fatusi, & Anyanti, 2009; Batta, 2012; Jimoh, 2011; Lambe, 2008; Okidu, 2013; Okorie, 2013; Owens-Ibie, 2002; Umana & Ojebode, 2010). However, most of these studies have paid little or no attention to newspaper coverage of health issues in relation to the northern region of the country. Therefore, one of the research gaps that this study fills is the emphasis placed on northern Nigeria in relation to the coverage of health issues by Nigerian newspapers. This emphasis is considered worthwhile given the above background on the health and population profile of the region. Hence, this study examines newspaper coverage of health issues in relation to the north as a way of contributing to health communication scholarship in Nigeria.

This study also contributes to health communication research in Nigeria by investigating the general challenges involved in health reporting among newspaper health reporters and the influence of health and science training in newspaper coverage of health issues in Nigeria. It is contended that because most health reporters are trained in arts and social and sciences, it is difficult for them to accurately interpret findings in health and pure sciences (Kua, Reder & Grossel, 2004; Weeks, Verhoef, & Scott, 2007). In the process of health reporting, they face certain challenges, which may impede their proficiency and journalistic productivity. The experience of newspaper health reporters in health reporting vis-à-vis health and science training, and how they manage the situation is considered important in contributing to the body of knowledge in health communication research in Nigeria. More importantly and arguably, this area has not been researched in health communication field among communication scholars in the country.

This study further contributes to health communication research within the context of newspapers in Nigeria as the latitude of four years (January 2010 - December 2013) of investigation into the four prominent national newspapers gives the findings of the study a certain degree of authority. These findings may be found useful in health communication research in Nigeria and beyond. Most of the existing studies conducted in health communication field in the country were undertaken within a shorter period of time, in most cases only a few months (see Batta, 2012; Okidu, 2013; Okorie, 2013; Uwom & Oloyede, 2014), except Torwel and Rodney (2010) who examined two years of coverage in their study. These previous studies, therefore, may not be substantive to offer sound research standing compared to a timeframe of four years that was covered in this thesis.

1.3 Statement of Problem

The underlying statement of problem for this thesis centres on three major aspects of health communication research within the context of newspapers. Firstly, this study examines the potential of Nigerian newspapers in creating awareness about HIV/AIDS, malaria and polio through the frequency of coverage given to these three health problems in Nigeria. This study specifically focuses attention on HIV/AIDS, malaria and polio as a result of their prevalence in Nigeria and the consequential social and economic losses the country has recorded over the years. In the same vein, the fact that northern Nigeria has the highest prevalence of various health problems in Nigeria, including HIV/AIDS, malaria and polio, informs why this thesis further focuses attention on the region vis-à-vis newspaper coverage of health issues. The underlying statement of problem here is that if the northern region is well reported in health coverage by Nigerian newspapers, the attention of government health departments and agencies as well as other non-governmental organisations may be drawn more to the health situation in the region. This may consequently lead to formulation and

implementation of more health policies by the Nigerian government in order to improve the health conditions of the north.

The second aspect of the statement of problem underpins media effects. In this regard, the study examines the effect of seeking health information in Nigerian newspapers on the health behaviours of newspaper readers. Furthermore, given that health reporters play a central role in health reporting, which involves a wide range of challenges as a result of the specialised nature of health issues, this study investigates the influence of health and science training and the general challenges involved in health reporting among newspaper health reporters in Nigeria. This underpins the third aspect of the statement of problem, which examines the influence of health and science training in health reporting field and the challenges health reporters encounter in Nigeria.

All of these aspects, therefore, led to the central questions of the thesis: What is the frequency of newspaper coverage of HIV/AIDS, malaria and polio and what is the nature of challenge involved in health reporting among health reporters in Nigeria? The second central question asks to what effect does seeking health information in Nigerian newspapers have on the health behaviours of newspaper readers? The following research objectives were, therefore, derived from the thesis central questions in order to achieve the overall goal of the study.

1.4 Research objectives

- i. To examine the coverage of health issues in Nigerian newspapers to determine the level of attention given to malaria, HIV/AIDS and polio.
- ii. To examine the extent to which Nigerian newspapers focus attention on northern Nigeria in the coverage of health issues with particular reference to malaria, HIV/AIDS and polio in the region.

- iii. To examine newspaper readers' perception on seeking health information in Nigerian newspapers and the relationship this perception may have on their general health behaviours.
- iv. To examine the influence of global health campaigns on the coverage of HIV/AIDS, malaria and polio in Nigerian newspapers.
- v. To examine the general challenges involved in newspaper health reporting among health reporters in Nigeria.
- vi. To examine the influence of health and science training in health reporting among newspaper health reporters in Nigeria.

1.5 Background to the study

This section provides an essential background to the study, covering pertinent issues under four different themes. The themes include: media landscape in Nigeria: an overview, health reporting in the media, health issues in Nigeria: an overview and, Nigerian nation at a glance. These four themes provide the framework within which the thesis of the study is anchored. The first theme, health reporting in the media, is an integral part of health communication research. It discusses the media as an important component of human society given the basic functions that the media perform and the overbearing effects of these functions on individual members of society. These basic functions, which include information, education and agenda setting, make the media to disseminate information on various health issues. This is because the importance of health in human society cannot be over-emphasised and the media have been identified as playing a central role in social health promotion.

This section also gives an important background on the prevalence of various health issues in Nigeria with particular reference to the three global scourges- HIV/AIDS, malaria and polio. Over time, various reports have shown that the Nigerian health profile has been

consistently poor, especially in relation to HIV/AIDS, malaria and polio (Federal Ministry of Health, 2012). Therefore, there have been various efforts in forms of health programmes and policies by the federal and state governments as well as international health agencies to improve the health system. These efforts are also complemented in Nigeria by various social institutions including the media. This discourse is explored under the second theme: health issues in Nigeria: an overview. The third theme gives an insight into the Nigerian nation. This covers the evolution of the country as a nation state, a brief colonial antecedence, the regional divisions and their basic characteristics.

1.5.1 An overview of the media landscape in Nigeria

The media development in Nigeria and Africa at large has been described as a product of colonialism (Oso, 2012; Barratt & Berger, 2007) and can be regarded as a reflection of the political development of African continent (Barratt & Berger, 2007). The media in Africa in terms of “the ownership systems, their character, strengths and weaknesses, their political and social outlooks and their outputs and impacts, are all products of the societies that have formed and shaped them.” (Barratt & Berger, 2007, p.11) With particular reference to Nigeria, studies have shown that Nigeria has the most vibrant and robust media landscape in Africa (Oso, Odunlami & Adaja, 2011; African Media Barometer, 2011). Oso (2012) notes that the Nigerian mass media emerged as a colonial product, then turned to be an ideological and political apparatus for the Nigerian nationalists to advance the cause of national independence. The media-scape in Nigeria later developed within the dynamics of the nation’s political economy (Oso, 2012).

The political development in Nigeria under different phases such as the colonial rule, post-independent civil rule, military regimes and the current democratic governance, have impacted greatly on the media landscape of the country. Apart from the apparent influence of

the political systems of Nigeria on the political economy of the media over the years (Oso, 2012), another important area of influence is largely connected to the plurality of the media through which the Nigerian populace can broadly access information (Nwagbara, 2010; Oso 2012; Uche 1989). Although, a relatively comprehensive history of newspaper development in Nigeria is presented in chapter two of this thesis, it is noteworthy that following the establishment of newspapers in Nigeria in the 1880s (Duyile Coker, 1971; Duyile, 1987; Nwagbara, 2010; Oloruntola, 2008; Oso 2012), radio and television were established in Nigeria in the 1900s. While it is historically documented that radio broadcasting was first launched in Nigeria in 1932 (Nigeria Community Radio Coalition, 2012), television broadcasting was said to have emerged in the country in 1959 (Umeh, 1989).

One of the major distinctive elements in the historical development of the print and broadcast media in Nigeria is that, while newspaper industry started and is still dominated by private individuals; broadcast media were pioneered and are still dominated by the state and federal governments (Oso, 2012). In general, Nigeria has over 150 newspapers most of which are regional and community-based including over 20 national daily newspapers (Dragomir & Thompson, 2012). Research also shows that “there are 82 television stations in the country out of which the Federal Government owns 41; State Governments own 29; while private proprietors own 12. The Federal Government owns 43 radio stations out of 121, while state governments own 54 and private proprietors own 24.” (Oso, 2012, p. 9) Furthermore, the advent of information communication technologies, which has widened the media waves and access globally through the Internet, also impacted on the media landscape of Nigeria. Consequently, Nigerians now have access to an array of explosive information through the Internet (African Practice, 2014; Dragomir & Thompson, 2012; (Anyira, 2011).

Therefore, in Nigeria today, popular media among people include newspapers, magazine, radio, television and the Internet. Through the Internet, studies have found

Facebook, You Tube, Twitter, WhatsApp, Google and Yahoo as the popular social media among Nigerians (African Practice, 2014; Dragomir & Thompson, 2012). It is, however, important to note that among all mass media in Nigeria, studies have found radio as the most popular and widely owned and used medium among Nigerians (Oso, 2003); British Broadcasting Corporation World Service Trust, 2006; Dragomir & Thompson, 2012; mediaReach OMD Nigeria, 2005; (Broadcasting Board of Governors, 2012). According to Broadcasting Board of Governors (2014), “radio is the dominant mass media channel in Nigeria, with 77.4 percent overall listenership among the population and more than seven in 10 people across all major demographic groups listen to radio for news and other media contents regularly every week.” (p. 1) It was further found that 60 percent of the Nigerian population watch television regularly on weekly basis (Broadcasting Board of Governors, 2014). The Internet users in Nigeria are estimated at 30 percent of the population (African Practice, 2014) while newspaper readership account for 20.22 percent of the national population (Dragomir & Thompson, 2012).

With this set of data on the media usage in Nigeria, it shows that Nigerians are relatively active in their media consumption habit as they are largely connected with different forms of media. The fact that Nigerians are relatively active in using mass media may further imply that mass media in Nigeria may likely have some degree of effects on media audiences in general. It is important to observe that advancement in communication technologies also shaped the usage of the media in Nigeria as reflected in the percentage of the Internet users. This observation is apropos in this context given the fact that access to the Internet started in Nigeria in 1991, which is less than three decades (Anyira, 2011). However, considering newspaper as the oldest mass medium in Nigeria, its archival quality, comprehensive nature of its contents and its enduring nature, this thesis makes it a focus of investigation. This is to examine the degree to which Nigerian newspapers disseminate information on health issues

and to what extent do newspaper readers access health information and with what degree of effect.

1.5.2 Health reporting in the media

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; Lasswell, 1948; McQuail, 2010; Mujtaba, 2011; Schramm & Lerner, 1976). 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. In performing these functions, mass media provide information and act as a *teacher* in some cases by educating the media audience on important topical issues in society.

The agenda setting function of mass media means that the media essentially prioritise issues and events by giving prominence to some (issues and events) over others, thereby setting the agenda for public discussion (D. Weiss, 2009). The agenda-setting function of mass media is a 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. D. Weiss (2009) notes that the agenda setting function of the media evolved through the framework of the agenda setting theory originally formulated by Maxwell McCombs and Donald Shaw in 1972. Agenda setting theory explains the relationships between the emphasis the mass media place on issues and the importance media audiences attribute to those issues (McCombs & Shaw, 1972).

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 socio-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, p. 1)

However, one important component in every society is health. The health of a particular nation reflects largely the well-being of the citizenry and partly its level of development (Agbonifo, 1983). This is why all nations of the world treat the issue of health with ultimate concern. According to Lambe (2008):

All nations of the world take health issues as one of the fundamental concerns of government. At the global realm, the establishment of the World Health Organisation (WHO) as an organ of the United Nations charged with the responsibility of monitoring global health trends and proffering appropriate course of action as and when due, is a testimony to the primacy of health to the continual survival of the universe. (p. 191)

Health, which is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity” (World Health Organisation, 1993, p. 5) is seen as “sharing a symbolic relationship with communication as they both deal with living things and people.” (Owens-Ibie, 2002, p. 187) Therefore, mass media can be regarded as vital channels in promoting health information and publicising various health issues and diseases for public awareness. Mass media have the potential to inform and educate the general public on various health issues and provide health information that may engender healthy living among people. Ankem (2006) supports this view that the media are important allies in any public health matters as they play the role of being sources of information as

well as advocate health awareness. This, as observed by the United States Agency for International Development (2006), makes health authorities entrust the media with essential health information, which is then relayed to the public in readily accessible formats through a variety of media channels. Boyd and William D. (2009) also aver that mass media in general, help health workers to expand their audience reach because they (mass media) are effective in informing and perhaps persuading target audiences to adopt new behaviours or remind them of critical information about various health issues or diseases and where they can seek help.

In this contemporary world, people need information to survive on a wide range of issues affecting them. The reason being that information, according to Mtega (2012), is a vital resource, alongside land, labour, capital and skills. People need information in their day-to-day activities and for the development of their environment. A. Weiss, Crowder, and Bernardi (2000) describe information as the cornerstone of successful socio-economic development because it plays key roles in decision making. Mtega (2012) states further that information provides the facts or knowledge needed to answer some questions faced by people in their daily life. Every person needs information for decision making; the types of information needed range from common physiological to psychological information needs.

Over the years, people access information through various channels, namely: media, family, peer groups, schools, work places, professional platforms, friendship, interdisciplinary networks and research community. The need to access information from various channels is essential for decision making, for acquisition of knowledge and general survival (Pilerot & Limberg, 2011). Also, Robinson and Levy (1986) found that when people need some information on issues that would better their lives, they rely on other people, media and information repositories such as documents and databases.

One of the major areas of information needs is in health. People need health information to learn about health risks, disease outbreaks, domestic and international alerts

and healthy living (Torwel & Rodney, 2010). Mass media have been identified as major sources to learn about health issues and to receive health information for healthy living and survival on health related matters. This is because “mass media are the nexus between public and policy agenda and are highly influential in shaping discourses about health and research. The way in which news media affect the public is complex and diverse.” (G. Lewison, S. Tootell, R. Roe, & R. Sullivan, 2008, p. 569) In health communication scholarship, there is a substantial corpus of literature demonstrating the impact of mass media in shaping public opinion towards the health care systems of many countries (see E. Benelli, 2003; P. A. Collins, Abelson, Pyman, & Lavis, 2006).

Since good health is a prime concern for individual members of societies, its attainment and maintenance involve many varied aspects. As such, people turn to the media for health information given that health is one of the main topics covered by mass media (Carducci, Alfani, Sassi, Cinini, & Calamusa, 2011). Carducci et al. (2011) note further that several population surveys found mass media as the main source of public health information, the impact of which has over the years, shaped citizens’ knowledge, perceptions, attitudes and general health behaviours. Mass media play a central role in informing the public about health and medical issues (Alexander, 2005; Moyer, 1995; Thorson, 2006) and mass media serve as major sources of information about health issues for both general public and health professionals (Catalán-Matamoros, 2011; Torwel & Rodney, 2010).

People access health information for their peculiar health needs through health professionals, health educators and mass media all of whom are considered important gatekeepers in the health sector. But among them, mass media are likely the most important information sources on health and nutrition to the public (Sharma, 2013). Atkin and Wallack (1990) state further that, “the media help set the discussion agenda for society and create the boundaries within which debate takes place. The media tend to reinforce conventional

definitions of health problems and hence; determine to a large extent, the legitimacy of various solutions.” (p. 42) African Woman & Child Feature Service (2010) found mass media to be effective in the coverage of public health issues in Africa. This study was conducted in five African countries: Botswana, Cameroon, Kenya, Malawi and Kenya, using content analysis, focus group and in-depth interview methods. The summary of the study is captured below.

- i. Most media carry stories on public health issues and devote special pages and airtime to HIV/AIDS, malaria, and water borne diseases.
- ii. There are special features and documentaries in mass media that shed light on topical issues in public health.
- iii. Mass media alert the public to potential health hazards such as outbreaks of communicable diseases.
- iv. Certain genres in mass media, such as drama on television and radio, are unique ways of getting important health messages across to people. Mass media perform important roles in packaging information in ways that are interesting and appreciated by the public.
- v. Mass media play an important role in demystifying taboo subjects, such as HIV/AIDS and other public health advocacy areas.
- vi. An emerging role of mass media has been to act as an interface between the public, government agencies and health professionals. In the recent past, there have been good collaborations between media and health professionals, especially when health professionals are invited to discuss certain health issues and print media is seen to be doing better than the electronic media in this role.

Having discussed health reporting in mass media in general, it is specifically important to note that researchers in health communication field have over the years, focused attention

on newspapers considering the in-depth analysis involved in newspaper writing (especially features and editorials), easy access and its durable nature. Scholars in this domain focus attention on the role of newspapers and their advocacy in promoting health information and findings of health research. Rimal and Lapinski (2009) note that one of the main goals of health communication is to disseminate information and educate people about health and disease-related issues. In this regard, newspapers play an important role in health communication because they provide people with access to a wide variety of health-related information. This health-related information includes information on disease symptoms, risk factors, available treatments and recommendations for health promoting behaviours (Rimal & Lapinski, 2009). Mass media in general, with particular reference to newspapers, have been found as performing well in promoting important science issues and advancing social public health awareness. This is the reason why many people now regard newspapers as one of the leading sources of health information (African Woman & Child Feature Service, 2010).

Several studies have consistently shown that newspapers remain one of the most important sources of health information. This is because newspapers have the power to frame issues and perhaps, to influence perceptions of the risks and benefits of health interventions (see Gasher, Hackett, Gutstein, Ross, & Dunn, 2007; Gollust & Lantz, 2009; Lemal & Van den Bulck, 2011; Rachul et al., 2011; Westwood & Westwood, 1999). In spite of the explosive new media technologies available in the contemporary world, newspapers are still playing a leading role in health promotion. People continue to seek information on various health issues that affect them through newspapers (Marks et al., 2006). Despite the rise of electronic media in various forms, studies continue to acknowledge newspapers as important sources of health and science news to the lay public (Clark & Illman, 2006; J. A. Winsten, 1985). This is premised on the fact that the news media influence public opinion, and newspapers are often used strategically by health researchers to seek attention and funding

(Dorothy Nelkin, 1987), including various advocate groups, who seek policy change from government (Jernigan & Wright, 1996). Also, whenever a new scientific or health fact is discovered, which may have great impacts and benefits to humanity, newspapers are regarded as an important channel to disseminate such new scientific ideas by the scientific community (Phillips, Kanter, Bednarczyk, & Tastad, 1991).

Furthermore, scholars have considered newspapers as potential communication resources because newspapers often report health issues in a more comprehensive way. This is the reason why individuals, families and organisations use health information in newspapers to meet crucial health needs. Newspapers are one of the primary sources from which individuals learn about health risks and other health related matters (Brittle & Zint, 2003). It may be observed that factors of illiteracy, affordability and age might have influenced the outcomes of these previous studies but specifically, this thesis examines the perception of newspaper readers on the health information being disseminated in Nigerian newspapers in relation to their health behaviours. Similarly, Catalán-Matamoros, Axelsson, and Strid (2007) argue that dissemination of health information through newspapers is a very effective way of reaching the general public as the descriptive analyses of the space related to health in newspapers possibly can show how health information is being delivered, and also how the public receives health messages.

In many developed countries today, seeking health information from newspapers by members of the public is a common habit. For instance, Gasher et al. (2007) posit that health is a prominent topic in Canadian daily newspaper reportage. On a daily basis, Canadian newspapers report health-related stories on topics such as a breakthrough in medical research, a study on the quality of drinking water, or government spending on the health care system. Gasher et al., (2007) note further that the news values attributed to health topics by newspapers consequently engage the attention of Canadian population at large. Research also

shows that modern Americans seek information about health information from a variety of media sources and the primary sources for individual Americans who self-identify as health-conscious and health-oriented include print publications (Dutta-Bergman, 2004; Hoover & Cross, 2009). In Sweden, which is described as a nation of newspaper and magazine readers (Roberts & Bachen, 1981), newspapers are regarded as the most believable news media and noted for conveying health news and scientific breakthroughs more thoroughly than television or radio and more quickly than magazines (Catalán-Matamoros et al., 2007).

1.5.3 Health issues in Nigeria: an overview

Essentially, the prevalence of various health issues in Nigeria and the degree of attention received from mass media with particular reference to newspapers is, as rightly noted, the core focus of this study. Nigeria is noted for various diseases and other health issues among which are malaria, HIV/AIDS, polio, infant, cancer and maternal mortality, communicable diseases such as tuberculosis, measles, pertussis (whooping cough) and poor health facilities. Other health issues of concern in Nigeria include: poor primary, secondary and tertiary health care, shortage of health personnel and ineffective implementation of health policies.

The state of the health system as well as the prevalence of diseases in Nigeria, has over the years, attracted attention locally and globally. For instance, since the global efforts to eradicate polio around the world, Nigeria and two other countries (Afghanistan and Pakistan) remain the only countries where polio is yet to be eradicated (World Health Organisation, 2013c). Despite the fact that malaria is preventable, treatable and curable, it remains the most prevalent parasitic endemic disease in Africa (Sachs & Malaney, 2002), and constitutes a major health problem in Nigeria (Federal Ministry of Health, 2010). Since the first case of HIV/AIDS was reported in 1986 in Nigeria, the pandemic continues to evolve with multiplier effects resulting into a total death of 2.1 million people (Federal Ministry of Health, 2012).

While communicable diseases along with maternal, perinatal and nutritional conditions in Nigeria accounts for an estimated 67 percent of all mortality (Commonwealth Health Online, 2013), the country is rated the fourth highest tuberculosis burden-zone in the world (Federal Ministry of Health, 2010). Although this study engages in a more comprehensive exploration of health issues in Nigeria in chapter two (literature review), this insight is, however, considered important as a background to the thesis of this study. Given this insight, mass media have an important role to play in raising health awareness among Nigerians by promoting health information to improve the health orientation and the general health behaviours of the Nigerian populace. This thesis, therefore, examines the role of mass media in the coverage of health issues in Nigeria with particular reference to newspapers in order to achieve the earlier stated objectives.

1.5.4 Nigerian nation at a glance

It is pertinent to note that the rich, robust and comprehensive history of Nigeria as a nation state as well as a human society is such that it is not intended to be fully captured in this study. This section is meant to give an overview of the country's profile as apt as possible for assessment and juxtaposition vis-à-vis the state of the health system in the country. Nigeria, the widely adjudged most populous nation in Africa and the most populous black nation in the world (Mobolaji, 2012), is said to have been in existence since 9000 BC (Shaw & Daniells, 1984). Archaeological findings evidently show that, people were already living in south-western Nigeria (specifically Iwo-Eleru) as early as 9000 BC and perhaps earlier at Ugwuelle-Uturu (Okigwe) in south-eastern Nigeria, where microliths were used (Shaw & Daniells, 1984). The country officially became united as the colony and protectorate of Nigeria under British Colonial rule in 1914 when Nigeria was administratively divided into the northern and southern provinces and Lagos Colony. From the onset, western education and the development of a modern economy proceeded more rapidly in the south

than in the north, with consequences felt in Nigeria's political life until contemporary times (Shaw & Daniells, 1984).

Historically, the division of Nigeria into the north, west and east came into effect in 1954 through the adoption of the 1954 Federal Constitution. In 1960, Nigeria gained independence as a federation for self-rule from the British Colony but maintained the three regions: north, west and east. Nigeria formally became a Republic in 1963 with Dr. Nnamdi Azikwe being the first President (Martin, 2005). Nigeria soon after fell under military dictatorship for almost 30 years at different periods (1966-1979 and 1983-1998), while 26 years (to date) account for civil rule and democracy within the framework of four different republics (1960-1965, 1979-1983, 1993 and 1999 to date).

Currently, with 36 states, Abuja as the Federal Capital Territory (FCT) and 774 local government area councils, Nigeria's population is estimated between 167 million and 174 million (Central Intelligence Agency, 2013; Mobolaji, 2012; United States Embassy Nigeria, 2012) and this accounts for 20 percent of the total African population. The total land area of the nation is 923,766sq km; arable land is about 33.02 percent of the total land. In terms of natural resources, the country is endowed with over 34 solid minerals and 44 exportable commodities such as gas, tin, iron-ore, limestone, cassiterite, columbite, galena, gold, illemitite, lead-zinc, manganese, molybdenite, asbestos, limestone, coal, lignite, emerald, aquamarine, ruby and sapphire. Others include granite, marble, cocoa, coffee, cashewnuts, rubber, kolanuts, palm kernel, coconuts, cotton, ginger, charcoal, cow horns and hooves, timbercimetina, shrimps and prawns, sheanut, sesame seeds and so on (Nigerian Export Promotion Council, 2013). Nigeria, which is a member of the United Nations, Commonwealth of Nations and among the ten largest oil producing nations: a member of the Organisation of Petroleum Exporting Countries (OPEC), operates a mixed economy within the spectrum of capitalism (Mobolaji, 2012).

Nigeria lies on the Gulf of Guinea and has borders with Benin (west), Niger (north), Chad (north-east across Lake Chad) and Cameroon (east). As a tropical African nation, her climate is hot and humid on the coast, with high temperatures inland and cold nights in the north during December and January. The rainy season occurs usually from March-November in the south and May-September in the north. During the dry season, the harmattan wind blows from the Sahara. The country's most significant environmental issues are rapid deforestation, soil degradation and desertification (Federal Republic of Nigeria, 2012). Furthermore, the current six geopolitical zones within which Nigerian polity operates is shown in table below.

Table 1.1: The six geo-political zones in Nigeria

| SN | Zones | States | Number of States |
|----|------------------|---|------------------|
| 1 | North Central | Kogi, Niger, Benue, Kwara, Plateau, Nasarawa and (Abuja- the Federal Capital Territory) | 6 |
| 2 | North East | Taraba, Borno, Bauchi, Adamawa, Gombe and Yobe | 6 |
| 3 | North West | Kaduna, Kebbi, Zamfara. Sokoto, Kano, Jigawa and Kastina | 7 |
| 4 | South East | Ebonyi, Enugu, Imo, Abia and Anambra | 5 |
| 5 | South-South | Akwa-Ibom, Bayelsa, Edo, Cross River, Rivers and Delta | 6 |
| 6 | South West | Oyo, Ogun, Lagos, Osun, Ekiti and Ondo | 6 |
| | | Total | 36 |

Nigeria is culturally diverse and ethnically robust. The country has over 250 ethnic groups where the most populous and politically influential include: Hausa-Fulani 29 percent, Yoruba 21 percent, Igbo (Ibo) 18 percent, Ijaw 10 percent, Kanuri 4 percent, Ibibio 3.5 percent, Tiv 2.5 percent (United States Embassy Nigeria, 2012). While the English language

has been adopted as the official language in the country, the indigenous languages are deeply rooted and range from Hausa, Yoruba to Igbo (Ibo) in the three regions, with over 500 additional indigenous dialects. The dominant region is northern Nigeria, which accounts for more than half of the country's population (for instance, the last census exercise in 2006 puts the population of the north as 73.6 million and other regions as 64.9 million) (National Population Commission, 2006). Other major ethnic groups of the north are the Nupe, Tiv, and Kanuri.

The Yoruba people are predominant in the southwest. The Igbo people (Ibo) are predominant in the southeast, each of whom has different but unique cultural festivals in relation to their ancestral beliefs and background. In terms of religious inclination, the population is roughly balanced between Muslims and Christians with a small minority of other Nigerians who practise indigenous beliefs (Federal Republic of Nigeria, 2012; United States Embassy Nigeria, 2012). The present democratic government in Nigeria is under the leadership of General Muhammed Buhari (rtd) who was democratically elected in March 2015 as the President and the Commander of the Armed Forces under the platform of the All Progressive Congress (APC).

1.6 The outline of this thesis

This thesis, which largely reflects health communication scholarship, specifically examines the context of newspapers. Health communication researchers continue to focus attention on the role of communications in health care delivery and the role of mass media in health promotion. This study investigates the newspaper coverage of health issues in Nigeria to determine the extent to which Nigerian newspapers have possibly contributed to the improvement of health status of Nigerian society.

Consequently, this thesis is divided into two broad sections, namely: a conceptual section and an analysis section. The conceptual section comprises chapters one to three,

which give a comprehensive framework to the study. Specifically, chapter one conceptualises the statement of problem, the central questions of the thesis, the main objectives, the research gaps as well as a detailed background. This chapter defines the major focus of the entire thesis.

In chapter two, the study explores relevant literature for the purpose of connecting the thesis to previous works, thereby crafting what research gaps to fill in order to make the thesis a valuable contribution to knowledge. In this chapter, the study reviews various concepts and issues. These include the historical development of newspapers in Nigeria, the importance of health in human society, major health issues in Nigeria, and health communication research within the purview of newspapers. Also, considering the fact that this thesis is situated within the scholarship of health communication, this chapter presents a conceptual framework of health communication. This section reveals that the important nature of health in human society and the global concerns to improve the health outcomes of people led to the development of the field of health communication. The chapter further defines the theoretical framework of the study, which underpins priming and framing within the spectrum of agenda setting theory. This, therefore, explains the thesis as a media effect study. At the end of chapter two and based on the insights from the bodies of literature reviewed, this study crafts the research questions and the research hypotheses.

Research method and design are outlined in chapter three. Based on the research hypotheses and research questions and inferences from the literature review, this study adopts a mixed research method (quantitative and qualitative). This informs the triangular approach of the thesis between content analysis, survey and in-depth interview research methods. Triangulation involves the combination of three different research methods in a single study whereby the findings from these methods are integrated to enrich the outcomes of the study.

This chapter explains the justification for each method and how the three methods were operationalised during the data collection process.

In the second section of the thesis - referred to as the analysis section - chapters four to six discuss the data analysis and interpretation of findings. While chapter seven discusses the findings of the entire thesis, chapter eight concludes the study, identifying its limitations and making recommendations for further studies. Specifically, chapter four discusses the data analysis and interpretation of findings related to the content analysis portion of the study. Chapters five and six are devoted to the same engagement in relation to the survey and the in-depth interviews of the study respectively. As noted above, chapter seven discusses the findings from all the three methods adopted while chapter eight gives a summary of the entire thesis, identifies its limitations and makes some submissions as conclusions. This final chapter also makes some recommendations for further studies given that research as a phenomenon, is an ongoing process and no single study can explore an idea or issue without limitations.

1.8 Concluding remarks

This chapter sets the agenda for this thesis emphasising the importance of newspapers in society in the coverage of various aspects of human endeavours including health. The areas of focus covered in this research are clearly defined in the introduction, thereby leading to the research gaps, statement of problems and the research objectives. A detailed background, covering an overview of the media landscape in Nigeria, health reporting in the media, a summary of health situation in Nigeria, a brief discussion of Nigeria as a nation and the structure of the thesis, is also presented in this chapter. The various components that are covered in chapter one of this thesis are mutually inclusive and related to the central goals of the research. It is important to note that this introductory chapter does not only set the agenda

for the study, it gives an insight into the preoccupations and expectations of the remaining chapters of the thesis.

CHAPTER TWO

Literature Review

2.1 Introduction

This chapter reviews relevant literature across the scope of the thesis to build the framework for the entire study and to determine the rationale for the problem being studied (Boote & Beile, 2005). Therefore, this research reviews literature across the following areas in order to explore the central theme of the study.

- i. Historical development of newspapers in Nigeria: an overview
- ii. The importance of health in human society
- iii. Major health issues in Nigeria
- iv. Health communication research and the context of newspapers
- v. The concept of health communication
- vi. Theoretical framework
- vii. Research questions and research hypotheses

2.2 Historical development of newspapers in Nigeria: an overview

This study considers an overview of the historical development of newspapers in Nigeria important because, newspaper as a medium of mass communication and a channel of health communication campaigns is central to the thesis of this study. Also, the historical development of newspapers in Nigeria shows that the first newspaper in the country, *Iwe Iroyin*, made coverage of health issues one of its cardinal agenda items (Aina, 2007; Oladosu, 1993). Historically, therefore, newspapers have been major sources of health information to the Nigerian populace. Furthermore, the present structure and entire landscape of the newspaper industry in Nigeria is a reflection of its historical antecedent. This is reflected in the ownership pattern, newspapers and national politics, and their commercial orientation

(Oso, 2012). In Nigeria, the birth of the media was pioneered by a private individual in 1859 through the establishment of *Iwe Iroyin Newspaper*, and today in the country, all the national newspapers are owned by private individuals. This situation is succinctly captured by Oso (2012), who states that “while the newspaper press started and today remains as private enterprise, broadcasting started and remains largely state-owned. Unlike in the 1970s and 80s when government-owned newspapers overshadowed privately-owned ones, no newspaper of consequence is today owned by any government in Nigeria.” (p. 8) Oso (2012) further states:

Another main characteristic of the country’s media landscape is that they are concentrated in the southwest, although not necessarily predominantly owned by citizens from the southwest geographical zone. Apart from the fact that this reflects the history of the development of mass media in Nigeria, it also reflects the political economy of the country. (pp. 9-10)

Historically, newspapers in Nigeria have been an ally of national politics, which also facilitated the national independence in the country in 1960 (Nwagbara, 2010; Omu 1978; Oso, 2012). Oso (2012) avers that “there is a lot of emphasis on the role played by the press in Nigerian politics from colonial days when politics and journalism were more or less fused together. It has been difficult to separate them.” (p.10) This also resonates with the account of Golding and Elliot (1979) in describing the fusion of politics and the press in Nigeria. These authors state that:

Nigerian journalism was thus created by anti-colonial protest, baptised in the waters of nationalist propaganda and matured in party politics. The separation of politics and journalism has remained incomplete and the dual allegiances of journalists to professional and political goals have created conflicts whose resolution in daily practice underpins much of contemporary Nigerian journalism. (p. 31)

After the independence and to date, Nigerian newspapers have remained an active force in Nigerian politics (Oso, 2012; Oso, Odunlami, & Adaja, 2011). The birth of

newspapers in Nigeria through *Iwe Iroyin* in 1859 did not only focus on Christian evangelism and literacy agenda. The newspaper was noted for its political involvement in Egba-Land and Lagos (Oso, 2012). Given the historical antecedent of political involvement of newspapers in national politics, the current trend in Nigeria shows that a good number of national newspapers in Nigeria are owned by politicians who use their newspapers as political apparatus (Oso, 2012). Examples of such newspapers include: *The Nation Newspaper* owned by Senator Ahmed Tinudu, former Governor of Lagos State, *The Sun Newspaper* and *New Telegraph Newspaper* owned by Chief Orji Uzor Kalu, former Governor of Abia State, *The Union Newspaper* owned by Diezani Allison Madueke, former Minister of Petroleum, *The National Mirror* owned by Jimo Ibrahim, a strong politician, and *Nigerian Tribune Newspaper* owned by late Chief Obafemi Awolowo, the Premier of the old western region.

In relation to the commercial orientation that characterises contemporary Nigerian newspapers, a historical account shows that *Iwe Iroyin Newspaper* was also a commercial organ for the promotion of the so-called legitimate commerce at that time (Oso, 2012). The newspaper was used by Henry Townsend (the proprietor) in order to meet the business and mercantilist needs of the British when slave trade was no longer economically viable (Oso, 2012). Today in Nigeria, Nigerian newspapers are not only market-driven (Oso, 2012), “the language of market- products, brands, accounts and clients are becoming common in the nation’s newsrooms to describe the newspapers and readers. Reporters are now being sent to business schools to learn not journalistic skills but business and marketing principles.” (Oso, 2012, p.45) Oso, therefore, concludes that, “this is the reason why newspapers with readership possessing purchasing power appeal to advertisers.” (Oso, 2012, p.37)

The historical development of newspapers in Nigeria shows that the Nigerian press predates the Nigerian nation. This is because newspapers had existed before the formal

annexation of any part of Nigeria by the British (Agbaje, 1992). This allowed the Nigerian press and newspapers in particular, to have been noted as a major institution before the formation of the Nigerian political state (Jakande, 2004, cited in Oso, Odunlami & Adaja, 2011). As demonstrated by several bodies of literature, the historical development of newspapers in Nigeria can be captured under three different phases, namely: the missionary newspapers, the nationalist newspapers and the post-independent newspapers (Aina, 2007; Duyile, 1987; Oloruntola, 2008; Oso, Odunlami, & Adaja, 2011).

The missionary era featured newspapers that were published in Nigeria by the early generation of foreign Christian missionaries. The nationalist newspapers are newspapers that were published by Nigerian elites who used their publications as channels for advancing the course of national independence from the British. The post-independent era of newspapers refers to publications after Nigerian independence until date. Having noted earlier why this study attempts an overview of the historical development of newspapers in Nigeria, it is pertinent to state that each of these eras contributed remarkably to the growth and development of the present landscape of the newspaper industry in Nigeria.

Historically, many accounts show that the evolution of newspaper or mass media in Nigeria was marked on the 3rd day of December, 1859, when Late Rev. Henry Townsend, a Briton of the Church Missionary Service (CMS), published the first edition of the first newspaper in Nigeria named *Iwe Iroyin Fun Awon Ara Egba Ati Yoruba*² in Abeokuta, Ogun State, south west Nigeria (Aina, 2007; Aro, 2011; Nwagbara, 2010; Oloruntola, 2008; Oso et al., 2011). However, it is noted that Rev. Hope Waddell had earlier established a printing press in Calabar, south-east Nigeria in 1846. As a missionary, Rev. Waddell was involved in

²This literally means newspaper for the Egba people and the Yorubas. The Egba people are the natives of Abeokuta and its environs, while the Yorubas are the predominant ethnic group in the south west Nigeria. This is the reason why *Iwe Iroyin* started publication in Yoruba language, the major indigenous dialect in the south west. The establishment of *Iwe Iroyin* in Abeokuta in 1859 makes Abeokuta to be popularly referred to as the cradle of journalism in Nigeria.

the printing of tracts, pamphlets and booklets for Christian evangelism before the establishment of Townsend's printing press in Abeokuta (Aina, 2007; Ajibua, Oladitan, Adesina, & Bewaji, 2013; Nwagbara, 2010; Oduntan, 2005).

From inception, Henry Townsend clearly defined the prime philosophies of *Iwe Iroyin*, which were promotion of literacy or western education and Christian evangelism (Duyile, 1987; Oladosu, 1993; Oso et al., 2011). *Iwe Iroyin* as popularly called, started publication fortnightly in Yorùbá language at the rate of 120 cowries per copy. In March 1860, the publication became bilingual with the introduction of an English language supplement (Oso, 2012). The newspaper published news about Christian activities involving the movement of church officials to and from a district or parish, news of ordinations, news on health matters related to local people and commercial news about farm produces and their prices (Aina, 2007; Oladosu, 1993). *Iwe Iroyin* accordingly, later became the chief weapon of Townsend's political propaganda and shrewd manoeuvring for power in Egba-Land (Omu, 1978). In the process, it (*Iwe Iroyin*) became engrossed in political advocacy, which created conflict between Henry Townsend and the colonial administration in Lagos and by extension, the home government in England (Oso et al., 2011).

This conflict led to the extinction of the newspaper in 1867 (Duyile, 1987). Oloruntola (2008) notes that Rev. Hope Waddell of the Presbyterian Press in Calabar, south east Nigeria, thereafter established two newspapers: *Uwana Efik* in 1885 and *Obupong Efik* in 1886 respectively. The two newspapers existed for a short period of time (Oloruntola, 2008).

Also, *Anglon African*, a weekly newspaper, was later established by Robert Campbell and made its debut in Lagos in 1863 but existed only for two years (1863-1865) (Aina, 2007; Oloruntola, 2008).

Between 1867 and 1880, history, however, holds that there were no newspapers published in Nigeria. Consequently, this period is referred to as ‘the blank period’ in the historical development of mass media in Nigeria (Coker, 1971; Nwagbara, 2010). Later, newspapers reappeared in Nigeria in what Nwagbara (2010) describes as the period of ‘flowering of the press.’ The flowering of the press era saw the emergence of *The Lagos Times and Gold Coast Colony Advertiser*, established by Mr. Beele Blaize and edited by Andrew Thomas (Aina, 2007; Oloruntola, 2008). Other newspapers include, *The Lagos Observer* edited by Blackwell Benjamin; and *The Mirror*, which was established by Adolphous Mark (Aina, 2007; Nwagbara, 2010).

With appreciable promotion of literacy, by encouraging Egba people to read and seek information on national issues (Duyile, 1987), and awareness for political liberation offered by *Iwe Iroyin* (Aina 2007), the journey to Nigerian nationhood started. The development of literacy inspired some Nigerian elites to use newspaper ownership as a means of promoting political liberation and national independence from the colonial masters (Omu, 1978). Because of the foundational orientation of *Iwe Iroyin* – promotion of literacy and awareness for political liberation and self-rule, the newspapers that came after the missionary era assumed a more radical orientation and served as the main instruments for political warfare (Oso et al., 2011). Consequently, many Nigerian elites became conscious of the nationalist struggle against the British Colony in Nigeria and a good number of them later became newspaper publishers, journalists³ and politicians (Coker, 1971; Duyile, 1987). Oloruntola (2008) succinctly states that:

³ Two prominent examples of these nationalists who became journalists were: (1) Dr. Nnamdi Azikwe, the publisher of *The West African Pilot*, who later became the second Governor-General in Nigeria from 1960-1963 and the first President of the Federal Republic of Nigeria from 1963-1966, (2) Chief Obafemi Awolowo, the publisher of *The Nigerian Tribune*, who later became the Premier of the old Western Region in Nigeria from 1952-1959.

With the dwindling of the fortunes of the missionary newspapers and other publications in the late 1880s, and the growing dissatisfaction with the colonial administration which led to the formation of the nationalist organisations, the stage was now set for the commencement of the second notable epoch in media history in Nigeria- the nationalist period which spanned from the late 1880s to 1960 when Nigeria gained independence. (Oloruntola, 2008, p. 14)

Similarly, Nwagbara (2010) states that “nationalistic sentiment and struggle for decolonisation found resonance in the establishment of many newspapers in Nigeria.” (p. 15) Some of these newspapers include: *The Nigerian Chronicle*, which was set up by Johnson Brothers in 1908, while Kukoyi Ajasa inaugurated *The Nigerian Pioneer*. Subsequently, in 1926, the Nigerian Printing and Publishing Company floated *Nigerian Daily Times* with Ernest Ikoli as its first editor; and in 1937, *The West African Pilot* was established by Nnamdi Azikiwe (Nwagbara, 2010). Therefore, the nationalist era of newspaper publication in Nigeria witnessed a good number of newspapers. Uche (1989) states that other newspapers in this era are: *The Lagos Observer (1882)*, *The Eagle and Lagos Critic (1883)*, *The Mirror (1887)*, *Lagos Echo (1890)*, *Lagos Standard (1983)*, *Lagos Weekly Record (1890)*, *The Chronicles (1908)*, *The Pioneer (1914)*, *Lagos Daily Times (1925)*, *The Nigerian Daily Observer (1882)*.

Meanwhile, some of these nationalist newspapers were noted for good and quality production, and huge capital investment. Others were also popular for their political orientation, good in-house journalism training, and fierce opposition against colonial masters. The *Daily Times of Nigeria* in 1926 (which was later renamed *The Daily Times*), *The West African Pilot* and *The Nigerian Tribune* were notable in this context (Oso, 2012). In describing *The West African Pilot*, Coker (1971, cited in Oso, 2012) states that the publication was a fire eating and aggressive nationalist newspaper of the highest order in the tradition of Macaulay's *Lagos Daily News* and the *Nigerian Daily Telegraph*. Oso (2012) states further that “*The Pilot* became a very popular newspaper attracting the best and the

brightest young Nigerians, many of whom were later to become prominent journalists and politicians. Between 1937 and 1960, *The Pilot* dominated the Nigerian press scene; rising to overshadow other newspapers, including the better produced *Daily Times* and its later main political rival, *The Daily Service*, an organ of the Nigerian Youth Movement (NYM).” (Oso, 2012, p. 23)

It is interesting to note that most of these newspapers were based in Lagos, south west of the country. This is because Lagos was the centre of power and the then Federal Capital Territory where the British centrally administered the affairs of the nation. Lagos was also and is still the commercial centre of Nigeria. However, of all these newspapers, it is instructive to note that only the *Nigerian Tribune*, an Ibadan-based national newspaper, in Oyo State south west, that is still in existence today. Meanwhile, other newspapers of this era that based in the east include: *The Herald*, *The Southern Nigerian Defender*, *Nigerian Eastern Mail*, and *The Nigerian Monitor*. In the north, they include: *Gaskiyah Ta fi Kwabo* (Truth is worth more than penny), *Jerida Nigerian Ta Arewa (Northern Provinces News)*, *Daily Comet*, *Middle Belt Herald*, *Borno People’s Voice* and *Daily Mail* (Oloruntola, 2008). Notable features of newspapers in this era were private ownership, a sentimental philosophy against colonialism, publisher-editor unification (the publisher also acted as the editor of his publication), promotion of political participation, and economic-driven journalism (Oso, 2012).

After independence, the socio-political structure of the Nigerian state changed and consequently altered the colouration of the Nigerian newspaper ownership. Therefore, contrary to the private ownership pattern that dominated the newspaper industry before Nigerian independence, the three regional governments- east, north and west, as well as the central government - realised the need for a voice. This led to the establishment of *The Morning Post* by the federal government in 1961, *Daily Sketch* in 1964 by the western

government, *Nigerian Outlook* in 1960 by the eastern government and *New Nigeria* in 1966 by the northern government (Aina, 2007; Oloruntola, 2008). This development shows that the political system in Nigeria influences the media landscape. This finds resonance in the position of Siebert, Peterson, and Schramm (1963) that the media reflect the political colouration of the environment in which they are situated. Consequently, Oso et al., (2011) conclude that media structure often mirrors the political system in any society.

Therefore, as Nigeria created more states, the number of newspapers continued to increase with different missions and philosophies. However, the internal crises that engulfed the Nigerian polity after independence as a result of regional sentiment, regional politics, parochialism, civil war, military coups and military regimes, all led to the birth and death of many newspapers (Oso et al., 2011). Hence, the historical development of newspapers in Nigeria has been described as a chequered phenomenon (Nwagbara, 2010), yet, Nigeria has emerged to have the most robust and vibrant press in Africa (Oso et al., 2011). In contemporary Nigeria, there are several national newspapers, most of which are based in Lagos, south west Nigeria, as well as regional newspapers that are fairly spread across the country. According to the Nigerian Press Council (2009), there are over 150 newspapers in Nigeria, among which 20 are regarded as national in terms of coverage, circulation, reach and readership. The table below shows the 20 Nigerian national newspapers currently in operation.

Table 2.1: The twenty national newspapers in Nigeria

| National Newspapers | Place of Publication | Date of Establishment |
|----------------------------|-----------------------------|------------------------------|
| The Nigerian Tribune | Ibadan | 1949 |
| The Punch Newspaper | Lagos | 1974 |
| The Guardian Newspaper | Lagos | 1983 |
| The Vanguard Newspaper | Lagos | 1984 |
| The Champion Newspaper | Lagos | 1988 |
| PM News Newspaper | Lagos | 1994 |
| This Day Newspaper | Lagos & Abuja | 1995 |
| Complete Sports | Lagos | 1995 |
| National Mirror Newspaper | Lagos | 2006 |
| The Champion Newspaper | Lagos | 1988 |
| Business Day Newspaper | Lagos | 2001 |
| Daily Independent | Lagos | 2001 |
| Daily Trust Newspaper | Abuja | 2001 |
| The Sun Newspaper | Lagos/Abuja | 2003 |
| Leadership Nigeria | Abuja | 2004 |
| National Accord | Abuja | 2006 |
| National Mirror Newspaper | Lagos | 2006 |
| The Nigerian Pilot | Abuja | 2011 |
| The Union Newspaper | Lagos | 2013 |

(Sources: Inventory of Newspapers and magazines in Nigeria by Nigerian Press Council, 2009, Dragomir & Thompson, 2012, the website of The Union Newspaper)

2. 3. The importance of health in human society

One major importance of newspaper as a medium of mass communication in all societies is the dissemination of information on various issues that affect people in general. Considering the high premium generally placed on health in human society, newspapers disseminate information on health in order to inform, educate and perhaps influence health

attitudes and change the health behaviours of members of the public. A nation or society that desires total transformation for its citizenry will vigorously pursue an effective health care system and health policies. This is emphasised by the great thinker and philosopher, Aristotle, who states that society's obligation to maintain and improve health is grounded in the ethical principle of human flourishing. This principle holds that society is obligated to enable human beings to live flourishing, and thus healthy lives. Health, in particular, sustains all other aspects of human flourishing because without being healthy, no other human functioning is possible (cited in Ruger, Jamison, & Bloom, 2001).

Health is said to be the state of mental and physical uprightness, and one of the basic components of any functioning society (Agbonifo, 1983). Furthermore, it is averred that "a nation is healthy if the mental and physical needs of the generality of its citizens are adequately met. These needs include good nutrition, elimination of poverty, hygienic environment, infrastructural facilities such as good water supply and housing, as well as efficient health services and medical personnel." (Agbonifo, 1983, p. 2003) Therefore, public policy should focus on individuals' capacity to function and health policy should aim to maintain and improve this capacity by meeting the health needs of members of society (Ruger et al., 2001).

The emphasis placed on the health status of individual members of society is considered integral in societal development. This perhaps may have informed the contention demonstrated by many scholars who argue that development cannot only be measured or addressed from an economic point of view of gross domestic product (GDP), gross national product (GNP) and income per capita (Habte, 1983; Hamelink, 1983; Mabogunje, 1980; Sant'Ana, 2008). Rather, the health system and general health status of the citizenry are key indices in measuring development in human society (Habte, 1983; Hamelink, 1983). Health in human society is important as it cuts across all other spheres of human endeavours-

education, politics, economy and religion. Ruger et al. (2001) stress the importance of health to economic development in human society and posit that the link between health and economic development is directional in two-ways. Health depends on economic development in the same way economic development depends on health. Furthermore, health and demography can affect income through their impact on labour productivity, savings rates and investments in physical and human capital. Conversely, income can affect health and demography by improving the ability to obtain food, sanitation, housing, education and providing incentives to limit family size (Ruger et al., 2001).

Health is both intrinsically and instrumentally valuable in human society and yet; it is regarded as an end in itself (Sen, 1999). This viewpoint sees the opportunity for health and health care as constituent components of societal development, emphasising their importance in terms of the indirect contribution to economic development. It also recognises the interrelatedness of health and other valuable social ends like education and at the same time, emphasises the importance of health for individual agency—i.e. people's ability to live a life they value (Sen, 1999). Bloom, Canning, and Sevilla (2004) argue that health has a significant effect on the economic development of society. This is because health significantly affects labour productivity, which has overbearing effects on per capita income and the economic growth at large. Research also indicates that health enhances physical and mental capacities of both skilled and unskilled labourers. This is largely reflected in the improvements on the economic growth of many nations (Savedoff & Schultz, 2000). It is also found that fifty percent of the economic growth differentials between developed and developing nations of the world are attributed to ill-health and low life expectancy in the developing countries (World Bank, 2005).

The United Nations (UN) demonstrated the high premium placed on health when in 1946, it established the World Health Organisation (WHO) as an organisation charged with

the responsibility of monitoring and improving global health trends and proffering appropriate course of actions. Reiterating this important goal, Gro Harlem Brundtland, former Director General of the World Health Organisation, in one of her public speeches on May 19, 2000, argued that health is central to societal development and advocated increased health sector investment in developing countries as a way of demonstrating a strong link between health and human development (cited in Ruger et al., 2001). This, therefore, underscores the importance of health policy in general social development.

Poverty is a major characteristic of underdevelopment where a high proportion of the population is under-nourished, and therefore, more susceptible to communicable diseases. In this situation, productivity is bound to be low because, most under-nourished people become liabilities to the state and remain poor (Joy, 1973, cited in Agbonifo, 1983). Poverty is identified as a major factor affecting health across the world (World Health Organisation, 2005). Though poverty is found in every country, and while moderate poverty is associated with developed countries, extreme poverty occurs in low-income countries of the world (Sachs, 2011). This is why chronic diseases are mostly found in the developing and underdeveloped countries, resulting into premature deaths (World Health Organisation, 2005). “Because diseases and poverty are interconnected in a vicious cycle, poor people are more vulnerable for several reasons, including increased exposure to risks and decreased access to health services.” (World Health Organisation, 2005, p. 61). The World Health Organisation (2005) notes further that the interconnectedness of health and poverty is reflected in the fact that “poor people experience material deprivation, psychological stress, high level of risk behaviours, unhealthy living conditions and limited access to quality health care.” (p. 62)

It is impossible to address the question of health in human society without a mention to the environment, given the fact that human society flourishes with good environmental management (Agbonifo, 1983; McCamy, 1972). In other words, a good environment will

allow members of society to grow in mind and spirit as well as allow them to stay in good physical health, thereby contributing to overall societal development (McCamy, 1972). C. K. Anderson (1962) further sees a good health system as intrinsically tied to good environmental management and sustainability, as most illnesses stem from environmental factors, such as infection, allergies, toxins, fatigue, unhappiness, inter-personal stress. McCamy (1972) also maintains that the highest quality environment is that which produces the highest level of public health. Therefore, according to Morris and Liser (1978), a good environment should reduce infant mortality, encourage a long working life span (life expectancy), and produce a high level of literacy - all good indicators of development.

In more contemporary studies, it is further established that there is a significant interrelationship between human health and the environment. This is because our surroundings greatly affect our health through various channels such as exposure to physical, biological and chemical risk factors (Australian Institute of Health and Welfare, 2011). This is why Douglas (2011) posits that many diseases and deaths have resulted from poor environmental management and sustainability. Consequently, “the realisation that the pesticide-laced foods we eat, the smokestack-befouled air we breathe and the petrochemical-based products we use negatively affect the quality of life and has led to more attention on environmental management and sustainability across the world.” (Douglas, 2009, p. 2) The need to improve environmental conditions for improved public health is also supported by Prüss-Üstün and Corvalán (2006), who found that 24 percent of the world burden of disease and 23 percent of all deaths are caused by modifiable environmental factors. According to the authors, these environmental factors are sanitation, occupational risks, pollution and land use practices. These factors have consequently led to diseases like diarrhoea, lower respiratory infections and malaria. Furthermore, such environmental factors have contributed to diseases such as diabetes, coronary vascular disease, and asthma (Perdue, Stone, & Gostin, 2003).

In a comprehensive analysis, Resnik and Portier (2008) espouse the significant relationship between human health and the environment, and the resultant effects of poor environmental management on public health in general. The authors state that:

All organisms depend on their environments for energy and the materials needed to sustain life: clean air, potable water, nutritious food, and safe places to live. For most of human history, increases in longevity were due to improved access to these necessities. Advances in agriculture, sanitation, water treatment, and hygiene have had a far greater impact on human health than medical technology. Although the environment sustains human life, it can also cause disease. Lack of basic necessities is a significant cause of human mortality (p. 59-60).

It was further stated that:

In 2004, lack of access to safe drinking water was responsible for 1.8 million deaths (mostly small children) from diarrhoea. That same year, lack of adequate sanitation caused 160 million people to become infected with schistosomiasis, which can cause malnutrition and organ damage. Approximately, 1.1 billion people currently lack access to safe drinking water, and 2.6 billion do not have proper sanitation. Environmental hazards increase the risk of cancer, heart disease, asthma, and many other illnesses. These hazards can be physical, such as pollution and food contaminants, or they can be social, including dangerous working conditions and poverty. (p. 59-60)

Since it is argued that the health of individual members in a society is a summation of the health of that society, then the conditional context under which an individual lives is of great importance to his or her health status and quality of life (World Health Organisation, 2011). This is the more reason why improved health in human society is increasingly recognised not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of individuals and other agencies in society. The World Health Organisation (2011) underscores the importance of health in human society and therefore, identifies certain determinants of improved health to include

social and economic environment, the physical environment and the individuals' characteristics and behaviours.

Despite the primacy of health in human society, research has also shown that there are other key factors that determine the health status of people in societies in general. According to the Public Health Agency of Canada (2011), these factors include: income and social status, social support networks, education and literacy, employment and working conditions, social environment, physical environment, personal health practices and coping skills, biology and genetics, health care services, gender, and culture. Consequently, the high premium placed on health in contemporary societies, has over the years, resulted in various efforts by national governments and other global agencies. These efforts are reflected in the considerable attention given to the health sector in many nations of the world. These efforts are also manifested in the large number of studies and reports from different national and international organisations and contexts, which examine the linkages between improved health and human society. Some examples of such reports include the 1974 Lalonde Report from Canada, the Alameda County Study in California and the series of health reports by national governments and World Health Reports of the World Health Organisation. These various reports focus on global health issues, including access to health care and improved public health outcomes, especially in developing countries (see Housman & Dorman, 2005; Lalonde, 1974; World Health Organisation, 2013a).

Aside from the World Health Organisation (WHO), the critical and sensitive nature of health in society has also led to the evolution of several other global health agencies. The most prominent among these are: the United States Agencies for International Development (USAID), United Nations Children's Fund (UNICEF), Centres for Diseases Control and Prevention (CDC) (USA), Global Health Research Initiative (GHRI) (Canada), Pan American Health Organisation (PAHO) (USA), United Nations Development Programme (UNDP),

Global Fund to Fight AIDS, Tuberculosis and Malaria (GFFATM); the Global Alliance for Vaccines and Immunisation (GAVI); the United Nations Population Fund (UNPF); the World Bank's Human Development Network; Joint United Nations Programme on HIV/AIDS/UNAIDS and; the Global Health Program of the Bill & Melinda Gates Foundation.

Several global health action plans have also evolved from global health agencies to address global health scourges like malaria, HIV/AIDS, polio and other health global health problems. A sample of these action plans include: The Global Malaria Action Plan (GMAP) Roll Back Malaria Partnership (RBM), (2008); European Action Plan for HIV/AIDS 2012–2015 (EAPHA) (WHO, 2011); Comprehensive Mental Health Action Plan 2013–2020 (CMHAP) (WHO, 2013a), Global Vaccine Action Plan 2011–2020 (GVAN), (WHO, 2013b) and Global Health Programme (Bill & Melinda Gates Foundation, n.d.). The Bill and Melinda Gates Global Health Programme covers such health issues as enteric and diarrheal diseases, family planning, HIV/AIDS, malaria, maternal, neonatal, and child health, neglected and other infectious diseases, nutrition, pneumonia, polio, tobacco, tuberculosis and global health discovery.

The adoption of the Millennium Development Goals (MDGs) in the year 2000 as a blueprint for building a worthwhile human society in the 21st century also underscores the primacy of health in human society. The Millennium Development Goals were adopted as a global declaration and targets in the presence of 147 heads of state and government and 189 nations, as well as a consensus of experts from the United Nations, International Monetary Fund (IMF), and the World Bank. Three of the eight goals focus attention on health related issues, namely: goal 4: reduce child mortality, goal 5: improve maternal health, goal 6: combat HIV/AIDS, malaria and other diseases. This clearly demonstrates the paramount importance of health in human society as the emphasis placed on health issues in the MDGs

is an effort of the world community to achieve significant and measurable improvements in people's lives (Suriname, 2007; Wagstaff, Claeson, Hecht, Gottret, & Fang, 2006).

2.4 Major health issues in Nigeria

Over the years, the state of the health system in Nigeria has been of concern because the country continues to battle with various epidemics as well as other preventable and curable diseases. Nigeria has recorded a huge loss of lives from these diseases and consequently the situation has attracted attention by Nigerian government representatives at all levels. The situation has also attracted attention from the global health agencies, such as the World Health Organisation (WHO), United States Agency for International Development (USAID), United Nations Development Programme (UNDP) and Bill and Melinda Gates Foundations. The Federal Ministry of Health in Nigeria also confirms the poor state of the health sector in the country. It states that the health profile of Nigeria in terms of epidemic burdens, such as HIV/AIDS, malaria, polio and the general health system are all in a deplorable state. The primary, secondary, and tertiary health care, health policies, structures, facilities, personnel, and the overall health administration are also poorly affected (Federal Ministry of Health, 2009b).

The general state of health in Nigeria, according to the Federal Ministry of Health in the nation, is compounded by increasing poverty in the country. "Poverty is keeping more and more people in poor health and so also is the poor health of increasing number of Nigerians retaining them in poverty." (Federal Ministry of Health, 2009b, p. 1) Therefore, the nation is at a point where concerted efforts are needed by all stakeholders to improve the health status of Nigerians for sustainable development of the nation at large (Federal Ministry of Health, 2009b).

This study, therefore, reviews the health profile or health situation in Nigeria by specifically focusing on three major diseases- malaria, HIV/AIDS and polio. These three

diseases are known as the three global scourges (United Nations International Children's Education Fund, n.d.).

Malaria is found throughout the tropical and subtropical regions of the world and causes more than 300 to 500 million acute illnesses and at least one million deaths annually (Carter & Mendis, 2002; Gramiccia & Beales, 1998; Najera, 1999). It is estimated that 40 percent of the world's population, the larger proportion of whom are living in the poorest nations of the world, is at risk of malaria (Najera, 2001). Malaria affects five times as many people as Acquired Immune Deficiency Syndrome (AIDS), leprosy, measles and tuberculosis combined (Nabarro & Mendis, 2000). The global trend in health research reveals that malaria is the most prevalent parasitic endemic disease in Africa despite the fact that it is preventable, treatable and curable (Nabarro & Mendis, 2000; Sachs & Malaney, 2004), and it remains one of the major health problems in Nigeria (Federal Ministry of Health, 2003). Malaria in Nigeria is yet to improve despite several programmes of actions that have been designed by the government over the years (Federal Ministry of Health, 2012).

It is, however, instructive to note that one of the factors that makes malaria so prevalent in Nigeria is the climatic condition. The climatic condition makes it easy for malaria transmission throughout the country as Nigeria is primarily situated between 4° and 13° northern latitude (Federal Ministry of Health, 2009b). Also, *Plasmodium falciparum*, the dominant species of malaria parasites, which are responsible for the most severe forms of the disease, and *Anopheles gambiae* (complex *A. gambiae* s.s.), the dominant malaria carrier, are both found throughout the northern region (Federal Ministry of Health, 2012).

The northern part of Nigeria accounts for 53.4 percent of the total population, so it logically follows that over 50 percent of the population lives in areas of high transmission of malaria parasites while less than 50 percent of the population lives in the moderate transmission zone (Federal Ministry of Health, 2012). Statistics from the federal government

indicate that the country records 70-110 million malaria clinical cases per year and malaria related annual deaths for children under five years of age in Nigeria are estimated at around 300,000 (285,000-331,000). Furthermore, 11 percent of maternal mortality is due to malaria. This has an enormous economic impact of about ₦132 billion (\$174m) lost to malaria annually in form of treatment costs, prevention and loss of man hours (Federal Ministry of Health, 2009b). The country bears 25 percent of the malaria disease burden in Africa. Children and women are the most affected. Malaria accounts for 30 percent of under age-five mortality and contributes to about 60 percent of outpatient visits and 30 percent of admissions annually (Federal Ministry of Health, 2012).

It has also been found that the malaria preventive culture among mothers of under age-five children is generally poor across the six geo-political zones in Nigeria (Sachs & Malaney, 2004). The preventive health behaviour against malaria, especially the use of bed nets among under-fives, was found to be generally low across the six geo-political zones. Only 10 percent of the respondents in a national study claimed to use bed nets (Federal Ministry of Health, 2003).

Similarly, HIV/AIDS, which is regarded as a global threat, also poses challenges to human development in Africa. In many countries, the epidemic is said to have cut life expectancy and robbed society of millions of people in their prime working years. It has also dimmed the hope of living full and productive lives for unimaginable numbers of infants, children, young and adults (World Bank, 2011b). In the global arena, the pandemic of HIV/AIDS has constituted a major health and socio economic challenge for the past three decades. HIV/AIDS has reversed many of the health and developmental gains in underdeveloped and the developing countries (Federal Ministry of Health, 2012).

None of the problems plaguing society in the 21st century- wars, famine or crime - is as threatening to mankind as Acquired Immune Deficiency Syndrome (AIDS) (Federal Ministry

of Health, 2010). Since its discovery in 1981 by Robert Gallo of USA and Lue Montgnier of France, (Federal Ministry of Health, 2010), the virus has killed more than 33.3 million people in the world out of which Sub-Saharan Africa accounts for 22.5 million (68 percent of the global total). In Nigeria, it is estimated that HIV/AIDS has affected 3.1 million people, including 2.1 million deaths, thereby making Nigerians the second highest number of people living with HIV/AIDS in the world after South Africa (Federal Ministry of Health, 2012). Furthermore, between 2000 and 2011, the World Bank alone has provided more than \$1.5 billion to over 30 countries in Sub-Saharan Africa, including Nigeria to combat the epidemic of HIV/AIDS (World Bank, 2011b).

The scourge of HIV/AIDS in Nigeria has affected the social and economic fabrics of the nation thereby impeding the overall progress of the country. Since the first case of HIV/AIDS reported in 1986, the pandemic has continued to evolve with multiplier effects (Federal Ministry of Health, 2010). Retrospectively, in 1991, the HIV prevalence rate in Nigeria was 1.8 percent, 3.8 percent in 1993, 1998 recorded 4.5 percent and 5.4 percent was recorded in 1999. In 2001, Nigeria recorded 5.8 percent HIV prevalence rate, 5.0 percent in 2003, 4.4 percent in 2005, 4.6 percent in 2008 and 4.1 percent in 2010 (Federal Ministry of Health, 2012). Furthermore, statistics show that in 2010, HIV positive birth in Nigeria was 56,681; the death rate in the same year was 215,130, and since its discovery in 1986 (in Nigeria), the total number of HIV/AIDS orphans is 2,229,883, while the cumulative death toll is 2.1 million (Federal Ministry of Health, 2012). Among the high risk groups, female sex workers constitute an important reservoir of HIV infection for continuous transmission to the general population (Federal Ministry of Health, 2012).

The prevalence of HIV/AIDS in Nigeria has further facilitated the re-emergence of disease conditions such as pulmonary tuberculosis and other opportunistic infections (Federal Ministry of Health, 2010). Furthermore, it is found that HIV/AIDS cases are very visible in

Nigeria because about one out of every four persons in the country knew someone who died of AIDS (Federal Ministry of Health, 2010). Benue State, a state from the north central geo-political zone of the country has the highest prevalence rate of HIV/AIDS. Among the six geo-political zones in the country, north central has the highest prevalence rate of HIV/AIDS, while the most affected age group is 30-34 (Federal Ministry of Health, 2010).

The case of polio and its epidemic nature in the global arena has been an age-long phenomenon across the world. The pandemic once ravaged the developed countries of the world. For instance, the United Kingdom in 1789 and United States of America in 1843 recorded their first polio cases respectively (Centres for Diseases Control and Prevention, 2009). According to the World Health Organisation (2013c), polio is a highly infectious disease caused by a virus, which invades the nervous system, and can cause total paralysis in a matter of hours. Poliomyelitis, or polio as commonly called, is a disease caused by an enterovirus found throughout the world (Renne, 2010), and one in 200 infections leads to irreversible paralysis (usually in the legs). While five to ten percent of those paralysed die when their breathing muscles become immobilised, it is confirmed that unlike the scourge of malaria and HIV/AIDS, polio has largely been eradicated in many countries of the world (World Health Organisation, 2013c).

Some key facts about polio as highlighted by the World Health Organisation (2013c) include:

- i. Polio (poliomyelitis) mainly affects children under five years of age.
- ii. Polio cases have decreased by over 99 percent since 1988, from an estimated 350, 000 cases to 223 reported cases in 2012.
- iii. In 2013, only three countries (Afghanistan, Nigeria and Pakistan) remain polio-endemic from more than 125 countries in 1988.

- iv. As long as a single child remains infected, children in all countries are at risk of contracting polio. Failure to eradicate polio from these last remaining strongholds could result in as many as 200,000 new cases every year across the world over the next 10 years.
- v. In most countries, the global effort has expanded capacities to tackle other infectious diseases by building effective surveillance and immunisation systems.
- vi. There is no cure for polio, it can only be prevented. The polio vaccine, given multiple times, can protect a child for life.

In Nigeria, polio seems perpetual as over the years, the pandemic continues to exist. The Bill and Melinda Gates Foundation (2013) and the World Health Organisation (2013c) discovered that out of the three countries (Afghanistan, Pakistan and Nigeria) of concern where polio eradication is yet to be achieved, Pakistan has reduced the number of polio cases from 198 in 2011 to 56 in 2012. Afghanistan saw a decrease from 80 to 35 during the same period, but cases in Nigeria increased from 62 in 2011 to 119 in 2012. The long history of Nigeria's struggle with polio is evidenced in traditional linguistic descriptions of polio throughout the country over time (Renne, 2010). For instance, it is called *arun aromolapa romolese* (literally, a disease that cripples a child's hands and legs) among the Yorubas, in the southwest, *o ri a ngwulo* (a disease that causes paralysis of limbs, lameness) among the Igbos in the southeast, and *cutar Shan Inna* (literally, a disease caused by the drinking of Inna) among the Hausas in the north (Renne, 2010). Because of the prevalence of polio in Nigeria, studies since the 1950s and in the early 1960s started to focus attention on this endemic, particularly when some six European expatriates contracted polio in Lagos, south west Nigeria, which led to the death of two of them (Collis, Ransome-Kuti, Taylor, & Baker, 1961; Paul, 1971).

Nigeria over the years consistently makes the list of countries where polio is yet to be eradicated. The World Health Organisation declared Nigeria as one of the three countries where polio is yet to be eradicated alongside Afghanistan and Pakistan in 2013 (Bill and Melinda Gates Foundation, 2013; World Health Organisation, 2013c). In 2006, Nigeria was also declared as the country that had the highest numbers of confirmed cases of polio in the world (Renne, 2010). Furthermore, when many countries failed to meet up with the year 2000 target for eradicating polio across the world, the World Health Organisation set another target as 2005 (Renne, 2010). In setting the 2005 target, immunisation efforts specifically focused on Nigeria and India because the polio epidemics that struck both countries at that time contributed to the increased numbers of polio cases across the world between 2001 and 2002 (Chen, 2006). However, studies show that most polio cases in Nigeria are predominantly found in the north. More than 95 percent of all polio cases are found to be occurring in Borno, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe and Zamfara, the eight northern states where the disease is endemic (Renne, 2010; Tran, 2013).

Consequently, global attention has shifted to Nigeria in relation to how to eradicate polio given the fact that the few remaining cases of polio in Nigeria still represent a threat to global efforts to end polio. This is because the virus knows no borders and could still spread into many countries (Ruhl, 2011). Onno Ruhl is the World Bank Country Director for Nigeria who decried the remaining cases of polio in the country when the World Bank's Board approved an additional credit of \$60 million for Nigeria's partnership for polio eradication project in 2011, making the gesture the third of such since 2003 (World Bank, 2011a).

Generally, health indicators in Nigeria consistently remain below national targets and international benchmarks. These indicators also show that Nigeria is not on course to achieve the health Millennium Development Goals (MDGs) by 2015 (Federal Ministry of Health,

2009b). The summary of Nigerian health indicators below further reflects the health situation in the country.

- i. Life expectancy at birth is 48.4 (United Nations' Human Development, 2010)
- ii. Fertility rate (births per woman) is 5.7.
- iii. Infant mortality rate (per 1,000 live births) is 75.
- iv. Under -5 mortality rate (per 1,000 children) is 88.
- v. Maternal mortality ratio of 800 per 100,000 live.
- vi. Adult literacy (15 years and above) female: (percent) 60, male: (percent) 78.2.
- vii. TB burden is the fourth highest in the world.
- viii. Infant and child mortality in the north west and north east zones of the country are approximately twice the rate in the southern zones, while the maternal mortality in the north west and north east is 6 times the rate of 165/100,000 recorded in the south west zone (Federal Ministry of Health, 2008).
- ix. The Human Development Index (HDI) for Nigeria was 0.423 in 2010, thereby ranking the country 142nd among 169 countries, which were assessed (United Nations' Human Development, 2010).

As variously observed, some of the problems associated with the Nigerian health sector are the lack of an effective stewardship role of government, fragmented health service delivery, inadequate and inefficient financing, weak health infrastructure, mal-distribution of health work force and poor coordination amongst key players. Others include: non-availability of population and medical statistics for proper planning and review, insufficient budgetary allocation to health (less than the WHO stipulated 5 per cent of GDP), inadequate support infrastructures, e.g. water, electricity and good roads; bad leadership and corruption (see Adeyami & Petu, 1989; Federal Ministry of Health, 2009; McFubara, Edoni, & Ezonbodor-Akwagbe, 2012).

The above background on health in Nigeria with particular reference to malaria, HIV/AIDS and polio, necessitates a comprehensive approach to improve the situation. The approach must move beyond the intervention of medical practitioners, or health care providers alone, and involve other important stakeholders and institutions. Scholars, health practitioners and policy makers have therefore recognised the significance of health communication to public health issues (Rimal & Lapinski, 2009; Schiavo, 2007). Rimal and Lapinski (2009) argue further that the need for prevention against various diseases, which have now become global threats, also underscores the importance of health communication and the use of the media as complementary approaches in improving the public health.

2.5 Health communication research and the context of newspaper

Since the evolution of health communication as a field of inquiry, many studies have been conducted to show that newspapers disseminate information on various health issues in society (see Al-Naggar & Al-Jashamy, 2011; A. E. Davidson & Wallack, 2004; Laar, 2010; Torwel & Rodney, 2010; Uwom & Oloyede, 2014; Westwood & Westwood, 1999). Newspapers, have been found to serve as reliable and credible sources, where members of the public access health information or know about prevalent health problems in society (Dutta-Bergman, 2004; Gary L. Kreps & Thornton, 1992; Atkin & Wallack, 1990). While other studies show that health information from newspapers improves the health behaviours of members of the public (see Feeley & Vincent, 2007; Pratt, Ha, & Pratt, 2002; Uwom & Oloyede, 2014; Wagstaff et al., 2006; A. L. Wang, Duke, & Schmid, 2009), it is also found that health reporting in newspapers involves many challenges, which continue to generate conflicts between newspaper health reporters and health and science researchers.

Apart from the technical nature of health and science, which poses challenges to health reporters, another major reason for the conflict between health reporters and health and science researchers/professionals is connected to the fact that most newspaper health

reporters do not have health and science training (Goodfellow, Almomani, Hawwa, & McElnay, 2013; Milazzo & Ernst, 2006; Weeks et al., 2007). It is argued that the lack of health and science training by health reporters affects the accuracy of information they report on health and science news. This also poses other challenges to them in the course of health reporting such as inability to interpret health data and statistics, reporting out of context and omission of research methods in newspaper stories (MacDonald & Hoffman-Goetz, 2002; Pellechia, 1997; Schwitzer et al., 2005; A. L. Wang et al., 2009).

Therefore, this study reviews literature across these three components because they are central to the thesis. The first component discusses newspapers as sources of health information and a means of informing members of the public on various health problems. While the second component underpins the effects of health information in newspapers on the health behaviours of newspaper readers, the third aspect reviews literature on the influence of health and science training in health reporting and the general challenges involved.

2.5.1 Newspapers as sources of health information to members of the public

Newspapers have been identified as a channel of disseminating health information to members of the public. They also disseminate information to members of the public on various health risks, disease outbreaks, and other prevalent health issues in society (Torwel & Rodney, 2010). For a serious health information seeker, newspapers appear to be the best option to get health information. This is because newspapers are seen to be highly reliable sources of information (Dutta-Bergman, 2004). This is the more reason why information-oriented newspapers have been noted for health promotion as they connect the public with relevant health information (Atkin & Wallack, 1990). Newspapers have often been noted to dedicate pages for health reports to present information on various health issues. By virtue of the archival quality of newspapers (newspapers can be found in libraries, offices, homes and

other relevant places), past health reports could readily be accessed by an individual looking for specific health information (Sissors & Bumba, 1977). Such health information can be shared with family members, friends, nurses, or doctors (Dutta-Bergman, 2005). Hence, the health-oriented individual is likely to be drawn to newspapers when in need of health information (Becker & Dunwoody, 1982; Chaiken & Eagly, 1983; Robinson & Levy, 1986; Singer, 1980; Stone, 1987).

Consequently, studies in the field of health communication have continuously focused attention on newspapers as a medium of mass communication and their potential to disseminate information about health issues, which can be of great value to the public (see Rimal & Lapkin, 2009; Westhood & Westhood, 1999; African Women & Child Feature, 2010; Jones-Webb, Baranowski, Fan, Finnegan, & Wagenaar, 1997; Menashe & Siegel, 1998; Sorenson, Manz, & Berk, 1998). Other channels of mass communication also disseminate health information, but newspapers allow the general public the opportunity to read over health pieces many times. Furthermore, the comprehensive analysis involved in newspaper writing makes newspapers acceptable sources of health information (Clark & Illman, 2006; J. A. Winsten, 1985). The frequency of daily publication of newspapers and other advantages of the medium over other news media also make newspapers popular among health communication researchers (Lemal & Van den Bulck, 2011; Rachul et al., 2011).

Over the years, health communication researchers across the world have focused their attention on newspapers, examining newspaper coverage of health issues, the extent to which they (newspapers) disseminate information and portray various health problems in society. For instance, Rachul, Ries and Caulfield (2011) found newspaper coverage of the A/H1N1 vaccination program in Canada was largely supportive and effective as serious risks associated with contracting the A/H1N1 virus were frequently discussed in the print media.

Also, research has examined differences in the amount and nature of cancer coverage in newspapers and found that cancer was the main topic in a higher proportion of health stories in black newspapers than in general-audience newspapers in Canada (E. L. Cohen et al., 2008). The study further indicates that breast cancer was the most commonly reported cancer in both black and general newspapers. This study cites Hoffman-Goetz and Friedman (2005) who had earlier found similar results in previous studies of cancer coverage in Canadian newspapers and United States magazines.

Research shows that the United States of America once recorded the highest rate of non-HIV sexually transmitted diseases (STDs) in the developed world (Institute of Medicine, 1997), as one in four Americans was infected with a STD (Donovan, 1993). In a later study, it was estimated that there are more than 15 million new cases of non-HIV STDs in the United States each year, accounting for an annual financial burden of more than 10 billion dollars (Henry J. Kaiser Family Foundation, 1998). Therefore, A. E. Davidson and Wallack (2004) examined the content of national newspapers in the United States with regard to the presentation of non-HIV STDs. The authors in their work attempted to provide a baseline assessment on how the problem of STDs was being presented by newspapers to the American public. The authors, however, found that only 19 percent of articles in the total sample mentioned the causes, consequences, prevention, signs, or symptoms, screening, transmission, treatment, trends or rates of STDs. The study shows low reporting of STDs in the print news media contributed to the high prevalence of STDs among the American public (Davidson & Wallack, 2004). It was noted in this research that newspapers have considerable potential to create more awareness and information about STDs among the American public. The researchers, however, concludes that considering the strategic importance of newspapers in society, health reporters need to use more statistical information

about the consequences of STDs in ways that would facilitate prevention among members of the public.

In the recent past, major social and economic change has brought an escalating diabetes epidemic to low- and middle-income countries in addition to the diabetes already found in higher-income countries (International Diabetes Federation, 2011). Consequently, the disease kills, disables, impoverishes families and imposes a huge economic burden on governments and business, and affects health systems in general (International Diabetes Federation, 2011). Previously, diabetes was considered a disease of the rich and elderly, but it has now been found prevalent in developing countries. Three out of four people with diabetes now live in low-and middle-income countries. The epidemiological trend is projected to continue over the next twenty years with the highest number of people with diabetes coming from Africa, Middle East and South-East Asia regions (International Diabetes Federation, 2011). Zhang et al. (2010) found healthcare expenditures on diabetes to account for 11.6 percent of the total healthcare expenditure in the world. About 95 percent of the countries covered in the study spent 5 percent or more of their total health care expenditure, and about 80 percent of the countries spent between 5 percent and 13 percent of their total healthcare dollars on diabetes (Zhang et al., 2010).

Health communication researchers have also focused attention on the extent to which the media, especially newspapers, have complemented the efforts of health care providers in reporting and providing health information on diabetes. This is because people access much of their information about health and health policy from print media (Brodie, Kjellson, Hoff, & Parker, 1999). Research also demonstrates the media's influence across cultures and settings, and how the media place high value on health reporting (Seale, 2003). Therefore, Gollust and Lantz (2009) studied newspaper reportage of type-2 diabetes in the United States, examining the extent to which newspapers discussed diabetes in the context of social

determinants, upstream interventions, or disparities. The study found behavioural factors and obesity as the predominant explanation for type-2 diabetes in newspapers. This, therefore, suggests that newspapers in the United States disseminate information about type-2 diabetes, and indicates further that behavioural factors and obesity dominate the explanation of type-2 diabetes in newspapers.

Also, in the process of disseminating health information, mass media are noted for portraying health and health care issues in society (Joseph & Kearns, 1999; Seale, 2004). Lawrence, Kearns, Park, Bryder, and Worth (2007) argue that newspapers are a major channel in measuring the media portrayal of health issues effectively. The authors examined newspaper reports in New Zealand on the portrayal of tuberculosis in the three major cities of New Zealand: Auckland, Christchurch and Wellington. The study found tuberculosis occurring in the three major cities, but indicates that tuberculosis predominantly occurs in Auckland. The study concludes that representation of tuberculosis in New Zealand print media is partial, mirroring the reality about tuberculosis prevalence in New Zealand. The authors, therefore, describe tuberculosis as a national concern in New Zealand. Other health issues which health communication studies have examined in relation to newspaper reportage include HIV/AIDS, malaria, polio, family planning, abortion, drug and tobacco intakes and hypertension (see Leask & Chapman, 1998; Lemmens, Vaeth, & Greenfield, 1999; Wakefield et al., 2010; P. M. Wilson, Booth, Eastwood, & Watt, 2008).

In Nigeria, however, Okidu (2013) studied communication models in HIV/AIDS coverage in selected Nigerian newspapers. The study confirmed the strategic roles newspapers play in setting the contextual agenda to complement the multi-sectoral and community-based response to HIV/AIDS prevention, treatment, care and support adopted by the government. The significant coverage in the frequency of HIV/AIDS activity-oriented information in Nigerian newspapers confirms how HIV/AIDS contextual issues are high on

their agenda (Okidu, 2013). The study, however, concludes that the overwhelming burden of new cases of HIV/AIDS in Nigeria cannot be attributed to diminished media coverage of contextual elements. As a further step to Okidu (2013), this thesis examines newspaper coverage of HIV/AIDS, malaria and polio in Nigeria given the prevalence of these health problems in the country. Also, Okidu (2013) did not examine the newspaper coverage of HIV/AIDS in relation to northern Nigeria, where HIV/AIDS, malaria and polio are mostly prevalent. This thesis examines newspaper coverage of health issues in the context of this important northern region of the country.

From the above review, it shows that newspapers disseminate information about health issues in society. Newspaper coverage of health issues in society serves as a source of health information and awareness to members of the public. Therefore, this thesis examines the situation in Nigeria to determine the extent to which Nigerian newspapers report health issues with particular reference to HIV/AIDS, malaria and polio, and the context of northern Nigeria, which are observed as gaps in many health communication studies in Nigeria.

2.5.2 The effects of disseminating health information in newspapers on the health behaviours of newspaper readers

People's perception of 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 & Bates, 2013; Cassell, Jackson, & Chevront, 1998). The media reports on various health issues can 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). Several health communication studies have also examined this domain and found that health information in newspapers affects the health

behaviours of people, especially newspaper readers (see Feeley & Vincent, 2007; Wakefield et al., 2010; A. L. 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 (A. L. Wang et al., 2009). 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 & Lupton, 1994). J. T. Bertrand, O'Reilly, Denison, Anhang, and Sweat (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 work 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 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.
(p. 5)

Specifically, newspapers have been identified as major sources of health information among other mass media (R. E. Rice, 2001; Winett & Wallack, 1996). This is connected to the roles of newspapers in shaping the health behaviours of members of the public (Niederdeppe & Frosch, 2009; Pierce & Gilpin, 2001), and their ability to influence public health policies (Asbridge, 2004; Tong, Chapman, Sainsbury, & Craig, 2008). Wakefield et al. (2010) state that media campaigns in newspapers have affected various health behaviours in society. "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, such as the use of tobacco, alcohol, and other drugs. Other health-risk behaviours the authors focused on include: 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 populations.

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 & Fan, 1995). These topical contents include drugs (Shoemaker, Wanta, & Leggett, 1989), and HIV/AIDS (Rogers, Dearing & Chang, 1991), as well as other local issues that affect the general populace (K. A. Smith, 1987). Hertog and Fan (1995) studied the impact of press coverage on the transmission of HIV in the United States. The authors identified three routes of HIV transmission, namely: sneezing, insects, and toilets. 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 willingness to spend their scarce resources in an attempt to prevent further harm and to assist the afflicted in the society. Hertog and Fan (1995) specifically found that “the relationship between press contents and polls for the three transmission routes (sneezing, insects and toilets) were strong.” (p. 562) The authors,

therefore, conclude that public health campaign researchers and mass communication scholars should not ignore the significant impact of health news coverage on public beliefs.

While Pratt et al. (2002) found that scarce reporting of tuberculosis and measles in the media may have undermined their importance to policymakers, the authors found that media coverage of HIV/AIDS increased the perceived importance of prevention and intervention programs in Africa. The media have been noted for reporting HIV/AIDS prevention messages for quite a long time. Historically, campaign awareness against HIV/AIDS started early enough especially in the United Kingdom. After the discovery of HIV/AIDS globally in 1986, the British government was reported to have launched its first television advertising campaign on Acquire Immune Deficiency Syndrome in December 1986 (Kitzinger & Miller, 1998). The first historical campaign, according to Kitzinger and Miller (1998), is “an unprecedented public education campaign about AIDS from the British government, which has made more extensive use of communication media than any previous regime.” (p. 2) The first British government television advert on AIDS reads:

There is now a danger that has become a threat to us all. It is a deadly disease and there is no known cure. The virus can be passed during sexual intercourse with an infected person. Anyone can get it, man or woman. So far it has been confined to small groups, but it is spreading. So protect yourself and read this leaflet when it arrives. If you ignore AIDS it could be the death of you. So don't die of ignorance. (Cited in Kitzinger & Miller, 1998, p. 1)

This effort from the British government in 1986 recognised early the central role of the media because of their potential to affect the health attitudes of members of the public through what was described as public education (Miller & Williams, 1998). The public education approach basically focused on advertising campaigns and within a short time, it attracted intense debates and attention in the media and among other stakeholders (Miller & Williams, 1998). Therefore, the British government heavily concentrated on this public

education as the main plank of the government policy on HIV/AIDS over and above research, treatment and cure (Kitzinger & Miller, 1998). *The Street* once quoted the then British Government Minister, Norman Fowler in 1988, who declared that, “public education is the only vaccine we have.” (Cited in Kitzinger & Miller, 1998, p. 1) However, Miller and Williams (1998) render a contextual extrapolation of the constituent of the “public education”. In their analysis, Miller and Williams (1998) espouse:

The type of public education which was envisaged was a campaign of information giving to increase knowledge, which would lead to attitude change and then shifts in behaviour. The main constituent of the campaign was to be advertising in the mass media, with some attempt at targeting at risk populations. The targets of information were people who might contract HIV. There were no campaigns aimed at those who were already HIV positive. Nor were there campaigns to change general attitudes either to people with or those perceived to be at risk from HIV. The campaigns were about trying to deliver information effectively, rather than about social and cultural management. (pp. 15-16)

This analysis shows the unsophisticated and incomplete nature of the public awareness campaigns about HIV/AIDS in the mid-1980s in the United Kingdom. Furthermore, this may also be a larger reflection of the global trend in HIV/AIDS public campaigns at that time. Interestingly, however, it may imply that these campaigns could be regarded as a springboard upon which subsequent media campaigns about HIV/AIDS were developed and improved. This is because after the first British government campaign on HIV/AIDS, massive media responses flourished, which were later described as news variations about HIV/AIDS (Beharrell, 1998).

Therefore, while the British government public education campaign was regarded as only one component of the information available to the public about HIV/AIDS (Beharrell, 2008), the waves of HIV/AIDS campaigns later flourished in the mass media. Consequently,

the media started to give a wide coverage to HIV/AIDS and became the most prominent sources of public information which provided context within which later British government campaigns operated (Beharell, 1998). It was found that HIV/AIDS coverage in the British press rose and fell in the media prominence Beharrell (1008). The author found that HIV/AIDS was prominently covered in November and December 1986 and concludes that “the shifting amount of attention given to AIDS is not just a function of changes in its intrinsic news values. It also reflects the material impact of AIDS and the development of the debate around it.” (Beharrell 1998, p. 47)

Furthermore, D. Miller and Beharrell (1998) examined the range of coverage of HIV/AIDS on British network television news from 1986 to 1990 to determine who accessed the news, who were interviewed or quoted in the news and how they were treated. This study found that the most frequent types of AIDS news were the official government campaigns, people living with HIV, news stories on the search for the cure and treatment/vaccines, and reports on other countries. D. Miller and Beharrell (1998) further found that television news displayed considerable support for the idea of a government health education campaign and an acceptance on the risk of heterosexual transmission. In other words, the idea of a mass media public education campaign was universally reported on British television news as a good thing (D. Miller & Beharrell, 1998). The authors state that “in this period, journalists regularly identified themselves closely with the government perspective and on many occasions, explicitly endorsed the message from the Department of Health and Social Security.” (Miller & Beharrell 1998, p. 73) D. Miller and Beharrell (1998), however, found television reporters as being critical against the government policies, especially when such policies departed the expectations or demands of the liberal/medical approach.

Another important aspect of the findings of the study by D. Miller and Beharrell (1998) is the explanation of HIV/AIDS about Africa as projected by British television news. The

authors found that British television news explained the spread of HIV/AIDS in Africa within the contexts of African culture and beliefs, poverty, ignorance and promiscuity. Most of these television explanations reflected the traditional resistance of some African men who refused to use condom and a wide spread of lack of medical facilities (Miller & Beharrell, 1998). The studies of Beharrell (1998) and D. Miller and Beharrell (1998) show how the popular media (newspapers and television) at that time responded to the coverage HIV endemic after its discovery in 1981. It further indicates how long the international media have been reporting African continent and its attendant challenges including health problems.

Mass media-based interventions, as noted by Wellings (2002) have been an integral part of HIV prevention since the mid-1980s, when many nations began sponsoring national campaigns. Mass media intervention to HIV risks could be regarded as a furtherance to the mass media-based health intervention since the 1960s. According to LaCroix, Leslie, Snyder, Huedo-Medina, and Johnson (2014), “since the 1960s, mass media-delivered health interventions, also known as public communication campaigns or social marketing campaigns have been an important strategy for many health behaviour change topics, including heart disease, smoking, family planning, and HIV/AIDS prevention.” (p. 329) In particular reference to HIV prevention, LaCroix et al., (2014) posit that the use of the media within the context of an HIV prevention intervention may facilitate a wider reach, standardisation and repetition of messages and the ability to use different content formats, including entertainment, news, and short advertisements or announcements. This study, however, recognises the effectiveness of integrating other forms of communication along mass media health intervention. “With regard to HIV prevention campaigns, mass media channels can be used on their own (eg, television, newspapers, radio) or in combination with interpersonal sources of information (e. g, outreach workers, peer educators).” (LaCroix et al., 2014, p. 329)

Therefore, there has been a growing corpus of literature in health communication research, emphasising the need to integrate other forms of communications and strategies beyond the mass media intervention in HIV intervention. This approach is found to enhance effective health outcomes among the target populations (Alan R. Andreasen, 1995; Philips. Kotler & Lee, 2008; Piotrow, Kincaid, & Rimon, 1997; J. A. Ross & Mauldin, 1996). While studies have recommended condom pricing and distribution strategies in HIV prevention campaigns (Andreasen, 1995; Kotler & Lee, 2008), community organizing, or advocacy for policy change have been postulated by other studies (Ross & Mauldin, 1996). Research has also concluded that the use of multiple communication and media channels in an HIV campaign may predict the extent to which that campaign influences the target population because multichannel approaches are often seen as more effective than single channel interventions (Piotrow et al., 1997).

In health communication practice, the HIV prevention and intervention approach is now common among practitioners and campaigners. In other words, the field of health communication has offered a combined preventive paradigm by integrating behavioural, biomedical, and structural interventions (Tomori et al., 2014). This combined preventive approach is regarded by health communication scholars as more effective because it opens new window of opportunities for employing health communication approaches across the entire continuum of care to enhance HIV treatment and prevention (Tomori et al., 2014). It is pertinent to note that the most important element in the integrated health communication paradigm is interpersonal communication. Tomori et al., (2014) aver that health communication interventions “rely primarily on interpersonal communication, especially individual and group counselling, both within and beyond clinical settings to enhance the uptake of and continued engagement in care.” (p. 306)

In this regard, many successful intervention efforts were reported to have mobilised a network of trained community supporters who provided education, counselling, psychosocial support, treatment supervision and important assistance across the care continuum (Tomori et al., 2014). This, therefore, informs the conclusion of Tomori et al., (2014) that:

A broader range of communication approaches, traditionally employed in HIV prevention efforts, that address community and socio-political levels through mass media, school- or workplace-based education and entertainment modalities may be useful to interventions seeking to address the full care continuum. Future interventions would benefit from development of a framework that maps appropriate communication theories and approaches onto each step of the care continuum to evaluate the efficacy of communication components on treatment outcomes.

In South Africa, HIV/AIDS is very endemic and the country has the largest number of people living with HIV in the world (Federal Ministry of Health, 2012; (Shisana et al., 2014). Therefore, in a national study in South Africa, Fisher et al. (2014) examined the need for sustainable interventions to minimize HIV risk behaviour among people living with HIV. The study found clinical counselling/ intervention (through interpersonal communication) implemented during routine care as effective and efficient for HIV risk reduction among HIV-infected South Africans (Fisher et al., 2014). The finding of this study, according to the authors, “is compatible with an integrated behavioural and biomedical approach to stemming HIV and holds promise for sustainable and widespread dissemination efforts linking treatment and prevention to curtail the South African epidemic.” (Fisher et al., 2014, p. 505)

Furthermore, a good number of studies examined media coverage of health-related issues and found behavioural changes among media audiences (see Feeley & Vincent, 2007; Moshrefzadeh, Rice, Pederson, & Okoli, 2013; A. L. 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).

2.5.3 Health communication and behavioural changes: Related concepts/strategies

Given the behavioural dynamics of human beings, scholars have described us as an enigma (Berdyayev, 1944; Omatseye, 2003; Pessin, 2002). The complex and changing nature of human behaviours has, therefore, necessitated the combined or integrated health communication approach, which is regarded as an effective approach to achieve good public health outcomes (Tomori et al., 2014; LaCroix et al., (2014). In other words, evidence has shown that the use of mass media alone for public health campaigns is not sufficient and may not achieve the desirable health outcomes among people (Ishikawa & Kiuchi, 2010). Consequently, health communication professionals or practitioners now integrate various channels of mass media and other forms of communication (interpersonal, verbal, group, organisational and cultural) into public health campaigns directed towards the populace. This approach further emphasises why health communication is described as a hybrid and interdisciplinary field of inquiry (Nacinovich & Langdon-Neuner, 2011). Some of the related concepts that scholars have identified, which have been integrated into the practice of health communication to achieve good public health outcomes include, but not limited to, health literacy, media literacy, social marketing, social and behavioural change communication and therapeutic communication. These are discussed below.

Health Literacy

Health communication involves interpersonal and mass communication programmes aimed at improving the health of individuals, organisations and larger populations through appropriate health information (Ishikawa & Kiuchi, 2010). In understanding and applying

information about health issues, there is need for some basic required skills, which are considered critical, because they have considerable impacts on health behaviours and health outcomes of individuals and the general population (Ishikawa & Kiuchi, 2010). These skills according to Ishikawa and Kiuchi (2010) are now regarded as health literacy skills. Scholarship inquiry in health literacy originates from the field of public health and adult education; and dates back to the 1960s with primary attention on written information and materials about health (Centres for Diseases Control and Prevention, 2009). The field has today grown to cover new areas of research, shifting attention away partly from the hospital settings to the larger communities in order to improve people's understand and use of health information in daily lives (Ishikawa & Kiuchi, 2010).

It is argued that “improved health literacy may enhance the ability and motivation of individuals to find solutions to both personal and public health problems, and these skills could be used to address various health problems throughout life.” (Ishikawa & Kiuchi, 2010, p. 1). Nutbeam (2008) also notes that the interrelationship between poor literacy skills and health status of people in general has now gained considerable recognition. This interrelationship has eventuated to the emergence of the concept of health literacy from two different roots – clinical care and public health. Furthermore, the need to integrate health literacy into health communication process formed one of the cardinal objectives of *Healthy People 2010* project in 2000 in the United States. Health literacy was identified as an effective health communication strategy to improve the health literacy level of people with inadequate or marginal literacy skills in the United States. This is because people with such limited health literacy skills may not be able to adequately understand health information, even in the presence of access to such information and related services (Ishikawa & Kiuchi, 2010).

Health literacy simply denotes the application of literacy skills in health context to enhance healthy living of individuals and general population. This emphasizes the relationship between the level of education of individuals and their health behaviours. Several studies have found significant relationship between low literacy and low health literacy (Hayes et al., 2007; Ishikawa & Kiuchi, 2010; Nutbeam, 2008; R. M. Parker, 2000). People with a low health literacy level have been found to be prone to various health problems, including longer and more frequent hospitalisations and chronic health conditions (Cuban, 2006; Institute of Medicine, 2004; Nutbeam, 2008; B. D. Weiss & Palmer, 2004). Inability to understand physician's explanations of their conditions (DeWalt, Berkman, Sheridan, Lohr, & Pignone, 2004; Kalichman et al., 2000; Schillinger, Bindman, Wang, Stewart, & John, 2004), and non-compliance with prescribed treatment, self-care regimens, making more medication or treatment errors, and lack of the needed skills to navigate the healthcare system (B. D. Weiss, 1999) are other manifestations of low health literacy.

Furthermore, studies have shown that individuals are more convinced that their behaviours have a greater impact on their health attitudes and behaviours than structural and material factors such as (see Blaxter, 1997; P. A. Collins, Abelson, & Eyles, 2007; R. Davidson, Kitzinger, & Hunt, 2006; Eyles et al., 2001; McIntyre, McKay, & Ellaway, 2005; Popay et al., 2003; Reutter, Neufeld, & Harrison, 1999). Therefore, the means through which individuals can attain the required capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions is the role being played by health literacy. This emphasises why scholars have identified it as an integral part of health communication process.

According to the United States Department of Health and Human Services (2000), health literacy refers to the degree of individuals' capability to obtain, process, and understand basic health information and services needed to make appropriate health

decisions. In a broader perspective, the World Health Organisation (2008) defines health literacy as the cognitive and social skills, which determine the motivation and ability of individuals, to gain access, understand, and use information in ways, which promote and maintain good health. Also, the United Kingdom Department of Health (2004) conceptualises health literacy as the capacity of an individual to obtain, interpret and understand basic health information and services in ways that are health-enhancing (Cited in Sihota & Lennard, 2004). The concept is also espoused as our ability to obtain, interpret and understand basic health information and services, as well as our competence and motivation to use such information and services in ways that enhance our health (Kilker, 2000).

From these definitions, certain postulations are advanced, which further justify the need to integrate health literacy into the process of health communication. Firstly, health literacy goes beyond focusing on patients and health care consumers in healthcare settings and their understanding of medical information alone. It involves individuals outside the clinical settings and the promotion of health and preventive behaviours in larger communities (Ishikawa & Kiuchi, 2010). Secondly, these definitions indicate that health literacy involves some degree of knowledge, personal skills, and confidence that may bring about changes in personal lifestyle and living conditions to improve personal and community health (Ishikawa & Kiuchi, 2010). The third point is that health literacy is important and has the potential to stimulate a more sophisticated understanding of the concept and process of health communication within clinical and community settings. This is because health literacy enhances the effectiveness of a health communication process through more personal forms of communication and community based educational outreach (Nutbeam, 2008). Finally, it is inferred from these definitions that health literacy also focuses attention on the cognitive elements of comprehending, analysing, and applying health information and messages to make decisions on health matters (Ishikawa and Kiuchi, 2010).

Mayer and Connell (2003) suggest some important points in using health communication to effectively achieve health literacy by health professionals. These include: (1) Admit that health literacy is a problem and that clear communication is critical to successful healthcare, (2) Major points should be limited to things the patient needs to know versus what is nice to know. Summaries provide repetition and emphasis of message, (3) Move from formal to friendly. Adopt a user-friendly tone, using a conversational style and vivid nouns, verbs, and pronouns. Keep technical jargon to a minimum. Write short, declarative sentences and use bullet points for lists, (4) Give priority to patient action and motivation, (5) Avoid jargon, unnecessary background information, and statistics, (6) Long sentences should be simple in structure, (7) Use active rather than passive voice when communicating, (8) Think about your target audience and remember that you are writing for these individuals (Cited in Bendycki, 2008, p. 35).

Media Literacy

The media explosion of the 21st century as a result of the emergence of information communication technologies has largely re-defined many aspects of human endeavours – education/academia, business and economy, politics, sports, environments, arts and cultures and health. This has consequently led to the pursuance and acquisition of certain general and specialised knowledge and skills. These skills empower people with the required capacities, competencies and capabilities to cope effectively in this century. One of these competencies is media literacy. The media saturated and information explosive world that we currently live, necessitates the need for media literacy, especially people of young age. This will enable them with the competencies required to deconstruct media contents for better use. People of this age, especially young people, have demonstrated a media-driven lifestyle over time. This is the reason why Prensky (2001) describes young people as the N- or net generation, D- or digital generation, the millennial generation, or “digital natives.

Therefore, media literacy, which is regarded as a relatively new approach, has been developed by scholars in the field of media studies as a means of empowering young people, in particular, to be critical in their media viewing habit. Media literacy enables media audiences to critique media messages in order to make good and informed decisions about their health and other issues affecting their lives (J. A. Brown, 1998). People in general, especially the adolescents, are immersed in the popular media - television, newspaper, movies, music, teen magazines, books and the Internet (J. A. Brown) and are media-driven in their social quests, tastes, choices, automobiles, relationships and general life pattern (Bello, Adejola, & Adebimpe, 2013). It has now been realised that media literacy is as important as the classics in teaching cultural norms and expectations (J. A. Brown, 1998). This is because the skill of coping with mass media messages is of utmost importance, and it is not necessarily a simple one to master. It is much more than booting up the computer, turning on the television set, or flipping the pages of magazines and newspapers (Baran, 2009). Rather, “it is indeed, a learnable skill, one that can be practised; this skill is media literacy, the ability to effectively and efficiently comprehend and use any form of mediated communication.” (Baran, 2009, p. 29).

Several studies have identified mass media as a social agent for general populations, including young people, glamorising them with a heap of information to enhance desirable health behaviours and health outcomes (J. D. Brown, Halpern, & L’Engle, 2005; Selkie, Benson, & Moreno, 2011). Prensky (2001) further contends that through mass media, people of young age in the contemporary times are undergoing another dimension of socialisation process that is significantly different from that of older generations. This makes mass media to be ranked topmost among the most important socialisation agents, which exert a greater influence on the health behaviours of young people (Strasburger & Wilson, 2002).

On the contrary, many authors have also found that the media increasingly enhance the aggression level of young people, their sexual behaviour, body satisfaction and eating disorders, as well as alcohol use and cigarette smoking (J. D. Brown & Cantor, 2000; Lenhart, Purcell, Smith, & Zickuhr, 2010). In other words, it is argued that the media also do more harm to young people, considering the explosive amount of general and health information available in the media and the inability of young people to choose relevant information from appropriate sources (Gray, Klein, Noyce, Sesselberg, & Cantrill, 2005). This is because they lack the required skills and cognitive requirements needed to critically evaluate and interpret the usefulness of the mixed messages about health received from the media (Bergsma, 2011; Gray et al., 2005). Also research indicates that young people sometimes lack the emotional maturity to consult appropriate authorities - family, teachers, friends, or medical experts for proper guidance on the health information they access from the media (Ettel, Nathanson, Ettel, Wilson, & Meola, 2012).

Given this situation, media literacy training has been identified as an effective catalyst for self-efficacy and agency among digital natives and the general population in order to understand the inner workings of health messages in the media (Jackson & Barnes, 2013). Media literacy is conceptualised as a systematic process that empowers citizens and transforms their passive relationship with the media into an active, critical engagement capable of challenging the traditions and structures of a privatised, commercial media culture, and finding new avenues of citizen speech and discourse (Bowen, 1996, cited in Bello, Adejola & Adebimpe, 2013). Further, Tallim (1993) defines media literacy as the process through which media audiences are empowered with the ability to sift through and analyse the media messages ranging from music to video and web environments to product placements in films and virtual displays through critical thinking skills. “It is about asking pertinent questions about what is there, and noticing what lies behind media production- the

movies, the money, the values and the ownership- and to be aware of how these factors influence contents.” (Tallim, 1993, cited in Bello et al., 2013, p. 118)

Centre for Media Literacy (n.d) postulates that the heart of media literacy is an informed inquiry, which is premised on a four- step inquiry process of *awareness, analysis, reflection, action*, through which young people can be empowered with media navigating skills. This informed inquiry process makes media literacy an alternative to censoring, boycotting or blaming the media. Media literacy is deeply committed to freedom of expression, and its strength lies in its ability to inspire independent thinking and foster critical analysis among media audiences in order to make wise choices (Centre for Media Literacy, n.d).

In the domain of health communication, media literacy is being applied as a means of empowering and helping media audiences, especially young people, to see that the media are in the business of selling them products and behaviours that often are not good for them. This view makes media audiences to be more critical of what they read and watch so that they are less likely to engage in unhealthy behaviours promoted in the media (J. D. Brown, 2006). This framework has increased the volume of studies that advocate the application of media literacy in health communication process and campaigns, as well as the intersection of media literacy and health communication (Jackson & Barnes, 2013). It is further contended that it is better to concentrate on the media consumers rather than the source of the message (the media) because affecting or changing media contents is a difficult proposition given the commercially-driven and liberalised media landscape that operates across the world (J. D. Brown, 2006).

Though health care advocates, health communication practitioners and governments have succeeded in the past in changing media contents. An example is cigarette advertising,

which was banned on radio and television, in the past years through regulatory mechanisms (J. D. Brown, 2006). However, while efforts are on to persuade the media to provide healthier contents for media audiences, the most effective and prudent approach is to use media literacy to reduce the potentially harmful effects of the media on adolescents' health behaviours (J. D. Brown, 2006). Therefore, there have been several bodies of literature examining how media literacy (critical-thinking) skills have been used for preventing unhealthy behaviours, reduction of health risks among adolescents and wise use of media contents (see Austin & Johnson, 1997; Bergsma, 2004; Bergsma & Ingram, 2001; Wade, Davidson, & O'Dea, 2003). Further, "the constructs of empowerment education in media literacy and health promotion interventions deal with building individual resistance to unhealthy messages by inculcating critical-thinking skills (inquiry)." (Bergsma, 2004, p. 153) Similarly, "many of the studies on the effectiveness of health promotion and media literacy conclude that media literacy education has a significant potential to promote healthy knowledge, attitudes, and behaviours." (Bergsma, 2011, p. 27)

Social Marketing

One of the major themes in public health campaigns, which also remains a core issue in health communication inquiry and practice, is the health behaviour of members of society. Several studies have underscored the significance of health behaviours in public health issues and the need for individuals to maintain good health behaviours. This is considered important for individual members of society in order to achieve healthy living rather than attributing health problems to environmental factors alone (see Blaxter, 1997; P. A. Collins et al., 2007; R. Davidson et al., 2006; Eyles et al., 2001; McIntyre et al., 2005; Popay et al., 2003; Reutter et al., 1999). Therefore, "many of the significant challenges we face in public health require that individuals change their behaviours as part of the solutions. Barriers to behaviour change, whether known or unidentified, compound these challenges even more. Robust social

marketing practice offers significant promise to overcome these impediments to improving the public's health" (Daniel, Bernhardt, & Eroğlu, 2009, p. 2120).

Social marketing, which developed in the realm of marketing research and scholarship (Alan R. Andreasen, 1994), specifically focuses attention on the development and integration of marketing concepts and principles to influence or change behaviours that benefit individuals and communities for greater social goods (Alan R. Andreasen, 1994). It is observed that the rapidly changing landscape in the field of health communication in the last few decades has evolved from one unidirectional approach of relying on public service announcements to better sophisticated approaches. One of these better sophisticated approaches is social marketing, an extension of commercial marketing (Weinreich, 2010). Rather than disseminating information in a top-down approach, public health professionals now focus their concern on the needs and desires of the target audience or consumers. This is facilitated through an in-depth research before embarking on health campaigns. This approach defines the very essence of social marketing (Weinreich, 2010).

Furthermore, Andreasen (1994) strongly contends that for better appreciation and application of social marketing in relevant domains, it is fundamental to share a clear understanding of the concept through adequate and scholarly definitions. The author conceptualises social marketing as the adaptation of commercial marketing technologies to programmes designed to influence the voluntary behaviours of target audiences to improve their personal welfare and that of society of which they are a part. The first and formal conceptualisation of social marketing was attempted by Philip Kotler and Zaltman (1971). According to the authors, "social marketing is the design, implementation and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research." (p. 5) Kotler and Roberto (1989) further postulate that social marketing is "an

organised effort conducted by one group (the change agent), which intends to persuade others (the target adopters), to accept, modify, or abandon certain ideas, attitudes, practices, and behaviours." (p. 6)

In summary, the ultimate goal of social marketing is "social good" for the benefits of members of society, while in "commercial marketing," the aim is primarily "financial." Social good in this context are framed to include: health, welfare and environmental sustainability (Aiden, 2010). Hence, social marketing has been identified as an applied approach built on the principles and perspectives of commercial marketing to achieve social goods. Social marketing is used by health advocates to understand and unravel complex public health issues by focusing on how consumers (members of the public) relate with services as well as products that enhance public health. The central thrust of social marketing is the notion of voluntary exchange, whereby individuals willingly adopt products, ideas and behaviours that can enhance their health (Daniel, Bernhardt & Eroglu, 2009). The application of social marketing approach in health communication campaigns has been identified as resulting into a stronger and more permanent behaviour changes (French & Blair-Stevens, 2007). In the recent past, other exponents of social marketing have advocated its application beyond the operational or traditional level, which focuses on achieving behavioural change. In other words, they have also called for strategic application of social marketing to inform and affect policy formulation for strategic development to enhance social goods (Lefebvre, 2013).

Historically, the evolution of social marketing dates back to the 1950s, though without the term "social marketing." (Wiebe, 1951-1952) proposed a rhetorical question similar to the approach of social marketing, which underpins the intersection of marketing and society. Wiebe (1951-1952) asked, "why can't you sell brotherhood and rational thinking like you can sell soap?" The author identified some challenges in selling social good as if it were a commodity. Over a decade later, the work of Simon (1968) followed and expanded the effort

of Wiebe on social marketing. Simon (1968) approached family planning campaigns through marketing approach, yet without the term “social marketing” (Cited in Andreasen, 1994). The supreme scholarly engagement on the evolution of social marketing as a field of study was marked with the publication of the classic article of Kotler and Zaltman in 1971, where the term social marketing was coined and made its debut in the literature. The article was titled “*Social Marketing: An Approach to Planned Social Change*” and published in the *Journal of Marketing* in 1971.

Kotler & Ziltman (1971) conceptualise social marketing “as the design, implementation and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research.” (p. 5). The authors conclude that social marketing is an applied field that represents a bridging mechanism, which links the behaviours scientist's knowledge of human behaviour, with the socially useful implementation of what that knowledge allows. (B. Brown, 1986), however, underpins major factors that contributed to the emergence of social marketing. He argues that it (social marketing) is a natural outgrowth of several developments in and out of marketing, including the following: (1) Increased needs of non-business organisations for marketing services (2) Attacks on marketing's negative impact on society (3) The emergence of exchange theory (4) The coalescence of social marketing oriented theory, and (5) The decline of consensus-oriented perceptions of social reality.

Lefebvre (2013) notes that since the 1980s, there have been effective and wide applications of social marketing to address myriad of social issues, including, improving the quality of health care, disaster preparedness and response, ecosystem and species conservation, patient-centred health care, active living communities and environmental issues. Other areas of social marketing application are global threats of antibiotic resistance, sanitation demand, reducing health disparities, government corruption, injury prevention,

landowner education, marine conservation and ocean sustainability, sustainable consumption, transportation demand management, water treatment systems and youth gambling problems (Lefebvre (2013)).

Social marketing effectively became an integral part of public health communication campaigns since the 1980s, (Rocella & Ward, 1984). For instance, the *National High Blood Pressure Education Program* and the *Community Heart Disease Prevention Studies* in Pawtucket, Rhode Island at Stanford University in the United States confirmed the effectiveness of social marketing approach in addressing population-based risk factors and behaviour change (Lefebvre & Craig, 1988). Furthermore, early adoption and application of social marketing into health communication of public health issues took place in the State of Victoria in Australia in 1988. The Victoria Cancer Council developed its anti-tobacco campaign "Quit" and "SunSmart"; and "Slip! Slop! Slap!" campaign against skin cancer. These campaigns were launched in 1988 with landmark results (Victorian Health Promotion Foundation, n.d.). Another example of the application of social marketing in a public health communication campaign is the "Choosing Health," which was launched in the United Kingdom in 2004 (United Kindgom Department of Health, 2004).

Generally, the application of social marketing approach into public health communication campaigns has witnessed rapid growth and expansion, covering a wide range of health issues such as HIV/AIDS prevention, provision of basic health services, point-of-use water sanitation methods, control of childhood diarrhoea (through the use of oral re-hydration therapies) and malaria control and treatment (Lefebvre, 2011). Social marketing practice in public health campaigns is now progressing in many countries of the world. Some of these countries include: Australia, Canada, the United States of America, New Zealand and the United Kingdom (United Kingdom Department of Health, 2004).

Considering the social psychological dimensions of human behaviours and the need to improve these behaviours to achieve good health outcomes, a branch of social marketing has emerged. This is called community-based social marketing (CBSM). This branch of social marketing was propounded by a Canadian environmental psychologist, Doug McKenzie-Mohr, who postulates that community-based social marketing is inevitable as a systematic way to foster more sustainable behaviours among community members in achieving good health outcomes (McKenzie-Mohr, 2000). Community-based social marketing emerged in order to change or improve the behaviours of communities for the purpose of reducing their impacts on the environment (McKenzie-Mohr, 2000). McKenzie-Mohr (2000) further states that:

Community-based social marketing has been shown to be quite effective at fostering sustainable behaviours. Its effectiveness is due to its pragmatic approach, which involves the following steps: carefully selecting an activity to be promoted, identifying barriers to the activity, designing a strategy to overcome these barriers, when possible, piloting the strategy with a small segment of a community, and finally, evaluating the impact of the program once it has been implemented across a community. (p. 532)

Essential tools for community-based social marketing according to McKenzie-Mohr (2000), include: piloting and evaluation, focus group, survey and case studies. Other proponents of social marketing have averred that the tools of community-based social marketing have provided useful insights to health advocates, who employ these tools, to foster sustainable behaviours in many areas such as energy conservation (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007), environmental regulation (Kennedy, 2010), and recycling (Haldeman & Turner, 2009). One of the essential values of social marketing in general is that, it offers a dynamic model with interconnected activities, which if properly designed, would ensure an effective response to public health problems. These activities are

called the marketing mix, which centrally define the whole engagement of a marketing plan (Daniel et al., 2009). The authors state further that:

These elements are called the 4 P's: product (including services, behaviours, and policy changes), price (what the consumer must "give up" to change), place (environmental and societal context in which health decisions and behaviours occur), and promotion (the provision of information and the appeal to the consumer emotion that makes them want to engage in healthy behaviours). (p. 2120)

In social marketing, the four P's model has been expanded to include other P's like policies, partners, packaging and purse strings (Weinreich 2010). This is because "the focus on audience is a basic principle of social marketing given the differences in attitudes, preferences and behaviours, each of the P's should be designed with the target audience in mind." (p. 2121) Audience perspective approach has been widely used particularly in addressing HIV/AIDS problem and many other public health issues (Daniel et al., 2009). Social marketing uses effective communication strategies, which rely on formative research. In this case, target audiences are made to understand the context, the issue from their perspective, and factors that influence improved practices. Hence in social marketing, "communication goes beyond the delivery of a simple message or slogan to encompass the full range of ways in which people individually and collectively convey meaning." (Health Communication Capacity Collaborative, 2009, p. 2). Health Communication Capacity Collaborative (2009) further identifies interpersonal communication system, mass communication, community-based activities and the use of information communication technologies as powerful tools in achieving the goal of social marketing.

Social and Behavioural Change Communication

In health communication discipline, both as a field of inquiry and practice, health behaviour is a central theme. This makes scholars in health communication to focus more on the health behaviours of individual members of society. This approach enables health communication practitioners to understand the attitudes and the dynamics of health behaviours of individuals and communities. In other words, research efforts in health communication, over the years, have examined the effects of communications and mass media messages on the health behaviours of members of the public. Health communication practitioners, health advocates and health care professionals concentrate efforts on the use of interpersonal communication, mass communication and other forms of communication as viable means to influence, improve and change the health behaviours of individuals and the general population. This is because research has shown that much of health status is dependent on health behaviours rather than medical treatment, prevention and cure (Hornik, 2002).

The central nature of health behaviours and the need for an improvement or outright change depending on the context, has led health communication researchers to focus much attention on understanding why people exhibit different health behaviours and how to elicit desirable health behaviours among them. This has resulted into the development of models of health behaviour, which now provide a practical framework for health communication practitioners in addressing many public health issues among members of society (Hornik, 2002). In addressing the health behaviours of people in general, Hornik (2002) identifies three models, which have proven effective in many public health campaigns.

According to Honik (2002),

There are three complementary models of behaviour change implicit in many public health communication campaigns. The individual effects model focuses on individuals as they improve their knowledge and attitudes and assumes that individual exposure to messages affects individual behaviour. The social diffusion model focuses on the process of change in public norms, which leads to behaviour change among social groups. The institutional diffusion model focuses on the change in elite opinion, which is translated into institutional behaviour, including policy changes, which in turn affect individual behaviour. (p. 54)

Social and behavioural change communication, which involves these three models of behaviour, has been identified as one of the practical approaches in addressing the health behaviours of people in general (Hornik, 2002). Originally known as behavioural change communication, social and behavioural change communication is widely used by health communication practitioners, health advocates and health care professionals in addressing the behaviour change of members of society. This is to allow members of the public increase and control their health habits. Enhanced health outcomes at individuals' levels and communities are achieved through the interplay of biology and social determinants such as knowledge, attitudes, norms and cultural practices, which are captured by the framework of social and behavioural change communication (Health Communication Capacity Collaborative, 2009). The fact that behavioural change is central in achieving enhanced health outcomes, has made many health promotion efforts to focus attention largely on health behaviours with the use of the most powerful and fundamental human interaction- communications that positively influence these social dimensions of health and well-being. This is what is now referred to as social and behavioural change communication (Health Communication Capacity Collaborative, 2009).

Through social and behavioural change communication, tens of millions of people change their health habits and other lifestyle aspects every year (Jenkins, 2003). This is because health communication and health promotion campaigns focus attention on “both individual and family behaviours as well as healthy public policies in the community. This is to protect a person against numerous health threats and elicit a general sense of personal responsibility for maximizing one’s safety, host resistance, vitality, and effective functioning.” (Jenkins, 2002, p. 6). Hornik (2002) also notes that there has been a consistent behavioural change in the health lifestyle of many people in the contemporary world, and this is largely attributed to public health communication that integrates social and behavioural change communication and normal media coverage of health issues.

Behavioural change communication, now known as social and behavioural change communication (Leclerc-Madlala, 2011) is defined as a research-based consultative process of addressing knowledge, attitudes and practices through identifying, analysing and segmenting audiences and participants in programmes by providing them with relevant information and motivation through well-defined strategies, using an audience-appropriate mix of interpersonal, group and mass-media channels, including participatory methods (United Nations Children’s Education Fund, 2013). The locus of social and behavioural change communication is how to affect the health behaviours of individual members of society. This is what Singhal (2003) likens to a metaphorical tree (individual members of society) in the entire forest (society at large). The author contends that individuals’ attitudes and behaviours are largely essential in achieving good health outcomes in society, rather than harmful cultural values, societal norms and structural inequalities.

This view is also supported by other scholars who state that:

The explicit emphasis on behaviour change as an outcome helped to highlight the need for a thorough understanding of the full range of determinants, both internal and external factors, to understand why people do what they do and how to facilitate healthy options, decisions and support. These determinants could include knowledge and attitudes as well as many other factors elucidated in theories such as access to services, emotions, real and perceived consequences, social support (Glanz, Rimer & Viswanath, 2008, p. 23)

According to Glanz, Rimer, and Viswanath (2008), behavioural change communication is an evidence- and research-based process of using communication to promote behaviours that lead to improvements in health outcomes. Behavioural change communication intends to foster necessary actions in homes, communities, health facility or society at large. This is to improve health outcomes, promote healthy lifestyles and to prevent the impact of health problems using an appropriate mix of interpersonal, group and mass-media channels (Glanz, Rimer & Viswanath, 2008).

The fact that human behaviours cannot be isolated from the socio-ecological system within which we live and interact, made scholars to later advance the nuances on behavioural communication change to what they now term social and behavioural communication change. As rightly observed, behavioural change communication efforts have concentrated much on individual behaviour change given that the commonly applied models emphasise individuals as subjects of concern (Storey & Figueroa, 2012). However, Leclerc-Madlala, (2011) notes that human behaviours are sometimes products of subcultures and reflection of a particular socio-ecological context. This submission makes a change to require support from multiple levels of influence, resulted in an expansion of the approach to become social and behaviour change communication (SBCC) (Leclerc-Madlala, 2011).

The contention is that, the addition of ‘social’ to behavioural change communication is considered as an advancement on BCC in order to make public health communication approach systematic and socio-ecological within communication initiatives (Leclerc-Madlala, 2011). This is because individuals and their immediate social dynamics are dependent on the larger structural and environmental systems, which require social change approaches that can focus on both the individuals and the community as the unit of change (United Nations Children’s Education Fund, 2013). Hence, it is postulated that:

Social and behavioural change communication for health is a research-based, consultative process that uses communication to promote and facilitate behaviour change and support the requisite social change for the purpose of improving health outcomes. To achieve social and behaviour change, SBCC is driven by epidemiological evidence and client perspectives and needs. SBCC is guided by a comprehensive ecological theory that incorporates both individual level change and change at broader environmental and structural levels. Thus, it works at one or more levels: the behaviour or action of individual, collective actions taken by groups, social and cultural structures, and the enabling environment. (The Manoff Group, 2013, p. 4).

It is, therefore, contended that evidence-based communication approach like social and behavioural change communication has the required potential to increase knowledge, shift attitudes and cultural norms to produce changes in a wide variety of behaviours (United Nations Children's Fund, 2005). Over the years, health practitioners, health advocates and health care professionals have effectively used social and behavioural communication to achieve enhanced health outcomes among members of the public in many areas of public health. Some of these public health issues, where social and behavioural change communication has proven effective, include reducing the spread of malaria, the use of family planning methods, prevention of HIV/AIDS AND improving new-born and maternal health (United Nations Children's Fund, 2005). In core practice, social and behavioural

change communication encompasses three underlying assumptions. (1) It is an effective communication approach systematically planned to satisfy audience needs, aspirations and preferences, (2) It is a dynamic behaviour change model that underpins psychological framework to initiate specific health actions easier, feasible and closer to the ideal in order to protect and improve health outcomes, (3) It is a social-oriented model that initiates changes in the social system to achieve shifts in the perception of issues, people's participation and engagement, policies, gender and norms and relations (The Manoff Group, 2013).

Therapeutic Communication or Patient-Provider Communication

The dynamics and ubiquitous nature of communication in the existence of humanity and the sustenance of the universe renders communication as practically inevitable in all human endeavours. In health care delivery, health management and public health campaigns, where improving health lifestyle of people is key, the use of communication is central. In the recent past, one of the major areas of concern in health communication research was the communication process and the relationship patterns that exist between health care providers and patients. This concern was premised on the need to improve the health awareness and attitudes of people (Miller, 2010). This led to the emergence of the concept of therapeutic communication or what is also called patient-provider communication (N. A. Miller, 2010). The need to build relationships and initiate a heart-to-heart communication system is central to health care delivery and disease management in order to achieve good behavioural outcomes among individuals and communities. It is important for health care providers to acquire communication skills to improve upon and be able to avoid jargon-laden communication with patients. In this case, communication should be considered as a form of therapy (S. Collins, 2009).

Therapeutic communication is defined as the face-to-face process interaction that focuses on advancing the physical and emotional well-being of a patient. Nurses use therapeutic communication techniques to provide support and information to patients (Laffan (2011). Laffan, (2011) that thereapeutic communiation is a necessary technique to accomplish nursing goals in communicating with a patient. Therefore, “correctional nurses must attend to the therapeutic nature of the interactions taking place with patients. Caring, the essence of a nurse–patient relationship must be the forefront in determining communication and action.” (Laffan, 2011 p. 1)

From this definition, it can be deduced that communication can be administered in form of a therapy the same way drugs are administered to patients for prevention, assessment and management of a disease. One may propose further that communication therapy has three components, namely: engagement or information gathering level, to determine the nature of disease or illness; assessment and re-orientation level, to provide health education; and the effect or consequential level, to modify or change health behaviour. S. Collins (2009) states that the nature and manner of health care delivery largely shape or influence patients’ experience in general. Through effective therapeutic communication, patients can have firm belief and reassurance, can be better motivated to comply with a medication instruction, can comprehensively understand their illness, can freely express their desires and can feel protected and empowered (S.Collins). S. Collins (2009) emphasises the essence of communication in health delivery system further:

Communication is therapeutic. Building relationships is the cornerstone of nursing work, particularly with patients with learning disabilities; communication is a prerequisite to that process. It can also be lifesaving. If a patient is informed about what symptoms to mention, a cancer is more likely to be diagnosed and treated in time. Nurses have the most contact with patients, doing ‘connecting work’ that complements doctors’ consultations. Nurses provide the ‘glue’ – escorting a

patient into the consulting room; identifying with challenges in adhering to lifestyle changes by reporting their own experience; allowing patients to disclose concerns not shared with doctors; being chatty; sharing a joke; and providing explanations where doctors' communication has failed. (p. 1.)

In general, the above discussion underpins the fact that, in health communication process, mass media do not have an absolute power to affect the health lifestyle and the general behaviours of members of society. But notably, mass media are effective in disseminating health information simultaneously to a larger and heterogeneous audience across the globe. However, the limited ability of the media in creating absolute effects on the health attitudes and general behaviours of people, has been recognised by health communication researchers, practitioners and policy makers. This, therefore, informs why health communication practitioners continue to integrate health literacy, media literacy, social marketing, social and behavioural change communication and therapeutic communication in their public health campaigns within the framework of integrated health communication. In this framework, the most important element is the interpersonal communication process, which is regarded as the most effective in affecting the behavioural process of people in relation to their health lifestyles (Hornik, 2002; Health Communication Capacity Collaborative, 2009).

The above review on various studies indicates how health reporting or dissemination of health information in newspapers is capable of affecting the health orientation and the health behaviours of members of the public. This review further shows that the most effective public health campaigns are the ones that combine other forms of communication with mass media, especially interpersonal communication. This is what is reflected in the adoption of health literacy, media literacy, social marketing, social and behavioural change communication and therapeutic communication in health communication practice. This thesis, however, examines the situation in Nigeria to determine the perception of newspaper readers vis-a-vis health

information disseminated in Nigerian newspapers on their general health behaviours. This component of the study is considered important as many health communication studies conducted in Nigeria have not paid attention to the effects of health reporting in newspapers on the health behaviours of newspapers readers in Nigeria.

2.5.3 The challenges involved in newspaper health reporting: health reporters and the question of health and science training

In journalism practice, the personality of a reporter is of great importance. Reporters map the territory of many events and depict the reality of these events through various channels of mass media to inform, educate and entertain the public. This is why they are considered important in the gatekeeping process of journalism practice (Salcito, 2009). Gatekeeping in journalism is a system of rules, editorial checks and other verificational processes involved in newsgathering and production (Salcito, 2009). Therefore, the professional background of reporters, orientations, knowledge and other important skills needed for the job have been generally emphasised (Nisbet, 2012). This assertion is unarguably important because journalists are meant to cover a wide range of human endeavours, including politics, education, health, science and technology, marine and insurance, sports, arts and culture, business and economy, religion and law. In reporting issues in these domains, journalists need seasoned expertise to conform to the tenet of professional excellence, a global canon in journalism practice. Research has, however, shown that health and science reporting is one of the most difficult and sensitive areas of coverage in journalism practice (Schwitzer et al., 2005).

Considering the important nature of health in human society, journalism over the years, has continuously given attention to its coverage. As such, news coverage of health issues has become more prevalent in the media (Ahmed & Bates, 2013). Studies have shown that the accuracy and completeness of health and science reporting are often questioned due to the

lack of health and science training health reporters have demonstrated in the industry (A. Cassels et al., 2002; Hayes et al., 2007). Others have also questioned the quality and validity of health reporting in various channels of mass media (A. Cassels & Lexchin, 2008; Hoffman-Goetz & Friedman, 2005; Moynihan & Sweet, 2000). This situation has continued to generate conflicts between health and science researchers and health reporters. Health reporters also encounter many other general challenges in health reporting that are not related to the issue of health and science training. The nature of such challenges depend on the working environment (see Caulfield, 2004; MacDonald & Hoffman-Goetz, 2002; Milazzo & Ernst, 2006; Ooi & Chapman, 2003; Pellechia, 1997).

It is argued that when scientific research is reported in the press, important information regarding context is often lost (Kua, Reder & Grossel, 2004), and omission of research methods is another unpleasant flaw in health reporting (Pellechia, 1997). Health reporters often fail to give adequate attention to the limitations of science research, funding agencies that support various research studies, and financial conflicts of interests (Caulfield, 2004; Moynihan & Sweet, 2000; J. A. Winsten, 1985). Research also confirms that due to the limited scientific expertise of health reporters in general, newspapers have on several occasions published misleading information about health and scientific findings (Week et al., 2007). Accuracy in communicating health and scientific facts in media reporting is another issue science researchers have noted against health reporters (MacDonald & Hoffman-Goetz, 2002; MacKenzie, Chapman, Holding, & McGeechan, 2007), as well as the pressure of profit-driven journalism and the challenge of media hype (Caulfield, 2004; Ooi & Chapman, 2003). The profit nature of health reporting and its high demand by the public are among other factors, which make its coverage important to health reporters (Moynihan et al., 2000; D. E. Smith, Wilson, & Henry, 2005). However, research indicates that media coverage of

health issues and medical news, particularly stories about new treatments, have been found to be generally of poor quality (D. E. Smith et al., 2005).

Furthermore, due to the strategic position of the media in society, public health advocates and researchers often use them to convey important health messages. This is because mass media have the potential to create awareness about health issues and influence health behaviours, as well as health policies (Chapman, McLeod, Wakefield & Holding, 2005). Health and science researchers also use the media for awareness campaigns on preventative screening, suicide prevention and smoking cessation to the public (Durrant, Wakefield, McLeod, Clegg-Smith, & Chapman, 2003; Niederkrotenthaler & Sonneck, 2007). In disseminating health information, however, the lack of specialised training in health and sciences affects the quality of how health reporters interpret health and science statistics and findings (A. Wilson, Bonevski, Jones, & Henry, 2009).

It is instructive to note that health journalists themselves confirm some of these issues or inadequacies. The background training of most of them in journalism or mass communication does not give them the best skills to portray a perfect territory of science and health issues in their reportage. Schwitzer et al. (2005) acknowledge this limitation and confirm their inadequacies in the area:

Association members know that readers and viewers may make important health care decisions based on the information provided in our stories. We do know that journalists face two major challenges -understanding the clinical science and epidemiology. Medicine tends to be very methodical, slow, and subject to change. But the media want information that's definitive, they want it now, and, boy, it better be sensational. The medical industry churns out volumes of information for medical reporters to quickly sift through every day. There is a lack of special training for medical journalists (the general assignment reporter can expect to get thrown into the medical beat from time to time. (p. 579)

Consequently, while health journalists have always been advised to comply with professional ethics of journalism practice as guiding principles (Schwitzer et al., 2005), it is also found that specific codes of ethics have been adopted in some countries to guide health and science reporting. For instance, the Australian Government Department of Health and Aging (2002) adopted *Australia's National Strategy for Quality Use of Medicines: Responsibilities of the Media* as guiding principles for practising health or medical journalists. The summary of the codes are as follows:

- i. Health journalists must maintain ethical and responsible reporting on health-care issues.
- ii. Health reporting on medicines must be accurately done and corrections must be effected immediately whenever errors occur.
- iii. Health journalists must be aware of the variety of available information sources on medicines and the limitations of each source.
- iv. Health journalists must be aware of the impact of media reports on the use of medicines in the community.
- v. Health journalists must be aware of issues relevant to the broad context of medicine use, including risks of medicine use, non-drug alternatives, and the cost of medicine use to individuals and society.
- vi. Health journalists must ensure dissemination of messages that enhance the quality of medication use.

Recently, this development has generated other global efforts where science researchers, medical journals, and other independent groups have come together in Australia and the United Kingdom and established *Science Media Centres* (A. Wilson et al., 2009). These centres are meant to provide assistance to health journalists in interpreting scientific developments for the public. Another important effort made to improve this situation is the

practice of issuing media releases by medical journals and health research institutes to accompany the publication of important studies on new scientific discoveries (Woloshin & Schwartz, 2002). The news release is meant to simplify the technicalities involved in such scientific publications in order to facilitate easy understanding and interpretation by health reporters. This also allows health reporters to inform the public with correct and accurate information about health and science issues in general.

Another remarkable effort is the establishment of *The Media Doctor* in Australia, the United States and Canada. *The Media Doctor* is a project by science and health researchers, medical journals and other stakeholders with a designated website designed to objectively analyse the strengths and weaknesses of health stories published in various mass media (A. Wilson et al., 2009). A. Wilson et al. (2009) found that:

Between March 2004 and July 2008 *The Media Doctor* posted 1,230 reviews of health stories from Australian mainstream media. Of these, 613 (50.7 percent) were about pharmaceutical products, 121 (10 percent) reported on diagnostic tests, 98 (8.1 percent) were about surgical procedures, and 387 (31.5 percent) were classified under the heading 'other'. Stories classified as 'other' include complementary and alternative medicines, physiotherapy and dietetics." (p.3)

The website also helps health journalists to increase the completeness of health stories, and enhances their health literacy skills. It is observed that *The Media Doctor* has a host of experts, including clinicians, journalists and other health researchers, who work on a voluntary service as editors, reviewers, and advisers to review various health or medical stories. It is also observed that the website provides a set of criteria that reviewers use as benchmarks to review medical news or health reports across the media. According to Mary Hemming, the Chief Executive Officer of *The Media Doctor*:

The website reviews current news items and reports about medical treatments, assesses their quality using a standardised rating scale, including criteria such as novelty of treatment, treatment options, disease mongering, evidence, and a

quantification of benefits, harms and costs of treatment. The website presents reviews of good and bad examples of health reports, the hope being that these independent and objective critiques will improve journalistic practices in reporting new medications and treatments.” (2005, p.3)

The above review shows the challenges health reporters or medical journalists experience across the world in the discharge of their duties because of the technical nature of health reporting, and essentially in relation to health and science training. It further reveals several efforts that have been put in place by stakeholders across the world to improve the situation given that health reporters have the fundamental duty to report news about health in general. The fact that health reporting is a critical and sensitive area in journalism practice also calls for more caution on the part of health reporters. This is because dissemination of misleading information about health and scientific findings may lead members of the public to make the wrong decisions about their health. This thesis, therefore, examines the experience of newspaper health reporters in Nigeria to determine the nature of challenges they generally encounter, the influence of health and science training on their job and how they have managed the situation over the years.

In general, the above attempt on health communication research within the context of newspapers clearly captures how scholars in the field have focused attention on various aspects of health reporting in newspapers in spite of the existence of other media. Therefore, it is simplistic to conclude that attention has shifted away from newspapers by health communication researchers because of the emergence of the Internet in the 21st century (Marks et al., 2006). Rather, newspaper coverage of health issues continues to generate several research ideas in the field. This is not to conclude, however, that scholars in health communication are not researching new media and other channels of mass media, but the fact is that newspapers remain a primary source of health information (Brittle & Zint, 2003; Catalán-Matamoros et al., 2007).

Furthermore, the distribution of health information in newspapers has been rated as very effective (Catalán-Matamoros et al., 2007) and as such, newspapers are regarded as an effective medium in seeking health information like other news media by the populace (Marks et al., 2006). The studies of Catalán-Matamoros et al. (2007) and Marks et al. (2006) indicate that despite the challenges health reporters encounter in health reporting, newspapers are still regarded as a major source of health information. This means that health journalists report various health issues that may be of benefit to members of the public (Atkin & Wallack, 1990; Torwel & Rodney, 2010). But considering the fact that many areas of health reporting such as interpreting health data and statistics, interpretation of health reports and medical jargons require a technical expertise, health and science researchers often express displeasure about many health reports in newspapers (Weeks et al., 2007; MacDonald & Hoftman-Goetz, 2002).

2.6 The Concept of Health Communication

In the last few decades, the important nature of health in human society has led to the development of the field of health communication. Several bodies of literature have demonstrated the importance of health in human society (Agbonifo, 1983; Ruger et al., 2001; Sen, 1999) and the extent to which national governments and global health agencies have focused attention on how to improve health systems around the world. The evolution of health communication as a field of study and specialisation is considered as a necessary step complementing these global efforts of improving the health of individuals and the general population (Nutbeam, 1998; Rimal & Lapinski, 2009).

This field of inquiry, health communication, is regarded as a hybrid and trans-disciplinary field of study built on various approaches, theories and frameworks of other disciplines, including but not limited to, communications, health, social marketing, public relations, behavioural sciences and health education (Centres for Disease Control and

Prevention, 2011; Nacinovich & Langdon-Neuner, 2011). Nutbeam (1998) states that health communication is an effective approach in addressing public health issues and one of the important means of improving the health of individuals and the general population in this century. Health communication, which consists of interpersonal and mass communication activities, focuses attention on improving the health of individuals and emphasises the need for health literacy skills. Health literacy skills enable members of the public to understand and apply information about health issues to achieve substantial impact on health behaviours and health outcomes (Ishikawa & Kiuchi, 2010).

People in modern societies actively engage in the management of their health by making some health decisions based on access to health information in the media, which also contributes to the importance and advancement of health communication research (Clark & Illman, 2006; Phillips et al., 1991; D. E. Smith et al., 2005; J. A. Winsten, 1985). Sound health decisions require comprehensible health information that is accessible and appropriate to the needs of cultural and social backgrounds of individuals (Kickbusch & Maag, 2007). Further, an increase in mass media channels and a large volume of media messages, which make reports and information on health issues more available to the general public, are also critical to the evolution and advancement of health communication scholarship. This is because people now seek more health information from media to complement health information from health care professionals (Hesse et al., 2005).

It is argued that a theory-driven mediated health promotion programme embedded in health communication, has the potential to put health on the public agenda, reinforce health messages, stimulate the public to seek further information, and in some instances, bring about sustained healthy behaviours and lifestyles (Health Communication Unit University of Toronto, 2009). Advancement in communication media, particularly in the multimedia and information communication technologies, continues to improve access to health information,

complementing the traditional media (newspaper, radio, television). Consequently, health communication becomes an increasingly important component to achieving greater health empowerment for individuals and communities (Health Communication Unit University of Toronto, 2009). The National Cancer Institute (2001) emphasises the inherent values of integrating health communication into the process of managing the health of individuals and the general population:

Health communication can increase the intended audience's knowledge and awareness of a health issue, problem, or solution; influence perceptions, beliefs, and attitudes that may change social norms; prompt action; demonstrate or illustrate healthy skills; reinforce knowledge, attitudes, or behaviour; show the benefit of behaviour change; advocate a position on a health issue or policy; increase demand or support for health services; refute myths and misconceptions; and strengthen organisational relationships. (p. 23)

Health communication as a field of theory and practice has, over time, attained a high degree of disciplinary maturation because it continues to generate strong scholarly and research interest, considerable capacity building, support, economic values and high productivity (Gary L. Kreps, 2001). Hence, the field has been widely accepted beyond academia by many international health agencies such as the World Health Organisation and the United States Centres for Disease Control and Prevention. This perhaps also informs the conclusion of Rimal and Lapinski (2009) that "health communication has much to celebrate and contribute. The field is gaining recognition in part because of its emphasis on combining theory and practice in understanding communication processes and changing human behaviours." (p. 1)

The application of health communication strategies or approaches is essential in public health promotion given that many of the threats to global public health (through diseases and environmental hazard) are rooted in human behaviours. Therefore, by bringing together researchers and practitioners from diverse disciplines and adopting multilevel theoretical

approaches, health communication has the unique potential to provide meaningful input in improving and saving lives (Rimal & Lapinskin, 2009). This manifests in changing attitudes, giving adequate knowledge and evolving healthy behaviours among people.

2.6.1 Health communication defined

In spite of the global acceptance that the theory and practice of health communication now enjoys, there is yet to be a universally accepted definition of the field. Although there have been several efforts by many scholars and health agencies to define the concept within the framework of certain converging points, no single definition of health communication offered so far can still be regarded as universally acceptable (Centres for Disease Control and Prevention, 2011; Nacinovich & Langdon-Neuner, 2011). According to the United States Office of Disease Prevention and Health Promotion (2011), “health communication is the study and use of communication strategies to inform and influence individual and community decisions that affect health.” (p. 20

In *Healthy People 2010*⁴, the United States Department of Health and Human Services (2000) defines health communication as “the field of theory, research, and practice, which studies and uses communication strategies, methods, programmes and interventions as means to inform and influence individual and community decisions to enhance health.” (pp. 11-12)

In the view of Schiavo (2007), health communication is defined thus:

Health communication is also defined as a multifaceted and multidisciplinary approach to reach different audiences and share health-related information with the goal of influencing, engaging and supporting individuals, communities, health professionals, special groups, policymakers and the public to champion, introduce,

⁴ *Healthy People* is a project in the United States with a set of goals and objectives with 10-year targets. It is designed to guide national health promotion and disease prevention efforts to improve the health of all people in the United States. The project is being coordinated by the United States Department of Health and Human Services each decade and other health-sector partners. Its comprehensive set of objectives and targets are used to measure progress for health issues in specific populations, and serves as (1) a foundation for prevention and wellness activities across various sectors and within the federal government, and (2) a model for measurement at the state and local levels (United States Department of Health and Human Services, 2010).

adopt, or sustain a behaviour, practice, or policy that will ultimately improve health outcomes.” (Schiavo, 2007, p. 9)

Furthermore, health communication is the art and technique of informing, influencing and motivating individuals or larger audiences about important health issues based on scientific and ethical considerations. It includes the study and use of communication strategies to inform and influence individual and community decisions that enhance health by creating knowledge, attitudes and practices with regard to health and healthcare (Health Education And Training, n.d.).

Health communication is “the process through which an individual or an audience engages, either directly or indirectly, information that can influence health-relevant beliefs and behaviours, regardless of whether that information was or was not intended to affect health outcomes.” (Stephenson, Southwell, & Yzer, 2011, p. 7) Health communication is further defined as “the process of promoting health by disseminating messages through mass media, interpersonal channels and events, including diverse activities such as clinician-patient interactions, classes, self-help groups, mailings, hotlines, mass media campaigns, events directed toward individuals, networks, small groups, organisations, communities or entire nations.” (Health Communication Unit University of Toronto, 2009, p. 5)

Health communication is also conceptualised as a key strategy to inform the public about health concerns and to maintain important health issues on the public agenda (New South Wales Department of Health Australia, 2006). Freimuth, Linnan, and Potter (2000) view health communication as “a means to disease prevention through behaviour modification.” (p. 337) Defining health communication, W. A. Smith and Hornik (1999) postulate that it is a process for the development and diffusion of messages to specific audiences in order to influence their knowledge, attitudes and beliefs in favour of healthy behavioural choices.

Further, health communication is conceptualised as “the use of communication technologies to positively influence individuals, populations and organisations for promoting conditions conducive to human and environmental health.” (Maibach & Holtgrave, 1995, pp. 219-220) Ratzan et al. (1994) also conceive health communication as “the art and technique of informing, influencing and motivating institutional and public audiences about important health issues. Its scope includes disease prevention, health promotion, health care policy and business, as well as enhancement of quality of life and health of individuals within the community.” (p. 361) Similarly, health communication is regarded as “the process of increasing knowledge and understanding of health related issues to improve the health status of the intended audience.” (Muturi, 2005, p. 78) Bernhardt (2004) further views health communication as “the scientific development, strategic communication, and critical evaluation of relevant, accurate, accessible and understandable health information communicated to and from intended audiences and to advance the health of the public.” (p. 2051)

2.6.2: Conceptualising health communication: converging points and key issues

Although there is yet to be a universally accepted definition of health communication (Nacinovich & Langdon-Neuner, 2011; Centres for Disease Control and Prevention, 2011), the above attempts by several authors underpin certain converging points, which underscore the central ideas and key issues in health communication, both as a theory and practice. In this study, an attempt is made to distillate these converging points and key issues for a clear understanding and better appreciation of health communication. These converging points and the key issues are discussed below.

i. Health communication is an impact or effect-driven process

One of the major goals of health communication is to affect health domains at individuals’ level, organisations and communities at large (Schiavo, 2007; United States

Department of Health and Human Services, 2010). This is variously reflected in its conceptualisation by many authors as noted above. Inasmuch as health communication uses communications and mass media in general, the question of effects or impact on media audiences, who receive or access health information through the media, will remain a constant phenomenon. Freimuth and Quinn (2004) therefore, contend that media channels, including print journalism, advertisements, fiction films, television shows, documentaries, and computer technology affect the healthcare system and individuals' use of that system. This is further corroborated by Seale (2004) that media representations of health and illness, as well as dissemination of health information, shape our understanding of health and health systems, and influence our health beliefs, health behaviours, healthcare practices, and policy-making.

Interestingly, defining health communication within the purview of *effects or impacts* appears to be the central theme in its conceptual and theoretical engagement. This is reflected in several scholarly conceptualisations that underpin how the effects of health communication influence health knowledge, attitudes, and behaviours of individual members of society (see Atkin & Salmon, 2010; R. Rice & Atkin, 2009; Salmon & Atkin, 2003). Despite the shifts in communication technologies, there remain three levels of effects that occur in a health communication process. These are: learning of correct health information, changing of health attitudes and values, and establishment of new health behaviours (Griffiths & Knutson, 1960). This perhaps informs why public health practitioners pay strong attention to the use of mass media and interpersonal communication as effective channels to modify individuals' health attitudes and behaviours. This, consequently, facilitates individuals' ability in society to protect their health, avoid health risks and experience good health outcomes (Amezcuca, McAllister, Ramirez, & Espinoza, 1990; Hornik, 1989; Wallack, 1989).

The question of effects has since dominated research in health communication. This is because the media at various levels and formats are the nexus between public and policy agenda and are highly influential in shaping the direction of discourses about health and health research (G. Lewison, S. Tootell, P. Roe, & R. Sullivan, 2008). Mass media affect media audiences through two complex and different levels of effects, which have been identified by scholars in health communication. The first level is “informing audience.” This can be regarded as the lowest level of effects (Rees & Bath, 2000) and the second level effect involves “agenda-setting, framing and persuasion.” The second level defines the high level of effects in health communication (Iyengar, 1997; Passalacqua et al., 2004). Consequently, this has generated substantial corpus of literature demonstrating the effects of mass media in shaping public opinion on health orientation, health behaviours and towards countries’ health-care systems (Eva Benelli, 2003; P. A. Collins et al., 2006).

ii. Health communication is a transactional process

Considering the fact that health communication is an extension of the concept of communication, where communication stimuli are designed to generate health outcomes, it is then bound to share certain commonalities such as *transactionality* with the concept of communication. This is specifically obtainable in the realm of an interpersonal communication system. Interpersonal communication is a communication situation that allows a face-to-face interaction between the source of message and the receiver (s) of such message. Given that interpersonal communication allows transaction of messages between sources and receivers, it makes the communication process dynamic and enhances a considerable degree of effects. Rogers (1994) views health communication as involving all aspects of human communications that relate to health, whose content is concerned with health and where the focus is on health-related transactions, including whatever factors that can influence participants in the communication process.

In the actual fact, communication is regarded as the means and dynamic process through which information is imparted and shared between a source and one or more receivers. It is a process of sharing meanings, using a set of common rules (Northouse & Northouse, 1998). The fact that man is also gregarious in nature makes communication a central phenomenon in his everyday functioning and can be the very essence of the human condition (Hargie & Dickson, 2004). The value of communication in every stage of life is further aptly expressed by Hybels and Weaver (2011), that “to live is to communicate and to communicate is to enjoy life more fully.” (p. 5) Therefore, the transactional process of health communication system implies that the communication players in the process share meanings to achieve desirable health outcomes as applicable in any communication situation. In this case, the parties are mutually inclusive and interdependent, as role changing sets in and consequently; making each player in the communication process acts both as a speaker and a listener, simultaneously sending and receiving messages (Wood, 2009).

The transactional nature of health communication holds that there must be shared meanings between health care providers and patients to achieve effective health outcomes. It is not a one- way communication system that hinges on a linear model. Rather, communication in this sense is cyclic and dynamic in order to achieve shared meanings and commonality between and among health communication participants. This is what is technically called homophily (the same level of commonness) in a communication process. The need for *transactionality* in a health communication process is further demonstrated by patient-friendly publications such as the *Patients’ Charter*, which has now been replaced by *Your Guide to the National Health Services*, in the United Kingdom Department of Health (United Kingdom Department of Health, 1992, cited in M. Smith, 2002). The charter provides for the rights of patients to be given a clear, friendly and unambiguous explanation

of any proposed treatments, including any risks involved and whatever alternatives available to the recommended treatment.

Similarly, the *Toronto Consensus Statement*⁵ further demonstrates the need for *transactionality* in health communication practice in order to achieve health outcomes (Simpson et al., 1991). This document contains eight cardinal points, which emphasise *transactionality*, in the communication process between health care providers and patients. The eight points are highlighted below.

- a. Communication problems in medical practice are important and common.
- b. Patient anxiety and dissatisfaction are related to uncertainty and lack of information, explanation and feedback.
- c. Doctors often misperceive the amount and type of information that patients want to receive.
- d. Improved quality of clinical communication is related to positive health outcomes.
- e. Explaining and understanding patient concerns, even when they cannot be resolved, results in a fall in anxiety.
- f. Greater participation by the patient in the encounter improves satisfaction, compliance and treatment outcomes.
- g. The level of psychological distress in patients with serious illness is less when they perceive themselves to have received adequate information.
- h. Beneficial clinical communication is routinely possible in clinical practice and can be achieved during normal clinical encounters, without unduly prolonging them, provided that the clinician has learned the relevant techniques.

⁵ The *Toronto Consensus Statement* is a document produced at an international conference on health communication in Canada. The document spells out relationship between communication practices and health outcomes

Consequently, research has shown that healthcare providers and other health professionals, who are transactional in their communication with patients, are more likely to generate and secure positive outcomes for patients, themselves and others (Dianne, 2006). This also informs the position of Lloyd and Bor (2009) that for health care providers, whose communication approach with patients are transactional; they are better positioned for vintage results in terms of accuracy and comprehensive diagnoses, easy and quick detection of emotional distress in patients. They also enjoy intimacy with patients, who are more satisfied with their care and less anxiety, and who agree with and follow their line of guidance and counselling.

Several bodies of literature have also confirmed that patients who experience effective and transactional communication approach with health care providers tend to have more improved health indices and recovery rates (Davis & Fallowfield, 1991; Greenfield, Kaplan, & Ware, 1985; Ong, de Haes, Hoos, & Lammes, 1995). Other studies have found that when patients are informed and involved in their cases with effective transactional communication, it leads to significant reductions in blood pressure and improvements in diabetic control and management compared with the introduction of a new drug (Dulmen & Bensing, 2001; Greenfield et al., 1985; Roter & Larson, 2002; Stewart, 1995). This perhaps informs the conclusion of Schofield (2004) that effective and transactional communication is a drug that worth prescription for patients.

iii. Health communication is a multifaceted discipline

Health communication has been variously described as a multifaceted, hybrid and interdisciplinary field because its theoretical foundation and practice are built on various approaches, theories and frameworks of other disciplines. These other disciplines include, but not limited to, communications, health, social marketing, public relations, medicine,

behavioural sciences and health education (Nacinovich & Langdon-Neuner, 2011; Centres for Disease Control and Prevention, 2011). This is why health communication finds leverages in various disciplines like medicine, media studies, mass communication, health education and psychology. However, for contextual explication and proper understanding of the interdisciplinary nature of health communication, the definition of an interdisciplinary study espoused by Klein and Newell (1997) clearly puts this into a perspective. According to the authors, “an interdisciplinary study is a process of answering a question, solving a problem, or addressing a topic that is too broad or complex to be dealt with adequately by a single discipline or profession and draws on disciplinary perspectives and integrates their insights through construction of a more comprehensive perspective.” (Pp. 393–394)

Furthermore, for a discipline to be regarded as interdisciplinary like health communication, Vickers (1998) cited in Repko (2011), postulates that such a field of study should:

- a. Claim a burgeoning professional literature of increasing sophistication, depth of analysis, breadth of coverage and utility. This literature includes subspecialties on interdisciplinary theory, program administration, curriculum design, research process, pedagogy, and assessment.
- b. Make use of interdisciplinary methods, but these are subsumed under a research process of its own that involves drawing on relevant disciplinary insights, concepts, theories, and methods to produce integrated knowledge.
- c. Produce new knowledge, more comprehensive understandings, new meanings, and cognitive advancements.
- d. Begin to form a core of explicitly interdisciplinary courses.
- e. Form its own community of experts.
- f. Largely dependent on other disciplines for its source materials.

A critical look at health communication as a theory and practice over the past few decades of scholarship clearly shows that it is interdisciplinary in nature based on the above postulations. More importantly is the fact that, the critical and complex nature of health in human society is such that it requires a holistic and all-encompassing approach. Therefore, there is need for the application of methods, models, theories, strategies from other disciplines by scholars and professionals in health communication to address many health problems and epidemics around the world, especially in the developing countries. The field has today generated its community of experts, researchers and professionals from across many disciplines. Considering the fact that health communication involves a broad range of health care communication, communication media, channels, levels, and settings, it could be regarded as a convergent research area that benefits from the works of scholars from various disciplines (Gary L. Kreps, Bonaguro, & Query, 1998). This is why the evolution of health communication is regarded as representing a trans-disciplinary scholarship that reflects multiple perspectives, research traditions, disciplines, and methodological and theoretical perspectives (Gary L. Kreps et al., 1998; Lupton, 1994). This allows researchers in the social sciences, humanity and other technical disciplines to conduct researches that focus on a diverse set of health issues in a broad range of health care settings (G. L. Kreps, 2001).

iv. Health communication as a mass media system

Another converging and key issue in conceptualising health communication is the fact that health communication is a mass media or mediated system. A mediated system of communication is a process of communication through a channel where *physicalness* is not allowed and a face-to-face interaction is impossible. This is technically referred to as communication through mass media or mass communication. Dominick and Wimmer (2014) define mass media communication as any form of communication that simultaneously reaches a large number of people through but not limited to, radio, TV, newspapers,

magazines, the Internet, billboards, films, recordings and books. Some of the fundamental distinctions of mass media communication from all forms of communications are: (1) it reaches large, heterogeneous and dispersed audience, (2) its ability to reach all levels of audiences simultaneously or at the same time, (3) the use of a mediated system, which does not allow for face-to-face interaction and, (4) it is technological-based.

Consequently, due to these distinctions through which mass communication creates awareness on various issues for the public and through which considerable level of impact is generated, communicating health to the public has also dominated the media (King & Watson, 2005). This is because “in today’s media-saturated world, the importance of research on health communication in mass mediated contexts cannot be overemphasised given that mass media are important communication channels for advancing health education and promotion, disease prevention, and shaping public policy.” (Ahmed & Bates, 2013). Furthermore, mass media shape general understanding of the public regardless of location on health issues and health risks, thereby playing an important role in promoting public health (Abroms & Maibach, 2008; Atkin & Wallack, 1990; Viswanath, Wallington, & Blake, 2009).

It is further contended by Wallack (2000) that “the media can be a delivery mechanism for getting the right information to the right people in the right way at the right time to promote personal change. The media can be a vehicle for increasing participation in civic and political life and social capital to promote social change.” (p. 338) Today, therefore, it is not uncommon that due to the current rich and robust media landscape, particularly with the advancements in information and communication technologies (ICTs), there is an increasing growth in integrating mass media strategies into health education, promotion, and disease prevention practices (Melanie, Wakefield, & Hornik, 2010; J. C. Parker & Thorson, 2009; Viswanath et al., 2009). This is the reason why the context of mass media is one of the prominent converging points in conceptualising health communication. This is because mass

media are channels through which health communication can be effectively delivered to enhance health outcomes among the public. This makes health themes to consistently be one of the main topics covered by the media across the world because health itself is a prime concern for the generality of humanity (Moore, 1989; D. Nelkin, 1996; Rodford, 1996).

v. Health communication is a theory and practice

Health communication has been described as a theory and practice (Gary L. Kreps & Kunimoto, 1994; Muturi, 2005; New South Wales Department of Health Australia, n.d.; The Health Communication Unit University of Toronto, 2009). A theory, which according to Kreps et al. (1998), involves research that “examines the pragmatic influences of human communication on the provision of health care and the promotion of public health to enhance the quality of health care delivery and health promotion. In view of this, health communication inquiry is usually problem-based, focusing on identifying, examining, and solving health care and health promotion problems” (Kreps et al., 1998, p. 1). This is why over the years, health communication as a theory has involved academic engagements, conferences, academic seminars, specialised journals, postulation of theories and models, and training in formal academic programmes.

The field has today generated a host of scholars and researchers and academic programmes in many universities in the United States, United Kingdom, and Canada with specialised curriculum. The curriculum covers academic programmes both at undergraduate and postgraduate levels. Some of the universities that offer courses in health communication to reflect its theoretical endeavour are the University of Minnesota, Pennsylvania State University, Loughborough University, the University of Southern California, University of Toronto, Harvard University, USA and University of Sydney, Australia. Several medical schools also offer health communication courses among which are the University of Illinois,

Southern Illinois University, University of North Carolina, and the University of Calgary (Kreps et al., 1998). Furthermore, as a theoretical-based discipline, many research institutes and centres have emerged across the world, especially in the United States researching into many areas of health communication. Some of them include: Office of Disease Prevention and Health Promotion, Centre for Disease Control and Prevention, Health Education And Training (HEAT) and Centre for Health Communication.

Furthermore, health communication is a practical-based field as it involves the application of strategies, models, methods, programmes of actions or campaigns to reach out to the public in delivering health messages in order to enhance health outcomes. Health communication, therefore, involves thorough planning and critical evaluation of health messages and other practical steps, in order to achieve the goal of public health campaigns. Today, many international health agencies, health communication research institutes and centres embark on health communication campaigns to address several health problems in relation to a particular group or communities. The World Health Organisation (WHO), Centre for Diseases Control and Prevention (CDC), Bill and Melinda Gates Foundation are prominent in funding and embarking on health communication campaigns. This has, therefore, led to the development of a stepwise approach or model in health communication campaigns. An example is the health communication campaign model developed by the Health Communication Unit of the University of Toronto. The table below shows the twelve steps involved in the health communication campaign model designed by the Health Communication Unit of the University of Toronto.

Health communication campaign model designed by the Health Communication Unit of the University of Toronto

| | |
|--------------------|---|
| Project management | Step 1: Project management |
| Pre-planning | Step 2: Revisit your health promotion strategy Step 3: Analyse and segment audiences Step 4: Develop Inventory of Communication Resources |
| Planning | Step 5: Set Communication Objectives Step 6: Select Channels and Vehicles Step 7: Combine and Sequence Communication Activities |
| Message production | Step 8: Develop the Message Strategy Step 9: Develop Project Identity Step 10: Develop Materials |
| Implementation | Step 11: Implement Your Campaign |
| Evaluation | Step 12: Complete the Campaign Evaluation |

The concept of health communication and its converging points explicated above basically define the goals of health communication as a field of inquiry and practice. Health communication, as reflected above, principally focuses on the use of mass media and other forms of communication to modify, improve and change the health attitudes and behaviours of individuals and communities. This central goal of health communication-achieving good health outcomes among individual members of society, further positions health communication as having relationship with media effects theories. This is comprehensively discussed below.

2.7 Theoretical framework

This study is broadly situated within the purview of media effects, but specifically anchored on the propositions of priming and framing within the generalised framework of agenda setting theory. According to Guo, Vu, and McCombs (2012), “agenda-setting has evolved from a focus on media effects on the public’s perception of the most important issues of the day to a theory elaborating a hierarchy of communication effects.” (p. 51) Priming, framing and agenda setting are, therefore, media effects-driven - both in theory and practice. This is because the central thrust of the three theories is to determine or examine the relationship and correlation between media messages and opinions, views, attitudes, and the general behaviours of media audiences. Hence, scholars have described priming, framing and agenda setting as theories of strong and powerful media effects (McQuail, 2011; Hojier, 1998). This study does not test the agenda setting function of Nigerian newspapers in relation to health behaviours. Rather this research emphasises priming and framing as a more relevant and practicable approach to uncover the relationships between the perception of newspaper readers in Nigeria in seeking health information from Nigerian newspapers and its effects on their health behaviours.

2.7.1 Health communication and media effects: towards a convergence

The convergence between health communication and media effects can be underpinned within the conceptual framework of health communication. 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, pp. 11-12) 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.” (p. 9) Therefore, the field, both in theory and practice, thrives within the spectrum of media effects. Media effects are the overall results that different levels of mass media exposure have on media audiences. These results could be changes or modification in people's behaviours, attitudes, orientation or beliefs.

In other words, media effects are defined as the correlation between media exposure and audience behaviours (Signorelli & 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 discussion, 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. (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.” (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. (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 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). Research shows that pioneer efforts on media effects studies have taken the centre stage of mass communication scholarship since the 1920s (Lowery & DeFleur, 1988), A study in 2007 notes that a very large number of studies have examined media effects and in the minimum, estimates place the number of published studies in communication journals at about 4,000 (Potter & Riddle, 2007).

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 has 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, 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 K. Miller, 2004, pp., 236)

Consequently, studies in media effects have, over the years, identified various paradigm shifts, which are regarded as responses to human development and advancement. Hence, the pendulum has swung between powerful effects, argument for null effects and then the return of limited media effects (Livingstone, 1996). McQuail (2010) chronicles this paradigm shift into four eras, namely: all-powerful media, theory of powerful media put to the test, powerful media rediscovered and negotiated media influence. The interesting thing about the debates around media effects is the fact that none of the scholarly works in this domain (see Hoijer, 1998; Katz, 1980; Noelle-Neumann, 1973; Roberts & Bachen, 1981; Signorelli & Morgan, 1992) denies the ability of mass media to create *effects*. But the contention has been the degree of effects. Media audiences are not gullible masses and cultural dopes that are automatically vulnerable to a *media bullet* (Livingstone, 1996) and exposure to mass media contents or reception of media contents is self-selected (Bandura, 2009; Slater, 2007). This implies that media audiences sometimes select media content to specifically serve their personal needs, regardless of whether those needs match the intent of the message sender or not. Hence, absolute or universal media effects do not exist (Valkenburg & Peter, 2013).

Depending on the communication context, the effects could be unlimited or all-powerful (hypodermic needle or magic bullet theory). The media effects could also be minimal (two-steps flow hypothesis and uses and gratification theory), powerful effects (agenda setting) and negotiated media effects (selective perception, social constructive

approach and social psychological perspective) (see McQuail, 2010; Hoijer, 1998; Noelle-Neumann, Oso & Bello, 2012). 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 & Windhal, 1993). 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).

In the field of health communication, there appears to be consensus among media analysts/researchers, social and behavioural scientists and mental health professionals that mass media still have some degree of powerful effects on peoples' behaviours (see C. A. Anderson et al., 2010; Bandura, 2009; Gerbner, Larry, Morgan, Signorielli, & Shanahan, 2002; Huesmann, 2007; Huesmann, Moise-Titus, Podolski, & Eron, 2003). In this context, television and other electronic media have been noted by many media researchers (see Huesmann, 2007; Huesmann et al., 2003; Gerbner et al., 2002). This is because televisions and other electronic media have the potential to create a different image of the world into the mental and the cognitive system of viewers. This is particularly related to the impacts these forms of mass media exert on children and young people in general (see Huesmann, 2007; Huesmann et al., 2003; Gerbner et al., 2002). According to Gerbner et al. (2002):

Television is the source of the most broadly shared images and messages in history. It is the mainstream of the common symbolic environment into which our children are born and in which we all live out our lives. Even though new forms of media seem to sprout up weekly, television's mass ritual shows no signs of weakening, as its consequences are increasingly felt around the globe. (p. 43)

Contemporary studies in media effects have shown that the most apparent impact of television and other electronic media are mainly related to children vis-a-vis violent

and aggressive behaviours. This underpins powerful effects of the media (see Gerbner et al., 2002; Huesman, 2007; Huesman et. Al., 2003: American Psychological Association, 2013), Huesmann (2007) states that, “unfortunately, the consequences of one particular common element of the electronic mass media has a particularly detrimental effect on children’s wellbeing.” (p. 6) This is because research evidence has accumulated over the past half-century confirming that children exposure to violence on television, movies, and most recently in video games increases the risk of violent behaviours in them and other category of viewers (Huesmann, 2007). Television, like other electronic media, is a centralized system of storytelling whereby its drama, commercials, news, and other programmes bring a relatively coherent system of images and messages into every home (Gerbner et al., 2002). The consequential effect of this is mostly notable in the areas of violent and aggressive behaviours in children (Huesmann et al., 2003; Anderson et al., 2010).

It is specifically found that “children who watched many hours of violence on television when they were in elementary school tended to show higher level of aggressive behaviours when they became teenagers.” (Huesmann et al., 2003, p. 4) Furthermore, the American Psychological Association (2013) states that the emergence of video games has raised new questions about the potential impact of media violence. This is because the game players, mostly children and teenagers, are active participants rather than mere viewers. More importantly, “many of the most popular video games, such as “Call of Duty” and “Grand Theft Auto,” are violent, which contribute to their impacts on children because children tend to learn through imitation and mimic.” (American Psychological Association, 2013, p. 7)

Another domain of powerful media effect that health communication experts and other media researchers have noted is the area of mass media and the sexual behaviours

of youth in society. The fact that youth have indiscriminate access to the media (electronic media in particular) increases their opportunities to be sex-conscious through exposure to sexual media content, which further complicates their sexual behaviours (Wright, 2011). This has, therefore, generated consistent attention among media and health communication researchers. It is posited that entertainment media offerings in the United States are replete with portrayals of recreational, consequential-free sex and glorified violence (Gunasekera, Chapman, & Campbell, 2005; Kunkel et al., 2007). Wright (2011) also argues that sexual and violent productions in the electronic media in the United States are often driven by “sex sells” and “violence sells” clichés.

In the United States, the American Academy of Pediatrics (2001) studied sexuality, contraception and the media, and found that “the average American adolescent views nearly 14,000 sexual references per year, yet only 165 of these references deal with birth control, self-control, abstinence, the risks of pregnancy and STDs.” (p. 91) This study further corroborates the finding of Brown (1990), which found that sexual scenes were projected more on television in the United States without reference to contraceptives. Closely related to this is the study of L. M. Ward and Rivadeveyra (1999), which found a positive association between television viewing and female undergraduates’ recreational attitudes towards sex.

In a later study, Aubrey, Harrison, Kramer, and Yellin (2003) found that female who watched more sexual television contents expected sex to occur earlier in relationships than female who watched less sexual television films. This resonates with the argument of L. M. Ward (2003) who contends that mass media give minimal attention to the potential negative consequences associated with sexual activity, which invariably tends to increase consumption of such media contents among youth. More recently, television has been remarkably noted for affecting the sexual behaviours of younger generation through the

portrayal of sexual scenes with limited portrayal of sexual risk messages (Kunkel et al, 2007) and the consequences associated with being sexually active (Wright, 2009).

Several reasons have been advanced for the powerful media effects, especially the electronic media, on children and teenagers. The vulnerable nature of children, which makes them susceptible to media influence or *attacks*, leading to violent and aggressive behaviours often cultivated after exposure to violent media (Gerbner et al., 2002; Anderson et al., 2010). Furthermore, both children and teenagers belong to a constituent of society which has not developed a strong cognitive system to negotiate effectively with media content. Their individual differences and personality traits at that stage of life are still weak to challenge media influence. Furthermore, children and teenagers enjoy limited or no strong network of social relations to filter media content in order to minimise media influence on their behaviours (Wright, 2009). Therefore, much of the propositions of the uses and gratification theory, for instance, may not be applicable to children and teenagers.

Conversely, the individualistic perspective of media consumption and the social relations processes advanced by the uses and gratification theory (McQuali, 2010) suggests that “media audiences are not passive but are active in selecting and interpreting media contents because audiences are made up of individuals whose membership of social groups cannot be ignored.” (Dutton, O'Sullivan, & Rayner, 2003, p. 155) While the uses and gratification theory emphasises that the effects of the media are limited (Curran, 1996; McQuail, 2010; Morley, 1980) the theory underpins two main assumptions (Morley, 1980 cited in Oso and Bello, 2012). According to Morley (1980):

The uses and gratification approach directs attention to two important issues. One is the idea that any media message is polysemic and thus potentially open to different interpretation by members of the audience. The second issue is that

different members of the media audience may use and interpret any particular programme in a different way from how the communicator intended it, and in quite different ways from other members of the audience. (p 12)

2.7.2 Health communication research: the context of priming, framing and agenda setting theory

Having established from the above discussion, the relationship between health communication and mass media effects, it is then logical to posit that the thesis of this study is examined within the spectrum of media effects. In putting this into a proper context, however, this study is, therefore, anchored on the propositions of priming and framing theories, which are inherently connected to agenda setting theory (Scheufele & Tewksbury, 2007; Weaver, McCombs, & Shaw, 1998; D. Weiss, 2009). Priming, framing, and agenda setting are regarded as three theories of mass media effects (Scheufele & Tewksbury, 2007). In many health communication studies, scholars have examined media coverage of health issues within the framework of priming, framing and agenda setting theories (see Feeley & Vincent, 2007; Torwel & Rodney, 2010; Z. Wang & Gantz, 2007; Yanovitzky, 2002). These studies were conducted to determine the correlation that exists between health issues that the media consider important in their coverage and the level of importance media audiences attribute to those health issues (Funkhouser, 1973; Hertog & Fan, 1995; Shoemaker et al., 1989).

Many agenda setting studies have examined how mass media have framed and primed health news or set the news agenda on health issues, focusing on the amount of coverage, position of stories, labels or words used in new stories and the use of news values (see Torwel & Rodney, 2010; Hertog & Fan, 1995). These studies found that the media create awareness on prevalent health issues in society and serve as sources of health information to members of the public (Rachul et al., 2011; Torwel & Rodney, 2010). Members of the public attribute

considerable importance on such health information which, consequently, can to behavioural changes among them (Moshrefzadeh et al., 2013; Walsh-Childers, 1994). It is important to note that this thesis principally explores the framework of priming and framing because the focus and the design of the study cannot practically examine agenda setting theory as its main theoretical approach. Agenda setting is a time-based theory that concurrently examines media content and public opinion on a particular issue to determine their level of relationship and correlation (Hertog & Fan, 1995; McCombs & Shaw, 1972). This is not practically possible in this study given the displacement of time (2010-2013) within which the study examined newspaper coverage of health issues in Nigeria and the survey that was conducted in 2014.

The study examines evidence of priming and framing in newspaper coverage of health issues in Nigeria within the timeframe of 2010-2013. This allows the researcher to determine the level of attention Nigerian newspapers have given to HIV/AIDS, malaria and polio in their news coverage in relation other diseases, and given the prevalence of these three diseases in Nigeria. Also, the study examines how Nigerian newspapers have, over time, used priming and framing in their agenda setting function, to focus attention on northern Nigeria in their coverage of health issues. This is important in this study given that the northern region has continuously recorded the highest prevalence rate of HIV/AIDS, malaria and polio in the country. Furthermore, the study examines how Nigerian newspapers have framed and primed health information in general and its possible effects on the health behaviours of newspapers readers in Nigeria.

According to Scheufele and Tewksbury (2007), “priming occurs when news content suggests to news audiences that they ought to use specific issues as benchmarks for evaluating the performance of leaders and governments. It is often understood as an extension of agenda setting.” (Scheufele & Tewksbury, 2007, p. 11) The theoretical relationship between priming and agenda setting theory is further underpinned on two platforms. The

effects of priming and agenda setting are connected with memory-based models of information processing. In other words, the cognitive processes involved in information production and reception underpins the relationship between priming and agenda setting (Hastie & Park, 1986). This, according to Hastie and Park (1996), implies that people form attitudes based on the considerations that are most salient or accessible in their decision making process. It is, therefore, averred that “judgments and attitude formation are directly correlated with the ease in which instances or associations could be brought to mind.” (Tversky & Kahneman, 1973, p. 208)

The second assumption is based on commonness of theoretical foundation that exists between agenda setting and priming. Iyengar and Kinder (1987) contend that priming is a temporal extension of agenda setting. “By making some issues more salient in people’s mind (agenda setting), mass media can also shape the considerations that people take into account when making judgments about political candidates or issues (priming).” (Scheufele & Tewksbury, 2007, p. 11) This view also resonates with the postulation of Willnat (1997) who argues that “the alliance of priming and agenda setting has strengthened the theoretical base of agenda-setting effects by providing a better understanding of how the mass media not only tell us ‘what to think’ but also ‘what to think about.’” (p. 53)

D. Weiss (2009) likens priming in the media agenda process to the process of priming a pump to prepare the device to work quickly and readily. That is, the repetition and prominence given to mass media messages are conceived as priming the thoughts of media audiences at the point of exposure. Through priming, media messages are brought to the active cognition of media audiences. Consequently, the messages are readily available to an individual’s memory and, as such, the messages are cognitively more salient to media audiences (more quickly and readily remembered) (D.Weiss, 2009). Priming, according to McCombs and Shaw (1992), is a psychological process whereby media emphasis on

particular issues not only increases the salience of those issues, but also activates people's previously acquired information about those issues. The central propositions of priming and agenda setting underpin what scholars have labelled as the first level of agenda setting theory (Ghanem, 1997; McCombs, 2005; Weaver, 2007).

The second level of agenda setting theory underpins the relative salience of attributes of issues (Ghanem, 1997; McCombs, 2005; Weaver, 2007). Weaver (2007) states that these agendas of attributes are referred to as the second level of agenda setting, which distinguish them from the first level of agenda setting. While the thrust of the first level of agenda setting theoretically holds that the news media considerably tell us *what to think about*, the second level of agenda setting underpins that the media also tell us *how to think about issues or objects* (Weaver, 2007). This is what Kosciński (1993) describes as an advancement on media effects scholarship rather than issue salience, which is the main thrust of the first level of agenda setting theory. Wayne Wanta, Golan, and Lee (2004) also corroborate that "while the first level of agenda setting theory suggests media coverage influences what we think about, the second-level of agenda-setting theory suggests media coverage influences how we think." (p. 367) This is because "the perspectives and frames that journalists employ to draw attention to certain attributes of the objects of news coverage, as well as the objects themselves, influence how we think about the objects." (p. 147)

The first level of the agenda setting theorises the relative salience, usually operationalised as perceived importance that media audiences attribute to issues considered important by the media. This implies that the media set the agenda of issue salience. This is why Prosser and McCombs (1991) conclude that "the audience learns what issues are important from the priorities of the news media and incorporates a similar set of weights in their own personal agendas." (p. 2) Therefore, the first level of agenda setting theory holds that the news media tell us *what to think about*.

In the second level of agenda setting, McCombs (1997) postulates that framing is the selection of a restricted number of thematically related attributes for inclusion on the media agenda when a particular object is discussed.” (p.37) It is also contended that framing is more concerned with *how* issues and other objects (people, groups, organisations and countries) are depicted in mass media than with which issues or objects are more or less prominently reported (Weaver, 2007). Therefore, framing can be seen as the distinguishing element between the first and second levels of agenda setting theory (Weaver, 2007).

This also informs the position of Scheufele and Tewksbury (2007) who argue that framing is significantly different from accessibility-based models of priming and agenda setting. This is because framing defines how issues are characterised in the media and the overbearing effects they (issues) have on media audiences (Scheufele & Tewksbury, 2007). It is postulated that framing operationalises both at macro and micro levels (Scheufele, 1999). Framing is considered as a macro construct because the term framing refers to modes of presentation that the media use to present messages in a way that resonates with existing underlying schemas among media audiences (Shoemaker & Reese, 1996). However, this does not imply that journalists in general spin news stories or deceive their audiences. This is because framing is an essential tool for journalists to reduce and disseminate information about complex issues (Gans, 1979). The micro level construct of framing explains how media audiences use information and presentational features as they form impressions (Scheufele & Tewksbury, 2007)

Framing is regarded as the organisation, definition and structure of a news-story (D. Weiss, 2009). This informs the argument of many media theorists and researchers who hold that by framing media contents, journalists tend to be subjective and unbalanced in their presentation. Journalists necessarily report issues in ways that give audiences cues to understand and prioritise issues, including which aspects to ignore (D.Weiss, 2009). This

assertion resonates with the conceptualisation of framing by McCombs and Shaw (1992). The scholars both postulate that framing calls attention to some aspects of reality while obscuring other elements which might lead audiences to have different perceptions, reactions and actions. Tankard, Hendrickson, Silberman, Bliss, and Ghanem (1991) also describe a media frame as “the central organising idea for news contents that presents a context and suggests what the issue is through the use of selection, emphasis, exclusion and elaboration.” (p. 3) Further, “to frame in media reporting is to select some aspects of a perceived reality and make them more salient in a communication text in a way to promote a particular problem definition, causal interpretation, moral evaluation and treatment recommendation for the item described.” (Entman, 1993, p. 52)

Regardless of the nature of an issue or topic presented in the news agenda, the consequences on audience behaviours can be considerable. This is because when a communicator frames an issue, he or she sets an agenda of attributes and this can influence how the public thinks about that issue (Rogers, Dearing, & Bregman, 1993). This further presents agenda setting as a process which can affect both what to think about and how to think about it (Rogers et al., 1993). Hence, it is evident that the way an object in the news agenda is framed can have measurable behavioural consequences and the attributes of an issue emphasised in the news coverage can directly influence the direction of public opinion (McCombs & Shaw, 1993).

However, many scholars have also argued that priming and framing are closely and directly related to agenda setting because they are all regarded as media effects theories (Hastie & Park, 1986; Iyengar & Kinder, 1987; Scheufele & Tewksbury, 2007; Weaver, 2007). In view of this, this study discusses agenda setting theory because agenda setting theory is inextricably linked to priming and framing and a good understanding of priming and

framing theories of media effects is tied to a clear conceptual framework of agenda setting theory (Scheufele & Tewksbury, 2007; Weaver et al., 1998).

As postulated by Maxwell McCombs and Donald Shaw in 1972, agenda setting considerably proposes that the news media tell us *what to think about*. Both the selection of objects for attention and the selection of frames for thinking about these objects are powerful agenda-setting roles performed by the media (McCombs & Shaw, 1972). Agenda setting refers to the idea that there is a strong correlation between the emphasis that mass media place on certain issues (e.g. based on relative placement or amount of coverage) and the importance attributed to these issues by mass audiences (McCombs & Shaw, 1972). McCombs and Shaw (1972) clearly state the core proposition of agenda setting that “in choosing and displaying news, editors, newsroom staff, and broadcasters play an important part in shaping political reality. Readers learn not only about a given issue, but also how much importance to attach to that issue from the amount of information in a news story and its position.” (p. 176) Therefore, the perspectives which journalists and members of the public employ to think about each object is central to the news agenda and its daily set of objects- issues, personalities and events (McCombs, 1992).

Historically, the thesis of agenda setting hypothesis was said to have developed from earlier works that examined media effects on mass media audiences (Wimmer & Dominick, 2011). These earlier works could then be regarded as the springboard of the agenda setting theory. One was the study of Walter Lippmann in 1922, which studied media effects and viewed media as social forces that create images and pictures in the heads and minds of media audiences. Four decades later, B. Cohen (1963) also articulated an essential view about agenda setting theory. “The press may not be successful much of the time in telling what to think, but it is stunningly successful in telling its readers what to think about.” (B. Cohen, 1963, p. 13) This is because when mass media emphasise a topic or an issue in society, media

audiences receiving the message will consider this topic or issue to be important (B. Cohen, 1963). B. Cohen (1963) notes further that people will perceive the world in a different manner depending on the map they draw from the writers, editors and publishers of the paper they read or the media they are exposed to. Three years later, Lang and Lang (1966) also viewed mass media as a powerful institution that forces attention to certain issues by creating an image of an object or event, suggesting what individuals in the mass should think about, know about, and have feelings about.

The empirical research and scholarship engagement on the nuances of agenda setting theory was formally pioneered and launched in 1972 by Maxwell McCombs and Donald Shaw in their seminal paper titled *The Agenda Setting Function of Mass Media*, where the term agenda setting was first used in media research. The authors examined the 1968 presidential election in the United States and found strong support for the agenda-setting hypothesis. The study established strong connections between the emphasis placed on different campaign issues by mass media and the judgments of voters regarding the importance of various campaign topics (McCombs & Shaw, 1972).

Since then, research around agenda setting of mass media has flourished among communication scholars (see Ghanem, 1997; Reese, 1990; Rogers & Dearing, 1988; Rogers, Hart, & Dearing, 1997; Wallsten, 2007; Wayne Wanta, 1989; Wayne Wanta, 1991). These studies examined a wide range of themes, such as political campaigns and voters' decisions, and media, war and terror. Other themes that these studies examined are media, health campaigns and health outcomes, and blog contents and media agenda. Studies around agenda setting continue to grow. While research once identified more than 200 articles about agenda setting in the social science literature between 1972 and 1993 (Rogers et al., 1993), Walgrave and Van Aelst (2006) have noted that since its inception, the use of agenda setting theory has offered greater latitude and scope to researchers across communications studies. This is

reflected in many studies that examine the propositions of agenda setting theory in other areas of communication studies than political communication- the original scope of agenda setting theory (Walgrave & Van Aelst, 2006).

Agenda setting is simply the creation of public awareness and concern of salient issues by mass media. It is a process that underpins two basic assumptions which continue to revolve round agenda-setting research, namely: (1) the media do not reflect reality, they filter and shape it, (2) media concentration on a few issues and subjects leads the public to perceive those issues as more important than other issues (Kleinnijenhuis & Rietberg, 1995). McQuail (2010) notes that "it is assumed that the more attention the media give to a topic, the greater is the importance attributed to it by the news audience." (p. 548) This, therefore, means that "if the media give much air-time or space (in a repetitive manner) to an issue or event, it is seen by information consumers as very important." (Baran, 2009, p. 327)

Similarly, agenda-setting theory describes the power and influence of mass media to focus public attention on a few key public issues and ascribe importance to the issues in a way that the public will conceive them as important (McCombs, 2006; McCombs & Shaw, 1972). This agenda setting function of the media is reflected in its pattern of coverage of public issues repeatedly over some period of time (McCombs, 2006). Therefore, ranking of issues on the media agenda and public ranking of the importance of the same issues yield a significant correlation, and the aspect of issues selected for attention by the media similarly influence public's perception of these issues (Wanta & Ghanem, 2006). Functionally, agenda setting argues that a pattern of issues in news coverage can lead the public to place importance on those issues. This perhaps leads members of the public to also form images, perspectives and actions about these issues (Wanta & Ghanem, 2006).

The above theoretical explication on priming and framing, as well as agenda setting, clearly shows a strong relationship with health communication scholarship. This informs why

the theoretical framework of this thesis is particularly anchored on priming and framing. This is because much of the public's understanding of health issues and health policies is not from their direct personal experience, but mostly from mass mediated messages (Ahmed & Bates, 2013; A. Cassell et al., 1998). This is evidenced in framing and priming of various health discourses that are pervasive in newspapers, magazines, television, and the Internet. These media channels prime and frame news coverage of health issues in ways that shape the views of the public about such health problems (Ahmed & Bates, 2013). Therefore, mass media in general can affect the healthcare system and individuals' use of that system (Friedman 2004).

It is also argued that health communication, when delivered effectively in mass mediated contexts, has considerable potential to improve the health of individuals, communities and populations (Ahmad & Bates, 2013). Other studies posit that mass mediated messages are more likely to be successful in influencing and affecting health knowledge, attitudes, behaviours, practice and policy, if they integrate health communication theory into their design and evaluation (see Atkin & Wallack, 1990; Dutta-Bergman, 2005; Hornik, 2002; Maibach & Parrott, 1995; E. Murray, J. Burns, T. See, R. Lai, & I. Nazareth, 2009a).

2.8 Research hypotheses and research questions

The several bodies of literature explicated in this chapter informed the formulation of the research questions and the hypotheses derived from them. These research questions and hypotheses were crafted based on the insights from various health communication studies reviewed in this chapter, which particularly informed why this thesis investigates three aspects of health communication research covered in this study within Nigerian environment. The insights from these studies also informed the adoption of both quantitative and qualitative research methodologies in this research. Therefore, the two research hypotheses were tested quantitatively (through hypotheses testing) using content analysis and survey methods. Research question 1 was answered quantitatively as it is embedded in the content

analysis of the study while research questions 2-4 were answered qualitatively through the use of in-depth interview research method. The table below shows the research questions and research hypotheses.

Table 2.2: Research questions and research hypotheses

| Research hypotheses |
|---|
| <p>1. What is the relationship between newspaper coverage of health issues in Nigeria and northern region?</p> <p>H₀: The amount of coverage of malaria, HIV/AIDS and polio will not be related to the coverage of northern region in Nigerian newspapers.</p> <p>H₁: The amount of coverage of malaria, HIV/AIDS and polio will be related to the coverage of northern region in Nigerian newspapers.</p> |
| <p>2. What is the perception of newspaper readers vis-a-vis health information being disseminated by Nigerian newspapers on their health behaviours?</p> <p>H₀: Perceived dissemination of health information by Nigerian newspapers will not be related to the self-reported health behaviours of newspaper readers in Nigeria.</p> <p>H₁: Perceived dissemination of health information by Nigerian newspapers will be related to the self-reported health behaviours of newspaper readers in Nigeria</p> |
| Research Questions |
| <p>1. What is the frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases?</p> |
| <p>2. Does health and science training influence health reporting among newspaper health reporters in Nigeria?</p> |
| <p>3. What are the general challenges involved in health reporting among newspaper health reporters in Nigeria?</p> |
| <p>4. Do global health campaigns influence newspaper coverage of malaria, HIV/AIDS and polio in Nigeria?</p> |

2.9 Concluding remarks

The relevance of newspapers in disseminating and promoting health information in society is evidence in this chapter. The first newspaper in Nigeria, *Iwe Iroyin*, demonstrated this function to the Nigerian public. This positions newspapers in Nigeria and mass media in general as a relevant social institution in the process of improving the health of people and society at large. Having discussed the importance of health in human society as a basic index for national development, the chapter reviews major health issues in Nigeria with particular reference to HIV/AIDS, malaria and polio and their devastating socio-economic consequences. In a global framework, the chapter shows evidence from various studies on how newspapers and mass media have been used in public health campaigns.

This chapter also reveals that health reporters, who play a major role in the process of disseminating health information to the public, encounter many challenges because of the technical nature of health reporting, which requires some degree of health and science expertise. It is argued in the literature review chapter that health communication as a field of inquiry and practice is largely related to media effects, which makes priming, framing and agenda setting relevant to this research. This relationship is further reflected in various definitions of health communication presented in this chapter. It is also reviewed in this chapter that, considering the fact that health communication focuses attention on the health behaviours of individuals in society, mass media are not alone capable of having powerful effects on their behaviours in public health campaigns. Good public health outcomes can be achieved when mass media are used in combination with other forms of communication, especially interpersonal communication. This, as discussed in this section of the thesis, is what has led to the adoption of the integrated health communication approach in public health campaigns process.

CHAPTER THREE

Research Method and Design

3.1 Introduction

This study, which is explanatory in nature, adopts both quantitative and qualitative research designs. Explanatory research, according to Given (2008), implies a systematic inquiry and procedure intended to explain why and how, rather than simply describing the phenomena under study. In most cases, therefore, this type of study combines both quantitative and qualitative methods to explain the phenomena in question. This is done by examining and measuring relationships or correlation between variables through the collection and analysis of data with the use of statistical techniques to test research hypotheses (Given, 2008). Specifically, this study mainly uses inferential statistics with additional descriptive analyses. Explanatory research offers an insight into the causation and effect in a study and enables the researcher to offer comprehensive description and explanation of the existing relationships between variables in the phenomena being studied (Shieds & Rangarajan, 2013).

This study measures the relationship and statistical correlation between health coverage in Nigerian newspapers and several other variables. These include malaria, HIV/AIDS and polio in Nigeria, especially in the north, and the health behaviours of Nigerian newspaper readers. Furthermore, this study measures the relationship between global health campaigns and the newspaper coverage of malaria, HIV/AIDS in Nigerian newspapers to determine the influence of global health campaigns on the coverage of these health problems in Nigeria. Examples of such global health campaigns are Global Malaria Action Plan (2008) by the World Health Organisation, European Action Plan for HIV/AIDS (2012-2015) by the World Health Organisation, Global Health Action (2005-2006) by the collaboration of public

health experts, non-governmental organisations, civil society activists, community groups, health workers and academics. Moreover, this study examines the relationship between health reporting and the influence or effect of health and science training among health reporters to determine the challenges involved in newspaper health reporting in Nigeria. This underpins the agenda setting facet of this study.

Broadly speaking and as noted above, this study operates within the paradigms of both quantitative and qualitative methods. This is because neither research method can singularly offer a sufficient understanding of a research problem (Creswell, 2003; Sobowale, 2008; Teddlie & Tashakkori, 1998). There has been an increase in the exploration of mixed methods in a single study within social science inquiries to offer a broad perspective of the phenomena in question (Creswell, 1999). For instance, survey quantitative research often involves closed-ended information/data collected to measure attitudes (e.g., rating scales), behaviours (e.g., observation checklists) and performance instruments. The analysis of this type of data typically consists of statistically analysed scores collected through instruments (e.g., questionnaires) or checklists to answer research questions or to test hypotheses (Creswell, 1999).

Despite the main benefits of survey research- its replicability, generalisability and predictability, it is not adequate on its own to achieve the goals of this study. This is because questionnaires as research instruments have limited explanatory power (Schroder, 1999), and may not be able to comprehensively explore the social processes and dynamics (Gillespie, 1995) involved in the challenges confronted by newspaper health reporters in Nigeria due to variances in science and health background training. Therefore, the correlation of dissemination of health information in Nigerian newspapers with the health behaviours of newspaper readers in Nigeria, done through a survey, necessitated the use of a quantitative approach in this study. The use of quantitative method in this study is further necessitated by

the quantitative content analysis of various health themes in selected Nigerian national newspapers in order to determine the frequency of reporting of malaria, HIV/AIDS and polio. Content analysis is regarded as a research approach that systematically and objectively describes and quantifies phenomena, especially manifest communication content (Downe-Wamboldt, 1992; Krippendorff, 1980; Sandelowski, 1993).

Conversely, qualitative data involves open-ended information/data usually collected by researchers through interviews, focus groups and observations. Such data can be qualitatively analysed typically by aggregating the data into categories of information to present or report the diversity of ideas gathered during data collection (Creswell, 2003). Examples of qualitative data include interview transcripts, words, texts or behaviours, sites of research, gathering documents from a private (e.g., diary) or public source (e.g., minutes of meetings), or collecting audio-visual materials such as videotapes or artifacts. Therefore, qualitative approach is also relevant to this study as in-depth interviews were conducted with thirteen (13) newspaper health reporters in Nigeria to determine the nature of the general challenges involved in health reporting and the influence of health and science training in the coverage of health issues in Nigerian newspapers.

The researcher further interviewed some newspaper health reporters in Nigeria to find out what approaches they have adopted in managing those challenges. Furthermore, an in-depth interview method is appropriate to generate adequate qualitative data that explore how global health campaigns on malaria, HIV/AIDS and polio have influenced the coverage of these diseases in Nigerian newspapers. In-depth interviews are the most appropriate research approach in this case as the selected newspaper health reporters were interviewed individually and separately. It is, however, noteworthy to state that the in-depth interview as a qualitative method is limited in scope given that “its findings cannot be extended to wider

populations with the same degree of certainty that quantitative analyses can generate. This is because qualitative findings are not tested to discover whether they are statistically significant or due to chance.” (Atieno, 2009, p. 17) Furthermore, in qualitative data, researchers do not assign frequencies to linguistic features and rare phenomena. This can have the unintended consequence of giving an equal amount of attention to rare phenomena as to more frequent phenomena (Atieno, 2009).

Based on the weaknesses inherent in both quantitative and qualitative research methods, this study, therefore, employs what is known as a mixed research method, combined research method or integrated quantitative and qualitative research method (Creswell, 1999, 2003; Teddlie & Tashakkori, 1998). A mixed research method is a methodology for conducting research that involves collecting, analysing and integrating quantitative (e.g., experiments, surveys) and qualitative (e.g., focus groups, in-depth interviews) research. This approach to research is used to provide a more robust understanding of the research problem than what either method could offer alone. By combining both quantitative and qualitative data in a single study, the researcher gains in breadth and depth of understanding and corroboration, while offsetting the weaknesses inherent in using each approach by itself (Creswell, 2003). In view of this, this thesis triangulates between content analysis (quantitative), survey (quantitative) and in-depth interview (qualitative) methods. The table below illustrates the research methods applicable in testing each research hypothesis and in answering each research question in this study.

Table 3.1: Research questions and hypotheses and applicable research methods

| Research hypotheses | Research Method | Research Paradigm |
|---|------------------|-------------------|
| <p>1. What is the relationship between newspaper coverage of health issues in Nigeria and northern region?</p> <p>H₀: The amount of coverage of malaria, HIV/AIDS and polio will not be related to the coverage of northern region in Nigerian newspapers.</p> <p>H₁: The amount of coverage of malaria, HIV/AIDS and polio will be related to the coverage of northern region in Nigerian newspapers.</p> | Content analysis | Quantitative |
| <p>2. What is the perception of newspaper readers vis-a-vis health information being disseminated by Nigerian newspapers on their health behaviours?</p> <p>H₀: Perceived dissemination of health information by Nigerian newspapers will not be related to the self-reported health behaviours of newspaper readers in Nigeria.</p> <p>H₁: Perceived dissemination of health information by Nigerian newspapers will be related to the self-reported health behaviours of newspaper readers in Nigeria</p> | Survey | Quantitative |

| Research Questions | | |
|--|--------------------|--------------|
| 1. What is the frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases? | Content analysis | Quantitative |
| 2. Does health and science training influence health reporting among newspaper health reporters in Nigeria? | In-depth Interview | Qualitative |
| 3. What are the general challenges involved in health reporting among newspaper health reporters in Nigeria? | In-depth Interview | Qualitative |
| 4. Do global health campaigns influence newspaper coverage of malaria, HIV/AIDS and polio in Nigeria? | In-depth Interview | Qualitative |

3.2 Content analysis and justification

Given the nature of this study where communication texts on health issues in Nigerian newspapers were systematically studied and analysed to determine their relationship with northern Nigeria and the frequency of coverage of malaria, HIV/AIDS and polio, the use of content analysis was necessary. Content analysis is described as a structured method, which is based on the principles of social science of measuring and counting of media contents (Zeh, 2005). As postulated by Berelson (1952), content analysis is described as a “research technique for the objective, systematic and quantitative description of the manifest content of communication.” (p. 18) The ultimate goal in content analysis is to attain a condensed and broad description of the text under study. The outcomes of the analysis are concepts or

categories that enable the researcher to describe and explain the text being studied (Macnamara, 2005).

In any content analysis study, however, the specific approach (quantitative or qualitative) to be adopted by the researcher is determined by the nature of problem being studied and the theoretical and substantive interests of the researcher (R. P. Weber, 1990). This study adopts a quantitative approach to content analysis because the volume of mentions necessitated quantification by counting and frequency, and coding for statistical analysis to draw scientific conclusions (Macnamara, 2005). In health communication research, the use of content analysis is popular among scholars so much that research once identified more than 4,000 journal articles that used content analysis in media research between 1991 and 2002 (Macnamara, 2005).

The data collection process of the study began after some preliminary activities, which included selection of the four national newspapers to be studied and the justification for their selection. The population and the sample of the study within which the data was collected were further defined. Further, this study decided the unit of analysis as well as the variables as contained in the coding sheet (Appendix i). The research, however, adopted composite sampling technique for data gathering. Composite sampling technique is a common method in content analysis studies whereby researchers construct a composite week for each month in the sample (Wimmer & Dominick, 2011). “For example, a study might use a sample of one Monday (drawn at random from the four or five Mondays in the month), one Tuesday (drawn from the available Tuesdays), and so on, until all weekdays have been included.” (Wimmer & Dominick, 2011, p. 166) Furthermore, the researcher carried out a pre-test analysis to ensure the validity and reliability of the research instrument (coding sheet). The researcher also carried out an inter-coder reliability test, which determined the degree of agreement between the researcher and the research assistant in the coding process to minimise single coder bias.

All these steps define the whole process involved before the data collection vis-à-vis the content analysis aspect of the study. These steps are comprehensively discussed below.

3.2.1 Selected newspapers of study and rationale for selection

In Nigeria, there are over 150 newspapers, most of which are not daily publications and are regional in coverage and circulation (Dragomir & Thompson, 2012; Nigerian Press Council, 2009). There are approximately 20 daily newspapers, which have national coverage, circulation and readership in the country (Nigeria Press Council, 2009; Adeyanju & Okwari, 2005; Dragomir & Thompson, 2012). The researcher selected four of the national newspapers for the purpose of this study. These newspapers include: *The Guardian*, *The Punch*, *Nigerian Tribune* and *Daily Trust*. It is important to note that all four selected newspapers are well ranked among the 20 national newspapers in Nigeria in terms of readership and circulation. According to Dragomir and Thompson (2012), *The Punch* is ranked 1st, *Daily Trust* 4th, *The Guardian* 5th and *Nigerian Tribune* 6th.

These four newspapers were purposely chosen based on both common attributes and unique characteristics. For instance, all the four newspapers have national coverage, reach and circulation, which make them popular across Nigeria. All of the newspapers have been in existence for at least ten years in the country. These newspapers have consistently published since their establishment and enjoy readership across the length and breadth of Nigeria. Also, Okidu (2013) notes that these newspapers have a strong network of national correspondents and thoroughly bred professionals, which have over the years, earned them respect for their in-depth analysis and coverage of such national issues as politics, health, education, economy, sports, marine and insurance and so forth. In view of this, these newspapers have been widely cited in workshops, seminars, and training sessions on health communication in the country (Okidu, 2013).

All the four newspapers are English language dailies. The selection of only English language newspapers in this study is based on the fact that the English language is the official language in Nigeria. This brings these newspapers a wider readership in Nigeria than indigenous newspapers, which mostly focus on particular geo-ethnic areas or regions. In Nigeria today, the selected newspapers are among the top eight standing in terms of circulation, coverage and readership (Dragomir & Thompson, 2012; mediaReach OMD Nigeria, 2005; Osewa, 2005). They all also have online versions for online readership and this is important because Nigerian audience are now conscious of reading online version of newspapers (Dragomir & Thompson, 2012).

Similarly, these newspapers have certain unique characteristics that qualify them for selection in this study. *The Guardian Newspaper* which is based in Lagos State, south west Nigeria, readily draws the attention of the elite class of the country. Still, this newspaper is substantially commercial in orientation and for many years, it has attracted the largest proportion of advertisements among the national newspapers (Osewa, 2005; Dragomir & Thompson, 2012). *The Punch Newspaper*, a Lagos-based publication is one of the most widely circulated newspapers in Nigeria (Osewa, 2005; Dragomir & Thompson, 2012). Over the years, *The Punch Newspaper* has been the leading national newspaper in Nigeria in terms of circulation and readership (Dragomir & Thompson, 2012). So, the newspaper readily attracts the attention of many newspaper readers in the country.

The *Nigerian Tribune* is the oldest newspaper in Nigeria. The newspaper was established in 1949, which makes it the only existing precolonial newspaper, and the only national newspaper currently being published in Ibadan - the largest city in Africa, Oyo State, south west of the country. While this newspaper is generally national in scope, it has a stronghold in Ibadan and widely enjoys sympathy among the Yorubas given that the newspaper was founded by Chief Obafemi Awolowo. Chief Obafemi Awolowo was a

prominent Yoruba leader and the Premier of the old Western region in Nigeria from 1952-1959. *Daily Trust* is one of the national newspapers currently being published in the north, specifically located in Abuja, the Federal Capital Territory of the nation, with a branch office in Lagos State. There are other newspapers in the north, but they do not have national coverage and circulation. In contrast, these other newspapers are largely regional in orientation and circulation compared to the *Daily Trust Newspaper*.

3.2.2 Population, sample, sampling technique and sampling period

The universe or the population of the newspaper editions from which the sample of this study was selected were the entire editions of the four selected newspapers published over four years, from the 1st of January, 2010 to 31st of December, 2013 excluding Saturday and Sunday editions. The rationale for a four-year timeframe is that most of the health communication studies conducted in Nigeria within the context of newspapers were done within a short period, and at most two years (see Okidu, 2013; Uwom & Oloyede, 2014, Batta, 2012, Towel & Rodney, 2010). This thesis examines a period of four years as a further contribution to earlier studies in Nigeria. This timeframe allows for a broader insight into the coverage of health issues by Nigerian newspapers and perhaps health communication research in Nigeria.

Consequently, the total amount of newspaper editions for the period of four years of weekday coverage are estimated as 1,040 for each newspaper ($5 \text{ days} \times 52 \text{ weeks} = 260$ editions, $\times 4 \text{ years} = 1,040$) and 4,160 as total editions for the four newspapers ($1,040 \times 4 = 4,160$). To determine the sample, a composite sampling technique was adopted. This technique has been adjudged the most scientific and superior over random sampling and consecutive day sampling techniques, when analysing newspaper content (Lacy, Riffe, & Fico, 1998; Riffe, Aust, & Lacy, 1993). This sampling technique is also considered effective

because it controls the bias of cyclical trends in news coverage (Budd, Thorp, & Donohue, 1967; Riffe et al., 1993). Therefore, the composite technique was performed over the 48 months of the four years studied for each newspaper (2010-2013) to determine the selected newspaper editions for content analysis. Using the composite approach, this study specifically used a calendar to select each day of the week within the 48 months studied. This covers from January 1st 2010 to December 31 2013 (Appendix vi).

Through the application of composite or constructive sampling technique for each of the newspapers, 211 newspaper editions were selected and content analysed. Therefore, for the four newspapers, 844 editions ($211 \times 4 = 844$) were content analysed as the sample from the total population of 4,160 editions. This sample size is approximately estimated at 21 percent of the entire population, which is adequate to make a representative judgement for the entire population. A sample size between 10 percent and 25 percent is recommended as acceptable when determining sample size in content analysis (Wimmer & Dominick, 2011). The researcher, assisted by one research assistant, sourced all the 844 editions of newspapers by visiting the Olabisi Onabanjo University Library Sagamu Campus, Ogun State, south west Nigeria, the Simeon Adebo Library Abeokuta, Ogun State, south west Nigeria and the *Daily Trust Newspaper* library, Lagos and Abuja Offices.

3.2.3 The unit of analysis and content categories

The study focused on all conventional news stories, articles/column writings, editorials, letters to the editor and photographs that were related to health in all the selected national newspapers as the units of analyses. These are highlighted below:

Unit of analysis: The following items were focused in this study as units of analysis because they are used in newspapers to disseminate different forms of information including health information to members of the public.

- News story
- Editorial
- Feature article
- Column / commentary
- Letters to the editor
- Photograph

Within the units of analyses, content categories were coded, which include health topics, geographical focus of health stories, position of stories and types of photographs.

These are highlighted below:

Health topics:

- Malaria
- HIV/AIDS
- Polio
- Tuberculosis
- Diabetes
- Hypertension
- Asthma
- Nutrition and balance diet
- Mental illness
- Cholera
- Glaucoma
- Ulcer
- And so on as detailed in the coding sheet (Appendix i)

Geographical context of story

- North central
- North west
- North east
- South south
- South east
- South west
- Foreign countries
- Not indicated

Position of story: Generally, positions of stories in newspapers determine whether such stories are more prominent or less prominent. Given the fact that this study examines the frequency of malaria, HIV/AIDS, and polio, as well as the level of attention given to northern region by Nigerian newspapers in the coverage of these three diseases, focusing attention on the positions of health stories, as highlighted below, is central in this study.

- Lead story
- Other front page
- Back page
- Inside page
- Centre spread

Photo Diversity: Given that journalists use photographs to project stories, issues, places and events, which also determine the level of prominence given to such stories, this study, therefore, focuses on the use of photographs in Nigerian newspapers. This reveals how Nigerian newspapers use photographs in the reportage of malaria, HIV/AIDS and polio as well as northern Nigeria in the general coverage of health issues.

- Coloured

- Black and white
- No photograph used

All of these variables are clearly detailed in the coding sheet and coding instruction (Appendices i & ii).

It is important to note that in content analysis, there are two basic methods that are generally used in coding contents. These are a priori and emergent methods (Krippendorff, 2004; Wimmer & Dominick, 2011). A priori coding is done when “categories for coding are established before the analysis where data is collected based on some theoretical or conceptual rationale.” (Wimmer & Dominick, 2011, p.166) Conversely, emergent coding is applied in a situation “where subject categories are coded after doing a test run or a preliminary examination of the data that had been collected.” (Wimmer & Dominick, 2011, p. 165) In this study, the researcher applied both methods. Furthermore, the researcher had previously completed a content analysis study in a study, which also gave an insight to design the coding scheme for this study. In that previous study, an M.Sc thesis submitted to the Department of Mass Communication University of Lagos, Nigeria, the researcher examined the role of radio in reducing the menace of malaria in Ogun State, southwest Nigeria and content analysed radio reports on the coverage of malaria.

The researcher also applied the emergent coding approach to categorise content. The researcher subjected the coding scheme to a preliminary test by using it to code 100 health stories in the selected four Nigerian national newspapers. This exercise, which lasted for two days, pretested 2014 editions of the four selected newspapers. At the end of the exercise, the researcher garnered insights into the likely health categories in Nigerian newspapers, which substantially expanded the content categories. For example, the health themes were increased from 34 to 45 health themes in the original coding scheme (Appendix i). Also, “foreign countries” was added to the geographical categories.

3.2.4 Validity, reliability and inter-coder reliability

In any content analysis study, it is essential for the researcher to painstakingly factor the components of validity and reliability in the whole process of the study design. This is viewed as fundamental because validity and reliability are research components through which researchers make a strong case for the data generated through content analysis (Potter & Levine-Donnestein, 1999; Reel & Thompson, 1994; S. L. Smith, 1997). According to Hecht, Trost, Bator, and MacKinnon (1997), the questions of validity and reliability in content analysis studies should be carefully and essentially answered by researchers, especially when the results of content analyses are likely to be adopted in public health campaigns, which by extension, is related to the focus of this study.

As generally accepted in other fields of studies, reliability is a fundamental characteristic of content analysis (Lombard, Snyder-Duch, & Bracken, 2002). However, Krippendorff (1980) notes that in the context of content analysis, reliability implies inter-rater reliability, inter-coder reliability or inter-rater agreement. Inter-coder reliability refers to the degree of agreement that exists between independent coders on the rating or code they assign to each object in the study. Given that it is not generally accepted for a single researcher to perform the task of coding in content analysis studies to avoid subjective judgement (Hruschka et al., 2004; Macnamara, 2005; Oleinik, Popova, Kirdina, & Shatalova, 2014; Tinsley & Weiss, 1975), reliability is then emphasised between or among coders. It is further argued that “if a single researcher performs the tasks of reading a text and coding it with the help of a code book, the coder’s judgments may be highly subjective. The involvement of multiple coders, however, calls for gauging the strength of agreement between them.” (Oleinik, Popova, Kirdina & Shatalova, 2014, p. 2704) Therefore, achieving reliability between coders is necessary in the whole process. Reliability, which is also referred to as re-productivity according to Krippendorff (2004), is conceptualised as:

The degree to which a process can be replicated by different analysts, working under varying conditions, at different locations, or using different but functionally equivalent instruments. To be clear, agreement is what we measure; reliability is what we wish to infer from it. In content analysis, reproducibility is arguably the most important interpretation of reliability. (p. 215)

Furthermore, Potter and Levine-Donnestein (1999) note that re-productivity (reliability) requires a test-test process whereby different coders or raters analyse the same text, coding the set of content once each. If the judgements of the coders are the same by producing the same coding pattern, the data generated can be regarded as reliable. This, therefore, implies that results generated from such data can be regarded as valid. Given that the "reliability problems usually grow out of the ambiguity of word meanings, category definitions, or other coding rules" (R. P. Weber, 1990, p. 15), it is highly important that valid inference is made from the text, by ensuring that classification procedure is reliable. This is achieved through the principle of consistency, whereby different people code the same text in the same way (R. Weber, 1990). R. Weber, (1990) notes further that "the best test of the clarity of category definitions is to code a small sample of the text. Testing not only reveals ambiguities in the rules, but also often leads to insights suggesting revisions of the classification scheme." (p. 23)

In content analysis studies, one of the common methods of measuring reliability is to measure the degree of agreement in percentage term between coders or raters (Stemler, 2001). According to Stemler (2001), this approach sums up the number of cases coded in the same way by two different coders and divides it by the total number of cases. Despite the general acceptance of this percent agreement approach, J. Cohen (1960) had long identified its major flaw. The flaw that is associated with this approach is that it fails to consider the fact that raters or coders are expected to agree with each other a certain percentage of the time simply based on chance (J. Cohen, 1960). Therefore, to guide against this problem,

Haney, Russell, Gulek, and Fierros (1998) suggest Cohen’s Kappa to calculate the inter-coder reliability. Cohen’s Kappa presents 1 as a perfect reliability (perfect agreement) in coding while 0 implies no agreement other than what would be expected by chance (Heney, et al., 1998). Kappa is calculated or computed thus:

$$\kappa = \frac{P_A - P_c}{1 - P_c}$$

Where:

P_A = proportion of units on which the raters agree

P_c = the proportion of units for which agreement is expected by chance.

Further to this, while Kvalseth (1989) suggests that a kappa coefficient of 0.61 implies a reasonably good agreement (good reliability), Landis and Koch (1977) suggest a comprehensive benchmark for interpreting kappa coefficient values. The benchmark is stated in the table below.

Table 3.2 Kappa statistic and its strength of agreement

| Kappa Statistic | Strength of Agreement |
|------------------------|------------------------------|
| <0.00 | Poor |
| 0.00- 0.20 | Slight |
| 0.21- 0.40 | Fair |
| 0.41- 0.60 | Moderate |
| 0.61- 0.80 | Substantial |
| 0.81- 1.00 | Almost perfect |

In this study, the researcher adopted Cohen's kappa to calculate the degree of agreement between the researcher and one research assistant in the coding exercise in order to determine the reliability of the data. Cohen's kappa coefficient was chosen to calculate the inter-coder reliability because it accounts for agreement that is expected to occur by chance (Murphy & Ciszewska-Carr, 2005). Furthermore, Cohen's kappa is specifically designed to measure the level of agreement between two coders (Murphy & Ciszewska-Carr, 2005). Before the coding exercise, the researcher had designed a coding scheme and coding instruction, which was used to train the research assistant. The research assistant, at the time of this writing, is a fresh graduate of mass communication from Olabisi Onabanjo University, Nigeria. The training lasted for three days, taking about three hours each day. After the training, the research assistant independently coded 150 health stories across the four selected national newspapers covering the month of June, 2014. Afterwards, the research assistant sought clarifications from the researcher on areas that were not clear during the coding exercise. The researcher took time to clarify these ambiguous areas, which improved the understanding of the research assistant and his ability to perform content analysis.

After the examination of 150 preliminary articles, the researcher and the research assistant independently coded another set of health stories to determine the level of agreement. In this case, the researcher and the assistant coded the same 241 health stories, which determined the intercoder agreement. This was estimated at 10.2 percent of the entire 2,368 health stories that were eventually coded for the study. Apart from the 10 to 25 percent recommended as a benchmark by Wimmer and Dominick (2011) in determining the sample and intercoder reliability in content analysis, other previous studies have used 10 percent in their studies (see Batta, 2012; Caburnay et al., 2003; Laar, 2010; Uwom & Oloyede, 2014). The Statistical Package for the Social Sciences (SPSS) was used to calculate kappa coefficient. The kappa coefficient value found was .857, which suggested that there was

almost perfect agreement between the researcher and the assistant in the coding exercise (Landis & Koch, 1977). The overall Cronbach reliability coefficient for all the coding categories was further calculated and the value found was .759 (Table 3.3). This shows that all the content categories have high internal consistency.

Table 3.3: Reliability coefficient for all the coding categories

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .759 | .751 | 5 |

The table below further shows the reliability coefficient of each of the content categories (Table 3.4).

Table 3.4: Specific reliability coefficient for each content categories

| | Cronbach's Alpha if Item Deleted |
|-------------------------|----------------------------------|
| Type of story | .705 |
| Position of story | .673 |
| Photo diversity | .676 |
| Health themes/topics | .715 |
| Geographical context of | .779 |

The researcher and the assistant then coded all the entire health stories found in the four selected national newspapers for the study from 1st of January, 2010 to 31st of December, 2013. This is because it is not generally acceptable for a single researcher to perform the task of coding in content analysis studies because of the need to avoid subjective judgement (Hruschka et al., 2004; Macnamara, 2005; Oleinik et al., 2014; Prasad, 2008; Tinsley & Weiss, 1975). In all, the total number of stories coded was 2,368, out of which the

researcher coded 1,491 stories (63.1percent) while the research assistant coded 873 stories (36.9 percent) respectively.

3.3 Survey method and justification

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 positions this thesis as a media effects study. The study 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. As such, the choice of survey method was adopted (I. Bertrand & Hughes, 2005). Considering 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 & Thompson, 2012), questionnaire as a survey instrument was chosen to reach a proportion of the 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 & Hughes, 1981).

3.3.1. 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 & Thompson, 2012). Since it is difficult to survey the entire population considering the timeframe of this study, available resources and the research personnel involved, a sample became inevitable (Patton, 1990). A sample is defined as a subset of elements drawn from a larger population (Wilks, 1962), or a group of people or elements drawn from a population that satisfy a set of well-defined selection criteria (Shapiro, 2008). In any empirical study, appropriate sample size is central to the achievement of the overall goal of the study. This is because it is not scientifically acceptable for empirical

research to have an inadequate sample size - under-powered with few participants or over-powered with too many participants (McCrum-Gardner, 2010). Dierckx (2013) contends further that “a sample that is too big could lead to waste of precious resources such as time and money, while a sample that is too small may not allow researchers to gain reliable insights into the study.” (p. 4) This may also have a margin of error that is too high to be considered representative. Therefore, the key principle in sample size estimation is to achieve the correct balance (McCrum-Gardner, 2010).

The emergence of information technologies has broadened the frontiers of knowledge and information in the 21st century. This is also reflected in the estimation or calculation of sample size in empirical studies. Sample size can now be estimated using different software packages such as Minitab, PS (power and sample), G-Power and Epi-info/StatCalc (Dierckx, 2013; McCrum-Gardner, 2010). Furthermore, while these software packages have been used to prepare a *Model of Sample Size Table*, which can be used as a guide for researchers to determine their sample sizes, sample size can also be estimated online through certain websites. An example of a *Model Sample Size Table* is shown below.

Table 3.5: A model for sample size selection

| Population size | Confidence level = 95% | | | Confidence level = 99% | | |
|-----------------|------------------------|-------|-------|------------------------|-------|--------|
| | Margin of error | | | Margin of error | | |
| | 5% | 2,5% | 1% | 5% | 2,5% | 1% |
| 100 | 80 | 94 | 99 | 87 | 96 | 99 |
| 500 | 217 | 377 | 475 | 285 | 421 | 485 |
| 1.000 | 278 | 606 | 906 | 399 | 727 | 943 |
| 10.000 | 370 | 1.332 | 4.899 | 622 | 2.098 | 6.239 |
| 100.000 | 383 | 1.513 | 8.762 | 659 | 2.585 | 14.227 |
| 500.000 | 384 | 1.532 | 9.423 | 663 | 2.640 | 16.055 |
| 1.000.000 | 384 | 1.534 | 9.512 | 663 | 2.647 | 16.317 |

(Source: <https://www.checkmarket.com/2013/02/how-to-estimate-your-population-and-survey-sample-size/>).

In using these software packages or online websites to estimate the sample size in a survey study, four basic components of the study must be determined. These include: the population of the study, the confidence level, margin of error or confidence interval and the estimated response rate (McCrum-Gardner, 2010; Dierckx, 2013). According to Dierckx (2013), margin of error is the positive and negative deviation that is allowed in survey results for the sample, or the deviation between the opinions of respondents and the opinion of the entire population of the study. The confidence level is the degree of confidence in the results or findings of a particular research (Dierckx, 2013). Confidence level is expressed as a percentage, and represents how often the true percentage of the population who would pick an answer lies within the confidence interval (Zar, 1984). Generally, in social science, 95 percent is agreed as the confidence level and 5 percent is agreed as the margin of error (Dierckx, 2013; McCrum-Gardner, 2010; Zar, 1984).

In this study, 770 respondents were surveyed as the sample out of the total population of 26,488,200 newspaper readers in Nigeria. This sample size has an approximate 3.5 percent margin of error. 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, which has about 5 percent margin of error. The researcher arrived at this sample size using an online sample size calculator, at 95 percent confidence level and 5 percent margin of error as reflected in the table of sample size above.

In selecting the respondents and to ensure an appreciable degree of representation, the study mainly adopted a probability technique, with specific attention on stratified sampling. This was also complemented with the combination of quota, purposive and convenience sampling techniques. Therefore, the survey combines both probability (stratified) and non-probability (quota, purposive and convenience) sampling techniques. Probability sampling method is a selection process whereby each element or subject in the study population has a

known nonzero chance of being selected or has an equal chance of being selected (Battaglia, 2008; Berg, 2001). Conversely, the non-probability sampling method does not guarantee a process whereby each element in the study population has an equal chance of being selected. Sample elements in this case are chosen based on a set of criteria by the researcher in order to achieve the overall goal of the study (Battaglia, 2008; Berg, 2001). In a study that adopts a non-probability sampling technique, the researcher must explicitly detail how the sample is drawn from the population of study in order to satisfy concerns about representativeness (Berg, 2001).

This study adopted a stratified (probability) and other non-probability sampling methods. The reasons being that it was not practically possible for this research to generate a list of all the 26,488,200 newspaper readers in Nigeria within which the sample of 770 could be drawn using a simple random or systematic sampling technique. The short timeframe involved in this study and the relatively huge cost in using a simple random sampling accounted for the use of stratified as a probability sampling technique and other non-probability sampling techniques to achieve an appreciable level of representativeness (Battaglia, 2008). This study did not use a simple random or systematic random sampling techniques, which is considered as a limitation of the thesis. However, it is important to note that the use of other research methods, such as content analysis and in-depth interviews, may be regarded as complementary to the limitation observed in the survey method.

Consequently, the population of newspaper readers in Nigeria was regionally stratified into the north, south and west (I. Bertrand & Hughes, 2005). In each region, however, the most populated state that best or fairly represents the major characteristics and ethnic features of each region was further selected and in this case, their state-capital was focused. This is because the state capitals, which are all urban centres, play host to the major characteristics and ethnic features of each region in Nigeria. More so, the survey respondents (literate), who

are potential newspaper readers, can readily be found in the state capitals of each region in Nigeria. 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 according to the percentage of newspaper readers in each geographical region (M. W. Ross, 1988). In other words, a quota sampling technique was used. The basic idea of quota sampling is to set a target number of completed interviews with specific subgroups of the population of interest. Ideally, “the target size of the subgroups is based on known information about the target population, such as census data” (Battaglia, 2008, p. 523) 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 & 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 were 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 because these are the set of individuals who can be described as potential newspaper readers. 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. Essentially, most of the survey respondents were met in their offices or lecture rooms (in case of students) where they largely completed the questionnaires. A personal appeal approach was adopted by the researcher whereby Heads of Departments (in case of higher institutions), Directors of units (in case of ministries and other government establishments) were directly approached and asked to appeal to their own subordinates on behalf of the researcher. This approach (personal appeal) facilitated the cooperation and responsiveness of survey respondents despite the fact that no financial incentives were offered to them and also led to the high return rates recorded in the survey.

3.3.2 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 objectives and related hypothesis into consideration. This, therefore, determined the nature and type of survey questions that were asked from respondents. The questionnaire was divided into two sections. Section A featured questions around the research variables to be measured and the hypothesis to be tested while section B focused on the demographic variables of the respondents (Appendix iv).

3.3.3 Validity and reliability

The questionnaire was designed with simple, familiar and unambiguous words, and clear instructions (Zechmeister, Shaughnessy, & Zechmeister, 2012). The researcher also avoided double-barrelled questions- where two questions were asked at once. More so, the researcher grouped questions by topics to avoid switch back and forth from topics in the questionnaire design (Tourangeau & Rasinski, 1988) in order 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 samples 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 researcher 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 researcher interviewed 15 of them to know their experiences in the process of completing the questionnaire. The researcher specifically asked them about the clarity of instructions, the wording of questions, what items seemed unpleasant, how friendly or otherwise was the questionnaire, the clarity of response options, their ability to interpret questions easily and about the ease or difficulty involved in responding to the various items (Forsyth & Lessler, 1991). Consequently, the researcher 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. This made the questionnaire respondent-friendly and it is believed this considerably reduced measurement and nonresponse errors. It also provided a relatively easy and pleasant task for the respondents (Forsyth & Lessler, 1991).

Pre-testing is particularly important in this case since data was collected through self-administered questionnaires. In other words, the fact that the researcher 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 high return rate, which should be capable enough to generate adequate data to represent the entire population of newspaper readers in Nigeria. The study achieved a high return rate (97 percent) because of the personal appeal method adopted in the process of administering the questionnaires. With such an appeal from superior officers to the survey respondents and the fact that they (survey respondents) were met in their offices, such a high return rate was facilitated. More so, the researcher was assisted by research assistants (mass communication undergraduates) to administer the questionnaires in each region.

3.4 In-depth interview and justification

This study also adopted an in-depth interview research method in order to achieve the overall defined objectives. The in-depth interview method is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, issue, programme, or situation (Boyce & Neale, 2006). The in-depth interview method has been found to be a useful qualitative data collection technique for certain reasons including, but not limited to, needs assessment, programme refinement, issue identification, strategic planning and problem probing (Rubin & Rubin, 2004). The in-depth interview method is the most appropriate technique to probe into the general challenges being encountered by newspaper health reporters in Nigeria in general and, perhaps due to lack of health and science background training. The in-depth interview method is also appropriate to explore how global health campaigns have influenced the coverage of HIV/AIDS, malaria and polio in Nigerian newspapers. The use of an in-depth

research technique enabled the researcher to ask open-ended questions that elicited further depth of information from the selected journalists (Rubin & Rubin, 2004). This approach allowed the selected newspaper health reporters to comprehensively dwell on various questions that the researcher carefully and systematically asked from them. These questions covered the influence of global health campaigns on the coverage of health issues in Nigerian newspapers, the various challenges newspaper health reporters face in relation to health and science training, the impacts of these challenges and how health reporters have managed the situation over the years.

3.4.1 Population, sample and sampling technique

Sample selection of in-depth interview research is one of the areas that no universal or statistical technique has been postulated, widely accepted and adopted by scholars. It has therefore continued to generate debates over the years in many academic conferences and academic journals, which have produced written reports and myriad publications (Baker & Edwards, 2012). However, scholars have generally agreed that sample size in an in-depth interview research is often smaller than what is obtainable in quantitative research methods (Dworkin, 2012; Ritchie, Lewis, & Elam, 2003). This is because in-depth interviews are often concerned with garnering an in-depth understanding of a phenomenon, thereby focusing on meaning (and heterogeneities in meaning) (Crouch & McKenzie, 2006; Dworkin, 2012), which is often centred on the how and why of a particular phenomenon, issue, process, situation, subculture, scene or set of social interactions (Dworkin, 2012).

The nature of the problem being studied, the social setting, the size of population, the research timeframe and available resources are considerable factors in sample selection in an in-depth interview research (Morse, 2000; Ritchie et al., 2003). A number of articles, book chapters, and books recommend guidance and suggest between five and 50 interviewees as adequate sample (Creswell, 1998; Morse, 1994, 2000). Morse (1994) has suggested that five

to 25 interviewees are adequate as sample size in an in-depth interview method. Other studies suggest at least six to 15 interviewees should be the smallest acceptable sample size (Bertaux, 1981; Guest, Bunce, & Johnson, 2006). Lee, Woo, and Mackenzie (2002) argue that studies that use more than one method require fewer participants as interviewees.

Therefore, this study employed a purposive and snowball sampling techniques to select thirteen (13) newspaper health reporters, who granted interview sessions for this study. A purposive sampling technique is a form of non-probability sampling frequently used in social science research, where the decisions concerning the individuals to be included in the sample are made by the researcher based on a number of criteria. These criteria may include specialist knowledge of the research issue and the nature of the study (Oliver, 2006). Consequently, the researcher selected thirteen (13) health reporters as interviewees within the 20 existing national newspapers in Nigeria. The researcher selected only one health reporter from each newspaper organisation. The health reporters interviewed for this research were selected based on a particular set of criteria. These criteria include:

- i. **Health reporting as the current beat:** Individual journalists selected were (as at the time of interview) reporting for a health beat or writing for health columns of their newspaper organisations with particular emphasis on the newspapers selected for the content analysis of this study. This criterion was set in order to tap into the current trends in health reporting among health reporters in Nigeria.
- ii. **Full time employment:** All the health reporters interviewed were officially employed by any one of the national newspaper organisations in Nigeria as a full time staff. A full time staff of any national newspaper is more accountable to the organisation vis-à-vis his or her professional duties. This, therefore, increases the level of commitment to duty, thereby increasing experience on the job. The rationale here is that, the more a journalist is committed to duty given the status as a full time staff, the more

experiences that are likely to be garnered from the field. The researcher in this study considered this criterion essential in the selection of the health reporters that were interviewed.

- iii. **Five years of experience in health reporting:** All the health reporters included in the interviews have had in the minimum, five years of work experience in health reporting for newspaper (s) in Nigerian environment. The rationale behind this criterion is that five years of experience of health reporting should be sufficient enough to have made a health reporter a stakeholder in journalism practice, who will be able to discuss the intricacies and the dynamics involved in health reporting.
- iv. **Journalism training or training in health reporting:** All the health reporters included in the interviews were professionally trained and certified in journalism, mass communication or through short courses in journalism or health reporting. Such a qualification or certificate includes a Bachelor of Arts or Science (B.A/B.Sc), Higher National Diploma (HND), National Diploma (ND), Diploma, Postgraduate Diploma, Advanced Diploma and ordinary certificate.

In order to interview health reporters who met with the above stated criteria, the study further adopted a snowball research technique. Snowball research technique, which is “a form of non-probability sampling in which the researcher begins by identifying an individual perceived to be an appropriate respondent. This respondent is then asked to identify another potential respondent. The process is repeated until the researcher has collected sufficient data. Snowball is also called ‘chain letter’ sampling.” (Oliver, 2006, p.1) As a qualitative research technique that is more popular in sociological studies, snowball sampling technique is valuable given its potential to take advantage of the social networks of identified respondents, which is capable of generating an escalating set of potential contacts for a researcher (Atkinson & Flint, 2004). Atkinson and Flint (2004) define snowball sampling as “a

technique for gathering research subjects through the identification of an initial subject who is used to provide the names of other actors. These actors may themselves open possibilities for an expanding web of contact and inquiry.” (Atkinson & Flint, 2004, p.1044)

Consequently, the researcher was able to get the phone contact of the health reporter of *The Union Newspaper*. After the interview with *The Union Newspaper* health reporter, the researcher asked for the phone contacts of other health reporters who met the stated criteria. This process was repeated with other health reporters until the last health reporter was interviewed (Table 3.6). It is important to note that *The Union Newspaper* health reporter was able to supply many phone contacts of other colleagues because of the professional network already established among health reporters in Nigeria through the Health Writers Association of Nigeria. Using structured-questions format (Appendix iii), all the interviews were conducted in the offices of the selected health reporters, each of which lasted for an average of 50 minutes to one hour. All the interviews were tape-recorded with the permission of the interviewees. The researcher singlehandedly conducted and transcribed the interviews into texts, which were sent to all the interviewees via their email addresses. By so doing, the health reporters were able to check the texts against any factual errors and confirmed the accuracy of the transcription before the researcher analysed the interview data.

Table 3.6: Selected health reporters, newspaper organisations and professional status

| SN | Newspaper organisation | Educational degree | Years of experience in journalism | Years of experience in health reporting |
|----|------------------------|--------------------|-----------------------------------|---|
| 1 | The Daily Independent | Arts | 25 | 25 |
| 2 | The Vanguard | Science | 20 | 20 |
| 3 | Nigerian Tribune | Science | 17 | 17 |
| 4 | The Guardian | Science | 16 | 16 |
| 5 | New Telegraph | Arts | 15 | 10 |
| 6 | National Mirror | Arts | 15 | 5 |
| 7 | Daily Trust | Arts | 12 | 5 |
| 8 | The Sun | Science | 11 | 11 |
| 9 | The Hallmark | Arts | 10 | 5 |
| 10 | The Nation | Arts | 8 | 5 |
| 11 | The Union | Arts | 8 | 5 |
| 12 | Business Day | Science | 5 | 5 |
| 13 | The Punch | Science | 5 | 5 |

3.5 Data analysis

This study used Statistical Package for the Social Sciences (SPSS) to analyse the data that were collected in this study. Data analysis is one of the most crucial steps in a research process as it helps depict clear understanding of the research findings and makes it easy to evaluate the attainment of research objectives (Levesque, 2007). This was achieved with the use of SPSS in this study. Specifically, SPSS was used to analyse data that was collected from the newspapers content and data gathered from the survey (questionnaires). In other words, SPSS was used to analyse data from the quantitative aspect of this study in order to test the two research hypotheses related to the survey and content analysis, and to answer the research question related to the content analysis of this study.

The in-depth interview data in general was qualitatively analysed by adopting the six-step model of (Bryman (2012)). This model comprises: (1) careful reading of the transcript (2) coding or indexing by labelling relevant pieces such as words, phrases, sentences, actions, concepts (thematic analysis) (3) deciding the most important codes, and create categories (4) labelling categories and decide the most relevant ones and how they connect to one another (5) decide whether hierarchy could be created in the categories in order of importance or not and (6) presentation, interpretation and discussion of results. This six-step model was performed on the in-depth interview data in order to qualitatively answer the three research questions of the study related to the interviews.

3.6 Concluding remarks

The need to operationalise a research idea with a good methodological approach cannot be over-emphasised in any research endeavour. This will enable the researcher to achieve the set objectives with minimum errors. This chapter discusses and justifies the three research methods adopted in this thesis, which are content analysis, survey and in-depth interview. The whole process of data collection, which include defining the population of study, study sample, sampling techniques and research instruments, is comprehensively discussed. The weakness identified in the survey, whereby the researcher was unable to use a simple random or systematic sampling technique is noted. This weakness is, however, complemented by the strengths of using two other research methods (content analysis and in-depth interviews) in this research.

CHAPTER FOUR

Newspaper Coverage of Health Issues in Nigeria: The Contexts of HIV/AIDS, Malaria, Polio and the Northern Region

4.1 Introduction

This chapter presents the data analysis and interpretation of findings in relation to Hypothesis I and Research Question 1 of the study; both of which draw upon the findings of the content analysis. These hypotheses relate directly to the newspaper coverage of HIV/AIDS, malaria and polio and northern in Nigerian national newspapers.

4.2 Findings

Research Hypothesis I

H₀: The amount of coverage of malaria, HIV/AIDS and polio will not be related to the coverage of northern region in Nigerian newspapers.

H₁: The amount of newspaper coverage of malaria, HIV/AIDS and polio will be related to the coverage of northern region in Nigerian newspapers.

This study tested the research Hypothesis I by carrying out a correlation analysis using SPSS between the coverage of malaria, HIV/AIDS and polio in Nigerian newspapers and the geographical context of health coverage in Nigeria. The reliability coefficient found for these two variables was .737. These two variables were compared to determine how Nigerian newspapers have focused attention on the coverage of malaria, HIV/AIDS and polio on northern region (Table 4.1).

Table 4.1: Correlation coefficient value for Hypothesis I

| | | Correlations | |
|-------------------------------|---------------------|----------------------|-------------------------------|
| | | Health themes/topics | Geographical context of story |
| Health themes/topics | Pearson Correlation | 1 | .308** |
| | Sig. (1-tailed) | | .000 |
| | N | 159 | 159 |
| Geographical context of story | Pearson Correlation | .308** | 1 |
| | Sig. (1-tailed) | .000 | |
| | N | 159 | 159 |

** . Correlation is significant at the 0.01 level (1-tailed).

The reliability coefficient found for the two tested variables was .737. Given the correlation coefficient value of .308 and a significance value $p = .000$ which is less than 0.05 ($P = .000 < 0.05$), this study found that there was a moderate positive correlation between the two tested variables: [$r = .308, n = 159, p = .000$]. According to J. Cohen (1988), an absolute value of r of 0.1 is classified as small, an absolute value of r of 0.3 is classified as medium and an absolute value of r of 0.5 is classified as large. This finding suggests that there was a medium, or moderate, correlation between the coverage of malaria, HIV/AIDS and polio in Nigerian newspapers and northern Nigeria.

This study further investigated the frequency of newspaper coverage of malaria, HIV/AIDS and polio in relation to northern Nigeria within the context of the ten most frequently reported health issues in Nigerian national newspapers. This study focused on the ten most frequently reported health issues out of the 45 health issues analysed in Nigerian newspapers from 2010-2013. This approach is used as a basis for analysis in order to draw a contextual conclusion on the coverage of malaria, HIV/AIDS and polio in relation to northern Nigeria (Table 4.2 and Appendix vi).

Table 4.2: The geographical context and frequency of newspaper coverage of the ten most frequently reported health issues in Nigerian national newspapers from 2010-2013

Health themes/topics * Geographical context of story Crosstabulation

| | | | Geographical context of story | | | | | | Total |
|----------------------|-------------------------------|--|-------------------------------|-------------|------------|------------|-------------------|---------------|--------|
| | | | North | south south | south east | south west | foreign countries | not indicated | |
| Health themes/topics | Health care delivery | Count | 87 | 16 | 5 | 126 | 13 | 4 | 251 |
| | | % within Geographical context of story | 15.4% | 20.5% | 12.8% | 16.7% | 1.8% | 1.8% | 10.6% |
| | | Adjusted Residual | 4.3 | 2.9 | .5 | 6.6 | -9.0 | -4.5 | |
| | Health systems administration | Count | 82 | 13 | 7 | 97 | 9 | 13 | 221 |
| | | % within Geographical context of story | 14.5% | 16.7% | 17.9% | 12.8% | 1.3% | 5.8% | 9.3% |
| | | Adjusted Residual | 4.9 | 2.3 | 1.9 | 4.0 | -8.8 | -1.9 | |
| | HIV/AIDS | Count | 69 | 13 | 2 | 55 | 39 | 11 | 189 |
| | | % within Geographical context of story | 12.2% | 16.7% | 5.1% | 7.3% | 5.5% | 4.9% | 8.0% |
| | | Adjusted Residual | 4.3 | 2.9 | -.7 | -.9 | -2.9 | -1.8 | |
| | Cancer | Count | 13 | 2 | 4 | 37 | 74 | 11 | 141 |
| | | % within Geographical context of story | 2.3% | 2.6% | 10.3% | 4.9% | 10.5% | 4.9% | 6.0% |
| | | Adjusted Residual | -4.2 | -1.3 | 1.1 | -1.5 | 6.1 | -.7 | |
| | Nutrition and balance diet | Count | 8 | 2 | 0 | 19 | 62 | 23 | 114 |
| | | % within Geographical context of story | 1.4% | 2.6% | .0% | 2.5% | 8.8% | 10.3% | 4.8% |
| | | Adjusted Residual | -4.3 | -.9 | -1.4 | -3.6 | 5.9 | 4.0 | |
| | Polio | Count | 67 | 1 | 2 | 19 | 10 | 10 | 109 |
| | | % within Geographical context of story | 11.9% | 1.3% | 5.1% | 2.1% | 1.4% | 4.5% | 4.6% |
| | | Adjusted Residual | 9.4 | -1.4 | .2 | -3.3 | -4.8 | -.1 | |
| | Maternal health | Count | 31 | 0 | 1 | 27 | 25 | 13 | 97 |
| | | % within Geographical context of story | 5.5% | .0% | 2.6% | 3.6% | 3.5% | 5.8% | 4.1% |
| | | Adjusted Residual | 1.9 | -1.9 | -.5 | -.9 | -.9 | 1.4 | |
| | Malaria | Count | 25 | 4 | 0 | 37 | 21 | 6 | 93 |
| | | % within Geographical context of story | 4.4% | 5.1% | .0% | 4.9% | 3.0% | 2.7% | 3.9% |
| | | Adjusted Residual | 2.1 | .6 | -1.3 | 1.7 | -1.6 | -1.0 | |
| | Infant health | Count | 12 | 2 | 2 | 20 | 30 | 12 | 78 |
| | | % within Geographical context of story | 2.1% | 2.6% | 5.1% | 2.6% | 4.2% | 5.4% | 3.3% |
| | | Adjusted Residual | -1.8 | -.4 | .6 | -1.2 | 1.7 | 1.8 | |
| | Reproductive health | Count | 8 | 1 | 0 | 24 | 16 | 8 | 57 |
| | | % within Geographical context of story | 1.4% | 1.3% | .0% | 3.2% | 2.3% | 3.6% | 2.4% |
| | | Adjusted Residual | -1.8 | -.7 | -1.0 | 1.7 | -.3 | 1.2 | |
| Total | | Count | 564 | 78 | 39 | 756 | 707 | 224 | 2368 |
| | | % within Geographical context of story | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Table 4.2 shows that the coverage of malaria, HIV/AIDS and polio in Nigerian national newspapers about northern Nigeria is relatively higher than other regions covered in this study within the context of the ten most frequently reported health issues in Nigerian newspapers. Though malaria was reported more in the south west the north, this argument is further based on the fact that the adjusted residuals found for the north in relation to these three diseases: malaria (2.1), HIV/AIDS (4.3) and polio (9.4) (Table 4.2) were more than +/-

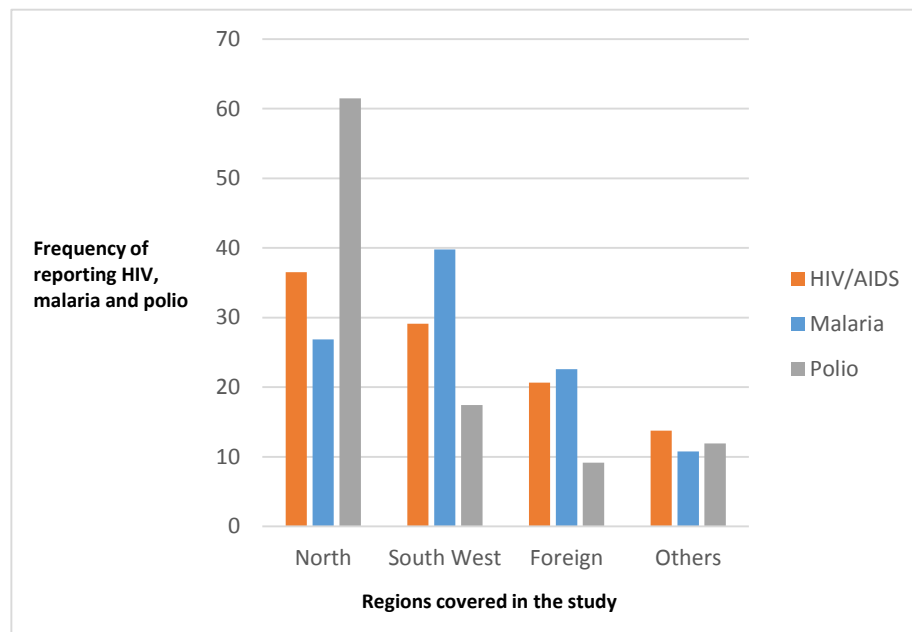
2.0. Kenix (2015) notes that strong effects are found between two variables if adjusted residuals are ± 2.0 because adjusted residuals or the difference between expected and observed counts are used to demonstrate actual effects of any given relationship. Furthermore, the adjusted residuals found for the north in relation to HIV/AIDS, malaria and polio are greater than those found for south-western Nigeria and foreign countries (Table 4.2). This is contrary to the general reportage of health issues in the four national Nigerian newspapers studied, whereby south-western Nigeria dominate all the four national newspapers studied (n=756, 31.9 percent), followed by foreign countries (n=707, 29.9 percent) and northern Nigeria as third (n=564, 23.8 percent) (Table 4.5 and Appendix vi). Therefore, this may inform why the adjusted residuals found for the south west and foreign countries in table 4.2 in relation to health issues other than HIV/AIDS, malaria and polio are greater than those found for the north.

The frequency of newspaper reportage of malaria, HIV/AIDS and polio about northern Nigeria than other regions, as extracted from table 4.2, is reflected below (Table 4.3).

Table 4.3: The coverage of HIV/AIDS, malaria and polio about northern Nigeria, southwestern Nigeria and foreign countries in Nigerian national newspapers from 2010-2013

| Regions | Freq | Percentage | Freq | Percentage | Freq | Percentage |
|----------------|-----------------|-------------------|----------------|-------------------|--------------|-------------------|
| | HIV/AIDS | % | Malaria | % | Polio | % |
| North | 69 | 37 | 25 | 27 | 67 | 61 |
| South West | 55 | 29 | 37 | 40 | 19 | 17 |
| Foreign | 39 | 21 | 21 | 23 | 10 | 9 |
| Others | 26 | 14 | 10 | 11 | 13 | 12 |
| Total | 189 | 100.0 | 93 | 100.0 | 109 | 100.0 |

Figure 4.1: The frequency of coverage of HIV/AIDS, malaria and polio about northern Nigeria, south west and foreign countries in Nigerian national newspapers from 2010-2013



This finding specifically indicates that Nigerian national newspapers have given a relatively significant amount of attention to northern Nigeria in the coverage of malaria, HIV/AIDS and polio than other regions. This argument is based on the adjusted residuals found for the north in relation to these three health problems, namely: malaria: 2.1, HIV/AIDS: 4.3 and polio: 9.4 and a significance value ($p = .000$), which is less than 0.05 ($P = .000 < 0.05$). Therefore, it may be argued further that the relatively high coverage of Nigerian newspapers to the north in relation to these three health problems than other regions, is related to the moderate positive coefficient correlation (.308) found in this study.

This study further determined how Nigerian newspapers have given attention to northern Nigeria in their health coverage generally. This was examined within the geographical context and the position of health stories. This, therefore, shows the level of

prominence given to the north by Nigerian newspapers in their coverage of health issues in general (Table 4.4).

Table 4.4: The geographical context and the position of health stories in Nigerian national newspapers from 2010-2013

Position of story * Geographical context of story Crosstabulation

| | | | Geographical context of story | | | | | | Total |
|-------------------|------------------|--|-------------------------------|-------------|------------|------------|-------------------|---------------|--------|
| | | | North | south south | south east | south west | foreign countries | not indicated | |
| Position of story | lead story | Count | 3 | 0 | 1 | 3 | 1 | 0 | 8 |
| | | % within Geographical context of story | .5% | .0% | 2.6% | .4% | .1% | .0% | .3% |
| | | Adjusted Residual | .9 | -5 | 2.4 | .3 | -1.1 | -9 | |
| other front page | other front page | Count | 10 | 0 | 3 | 11 | 9 | 2 | 35 |
| | | % within Geographical context of story | 1.8% | .0% | 7.7% | 1.5% | 1.3% | .9% | 1.5% |
| | | Adjusted Residual | .7 | -1.1 | 3.2 | -1 | -5 | -8 | |
| back page | back page | Count | 6 | 1 | 0 | 2 | 8 | 2 | 19 |
| | | % within Geographical context of story | 1.1% | 1.3% | .0% | .3% | 1.1% | .9% | .8% |
| | | Adjusted Residual | .8 | .5 | -6 | -2.0 | 1.2 | .2 | |
| inside page | inside page | Count | 543 | 77 | 35 | 740 | 689 | 220 | 2304 |
| | | % within Geographical context of story | 96.3% | 98.7% | 89.7% | 97.9% | 97.5% | 98.2% | 97.3% |
| | | Adjusted Residual | 2.5 | .8 | -2.9 | 1.2 | .3 | .9 | |
| center spread | center spread | Count | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| | | % within Geographical context of story | .4% | .0% | .0% | .0% | .0% | .0% | .1% |
| | | Adjusted Residual | -1.7 | -3 | -2 | -1.0 | -9 | -5 | |
| Total | Total | Count | 564 | 78 | 39 | 756 | 707 | 224 | 2368 |
| | | % within Geographical context of story | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

A cursory look at table 4.4 shows that lead stories about the north were only very slightly above what would be expected. This implies that the north, including other regions, was not prominently covered through lead stories, other front page stories, centre spread and back page stories. This argument is based on the adjusted residuals found for the north in relation to the position of health stories. The adjusted residuals found for the north in relation to the position of health stories were: lead stories (.9), other front page stories (.7), back page (.8), inside page (2.5) and centre spread (-1.7). Except the inside page stories, these adjusted

residuals indicate that the coverage of the north vis-à-vis general health issues in Nigeria was insignificant. This is a reflection of the pattern of newspaper coverage of health issues in Nigeria whereby health issues are mostly restricted to their designated health pages (Table 4.10).

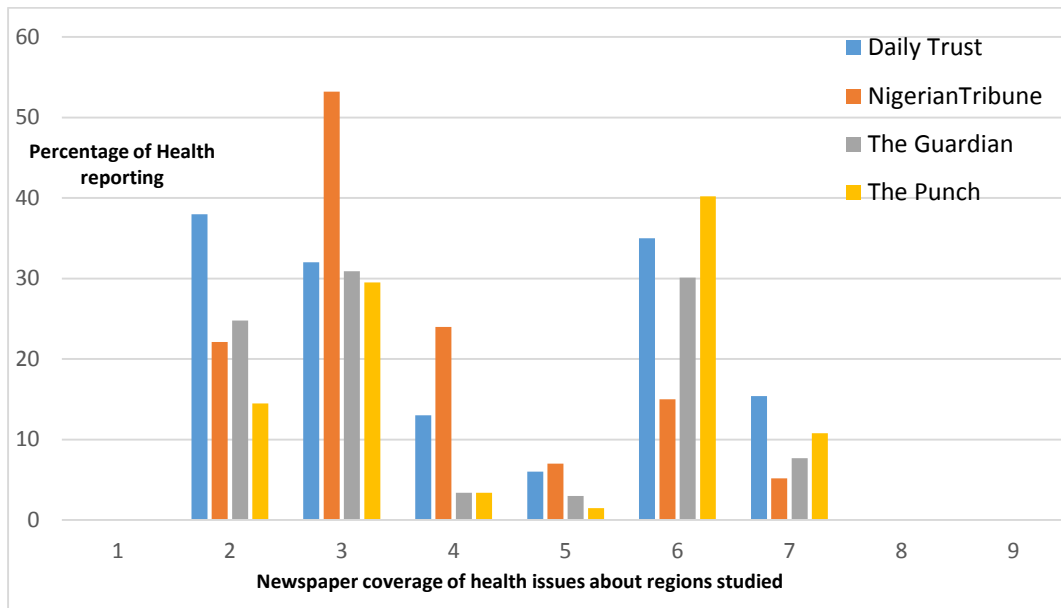
Furthermore, if the coverage of health issues about northern Nigeria (where health problems are mostly prevalent) is generally compared to south-western Nigeria and foreign countries, it is shown that south west and foreign countries were more reported than the north. An illustration of this is depicted below (Table 4.5 and Figure 4.2). This finding is further supported by the adjusted residuals found for the newspapers studied and the regions covered in this thesis (Table 4.5). Except in the *Daily Trust Newspaper*, which is located in the north and mostly reported health issues about northern Nigeria than other regions covered, the adjusted residuals found for both south-western Nigeria and foreign countries generally indicate more strength than those that were found for the north (Table 4.5).

Table 4.5: The geographical context of health reporting in Nigerian national newspapers from 2010-2013

Geographical context of story * Newspaper Crosstabulation

| | | | Newspaper | | | | Total |
|-------------------------------|--|--|-------------|------------------|--------------|-----------|--------|
| | | | Daily Trust | Nigerian Tribune | The Guardian | The Punch | |
| Geographical context of story | North | Count | 188 | 150 | 123 | 103 | 564 |
| | | % within Geographical context of story | 33.3% | 26.6% | 21.8% | 18.3% | 100.0% |
| | | Adjusted Residual | 8.7 | -1.3 | .6 | -7.0 | |
| | south south | Count | 13 | 24 | 17 | 24 | 78 |
| | | % within Geographical context of story | 16.7% | 30.8% | 21.8% | 30.8% | 100.0% |
| | | Adjusted Residual | -.8 | .4 | .2 | .1 | |
| | south east | Count | 6 | 7 | 15 | 11 | 39 |
| | | % within Geographical context of story | 15.4% | 17.9% | 38.5% | 28.2% | 100.0% |
| | | Adjusted Residual | -.8 | -1.5 | 2.7 | -.3 | |
| | south west | Count | 32 | 361 | 153 | 210 | 756 |
| | | % within Geographical context of story | 4.2% | 47.8% | 20.2% | 27.8% | 100.0% |
| | | Adjusted Residual | -13.4 | 14.1 | -.5 | -1.6 | |
| foreign countries | Count | 170 | 102 | 149 | 286 | 707 | |
| | % within Geographical context of story | 24.0% | 14.4% | 21.1% | 40.5% | 100.0% | |
| | Adjusted Residual | 2.9 | -10.0 | .1 | 7.2 | | |
| not indicated | Count | 74 | 35 | 38 | 77 | 224 | |
| | % within Geographical context of story | 33.0% | 15.6% | 17.0% | 34.4% | 100.0% | |
| | Adjusted Residual | 4.9 | -4.5 | -1.5 | 1.5 | | |
| Total | Count | 483 | 679 | 495 | 711 | 2368 | |
| | % within Geographical context of story | 20.4% | 28.7% | 20.9% | 30.0% | 100.0% | |

Figure 4.2: The geographical context of health reporting in Nigerian national newspapers from 2010-2013



As reflected in table 4.5 and figure 4.2, Nigerian newspapers mostly covered the southwest more than other regions in the country, except the *Daily Trust*, which gave more attention to the north in its health coverage. This may be related to the fact that the *Daily Trust* is located in Abuja, the north central geopolitical zone of the country, while the other newspapers studied are located in the southwest. This finding may suggest that Nigerian newspapers are influenced in their health coverage by the environment within which they are located. But given the prevalence of health problems in the north, and the need to complement the ongoing efforts to ameliorate the health condition of the region, it could be argued that Nigerian newspapers should have given more attention to the north than south west and foreign countries in the coverage of health issues in general. Similarly, this study further found that Nigerian newspapers used more photographs in health stories related to south west and foreign countries than the north (Table 4.6).

Table 4.6: The use of photographs in the coverage of health issues in Nigerian newspapers about northern Nigeria and other regions from 2010-2013.

Geographical context of story * Photo diversity Crosstabulation

| | | | Photo diversity | | | Total |
|-------------------------------|--|--|---------------------------|-----------------------------|--------------------|--------|
| | | | coloured with clear faces | black and white clear faces | no photograph used | |
| Geographical context of story | North | Count | 81 | 26 | 457 | 564 |
| | | % within Geographical context of story | 14.4% | 4.6% | 81.0% | 100.0% |
| | | Adjusted Residual | -2.1 | -2.0 | 7.7 | |
| | south south | Count | 8 | 8 | 62 | 78 |
| | | % within Geographical context of story | 10.3% | 10.3% | 79.5% | 100.0% |
| | | Adjusted Residual | -2.7 | .2 | 2.3 | |
| | south east | Count | 5 | 4 | 30 | 39 |
| | | % within Geographical context of story | 12.8% | 10.3% | 76.9% | 100.0% |
| | | Adjusted Residual | -1.5 | .1 | 1.2 | |
| | south west | Count | 133 | 78 | 545 | 756 |
| | | % within Geographical context of story | 17.6% | 10.3% | 72.1% | 100.0% |
| | | Adjusted Residual | -4.0 | 2.8 | 3.1 | |
| | foreign countries | Count | 232 | 79 | 396 | 707 |
| | | % within Geographical context of story | 32.8% | 11.2% | 56.0% | 100.0% |
| | | Adjusted Residual | 7.7 | 3.7 | -8.0 | |
| | not indicated | Count | 78 | 32 | 114 | 224 |
| | | % within Geographical context of story | 34.8% | 14.3% | 50.9% | 100.0% |
| | | Adjusted Residual | 4.6 | 2.5 | -5.7 | |
| Total | Count | 537 | 227 | 1604 | 2368 | |
| | % within Geographical context of story | 22.7% | 9.6% | 67.7% | 100.0% | |

Table 4.6 indicates that Nigerian newspapers published health stories with more photographs in relation to south west and foreign countries than northern Nigeria. Furthermore, the adjusted residuals found for south west and foreign countries in relation to coloured and black and white photographs indicate strong strength, while those found for the north show slightly more than would be expected by chance alone (Table 4.6). In actual fact, the health situation in the north should require more projection through photographs in Nigerian newspapers than other regions. In general, it is observed that the use of photographs in newspapers by journalists is to strategically give attention to some issues, events and places over and above others in their agenda setting function. Therefore, in an overall view,

this finding suggests that Nigerian national newspapers have given less attention to the north through the use of photographs in spite of the prevalence of health problems in the region.

Research Question 1

What is the frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases?

The findings of the content analysis of the 45 health issues covered in this study show that HIV/AIDS, malaria and polio were among the ten most frequently reported health issues by the four Nigerian national newspapers studied from 2010-2013 (Table 4.7, Appendix vi and Figure 4.3). Therefore, the ten most frequently reported health issues out of the 45 health issues were focused in this analysis in order to put the coverage of malaria, HIV/AIDS and polio into a proper perspective. Table 4.7 below specifically shows how Nigerian newspapers have given attention to these three health problems from 2010 – 2013 within the framework of the types of stories (news story, editorial, feature article, column writing, and letter to the editor).

Table 4.7: Types of newspaper stories for the 10 most reported health issues in Nigerian newspapers

Health themes/topics * Type of story Crosstabulation

| | | | Type of story | | | | | Total |
|----------------------|-------------------------------|------------------------|---------------|-----------|-----------------|----------------------------|--------------------------|-------|
| | | | news story | Editorial | Feature article | Column writing/co mmentary | Letters to the editorial | |
| Health themes/topics | Health care delivery | Count | 220 | 1 | 20 | 9 | 1 | 251 |
| | | % within Type of story | 14.4% | 4.0% | 3.2% | 4.9% | 7.7% | 10.6% |
| | | Adjusted Residual | 8.1 | -1.1 | -6.9 | -2.6 | -4 | |
| | Health systems administration | Count | 188 | 2 | 24 | 4 | 3 | 221 |
| | | % within Type of story | 12.3% | 8.0% | 3.9% | 2.2% | 23.1% | 9.3% |
| | | Adjusted Residual | 6.7 | -2 | -5.4 | -3.5 | 1.6 | |
| | HIV/AIDS | Count | 153 | 1 | 25 | 8 | 2 | 189 |
| | | % within Type of story | 10.0% | 4.0% | 4.1% | 4.3% | 15.4% | 8.0% |
| | | Adjusted Residual | 4.9 | -7 | -4.3 | -1.9 | -9 | |
| | Cancer | Count | 83 | 2 | 4 | 11 | 1 | 141 |
| | | % within Type of story | 5.4% | 8.0% | 7.1% | 6.0% | 7.7% | 6.0% |
| | | Adjusted Residual | -1.5 | .4 | 1.4 | .0 | .2 | |
| | Nutrition and balance diet | Count | 43 | 0 | 65 | 6 | 0 | 114 |
| | | % within Type of story | 2.8% | .0% | 10.6% | 3.3% | .0% | 4.8% |
| | | Adjusted Residual | -6.1 | -1.1 | 7.7 | -1.0 | -8 | |
| | Polio | Count | 90 | 1 | 15 | 3 | 0 | 109 |
| | | % within Type of story | 5.9% | 4.0% | 2.4% | 1.6% | .0% | 4.6% |
| | | Adjusted Residual | 4.0 | -.1 | -3.0 | -2.0 | -8 | |
| | Maternal health | Count | 61 | 0 | 30 | 6 | 0 | 97 |
| | | % within Type of story | 4.0% | .0% | 4.9% | 3.3% | .0% | 4.1% |
| | | Adjusted Residual | -.4 | -1.0 | 1.1 | -.6 | -.8 | |
| | Malaria | Count | 62 | 2 | 22 | 6 | 1 | 93 |
| | | % within Type of story | 4.1% | 8.0% | 3.6% | 3.3% | 7.7% | 3.9% |
| | | Adjusted Residual | .4 | 1.1 | -.5 | -.5 | -.6 | |
| | Infant health | Count | 40 | 1 | 29 | 8 | 0 | 78 |
| | | % within Type of story | 2.6% | 4.0% | 4.7% | 4.3% | .0% | 3.3% |
| | | Adjusted Residual | -2.5 | .2 | 2.3 | .8 | -.7 | |
| | Reproductive health | Count | 26 | 1 | 23 | 7 | 1 | 57 |
| | | % within Type of story | 1.7% | 4.0% | 3.6% | 3.8% | 7.7% | 2.4% |
| | | Adjusted Residual | -3.0 | .5 | 2.3 | 1.3 | 1.2 | |
| Total | Count | 1529 | 25 | 616 | 184 | 14 | 2368 | |
| | % within Type of story | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | |

Figure 4.3: The ten most frequently reported health issues in Nigerian national newspapers from 2010-2013

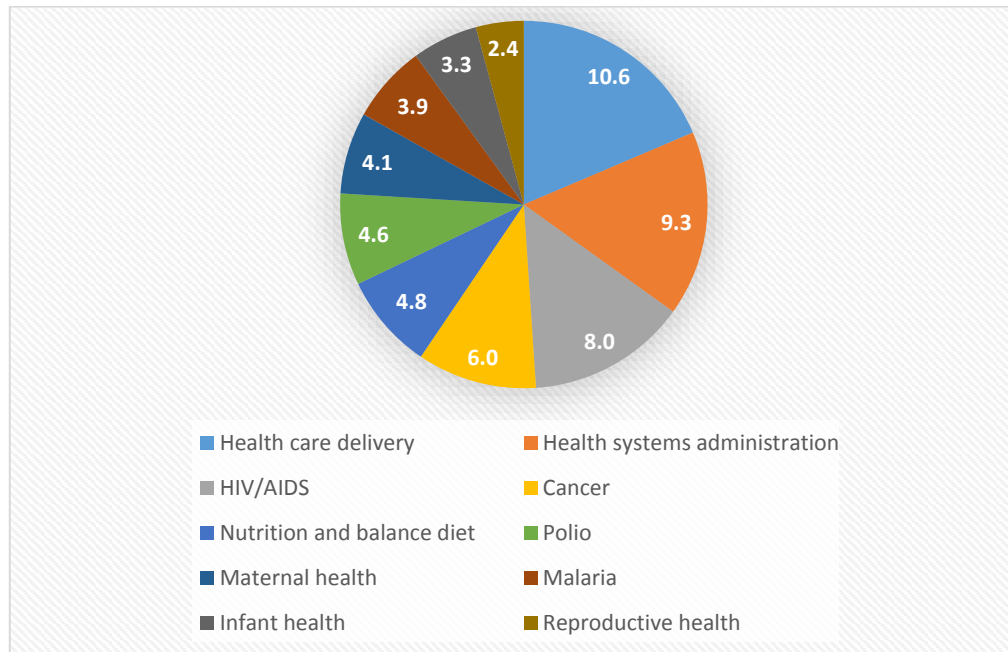


Table 4.7 indicates that Nigerian national newspapers reported malaria and HIV/AIDS through all the various units identified (news story, editorial, feature article, column writing and letter to the editor) in their health coverage. Though the general reportage of health issues through letter to the editor in Nigerian newspapers was low, polio was not reported at all through letter to the editor. However, it is instructive to note that malaria, HIV/AIDS and polio still made the list of the ten most frequently reported health issues in the four Nigerian national newspapers studied (Table 4.7 and Appendix vi). This study investigated this to determine the overall level of attention or coverage that Nigerian newspapers gave to these three global scourges, which are prevalent in Nigeria, leading to huge social and economic losses.

This study found that out of the 45 health issues included for analysis, HIV/AIDS accounted for 8.0 percent out of total health coverage, representing 189 out of 2,368 health

stories analysed in the newspapers. Polio accounted for 4.6 percent, representing 109 health stories, and malaria accounted for 3.9 percent, representing 93 health stories across the newspapers studied. Therefore, HIV/AIDS ranked third among the top ten health issues reported by Nigerian newspapers from 2010 - 2013, while polio and malaria ranked sixth and eighth respectively (Table 4.7 and Appendix vi). It is however, important to observe that newspaper readers in this study seem to be seeking more health information on nutrition and balanced diet. This may imply that they are conscious of living a healthy life (Table 4.7 and Appendix vi).

Given the ranking order of these three diseases among the ten most frequently reported health issues in Nigerian newspapers and among the 45 health issues studied, it may be interpreted that while HIV/AIDS enjoyed a relatively high frequency of coverage, polio and malaria enjoyed a relatively moderate frequency in health coverage by Nigerian newspapers. This argument is further supported by re-categorising all health issues covered in this study (Table 4.8). Table 4.8 shows that there are 12 diseases in the category of infection, 13 diseases in the category of chronic, and 3 under the category of viral.

Table 4.8: Re-categorisation of health themes

| SN | Health Themes | Topics |
|----|--|--|
| 1 | Malaria | Malaria |
| 2 | HIV/AIDS | HIV/AIDS |
| 3 | Polio | Polio |
| 4 | Infections | Tuberculosis, cholera, glaucoma, measles, skin infection, diarrhoea, whooping cough, leprosy, eyes disease, nose related disease, ears infection |
| 5 | Chronic /similar diseases | Diabetes, hypertension, asthma, ulcer, meningitis, haemophilia, cancer, stroke, hepatitis, arthritis, heart disease, Lassa fever, Parkinson |
| 6 | Health care/administration/herbal medicine | Health care delivery, health systems administration, launch of new drugs, health policies, mismanagement of ailment/health, herbal medicine |
| 7 | Viral diseases | Ebola, bacterial/viral infection, botulism |
| 8 | Nutrition/reproductive/mental health | Nutrition and balance diet, reproductive health, mental health, insomnia, alcohol/tobacco intake |
| 9 | Perinatal/maternal/infant health | Neo/ante-natal care, infant health, maternal health |
| 10 | Other | Other |

Crosstabulation analysis was then performed on malaria, HIV/AIDS and polio, and other diseases in order to put the coverage of malaria, HIV/AIDS and polio by Nigerian newspapers into a clear perspective. Furthermore, the crosstabulation analysis focused on diseases only and health issues such as health care, perinatal and others were excluded. Therefore, malaria, HIV/AIDS, polio, infections, chronic/similar diseases and viral diseases were focused for analysis (Table 4.9). Despite the fact that there are 12 diseases in the category of infection, 13 diseases in the category of chronic, and 3 under the category of

viral, the combined percentage of malaria, HIV/AIDS and polio is 41.3, which is relatively high in the context of other diseases.

The adjusted residuals found for HIV/AIDS, malaria and polio in relation to news story and feature article shows significant relationships. The adjusted residuals found for HIV/AIDS in relation to column writing also indicates significant strength (Table 4.9). Adjusted residuals are used to measure the effects between two variables. Strong effects are found between two variables if adjusted residuals are ± 2.0 (Kenix, 2015). This is because adjusted residuals or the difference between expected and observed counts are used to demonstrate actual effects of any given relationship (Kenix, 2015). These findings may further indicate that while HIV/AIDS enjoyed a relatively high frequency of coverage, polio and malaria enjoyed a relatively moderate frequency in health coverage by Nigerian newspapers.

Table 4.9: Crosstabulation of re-categorised diseases and types of newspaper stories

Health themes/topics * Type of story Crosstabulation

| | | | Type of story | | | | | Total |
|----------------------|------------------|-------------------|---------------|-----------|-----------------|----------------------------|--------------------------|-------|
| | | | news story | Editorial | Feature article | Column writing/co mmentary | Letters to the editorial | |
| Health themes/topics | Malaria | Count | 62 | 2 | 22 | 6 | 1 | 93 |
| | | % of Total | 6.6% | .2% | 2.3% | .6% | .1% | 9.8% |
| | | Adjusted Residual | 2.1 | .8 | -2.0 | -.9 | .4 | |
| | HIV/AIDS | Count | 153 | 1 | 25 | 8 | 2 | 189 |
| | | % of Total | 16.2% | .1% | 2.6% | .8% | .2% | 20.0% |
| | | Adjusted Residual | 5.1 | -1.0 | -3.8 | -2.6 | .6 | |
| | Polio | Count | 90 | 1 | 15 | 3 | 0 | 109 |
| | | % of Total | 9.5% | .1% | 1.6% | .3% | .0% | 11.5% |
| | | Adjusted Residual | 4.1 | -.3 | -2.6 | -2.4 | -1.0 | |
| | Infections | Count | 108 | 3 | 44 | 32 | 3 | 190 |
| | | % of Total | 11.4% | .3% | 4.7% | 3.4% | .3% | 20.1% |
| | | Adjusted Residual | -2.7 | .4 | -.2 | 4.2 | 1.5 | |
| | Chronic Diseases | Count | 198 | 5 | 113 | 36 | 1 | 353 |
| | | % of Total | 21.0% | .5% | 12.0% | 3.8% | .1% | 37.4% |
| | | Adjusted Residual | -4.5 | .3 | 4.6 | .9 | -1.3 | |
| | Viral Diseases | Count | 5 | 0 | 5 | 1 | 0 | 11 |
| | | % of Total | .5% | .0% | .5% | .1% | .0% | 1.2% |
| | | Adjusted Residual | -1.4 | -.4 | 1.7 | .0 | -.3 | |
| Total | Count | 616 | 12 | 224 | 86 | 7 | 945 | |
| | % of Total | 65.2% | 1.3% | 23.7% | 9.1% | .7% | 100.0% | |

Similarly, this study further investigated how Nigerian national newspapers positioned health issues on their pages to determine the level of prominence given to malaria, HIV/AIDS and polio among other health issues (Table 4.10 and Appendix vi). In this case, the ten most frequently reported health issues were focused as a basis in order to provide a context for fair interpretation and to enable the study draw a clear conclusion.

Table 4.10: The position of the ten most frequently reported health issues in Nigerian national newspapers from 2010-2013

Health themes/topics * Position of story Crosstabulation

| | | | Position of story | | | | | Total |
|----------------------|-------------------------------|----------------------------|-------------------|------------------|-----------|-------------|---------------|-------|
| | | | lead story | other front page | back page | inside page | center spread | |
| Health themes/topics | Health care delivery | Count | 2 | 0 | 0 | 248 | 1 | 251 |
| | | % within Position of story | 28.6% | .0% | .0% | 3.9% | 50.0% | 10.6% |
| | | Adjusted Residual | 1.3 | -2.1 | -1.5 | 1.6 | 1.8 | |
| | Health systems administration | Count | 1 | 4 | 2 | 214 | 0 | 221 |
| | | % within Position of story | 14.3% | 11.4% | 10.5% | 9.3% | .0% | 9.3% |
| | | Adjusted Residual | .3 | .4 | .2 | -.4 | -.5 | |
| | HIV/AIDS | Count | 1 | 6 | 6 | 176 | 0 | 189 |
| | | % within Position of story | 12.5% | 17.1% | 31.6% | 7.6% | .0% | 8.0% |
| | | Adjusted Residual | .5 | 2.0 | 3.8 | -3.7 | -.4 | |
| | Cancer | Count | 0 | 5 | 1 | 135 | 0 | 141 |
| | | % within Position of story | .0% | 14.3% | 5.3% | 5.9% | .0% | 6.0% |
| | | Adjusted Residual | -.7 | 2.1 | -.1 | -1.2 | -.5 | |
| | Nutrition and balance diet | Count | 0 | 2 | 0 | 112 | 0 | 114 |
| | | % within Position of story | .0% | 5.7% | .0% | 4.9% | .0% | 4.8% |
| | | Adjusted Residual | -.6 | .3 | -1.0 | .6 | -.3 | |
| | Polio | Count | 0 | 4 | 3 | 102 | 0 | 109 |
| | | % within Position of story | .0% | 11.4% | 15.8% | 4.4% | .0% | 4.6% |
| | | Adjusted Residual | -.6 | 1.9 | 2.3 | -2.5 | -.3 | |
| | Maternal health | Count | 1 | 1 | 0 | 95 | 0 | 97 |
| | | % within Position of story | 12.5% | 2.9% | .0% | 4.1% | .0% | 4.1% |
| | | Adjusted Residual | 1.2 | -.4 | -.9 | .4 | -.3 | |
| | Malaria | Count | 0 | 1 | 0 | 92 | 0 | 93 |
| | | % within Position of story | .0% | 2.9% | .0% | 4.0% | .0% | 3.9% |
| | | Adjusted Residual | -.6 | -.3 | -.9 | 1.0 | -.3 | |
| | Infant health | Count | 1 | 0 | 1 | 76 | 0 | 78 |
| | | % within Position of story | 12.5% | .0% | 5.3% | 3.3% | .0% | 3.3% |
| | | Adjusted Residual | 1.5 | -1.1 | -.5 | .1 | -.3 | |
| | Reproductive health | Count | 0 | 1 | 0 | 56 | 0 | 57 |
| | | % within Position of story | .0% | 2.9% | .0% | 2.4% | .0% | 2.4% |
| | | Adjusted Residual | -.4 | .2 | -.7 | .4 | -.2 | |
| Total | Count | 8 | 35 | 19 | 2304 | 2 | 2368 | |
| | % within Position of story | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | |

Generally, the trend of health coverage in Nigerian national newspapers shows that the lead story (the most important story of the day in any newspaper), other front page stories, back page and centre page stories were overwhelmingly not devoted to the coverage of health issues in Nigeria (Table 4.10 and Appendix vi). For instance, all the adjusted residuals found for the ten most frequently reported health issues in relation to lead stories were less than +/- 2.0, which show less strength, and further supports the fact that Nigerian newspapers did not give prominent attention to health issues. It is important to note that lead story, other front

page stories, back page and centre page stories in newspapers are generally known as the most strategic sections through which newspapers across the world set agendas for the public, and issues reported on these pages, are accorded a relatively high importance by members of the public. The practice of not reporting health issues in these important pages by Nigerian national newspapers may imply that newspapers in the country restrict health reportage to their traditional designated health pages (inside pages). This is reflected in this study as it was found that inside page stories were significantly devoted to the coverage of health issues in Nigerian newspapers (Table 4.5). This may further mean that health issues are given less prominence in Nigerian national newspapers.

While it may be argued that Nigerian newspapers have given a relatively high frequency coverage to HIV/AIDS and a moderate coverage to polio and malaria in relation to other medical issues, it is also important to note that Nigerian newspapers have not given a significant prominence to malaria, HIV/AIDS and polio, as well as other health issues, in their health reportage. This finding is based on the overwhelming level of restriction of health stories to their traditional designated health pages in Nigerian newspapers. Despite the fact that it is a global practice that newspapers designate a few pages as health pages to report health issues, the case of Nigerian newspapers may be regarded as extreme and this raises concerns considering the prevalence of malaria, HIV/AIDS and polio in Nigeria and their social and economic consequences.

Furthermore, photographs are a major element in newspaper reporting in journalism practice as journalists strategically use them to accord prominence to issues and by extension, to rank stories on the pages of newspapers. Therefore, this study investigated how Nigerian newspapers used photographs in the reportage of health issues in Nigerian national newspapers. This attempt further reveals how malaria, HIV/AIDS and polio have been projected in Nigerian newspapers through photographs (Table 4.11 and Appendix vi).

Table 4.11: The use of photographs in the coverage of the ten most frequently reported health issues in Nigerian newspapers from 2010-2013

| | | | Photo diversity | | | Total |
|----------------------|-------------------------------|--------------------------|---------------------------|-----------------------------|--------------------|--------|
| | | | coloured with clear faces | black and white clear faces | no photograph used | |
| Health themes/topics | Health care delivery | Count | 31 | 20 | 200 | 251 |
| | | % within Photo diversity | 5.8% | 8.8% | 12.5% | 10.6% |
| | | Adjusted Residual | -4.1 | -.9 | 4.3 | |
| | Health systems administration | Count | 41 | 10 | 170 | 221 |
| | | % within Photo diversity | 7.6% | 4.4% | 10.6% | 9.3% |
| | | Adjusted Residual | -1.5 | -2.7 | 4.3 | |
| | HIV/AIDS | Count | 16 | 17 | 156 | 189 |
| | | % within Photo diversity | 3.0% | 7.5% | 9.7% | 8.0% |
| | | Adjusted Residual | -4.9 | -.3 | 4.5 | |
| | Cancer | Count | 32 | 11 | 98 | 141 |
| | | % within Photo diversity | 6.0% | 4.8% | 6.1% | 6.0% |
| | | Adjusted Residual | .0 | -.7 | .5 | |
| | Nutrition and balance diet | Count | 44 | 19 | 51 | 114 |
| | | % within Photo diversity | 8.2% | 8.4% | 3.2% | 4.8% |
| | | Adjusted Residual | 4.2 | 2.6 | -5.4 | |
| | Polio | Count | 19 | 4 | 86 | 109 |
| | | % within Photo diversity | 3.5% | 1.8% | 5.4% | 4.6% |
| | | Adjusted Residual | -1.3 | -2.1 | 2.6 | |
| | Maternal health | Count | 30 | 4 | 63 | 97 |
| | | % within Photo diversity | 5.6% | 1.8% | 3.9% | 4.1% |
| | | Adjusted Residual | .9 | .1 | -.9 | |
| | Malaria | Count | 17 | 14 | 62 | 93 |
| | | % within Photo diversity | 3.2% | 6.4% | 3.9% | 3.9% |
| | | Adjusted Residual | -1.0 | 1.8 | -.2 | |
| | Infant health | Count | 25 | 8 | 45 | 78 |
| | | % within Photo diversity | 4.7% | 3.5% | 2.8% | 3.3% |
| | | Adjusted Residual | 2.0 | .2 | -1.9 | |
| | Reproductive health | Count | 20 | 7 | 30 | 57 |
| | | % within Photo diversity | 3.7% | 3.1% | 1.9% | 2.4% |
| | | Adjusted Residual | 2.3 | .7 | -2.5 | |
| Total | | Count | 537 | 227 | 1604 | 2368 |
| | | % within Photo diversity | 100.0% | 100.0% | 100.0% | 100.0% |

This study found that Nigerian national newspapers published more health stories without photographs than health stories with photographs. The combined number of health stories that used coloured and black and white photographs was less than health stories that were reported without photographs in the ten most frequently reported health issues in Nigerian newspapers (Table 4.11). In regards to HIV/AIDS, malaria and polio and the use of photographs in Nigerian newspapers, the adjusted residuals found for malaria show less

strength, polio only indicates slightly more than would be expected by chance alone in relation to black and white photographs. It is only HIV/AIDS that shows strong strength in relation to coloured photographs (Table 4.11)

However, it is noteworthy that while most of the health stories in Nigerian newspapers were published without photographs, health stories with coloured photographs were published more than health stories that were reported with black and white photographs. Conventionally, journalists use photographs to place prominence on stories, to authenticate stories, to tell the story in more depth and to appeal to the emotion of readers. Therefore, looking at the proportion of health stories published without photographs and the ones that were published with photographs, it may be argued that health issues have not received significant prominence in Nigerian national newspapers.

Overall, it may be argued that within the framework of the units of coverage (news story, editorial, feature article, column writing and letter to the editor), position of story, the use of photographs and in the context of the 45 health issues content analysed, there was a moderate coverage of malaria, HIV/AIDS and polio in Nigerian newspapers. One major area that is observed as extremely low in health coverage by Nigerian newspapers is the position of health stories, where only HIV/AIDS story was reported once as lead.

Another area of low coverage are other important sections of newspapers (other front page stories, back page, centre page and editorial), which may imply that the level of prominence given to malaria, HIV/AIDS and polio and health issues in general by Nigerian national newspapers is still low. This is because, despite the fact that most issues such as politics, economy, education, health and religion have their designated pages, Nigerian newspapers still report any of these issues on the important sections/pages to show the level of prominence accord to such an issue. It, therefore, implies that less prominence was given

to the reportage of health issues in Nigerian newspapers as they (health issues) were mainly restricted to their designated health pages.

However, in term of general coverage, this study holds that there was a relatively high coverage of HIV/AIDS while there was a relatively moderate coverage of malaria and polio by Nigerian national newspapers between 2010 and 2013 within the context of the 45 health issues analysed. In other words, it may be interpreted that the coverage of HIV/AIDS in Nigerian national newspapers is considered high because it ranked third among the 45 health issues content analysed. Furthermore, the coverage of polio and malaria in Nigerian national newspapers is considered moderate because both health problems were ranked sixth and eighth respectively among the 45 health issues analysed.

The findings of this content analysis on the coverage of malaria, HIV/AIDS and polio in relation to northern Nigeria and the frequency of reporting these three health issues in Nigerian newspapers in relation to other diseases, indicate that Nigerian newspapers seem to be aware of the prevalence of malaria (though malaria is covered more in relation to the south west), HIV/AIDS and polio in the north. The awareness of this prevalence, and the fact that malaria, HIV/AIDS and polio are global health issues, may have informed why Nigerian newspapers have reported on them in relation to northern Nigeria more than other regions covered in this study.

However, these findings further suggest that Nigerian newspapers have not given the north the same level of attention received in relation to malaria, HIV/AIDS and polio, when compared to the reportage of general health issues in Nigeria. This point is important given that northern Nigeria has the highest prevalence rates of, not only malaria, HIV/AIDS and polio in Nigeria, but also notable for many communicable and non-communicable diseases. The north also has the largest population profile in the country. Despite these important facts

about the north, the coverage of general health issues in Nigeria tilted more towards south-western Nigeria and foreign countries. This further emphasises the fact that Nigerian newspapers are generally influenced in their health reportage by the environment within which they are located (since most of them are located in the south west), and perhaps, through international publications on health issues, such as academic health publications, health reports from the World Health Organisation, the World Bank, the Centres for Diseases Control and Preventio and other international health agencies.

4.3 Concluding remarks

This chapter generally reports the coverage of health issues by Nigerian newspapers with particular reference to HIV/AIDS, malaria and polio from 2010 to 2013. The level of attention given to northern region in the coverage of health issues by Nigerian newspapers is also reported in this section of the thesis. In summary, the findings from the content analysis component of this research indicate that Nigerian newspapers have not given prominent attention to health issues in general. This is because all important sections of Nigerian newspapers (lead stories, other front page story, editorials, center spread and back page stories) did not significantly report health issues.

Despite the fact that health issues were mainly reported on the inside pages of Nigerian newspapers, it is, however, found that HIV/AIDS, malaria and polio were among the ten most frequently reported health issues among the 45 health issues analysed in this study. Furthermore, it is indicated in this chapter that among all the geographical regions covered, HIV/AIDS, malaria and polio were reported in relation to the north more than other regions except the southwest where malaria was reported more than the north. Having presented the findings of the content analysis aspect of this study in this chapter, the next chapter presents the findings from the survey component of the research.

CHAPTER FIVE

Dissemination of Health Information by Nigerian Newspapers and Correlation Analysis on the Health Behaviours of Newspaper Readers in Nigeria

5.1 Introduction

This chapter presents the data analysis and interpretation of findings in relation to Hypotheses II of the study. This hypothesis examines the survey portion of this thesis. Hypothesis II specifically examines the perception of newspaper readers in Nigeria on health information they seek from Nigerian newspapers to explore whether there may be relationships between that perception and their health behaviours.

5.2 Findings

Demographic variables of survey respondents

In any survey study, the demographic variables of respondents allow researchers to know how close the sample resembles the study population (Stoutenborough, 2008). Demographic variables are also the major means of identifying the characteristics that are likely to influence or shape the opinions of survey respondents and/or correlate with their perceptions, attitudes, experiences and behaviours (Stoutenborough, 2008). It is further stated that:

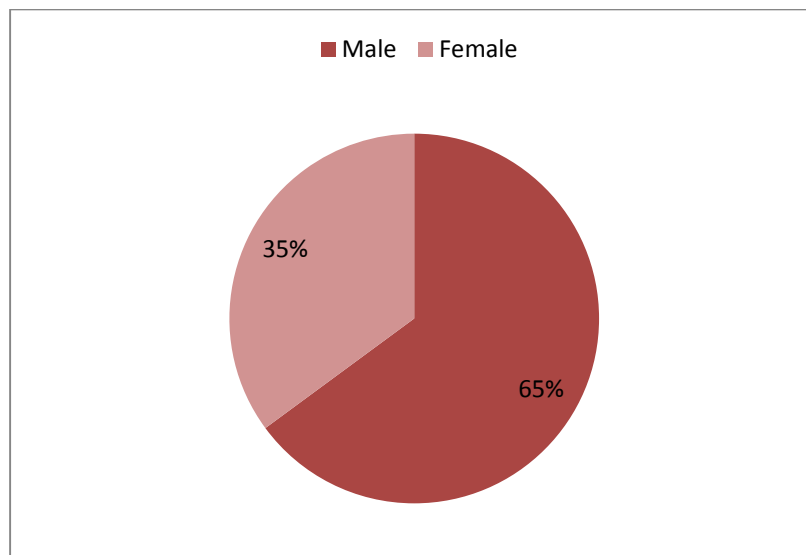
Demographic measures are important because numerous studies have demonstrated that opinions are formed primarily through an individual's environment. This environment socialises us to think and behave in accordance with community norms and standards. As a result, by identifying these demographic measures, pollsters are better suited to understand the nature of public opinion and possibly how it might be formed and modified. (Stoutenborough 2008, p. 186)

In this study, the gender distribution of survey respondents indicates that there were more male newspaper readers than female newspaper readers with about 65 percent and 35 percent respectively (Table 5.1 and Figure 5.1). Given that this study surveyed literate Nigerians who were newspaper readers, it may be interpreted that this finding is a reflection of the national literacy level between male and female in Nigeria. The Nigerian National Bureau of Statistics (2010) and the United Nations Education and Scientific Organisation (2012) report the literacy level of male and female in Nigeria as 65.1 percent and 34.9 percent respectively.

Table 5.1: Gender distribution of survey respondents

| Gender | Frequency | Percentage |
|---------|-----------|------------|
| Male | 474 | 64.9 |
| Female | 256 | 35.1 |
| Total n | 730 | 100 |

Figure 5.1: Gender distribution of survey respondents



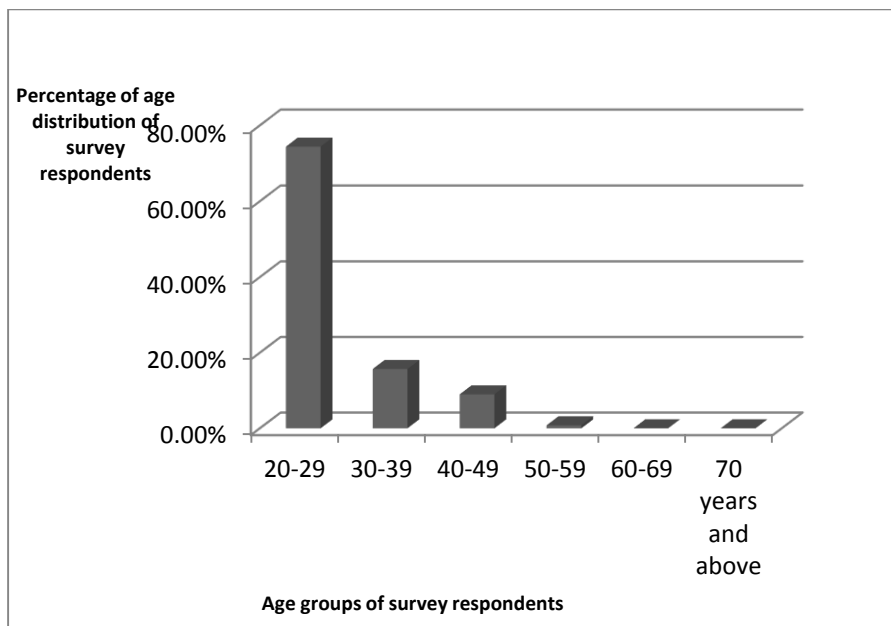
This study found that the age range of the survey respondents influenced the mode of newspaper (online or hardcopy) through which they seek health information in Nigeria. The

majority of survey respondents belong to 20-29 age group while people of ages 30-39 were the second largest age group to complete the survey (Table 5.2 and Figure 5.2).

Table 5.2: Age distribution of survey respondents

| Age | Frequency | Percentage |
|--------------------|-----------|------------|
| 20-29 | 539 | 74.4 |
| 30-39 | 114 | 15.7 |
| 40-49 | 65 | 9.0 |
| 50-59 | 6 | 0.8 |
| 60-69 | 0 | 0 |
| 70 years and above | 0 | 0 |
| Total n | 724 | 100 |

Figure 5.2: Age distribution of survey respondents

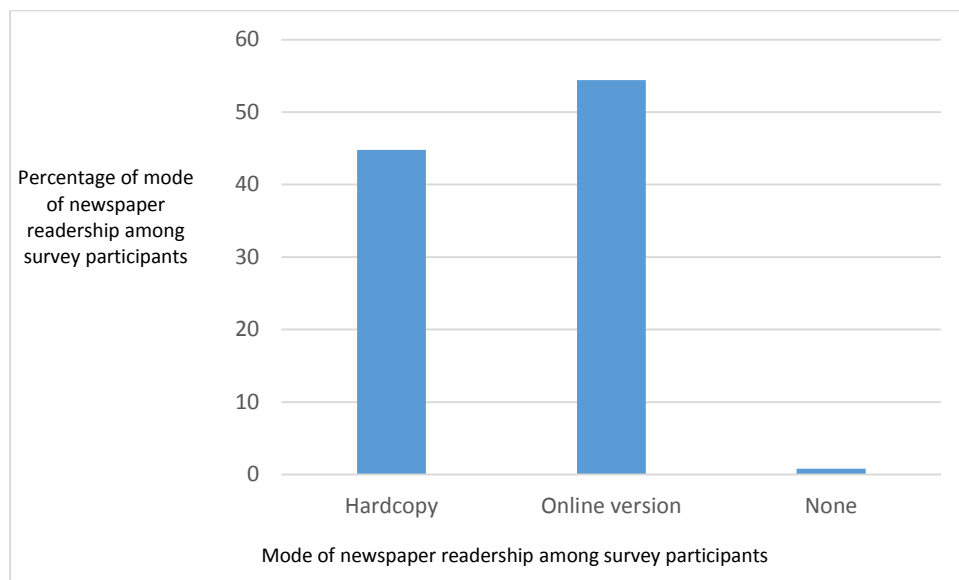


Thus, the largest proportion of survey respondents was of the active young age, which may be why the online newspaper was more preferred than the hardcopy version among the entire survey participants (Table 5.3 and Figure 5.3).

Table 5.3: Mode of newspaper readership preference among study participants

| Mode of readership | Frequency | Percentage of Preference |
|---------------------------|------------------|---------------------------------|
| Hardcopy | 322 | 44.8 |
| Online version | 396 | 54.4 |
| None | 6 | 0.8 |
| Total n | 724 | 100 |

Figure 5.3: Mode of newspaper readership preference among study participants



The study, however, found that though the overwhelming majority of survey participants were of an active young age, all respondents within the age bracket of 50-59 (100 percent) preferred to read hardcopy newspapers than online newspapers. Survey respondents within the age group of 40-49 were the second largest (71 percent) to prefer reading hardcopy newspapers while respondents within the age group of 30-39 were the third (45.6 percent) in this category. Respondents within the age bracket of 20-29 mostly (42.1 percent) preferred to read less hardcopy newspapers across the entire survey (Table 5.4).

Conversely, this study shows that the younger the survey participants, the more likely they preferred reading online newspapers. This is because most of the respondents (56.7 percent) within the age group of 20-29 preferred reading online newspapers (Table 5.4). The majority of respondents within the age group of 30-39 (54.4 percent) had preference for online newspaper readership while 28.8 percent of the respondents within the age group of 40-49 preferred reading online newspapers.

However, those in the 30-39 age group reported a preference for hardcopy newspaper slightly more than would be expected by chance alone. The preference of respondents within the age group of 50-59 shows that none of them read online newspapers. Furthermore, the adjusted residuals found for each age group as reflected in table 5.4 below demonstrate moderate strength between each age group and its mode of newspaper readership. This is because “adjusted residuals, or the difference between expected and observed counts, are used to demonstrate actual effects of any given relationship. Strong effects of a particular case of one variable on a particular case of another variable are found if adjusted residuals are +/- 2.0 points.” (Kenix, 2015, p. 563)

Table 5.4: Correlation between age groups and mode of newspaper readership among survey participants

Which mode of newspaper do you read more? * age Crosstabulation

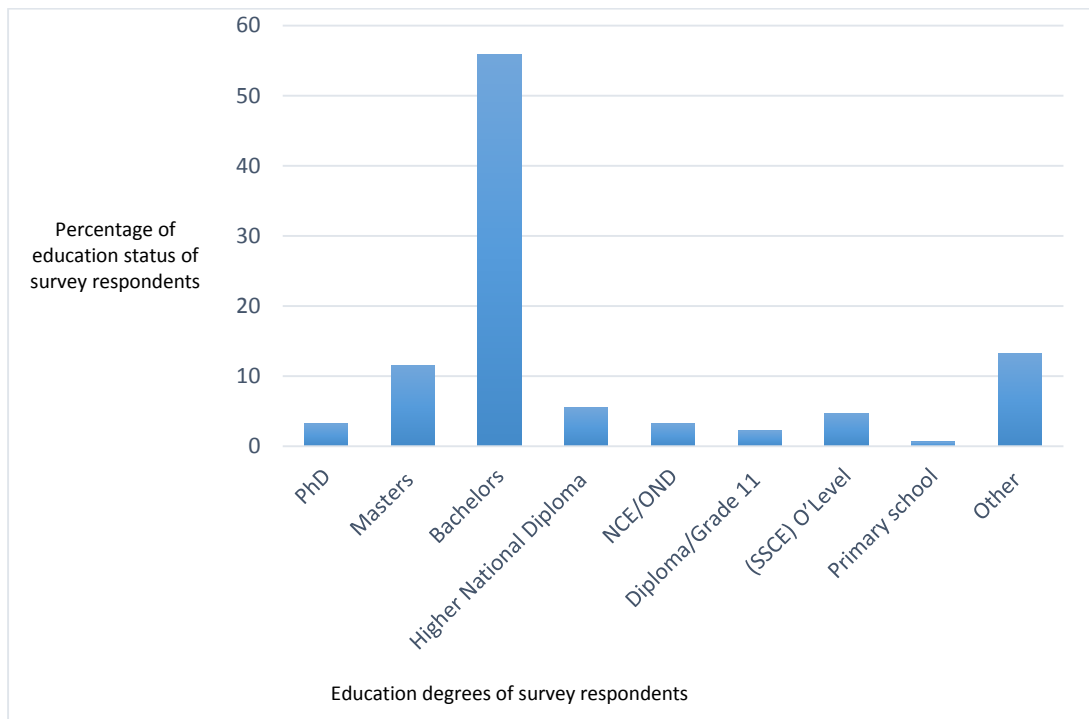
| | | | age | | | | Total |
|---|--|--|--------|--------|--------|--------|--------|
| | | | 20-29 | 30-39 | 40-49 | 50-59 | |
| Which mode of newspaper do you read more? | Hardcopy | % within Which mode of newspaper do you read more? | 70.3% | 16.5% | 11.8% | 1.5% | 100.0% |
| | | % within age | 42.1% | 45.6% | 71.2% | 100.0% | 44.8% |
| | | Adjusted Residual | -2.4 | 2.2 | 4.3 | 2.3 | |
| | on line version | % within Which mode of newspaper do you read more? | 77.9% | 16.1% | 4.4% | 1.6% | 100.0% |
| | | % within age | 56.7% | 54.4% | 28.8% | .0% | 54.4% |
| | | Adjusted Residual | 2.1 | -2.1 | -4.1 | -2.2 | |
| | none | % within Which mode of newspaper do you read more? | 100.0% | .0% | .0% | .0% | 100.0% |
| | | % within age | 1.1% | .0% | .0% | .0% | .8% |
| | | Adjusted Residual | 1.4 | -1.1 | -.7 | -.2 | |
| Total | % within Which mode of newspaper do you read more? | 74.6% | 16.1% | 8.4% | .8% | 100.0% | |
| | % within age | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | |

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 (Table 5.5 and Figure 5.4). 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.

Table 5.5: Education status of survey respondents

| Education | Frequency | Percentage |
|-------------------------|-----------|------------|
| PhD | 23 | 3.2 |
| Masters | 84 | 11.5 |
| Bachelors | 408 | 55.9 |
| Higher National Diploma | 40 | 5.5 |
| NCE/OND | 23 | 3.2 |
| Diploma/Grade 11 | 16 | 2.2 |
| (SSCE) O'Level | 34 | 4.7 |
| Primary school | 6 | 0.6 |
| Other | 96 | 13.2 |
| Total n | 730 | 100 |

Figure 5.4: Education status of survey respondents



Specifically, the study found that 86.1 percent of those holding Bachelor Degrees belong to the age group of 20-29 (Table 5.6). This finding is related to the fact that 74.4 percent of the total sample of survey respondents were 20-29 years old and this may further support why the online version of newspapers was more preferred among the entire survey respondents. The adjusted residual found for the 20-29 age group and Bachelor Degree (8.0) (Table 5.6) demonstrates strong strength, which further supports this finding.

This study also found that 51.2 percent of Masters Degree holders belong to the age group of 40-49 while 73.9 percent of survey participants who had PhD Degree belong to the age group of 30-39 (Table 5.6). The adjusted residuals of 14.4 found for the 30-39 age group and Masters Degree, and 7.8 found for the age group of 40-49 and PhD Degree demonstrate strong strength and further support these findings. While this study found that only 1.5 percent of those holding Bachelor Degree were 50-59 years old, it also shows that all survey participants (100 percent) within the age group of 50-59 had a Bachelor Degree (Table 5.6). The adjusted residual found for the 50-59 age group and Bachelor Degree (2.2) is slightly more than would be expected by chance alone (Table 5.6).

Table 5.6: Crosstabulation between age and education variables of survey respondents

| | | | education * age Crosstabulation | | | | Total |
|-----------------|--------------------|--------------------|---------------------------------|--------|--------|--------|--------|
| | | | age | | | | |
| | | | 20-29 | 30-39 | 40-49 | 50-59 | |
| education | Ph.D | % within education | 26.1% | 73.9% | .0% | .0% | 100.0% |
| | | % within age | 1.1% | 14.9% | .0% | .0% | 3.2% |
| | | Adjusted Residual | -5.4 | 7.8 | -1.5 | -.4 | |
| Master | % within education | 14.3% | 34.5% | 51.2% | .0% | 100.0% | |
| | % within age | 2.2% | 25.4% | 66.2% | .0% | 11.6% | |
| | Adjusted Residual | -13.4 | 5.0 | 14.4 | -.9 | | |
| Bachelor | % within education | 86.1% | 9.7% | 2.7% | 1.5% | 100.0% | |
| | % within age | 64.2% | 34.2% | 16.9% | 100.0% | 55.5% | |
| | Adjusted Residual | 8.0 | -5.0 | -6.6 | 2.2 | | |
| HND | % within education | 42.5% | 30.0% | 27.5% | .0% | 100.0% | |
| | % within age | 3.2% | 10.5% | 16.9% | .0% | 5.5% | |
| | Adjusted Residual | -4.8 | 2.5 | 4.2 | -.6 | | |
| NCE/OND | % within education | 100.0% | .0% | .0% | .0% | 100.0% | |
| | % within age | 4.3% | .0% | .0% | .0% | 3.2% | |
| | Adjusted Residual | 2.9 | -2.1 | -1.5 | -.4 | | |
| Diploma | % within education | 100.0% | .0% | .0% | .0% | 100.0% | |
| | % within age | 3.0% | .0% | .0% | .0% | 2.2% | |
| | Adjusted Residual | 2.4 | -1.7 | -1.3 | -.4 | | |
| SSCE | % within education | 85.3% | 14.7% | .0% | .0% | 100.0% | |
| | % within age | 5.4% | 4.4% | .0% | .0% | 4.7% | |
| | Adjusted Residual | 1.5 | -.2 | -1.9 | -.5 | | |
| Pry Sch Cert | % within education | 100.0% | .0% | .0% | .0% | 100.0% | |
| | % within age | 1.1% | .0% | .0% | .0% | .8% | |
| | Adjusted Residual | 1.4 | -1.1 | -.8 | -.2 | | |
| Other | % within education | 87.5% | 12.5% | .0% | .0% | 100.0% | |
| | % within age | 15.6% | 10.5% | .0% | .0% | 13.3% | |
| | Adjusted Residual | 3.1 | -.9 | -3.3 | -1.0 | | |
| Total | % within education | 74.4% | 15.7% | 9.0% | .8% | 100.0% | |
| | % within age | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | |

Research Hypothesis II

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.

This study tested research Hypothesis II by correlating questions five and eight of the questionnaire (Appendix iv). With a correlation coefficient value of .343 calculated using SPSS and a significance value (p) .000, which is less than 0.05 ($P = .000 < 0.05$), the study

found that there was a medium, positive correlation between the two tested variables [$r=.343$, $n=742$, $p=.000$]. J. Cohen (1988) classifies a correlation coefficient value (r) of .03 and less than .05 as medium.

Table 5.7: Correlation coefficient value for Hypothesis II

| 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).

This study, therefore, found a correlation between the dissemination of health information by Nigerian newspapers and the perception of survey respondents that health information improves their own health behaviours. This 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, this 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.

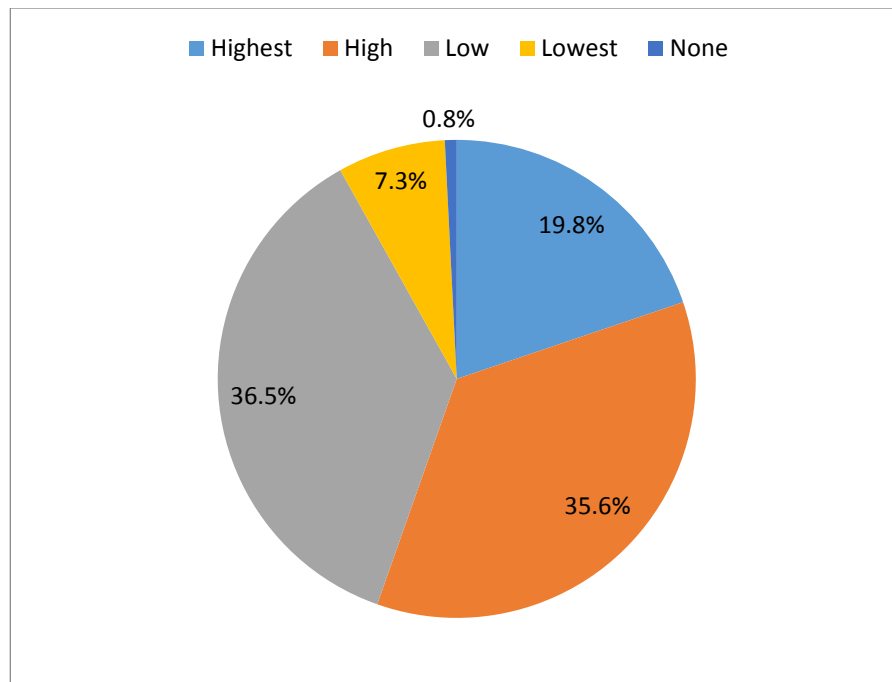
This study further reports the findings of other questions asked in the survey in order to support and strengthen the findings of Hypothesis II of the study (*Perceived dissemination of health information by Nigerian newspapers will be related to the self-reported health behaviours of newspaper readers in Nigeria*). These other findings, which were done through descriptive statistics, give an indepth analysis on the relationship between the dissemination of health information in Nigerian newspapers and the health behaviours of newspaper readers.

This study, therefore, examines the degree of access to newspapers that survey respondents have. This is because it is one thing for newspapers to publish health stories, while it is another matter for newspaper readers to read these health stories. This can only be achieved by newspaper readers having access to newspapers. This study found that most respondents (55.4 percent) reported either high or highest degree of access to newspapers (Table 5.8 and Figure 5.5). It may be interpreted that people who work in formal organisations in Nigeria tend to have access to newspapers as survey participants in this study were drawn from various government organisations and ministries.

Table 5.8: Reported degree of access to newspapers among survey respondents

| Degree of access | Frequency | Percentage |
|-------------------------|------------------|-------------------|
| Highest | 143 | 19.8 |
| High | 258 | 35.6 |
| Low | 264 | 36.5 |
| Lowest | 53 | 7.3 |
| None | 6 | 0.8 |
| Total n | 724 | 100 |

Figure 5.5: Reported degree of access to newspapers among survey respondents

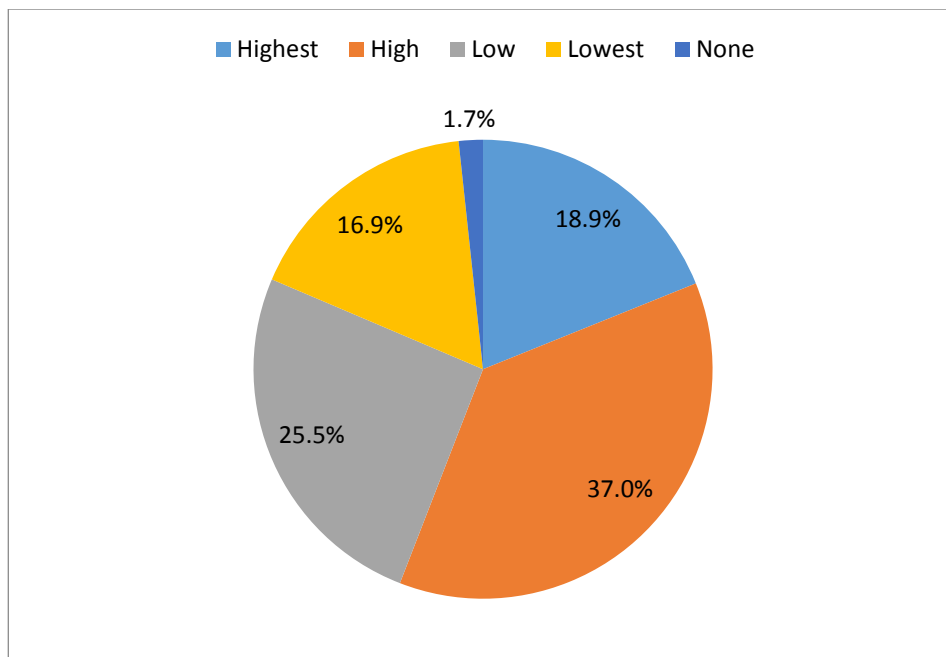


Access to newspapers does not necessarily determine the degree of readership. This study, therefore, examines the degree of newspaper readership among survey respondents. It was found that 414 respondents (55.9 percent) read newspapers at a high degree, which implies that survey respondents in general read newspapers at least three times in a week (Table 5.9 and Figure 5.6). The fact that survey respondents in general read newspapers at least three times in a week may mean that they are more likely to be exposed to newspaper messages including health information.

Table 5.9: Reported degree of newspaper readership among survey respondents

| Degree of readership | Frequency | Percentage |
|------------------------------------|-----------|------------|
| Highest (Everyday) | 136 | 18.9 |
| High (At least three times a week) | 266 | 37.0 |
| Low (Once a week) | 183 | 25.5 |
| Lowest (Once a month/occasionally) | 121 | 16.9 |
| None | 12 | 1.7 |
| Total n | 718 | 100 |

Figure 5.6: Reported degree of newspaper readership among survey respondents



Having determined the degree of newspaper readership among survey respondents, this study further investigated the actual hours survey respondents dedicated to reading newspapers every week as the frequency with which newspaper readers access health information may contribute to the degree of effects on their health behaviours. The study

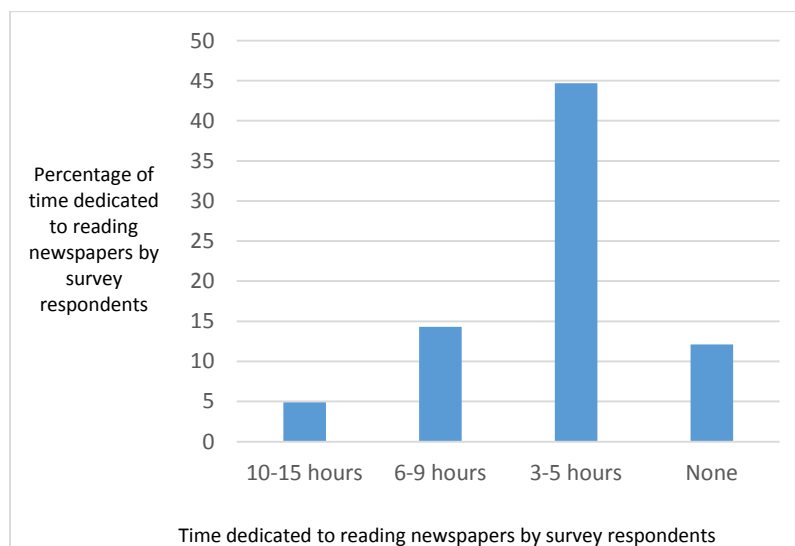
found that 4.9 percent (n=35) dedicated 10-15 hours to reading newspapers weekly while 14.3 percent (n=103) read newspapers for 6-9 hours (Table 5.10 and Figure 5.7). A large number of people, representing 44.7 percent of respondents (n=321), spent 3-5 hours reading newspapers on weekly basis, while 24 percent (n=172) devoted between 1 and 2 hours of their time to reading newspapers every week. This finding suggests that the average time devoted to reading newspapers by survey participants may be regarded as relatively average.

Though there is no national data on the time or hours devoted to newspaper readership in Nigeria, this finding is supported by the report of the United Kingdom National Readership Survey (2007). The United Kingdom National Readership Survey (2007) found that the average daily time devoted by readers to reading newspapers in the United Kingdom is 40 minutes, which translates into 4 hours and 6 minutes in a week. It is, however, important to note that the average time (3-5 hours or more) dedicated by survey respondents to reading newspapers weekly may have been facilitated through online newspaper readership. This is because most of them reported that they read online newspapers. Also, the fact that most of the survey respondents work in government organisations and ministries, where they have access to newspapers without necessarily buying a copy, may have also facilitated the degree of time they dedicate to reading newspapers weekly.

Table 5.10: Reported degree of time dedicated to reading newspaper on weekly basis among survey respondents

| Time dedicated to newspaper readership | Frequency | Percentage |
|---|------------------|-------------------|
| 10-15 hours | 35 | 4.9 |
| 6-9 hours | 103 | 14.3 |
| 3-5 hours | 321 | 44.7 |
| 1-2 hours | 172 | 24.0 |
| None | 87 | 12.1 |
| Total n | 718 | 100 |

Figure 5.7: Reported degree of time dedicated to reading newspaper on weekly basis among survey respondents



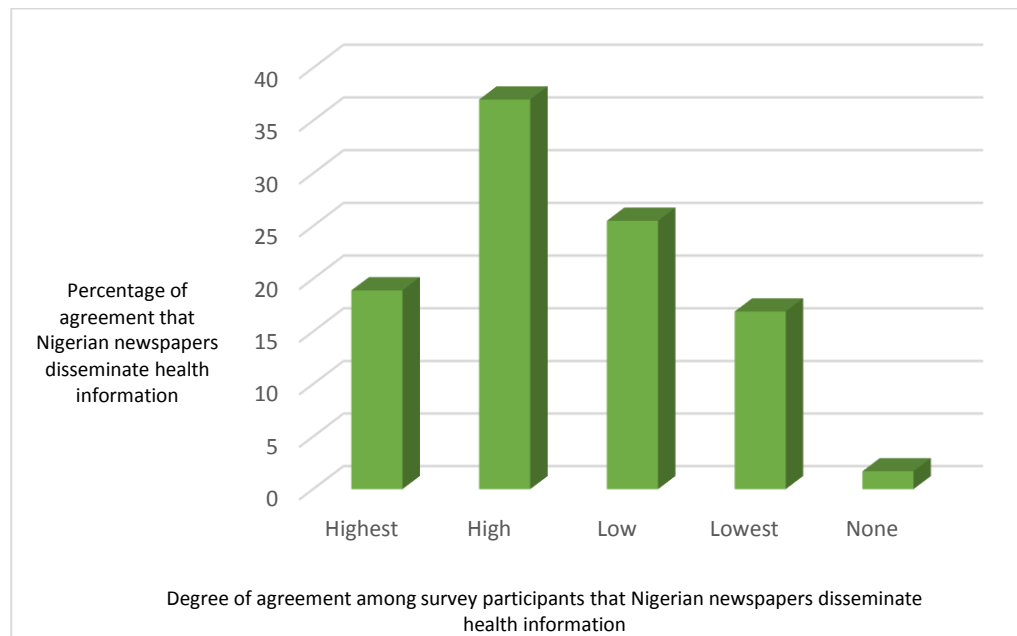
Newspapers disseminate information on various issues, including but not limited to health, to inform, educate and entertain members of the public. This study investigates the degree to which newspaper readers believed that Nigerian newspapers publish health

information for the benefit of the Nigerian public. It was found that 21.4 percent of respondents (n=155) agreed at the highest level that Nigerian newspapers disseminate information on health issues, 42.4 percent (n=307) agreed at a high level and 32.0 percent (n=232) agreed at a low level (Table 5.11 and Figure 5.8). This indicates that survey respondents believe that Nigerian newspapers disseminate information on various health issues for the benefit of the Nigerian public.

Table 5.11: Reported degree of agreement among survey respondents that Nigerian newspapers disseminate information on various health issues for the benefits of the public

| Degree of agreement | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| Highest | 155 | 21.4 |
| High | 307 | 42.4 |
| Low | 232 | 32.0 |
| Lowest | 18 | 2.5 |
| None | 12 | 1.7 |
| Total n | 724 | 100 |

Figure 5.8: Reported degree of agreement among survey respondents that Nigerian newspapers disseminate information on various health issues for the benefits of the public

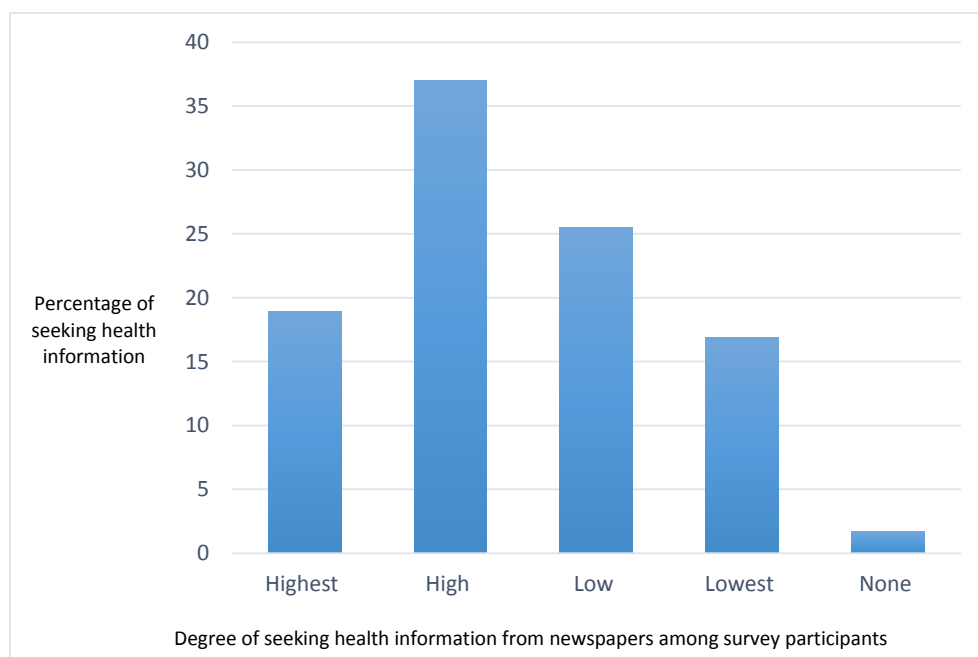


Having found that survey respondents believe that Nigerian newspapers disseminate information on health issues, it is imperative to investigate the degree to which newspaper readers seek health information from Nigerian newspapers as this is central to the thesis of this study. In this regard, the study found that survey respondents seek health information from Nigerian newspapers at different degrees. Specifically, 9.2 percent of respondents (n=68) agreed at the highest level that they seek health information from Nigerian newspapers and approximately 45 percent agreed at a high level (n=330) and 33.2 percent (n=246) agreed at a low level (Table 5.12 and Figure 5.9).

Table 5.12: Reported degree of seeking health information from newspapers among survey respondents

| Degree of access | Frequency | Percentage |
|------------------|-----------|------------|
| Highest | 58 | 9.5 |
| High | 324 | 45.1 |
| Low | 228 | 31.8 |
| Lowest | 81 | 11.3 |
| None | 17 | 2.4 |
| Total n | 718 | 100 |

Figure 5.9: Reported degree of seeking health information from newspapers among survey respondents



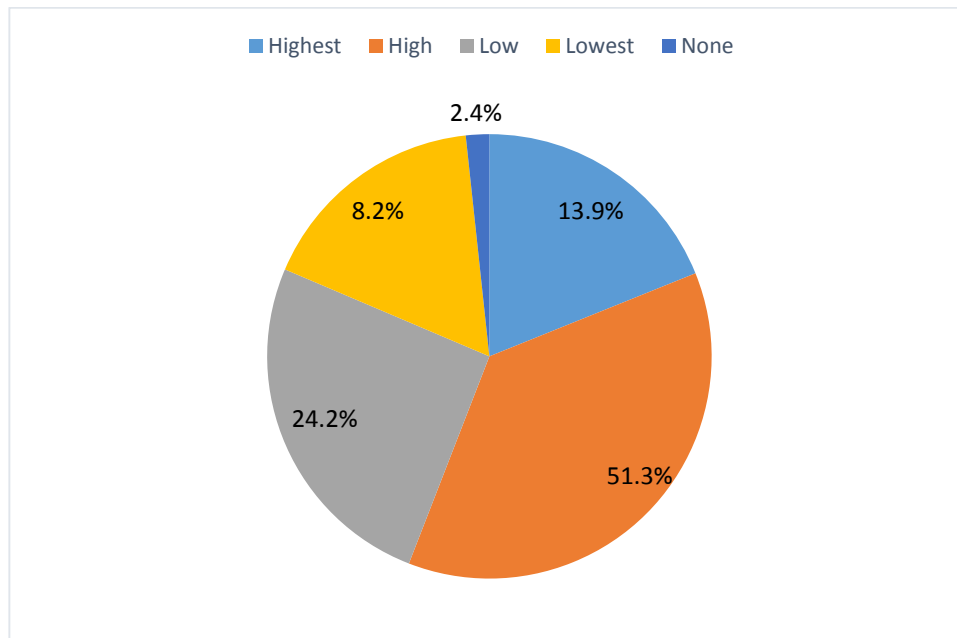
As this study has established that about 54 percent of survey participants seek health information at a reported high level from Nigerian newspapers (Table 5.12), the study further investigates the possible effects of this health information on their health behaviours. In other

words, this study investigates the relationship between the degree of health information sought from newspapers and participants' health behaviours. It was found that the majority of the survey participants (65.2 percent, n=468) agreed at a high level that seeking health information from Nigerian newspapers has improved their general health behaviours (Table 5.13 and Figure 5.10). The findings from tables 5.12 and 5.13, which show that most of the survey respondents seek health information from Nigerian newspapers and they also believe that such a practice has improved their health behaviours, further support the moderate correlation coefficient value of .343 and significance value (p).000 found for Hypothesis II of the study (*Perceived dissemination of health information by Nigerian newspapers will not be related to the self-reported health behaviours of newspaper readers in Nigeria*).

Table 5.13: Reported degree of agreement by survey respondents that seeking health information from newspapers has improved their general health behaviours

| Degree of agreement | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| Highest | 100 | 13.9 |
| High | 368 | 51.3 |
| Low | 174 | 24.2 |
| Lowest | 59 | 8.2 |
| None | 17 | 2.4 |
| Total n | 718 | 100 |

Figure 5.10: Reported degree of agreement by survey respondents that seeking health information from newspapers has improved their general health behaviours



This study identified 34 health issues which survey respondents seek information about from newspapers and sampled the opinions of respondents to determine which health issues they mostly seek information about. Survey respondents selected as many as possible health issues in their responses. The survey found that the top ten health issues among respondents include HIV/AIDS (53.7 percent, n= 402), nutrition (51.7 percent, n=387), malaria (42.1 percent, n=315), ebola⁶ (41.2 percent, n=308 respondents), diabetes (37.0 percent, n=252), cancer (33.7 percent, n= 252) skin infections (33.6 percent, n=251), hypertension (24.6 percent, n=184), diarrhoea (24.3 percent, n=182), and polio and heart disease, which both consisted of 23.1 percent of responses (n=173).

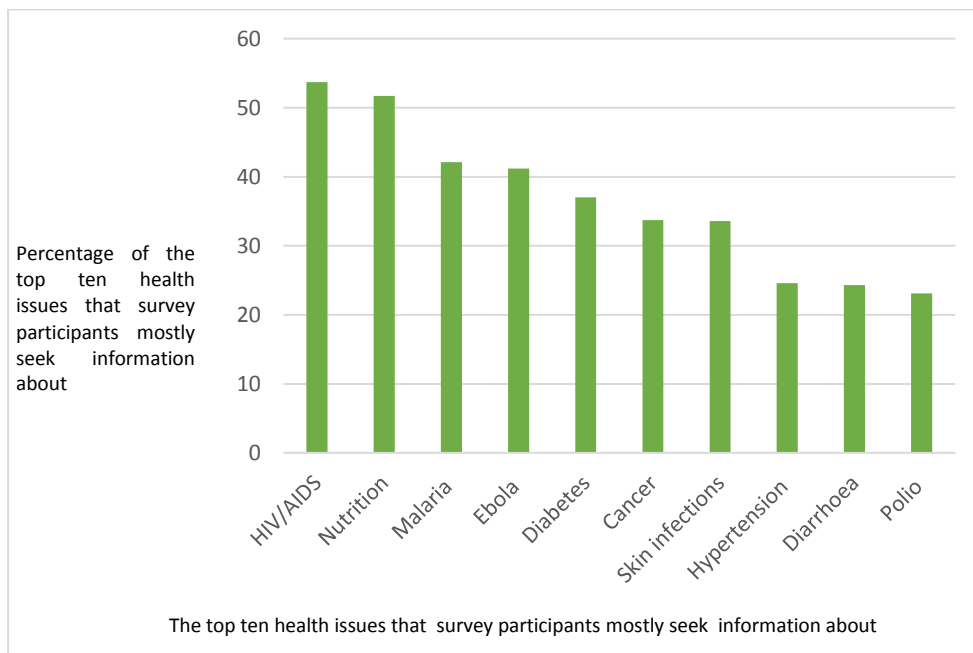
⁶ The data collection of this study was coincidentally carried out during the Ebola virus disease outbreak in Nigeria. The Ebola outbreak lasted for two months from July-August, 2014.

Table 5.14: Health issues that survey participants report seeking information about from Nigerian newspapers

| Health issues | Frequency | Percentage |
|------------------------------|------------------|-------------------|
| HIV/AIDS | 402 | 53.7 |
| Nutrition | 387 | 51.7 |
| Malaria | 315 | 42.1 |
| Ebola | 308 | 41.2 |
| Diabetes | 277 | 37.0 |
| Cancer | 252 | 33.7 |
| Skin infections | 251 | 33.6 |
| Hypertension | 184 | 24.6 |
| Diarrhoea | 182 | 24.3 |
| Polio | 173 | 23.1 |
| Heart disease | 173 | 23.1 |
| Cholera | 166 | 22.2 |
| Infertility | 160 | 21.4 |
| Ulcer | 155 | 20.7 |
| Stroke | 147 | 19.7 |
| Maternal health | 124 | 16.6 |
| Infant health | 123 | 16.4 |
| Health care delivery | 112 | 15 |
| Meningitis | 87 | 11.6 |
| Tuberculosis | 87 | 11.6 |
| Lassar fever | 82 | 11 |
| Asthma | 77 | 10.3 |
| Health system administration | 76 | 10.2 |
| Measles | 69 | 9.2 |
| Insomnia | 65 | 8.7 |
| Mental illness | 59 | 7.9 |
| Neo/antenatal care | 57 | 7.6 |

| | | |
|---------------------------------|----|-----|
| Health facilities/ personnel | 57 | 7.6 |
| Whooping cough | 35 | 4.7 |
| Arthritis | 35 | 4.7 |
| Leprosy | 29 | 3.9 |
| Heamophilia | 24 | 3.2 |
| Glaucoma | 23 | 3.1 |
| Other | 30 | 4 |

Figure 5.11: The top ten health issues survey respondents in Nigeria report seeking information about from Nigerian newspapers

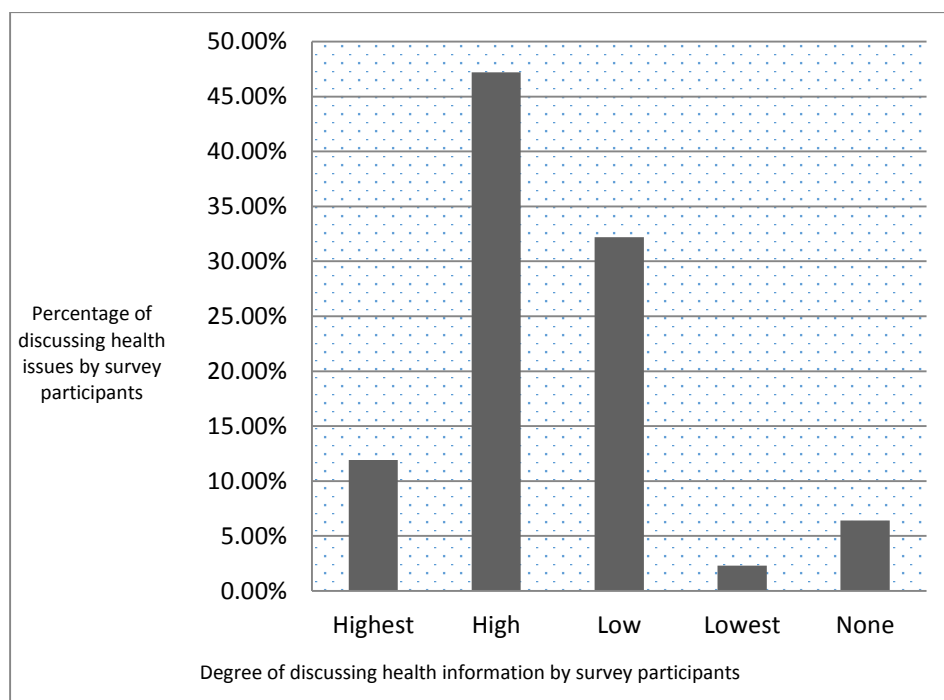


The influence of social interactions through interpersonal communication of mass media messages among media consumers was further confirmed by this study. It was found that about 59 percent of survey respondents agreed that they discuss health information accessed from Nigerian newspapers with friends, family members, professional colleagues and other people (Table 5. 15 and Figure 5.12).

Table 5.15: Reported degree of discussing health information or information on health issues accessed from newspapers with friends, family members, colleagues in office and others

| Degree of discussion | Frequency | Percentage |
|----------------------|-----------|------------|
| Highest | 88 | 11.9 |
| High | 348 | 47.2 |
| Low | 237 | 32.2 |
| Lowest | 17 | 2.3 |
| None | 47 | 6.4 |
| Total n | 748 | 100 |

Figure 5.12: Reported degree of discussing health information accessed from newspapers with friends, family members, colleagues in office and others



5.3 Concluding remarks

As reported in various studies that people still seek health information from newspapers for health awareness, which may have some degree of impacts on their health behaviours (Dutta-Bergman, 2004; Hoover & Cross, 2009; Kealey & Berkman; 2009; Catalan-Matamoros et al., 2007; Towel & Rodney, 2010), survey respondents within the context of this thesis confirmed that they also seek health information from Nigerian newspapers. They further note that such a habit helps them to improve their health behaviours.

With these findings, it may be interpreted that newspapers can have some degree of effects on the health behaviours of people who seek out health information from them (newspapers). Importantly however, the effects of seeking health information from newspapers on the behaviours of newspaper readers may not be very powerful or strong enough to achieve an effective health outcomes among people. In other words, seeking health information from newspapers alone may not be sufficient to have powerful or strong effects on the health behaviours of people. This argument may be supported with the moderate positive correlation found in this research between seeking health information from Nigerian newspapers and the health behaviours of newspapers readers. This also resonates with the consensus among health communication scholars and practitioners that effective public health outcomes cannot be achieved through the use of mass media alone but with the integration of other forms of communication, especially interpersonal communication (see Tomori et al., 2014; LaCroix et al., 2014; Ishikawa & Kiuchi, 2010; Nacinovich & Langdon-Neuner, 2011). This is why strategies like social marketing, health literacy, media literacy, social and behavioural social communication and therapeutic communication are now popular in public health campaigns.

CHAPTER SIX

Newspaper Coverage of Health Issues in Nigeria: An Assessment of the Challenges Involved and the Influence of Global Health Campaigns

6.1 Introduction

This chapter presents the data analysis and interpretation of findings from the in-depth interviews conducted with thirteen (13) health reporters in Nigeria. These interviews were in order to answer research questions 2-4 that are related to this aspect of the study, namely: (i) Does health and science training influence health reporting among newspaper health reporters in Nigeria? (ii) What are the general challenges involved in health reporting among newspaper health reporters in Nigeria (iii) Do global health campaigns influence newspaper coverage of malaria, HIV/AIDS and polio in Nigeria? This chapter is presented according to the following subthemes:

- i. An assessment of the influence of health and science training in health reporting among newspaper health reporters in Nigeria
- ii. The challenges involved in newspaper coverage of health issues among Nigerian journalists
- iii. The influence of global health campaigns in the coverage of HIV/AIDS, malaria and polio in Nigerian newspapers

As noted in chapter three of the study, these 13 health reporters were selected from the 20 national newspapers in Nigeria. The study selected one health reporter from each newspaper organisation and all the 13 health reporters have spent five years or more in newspaper health reporting in Nigeria. The newspapers within which the health reporters were selected include: *Daily Independent*, *The Vanguard*, *Nigerian Tribune*, *The Guardian*, *New Telegraph*, *National Mirror*, *Daily Trust*, *The Sun*, *The Hallmark*, *The Nation*, *The*

Union, Business Day and The Punch. The educational background of the 13 health reporters showed that six of them have a background in sciences such as biochemistry, industrial chemistry, microbiology and zoology while seven others were trained in mass communication and other related fields. Four out of the six health reporters that have a background in sciences have also received formal training in journalism culminating into advanced diploma, postgraduate diploma while the two others have also received journalism training through various workshops and seminars with ordinary certificates.

6.2 An assessment of the influence of health and science training in health reporting among newspaper health reporters in Nigeria

Unlike many areas of journalism, health reporting, is regarded as a specialised field because it involves information of a technical nature. *The Sun* health reporter (2014) notes that the technical nature of health reporting involves health jargon and terminology, interpretation of scientific findings, establishing relationships with health researchers and professionals and interpreting health reports, data and statistics. Therefore, the same health reporter likens the technical nature of health reporting to studying medicine. According to this health reporter, “in health reporting, a health reporter is meant to present issues like a doctor using the same terminologies and giving the same explanations.” (*The Sun* health reporter, 2014) In the view of *The Vanguard* health reporter (2014), “reporting health is different from reporting any other beats in journalism because as health reporters, we are not conduit pipes who just relay information that is passed to us to the public. We also make impact on peoples’ lives through the information we relay because we disseminate health information from the point of view of specialised knowledge.”

Health reporting is, as argued by the health reporter from *The Sun*, “based on universal standards and procedures that go beyond individual reporters’ views. A seasoned health reporter must comply with these standards. This is the reason why health reporters are trained

and retrained at what I describe as schools of health reporting.” (*The Sun* health reporter, 2014) In the view of this health reporter, schools of health reporting are the regular training courses and seminars organised by the United Nations, the World Health Organisation, national governments, non-governmental organisations and other international agencies. That same health reporter notes that in those courses and seminars, health issues are discussed in a modular form; in forms of topics because health issues have different registers, terminologies, and all that are associated with them.

Health reporting requires an appreciable degree of health and scientific expertise or training so that health reporters are able to relate well with the world of health and science. This necessity has presented health reporters with a range of challenges and consequences. Health reporters do not always have health and science-related degrees as many of them are trained in mass communication, journalism, arts or social sciences (Schwitzer et al. 2005; Week et al., 2007). Similarly, this study has found that six out of the thirteen health reporters interviewed have health and science related degrees while the other seven were trained in mass communication and other related disciplines. This, however, may not be a true reflection of the distribution of educational degrees among health reporters in both print and electronic media in Nigeria. This is because the interview participants in this study were limited to the national newspapers in Nigeria. Specifically, all the seven health reporters who have mass communication related degrees confirmed that they confront challenges due to a lack of health and science background training. But generally, all health reporters interviewed confirmed that they all encounter general challenges in newspaper health reporting within Nigerian environment.

According to the *Daily Trust* health reporter (2014), a lack of health and science training poses enormous challenges to health reporters as most of them find it very difficult to cover technical sessions in health and science because it is not their primary field of study.

This same health reporter further contends that most health reporters who have mass communication related degrees often require an expert to explain the health and scientific terminologies encountered at such sessions. Moreover, the *Daily Independent* health reporter (2014) states that “health reporters need to use different medical terminologies because they cover different areas of specialisations in the medical field. These include general medical practice, paediatrics, neurology, surgery, community and family health and a host of other specialities.” This, therefore, “makes health reporting a challenging task.” (*Daily Independent* health reporter, 2014)

Similarly, the *Daily Trust* health reporter (2014) argues that “due to the specialised field of health, it takes a longer time for health reporters who have no background in health and science to understand many of the terminologies involved.” This health reporter states further that

There are always breakthroughs in the field of HIV/AIDS. Sometimes those of us without a background in science find it difficult to understand the technicalities involved in all these breakthroughs. When a health expert begins to extrapolate HIV 1, 2 and 3, as a health reporter, I begin to wonder what all these classifications are. The most important thing is to report HIV and its consequences to Nigerian readers. The general public is less concerned about the HIV typology. This situation becomes complex to cope with because some of us have no background in health and science. (*Daily Trust* health reporter, 2014)

The view of this health reporter in relation to medical terminologies reflects the technical nature of health reporting field. This further confirms that health reporters who have no background in health and science have a challenging situation to cope with given that they must perform their professional duty of health reporting.

The Hallmark health reporter (2014) states that “reporting health issues without a health and science background is a major challenge, especially at the beginning of health reporting

career. This is because health experts and professionals often use medical abbreviations and acronyms without considering the background of most journalists.” Moreover, the health reporter from the *National Mirror* states that “specifically, in relation to my arts background, yes, I experience many challenges in health reporting in Nigeria but the fact is that you cannot claim to be a health reporter without living up to the expectations.” (*National Mirror* health reporter, 2014)

Also, the *New Telegraph* health reporter states that “since most health reporters do not have a science background, a good number of them have difficulties when it comes to issue like obstetrics and gynaecology.” (*New Telegraph* health reporter, 2014) and “in my observation, a lack of health and science training affects the level to which health reporters understand health and science-related subjects and the level of reporting such health related subjects.” (*The Union* health reporter, 2014) The health reporter from *The Nation*, however, contends that “technical knowledge required in health reporting alone does not determine the overall competency of health reporters as journalism training fairly teaches them how to handle all areas of reportage.” (*The Union* health reporter, 2014)

As noted earlier, health reporters who have a background in health and science also confirmed that health reporting in Nigeria is very challenging, especially for those with no background in health and science. According to *The Sun* health reporter (2014), a graduate of zoology, with eleven years of experience in health reporting in Nigeria, “health reporting is a strange world to those who have no background in health and science training. This is because such reporters would come in contact with topics such as human anatomy, microorganisms and different diseases.”

The Punch health reporter (2014), a degree holder in biochemistry and a health reporter in Nigeria for more than five years, further argues that:

There are challenges for our colleagues who have no background in health and sciences. The question of understanding and relating easily with the world of health and science is a big one to most of them. There is a big divide. At conferences or other functions that are health or science based, where we need to pay attention to all details, some of them find it difficult to relate well with such situations. There are some health reports that are also very difficult for some of them to disseminate to a lay man. Some of them make gross errors by twisting some health reports upside down due to a lack of health and science background knowledge.

6.2.1 Effects of a lack of health and science training among health reporters in Nigeria

Due to the technical nature of health reporting, most of the health reporters interviewed in this study confirm that a lack of health and science background has consistently generated conflicts between them and health researchers in Nigeria. The health reporters interviewed note that these conflicts mostly occur between health experts and health reporters who have no background in health and science. “This is why most health experts and professionals in Nigeria do not trust health stories on pages of newspapers because of what they perceive to be inaccuracies, misrepresentation of facts, quoting out of context, misleading information and a lack of comprehensiveness, as a result of the limited technical knowledge of most health reporters.” (*The Guardian* health reporter, 2014)

According to the *Daily Independent* health reporter (2014),

I learnt not to assume in health reporting when I got a knock from a renowned professor of health and science in Nigeria. The professor requested me to review an environmental book published by a group of universities collated by the United Nations for Nigerian readership. I assumed and misinterpreted some sections of the book and the experience was not palatable for me and two reasons accounted for this: I have no background in health and science and I was just two years into my health reporting career.

The experience of this health reporter further confirms the need for an appreciable degree of science expertise in health reporting. It may be argued that the two-year job experience in health reporting may not have been an excuse for misinterpreting some sections of the book if the health reporter were trained in health and science field. One of the major accusations from health professionals, as noted by the health reporter from the *Daily Trust*, is that “reporters do not give enough attention to necessary details in their health stories.” (*Daily Trust* health reporter, 2014).

Similarly, *The Hallmark* health reporter (2014) confirms that “health experts and professionals also complain about inaccurate and misrepresented facts and these issues have caused conflicts between health reporters and those working in medical fields.” However, despite these complaints from health experts in Nigeria, two health reporters in this study without health and science background specifically claim that they have not experienced any conflict with health experts in Nigeria. These two health reporters have not received any negative complaints or comments from health experts in Nigeria because they claim that they are thorough on their job, they follow a defined procedure and verify health claims perhaps, more than other health reporters in their category (those who have no background in health and science). These two health reporters are among the health reporters who believe and emphasise the need for self-development and self-regulation in the line of health reporting duty. The ability of these two health reporters to uphold these principles in their professional duties more than others may make them to experience little or no negative complaints from health experts in Nigeria.

The first one is *The Nation* health reporter (2014) who asserts that:

I have not experienced any bad encounters with health researchers in Nigeria. It has always been a good experience for me as far as health reporting is concerned. This is because I have learnt to do my job thoroughly. I am so thorough to the extent that I

don't leave a gap that could lead to negative reactions from any health or science researcher in the country.

The second health reporter, who claims not to have experienced any bad encounters from health experts is the health reporter from *The Union*. According to this health reporter, “the ability of a reporter to follow a defined procedure and verification of health claims from the established health institutes in Nigeria have been the guiding principles. I have personally adopted it in my job and thus far, things are working well for me in the field of health reporting.” (*The Union* health reporter, 2014).

For health reporters with a health and science background, they have a good advantage and enjoy a good audience from health and science experts. This is reflected in the opinions of health reporters from the *Business Day*, *The Guardian*, *Nigerian Tribune*, *The Punch* and *The Vanguard*. These health reporters state that they do not have problems with inaccurate and misrepresented or misleading information in health reporting. *The Guardian* health reporter (2014) puts this in a perspective. “In a simple analysis, there is lack of trust from health and science researchers in Nigeria to health reporters because they doubt the capacity and competencies of journalists to handle health and science information very well. It is a problem for many of my colleagues who do not have a background in science.” Furthermore, this same health reporter states that:

In my own case, I was very privileged to have been a scientist before joining journalism practice. It has made the job much easy for me all through and that is why a good number of health experts and professionals in Nigeria are quite comfortable to relate with me. And because of my science expertise, I have many sources that easily give me health information in Nigeria.” (*The Guardian* health reporter, , 2014)

The opinion of the health reporter from *The Guardian*, a degree holder in Botany, further confirms the challenges being faced by health reporters who have no background in health and science, which affects their relationship with health experts and professionals in

Nigeria. This may suggest that health reporters who have a health and science background seem to find health reporting easier than their colleagues who are trained in mass communication and other related fields. It may also be suggested that health experts in Nigeria seem to be more comfortable in relating with health reporters who have a health and science background than health reporters who are not trained in health and science.

The Vanguard health reporter, a degree holder in Chemistry, corroborates this view. “My science expertise and a long-standing practice in health reporting have earned me a good relationship with many health experts, Nigeria Medical Association (NMA) and several medical and para-medical associations in Nigeria. They know my pedigree so they need not question my competencies and credibility. The point I am making is that most of the experts tend to entertain suspicion on health stories as they often complain of misrepresentation of fact and inaccurate information. This is because some health journalists do not have the required science competencies to relate well with some aspects of health and science issues.”

(*The Vanguard* health reporter, 2014)

6.2.2 Lack of health and science training among health reporters: Managing and coping with the challenge

Newspaper health reporters in Nigeria have devised a number of ways to manage the challenges they encounter in health reporting within the context of health and science training. The *Daily Trust* health reporter (2014) states that “some of the ways we adopt in managing the challenges include attending seminars, workshops and short courses on health reporting to gain knowledge and sharpen our journalism/ health reporting skills.” This health reporter argues further that “attending these courses is essential for reporters to learn and understand the terminologies involved in reporting health issues.” (*Daily Trust* health reporter, 2014) It is further stressed by that same health reporter that attending training

sessions on health reporting has helped improve their job performance and and ability to check for errors in their writing.

Furthermore, the *Daily Independent* health reporter (2014) notes that “there are terminologies and a number of issues that are critical in health reporting. All of these are demystified at various health reporting seminars and workshops that we have attended so far. Through these trainings and re-trainings, we have been able to communicate much better in health reporting.” Many journalists in Nigeria, in the opinion of this health reporter, “have attended training sessions in health reporting in and outside Nigeria and this has made them better professionals.” (*Daily Independent* health reporter, 2014). This same health reporter maintains that “these trainings have helped teach reporters in Nigeria how to conduct investigative health reporting, how to obtain contacts, how to write high-quality articles with minimal errors and how to provide a human angle in stories.” (*Daily Independent* health reporter, 2014). It is further noted by the *Daily Independent* health reporter that these training sessions have improved the productivity of many health reporters in Nigeria and consequently, these courses are described by the same health reporter as an eye-opening and a means to network with foreign colleagues. Similarly, the opinion of *The Union* health reporter (2014) indicates that “at the end of each of these training sessions, health reporters are better for it intellectually and professionally because these trainings have boosted our productivity in many ways.”

This study has found that attending training sessions on health reporting is not only limited to health reporters with no background in health and science, health reporters who have a background in health and science have also attended many of such training sessions. According to *The Vanguard* health reporter (2014), “I have attended many training sessions in health reporting in Nigeria and abroad. I attended training sessions on HIV reporting, health/developmental journalism, and how to apply data in health reporting. Indeed, I really

appreciate these training sessions because they are good means of updating health reporting skills.” That same reporter argues that “the world changes every day and there is a need for health reporters to keep themselves abreast of professional developments in order to become seasoned in the field of health reporting.” (*The Vanguard* health reporter, 2014). According to this health reporter, “the nature of health reporting does not only require health journalists to update their knowledge but to also renew their skills.” (*The Vanguard* health reporter, 2014)

Furthermore, another health reporter states that “I have attended health training sessions on HIV reporting, nutrition reporting and child/infant health and all these sessions have improved my reporting skills in these areas despite the fact that I studied sciences in my first degree.” (*The Sun* health reporter, 2014).

It is important to note, according to all the health reporters interviewed in Nigeria, that most of the health training sessions attended were sponsored by international organisations/health agencies, such as the World Health Organisation (WHO), the United Nations Children’s Education Fund (UNICEF), the United Nations Population Fund (UNPF), the American Embassy in Nigeria, the United States Agency for International Development. *The Sun* health reporter (2014) and *The Nation* health reporter (2014) state that there are other organisations that are involved in sponsoring training sessions for health reporters in Nigeria.

According to the health reporter from *The Sun*, “I have been sponsored on health training sessions by the Reuters Foundation, Nestle Nigeria Plc. and Mobil Oil.” (*The Sun* health reporter, 2014). *The Nation* health reporter also notes that “I have benefited from many health training workshops and seminars sponsored by the Cable Network News (CNN) and Multi-choice.” (*The Nation* health reporter, 2014) While many media organisations in Nigeria are, according to all the health reporters interviewed, noted for not providing sponsorship for training sessions, *The Punch*, *Daily Trust* and *The Guardian Newspapers* are, according to

the health reporters from the *The Punch*, the *Daily Trust* and *The Guardian*, noted for providing constant in-house and sponsorship for training courses to empower their health reporters.

As noted above, health reporters who have a background in health and science training also attend journalism courses to improve their journalism skills since they do not have a background in journalism. In this regard, the health reporter from the *Business Day* and the health reporter from *The Guardian* report that they received certificates in Advanced Writing and Reporting from the Centre for Media and Communication at the Lagos Business School, Nigeria. *The Guardian* health reporter states that “I have attended a lot of international training courses in journalism in countries like Germany and Tanzania.” (*The Guardian* health reporter, 2014) *The Sun* health reporter also states that, “given my background in science and the need to improve my journalism skills, I have attended so many short courses in journalism where I received a lot of certificates in Nigeria and abroad. I have attended different training sessions and workshops on news gathering, editing, and online reporting.” (*The Sun* health reporter, 2014)

The Punch health reporter (2014) also puts this into a perspective that

At the beginning, I would say it was not easy being a graduate of biochemistry. But I argue that it was not too hard for me. This is because I did my internship at *The Punch Newspaper* where I went through some in-house journalism trainings within the organisation. This indeed gave me an empowerment in the practice coupled with the fact that I have a flair for writing...so when I joined *The Punch* officially as a member of staff after my university education, I had the opportunity to receive journalism training courses in Nigeria and abroad. For instance, I attended the International Institute of Journalism in Germany and another institute abroad. And within Nigeria, I have had many short courses not only on health reporting but on journalism as a whole. So, I am a qualified and certified journalist.”

The health reporters from *The Punch*, *The Guardian*, and other health reporters who have a background in health and science in addition to journalism school certified training, reported having better expertise and skills in health reporting than their colleagues who are trained in mass communication and other related fields. This may be because the rigour of learning journalism skills after a university degree in any science discipline is perhaps not as difficult as returning to university and learning sciences after a university degree in the arts or humanities. Therefore, all the health reporters with a health and science background interviewed in this study maintain that health reporting is not difficult for them given their science background and the fact that they believe that learning journalism skills is not a hard task. This may, therefore, account for why most of the health reporters with health and science background in this study claim that they enjoy more readership from health experts and professionals in Nigeria. Conversely, all the health reporters who have no background in health and science admit that despite the fact that they are trained in journalism, health reporting is a challenging field for them because of its technical nature, which requires some degree of science expertise.

Other methods employed by health reporters in Nigeria, especially those who have no background in health and science, include reading for self-development and clarifying issues from their colleagues who have a background in health and science. *The Nation* health reporter (2014) confirms that, “life is all about development. There is something we call ‘on the job training’. If you know you don’t have the required competencies on the job, it is better for you to develop yourself, especially through continuous reading. You need to do a lot of reading, which helps you to get acquainted with so many health and science registers. This is what I have applied in my practice over the years and it is working for me. That is why it is very difficult for people to say that I was not trained in a health or science discipline.” The experience of *The Nation* health reporter confirms that a lack of

health and science training, which may be interpreted as the ‘required competencies’ in health reporting, poses challenges to the health reporters without a health and science background. This is what *The Punch* health reporter also describes as “a big divide between the health reporters with science background and those who are trained in the arts or humanities.” (*The Punch* health reporter, 2014) However, the opinion of *The Nation* health reporter shows that the ability of the health reporters who have no science background to develop themselves through reading and research may minimise professional errors and can facilitate good job performance in health reporting.

The Union health reporter (2014) also emphasises that “good health reporters should not wait for funding agencies to send them on training courses, because there are certain things they have to do to improve their career, such as extensive reading and being able to conduct their own research.” Similarly, the *Daily Trust* health reporter maintains that health reporters in Nigeria should make concerted efforts in order to make a career in health reporting “because health reporting is not an everyday field; it is a specialised field of reporting whereby the terms are different from an ordinary English-speaking field such as politics and education.” (*Daily Trust* health reporter, 2014)

Furthermore, health reporters interviewed for this research state that they have the opportunity to learn from each other through the Health Writers Association of Nigeria (HWAN). According to the health reporters from *The Sun*, the *Business Day* and *The Union*, who are all executive members of HWAN (as at the time of interview), this association holds a monthly meeting to discuss various issues to empower members on health reporting. These health reporters note further that health reporters utilise the platform of the Health Writers Association of Nigeria to seek clarifications on various issues related to health reporting and the platform is also used to set the health agenda for the Nigerian public.

Health reporters in Nigeria confirm that all health reporters regardless of their backgrounds explore the Internet and read science journals and health reports published by the Nigerian government, health and science researchers, and various international health agencies. This is reflected in the opinions of the health reporters from *The Vanguard*, *the Business Day*, *The Guardian*, *the Daily Trust* and *The Union*. *The Union* health reporter (2014) states that “we also interview health experts and professionals, and consult top officials from the health institutes and government ministries and agencies as further ways of managing the challenges involved in health reporting.” Health reporters in Nigeria, according to the *Business Day* health reporter, *The Guardian* health reporter and the *Daily Trust* health reporter also rely on reports published by international agencies, such as the World Health Organisation (WHO), the Centres for Disease Control and Prevention (CDC) and the World Bank.

Within Nigeria, “we source health information from the Federal and State Ministries of Health, the National Agency for Food and Drug Administration and Control (NAFDAC), the Nigerian Institute of Medical Research (NIMER) and the National Institute of Pharmaceutical Research And Development (NIPRD) (*The Union* health reporter, 2014). The *Daily Independent* health reporter (2014) states that “we also source health information in Nigeria from the Nigerian Medical and Dental Council (NMDC), the Nigerian Academy of Science (NAS), the Heart Foundation, and the Nigerian Medical Association (NMA).”

6.3 The general challenges involved in Newspaper coverage of health issues in Nigeria

Apart from the challenges involved in health reporting within the purview of health and science training, this study also found that there are other general challenges that are associated with health reporting in Nigeria. According to all the health reporters interviewed

in this study, one of the most common challenges experienced by health reporters in Nigeria is the refusal of health experts and professionals to talk to them. *The Hallmark* (2014) also notes that “most of these health experts and professionals, who are regarded as a major source of health information in Nigeria, are unwilling to talk to health reporters.” *The Guardian* health reporter (2014) supports this view, stating that “my observation shows that health researchers and professionals in Nigeria seem to be afraid of being heard and sceptical once they meet with journalists.” Most of the health reporters interviewed emphasised this issue, but the health reporter from the *Business Day* provides an interesting perspective. “Health researchers and professionals in Nigeria have the attitude of non-disclosure. Health researchers in Nigeria are not really open to talk because they have the feeling that you are either going to distort what they say, or what they say might trigger some reactions from some quarters, which may undermine their offices or positions. Therefore, they tend not to give details and give you the face value of the issue at hand.” (*Business Day* health reporter, 2014)

Furthermore, *Daily Trust* health reporter notes that the unwilling attitude of health researchers and professionals to talk to health reporters is sometimes based on suspicion or official restrictions from superior officers and authorities. In this regard, the same health reporter states that “during the outbreak of ebola virus disease in Nigeria in 2014, which lasted for about two months, an epidemiologist was called to clarify certain issues in relation to the disease. The expert refused to talk because there was an official restriction that prevented him to make a statement on ebola.” (*Daily Trust* health reporter, 2014) *The Hallmark* health reporter also emphasises that one major challenge is from the health and science researchers, practitioners and professionals who are usually reluctant to talk or divulge important health information. This health reporter stresses that “some of the health experts sometimes feel that they are doing a favour to health reporters when you ask them

certain questions, forgetting the fact that they are playing their social responsibility role. Some would say, ‘look, if I discuss this issue elsewhere, I know how much money I would make in form of honorarium. You can’t just come and expect me to share it with you just like that.’ So, you can imagine that kind of frustrating situation.” (*The Hallmark* health reporter, 2014)

Given this attitude from health experts and professionals, health reporter from the *National Mirror* discloses that health reporters in Nigeria have to devise other means to obtain information from health professionals and researchers. According to this health reporter, “we, therefore, have to devise means of getting the needed information, sometimes by speculating, as much as it is allowed within the scope of the subject matter, and without blaspheming anybody.

We also disguise ourselves as ordinary members of the public in order to get our information.” (*National Mirror* health reporter, 2014). *The Nation* health reporter, however, argues that the social responsibility dimension of the healthcare profession should be a major consideration for health researchers and professionals to open up as much as possible and give needed health information to health reporters. *The Nation* health reporter (2014) contends further that “health and science experts need to talk more. They should know that, with the kind of job they do, they have a lot of responsibilities to the public. Whenever they endeavour to talk, they educate a good segment of society and whenever newspapers publish health information through them, it has a far reaching impact in the lives of members of the public. So they need to break their culture of silence.” Similarly, the *Daily Trust* health reporter supports this view that “the need for health experts and professionals in Nigeria to speak to health reporters is important in health reporting because it gives strength to health stories and it allows reporters to

domesticate findings on health issues from foreign journals.” (*Daily Trust* health reporter, 2014)

Another important general challenge that affects health reporting in Nigeria is the lack of current data and statistics. The *Business Day* health reporter states that (2014) “the lack of data is a problem in health reporting in Nigeria. Data and statistics are central in this profession. It is difficult to get access to data to support our stories from many organisations and government agencies.” Therefore, “reporting on health issues in Nigeria has often been based on estimates rather than actual data and statistics because there is no data on various health issues such as cancer and hypertension, which has also affected general health planning and implementation of health policies in Nigeria.” (*The Hallmark* health reporter, 2014) *The Punch* health reporter also argues this challenge in a comprehensive perspective. According to this health reporter, “of course, there are many challenges but the one that is very dear to my heart is the issue of getting statistics and access to local studies within the Nigerian context. So, getting aggregated data or statistics from national sources in order to support health stories is a big challenge.” (*The Punch* health reporter, 2014) That same health reporter notes further that “while there are cases of obsolete data and statistics, which are not relevant to current health situations, there are other cases whereby there are no aggregated statistics on some disease conditions in Nigeria and in a few situations where these statistics are available, those in charge may decide not to release them.” (*The Punch* health reporter, 2014)

In the opinions of health reporters in Nigeria, health reporting has recorded a major setback due to what they called non-professionalisation of health reporting field. Professionalisation of health reporting, according to the health reporter from *The Vanguard*, “is the process of recruiting a journalist principally and solely for the health reporting field. In this case, health reporters are allowed to grow in the field over the years, receiving

continuous training throughout their career.” (*The Vanguard* health reporter, 2014) This same health reporter contends further that, “one of the major gaps is that we don’t have too many people who are professional health reporters, who are recruited, trained and grew on the beat. My case and a few others are exceptional. I studied science in the first instance and then, I started journalism as a health reporter and I have been on that beat for over twenty years.” (*The Vanguard* health reporter, 2014)

This opinion resonates with the view of *The Guardian* health reporter (2014) who maintains that:

Unlike other health reporters, I have been on the health beat for the past fifteen years and I am better for it. I have received more than eleven awards including four from the Nigerian Medical Association. This is a product of being a scientist on one hand, and staying longer on the health beat on the other hand. The only award I have not received is that of CNN.

Except health reporters with a background in science, all the other health reporters interviewed had previously covered other beats and the *Daily Trust* health reporter observes that they do not see their current health beat as permanent because they can be transferred to another beat as decided by their superior officers. “This indeed, in my view, is one of the major problems of health reporting field in Nigeria.” (*Daily Trust* health reporter, 2014) This is because:

Most media organisations in Nigeria do not keep journalists very long on a particular beat except if such a beat is a specialised one. In this case, journalists with the required expertise are allowed to stay long on such beats and a good example is health reporting. Those who have a background in health and science stay permanent on the health beat unlike those of us without health and science background.” (*Daily Trust* health reporter, 2014)

This, therefore, accounts for why the health reporters who have no background in health and science are noted for being frequently transferred from one beat to another, which informs the opinion of the *Daily Trust* health reporter that “they do not see their current health beat as permanent.” (*Daily Trust* health reporter, 2014) Consequently, such a frequent beat transfer in journalism practice in Nigeria is considered as a major problem by all the health reporters interviewed as it affects the field of health reporting. This is because such a constant transfer from one beat to another may not afford the affected journalists the needed expertise and mastery they could gain on the job. Conversely, and as noted above, the problem of constant transfer from one beat to another does not, however, affect the health reporters who have a background in health and science. All the health reporters in this category have consistently been working as health reporters since they have been in journalism practice in Nigeria (Table 6.1).

Table 6.1: Selected health reporters, newspaper organisations, professional status and journalistic beat transfer

| SN | Newspaper organisation | Educational degree | Years of experience in journalism | Years of experience in health reporting | Transfer between journalistic beats |
|----|------------------------|--------------------|-----------------------------------|---|-------------------------------------|
| 1 | The Daily Independent | Arts | 25 | 25 | None |
| 2 | The Vanguard | Science | 20 | 20 | None |
| 3 | Nigerian Tribune | Science | 17 | 17 | None |
| 4 | The Guardian | Science/Journalism | 16 | 16 | None |
| 5 | New Telegraph | Arts | 15 | 10 | Transferred |
| 6 | National Mirror | Arts | 15 | 5 | Transferred |
| 7 | Daily Trust | Arts | 12 | 5 | Transferred |
| 8 | The Sun | Science/Journalism | 11 | 11 | None |
| 9 | The Hallmark | Arts | 10 | 5 | Transferred |
| 10 | The Nation | Arts | 8 | 5 | Transferred |
| 11 | The Union | Arts | 8 | 5 | Transferred |
| 12 | Business Day | Science/Journalism | 5 | 5 | None |
| 13 | The Punch | Science/Journalism | 5 | 5 | None |

Except the *Daily Independent* health reporter, a graduate of English language and a postgraduate diploma and Masters degree holder in mass communication who started journalism career as a health reporter and still remains on the beat (at the time of interview), all health reporters in this category have been transferred from one journalistic beat to another. The *Daily Independent* health reporter, however, notes that “while I have consistently covered the health beat over the last 25 years, I have also been designated to work on other beats occasionally in the past. But now I seem to be much more stable on the health beat.” (*Daily Independent* health reporter, 2014) Furthermore, the problem of constant transfer of reporters from one beat to another is also reflected in what the health reporters

interviewed for this research describe as the non-professionalisation of health beat. *The Vanguard* health reporter describes non-professionalism as a big gap in health reporting in Nigeria.

Another challenge that health reporters face in Nigeria is what the health reporters from *The Guardian* and the *New Telegraph* describe as poor working conditions, which include inadequate remuneration, limited training opportunities and a lack of job insurance cover. In addition to low remuneration for all health reporters in Nigeria, the health reporter from *The Guardian* notes that some journalists were not paid their salary for months, while the health reporter from the *New Telegraph* maintains that some reporters were not paid salaries for years. The *National Mirror* health reporter and *The Sun* health reporter argue that this has, therefore, led to the promotion of bribery and corruption, technically called ‘brown envelope’ among journalists in general. In this regard, some of the health reporters interviewed state that because of the poor working conditions and poor remuneration in journalism practice in Nigeria, most journalists demand money from newsmakers before publishing stories related to them. According to these health reporters, some journalists demand a particular amount of money or place a price tag before certain stories can be published depending on the personalities or organisations involved in the stories.

Another area of bribery and corruption is what the health journalists interviewed describe as ‘goodwill’. According to these reporters, goodwill is a general practice in journalism across all beats in Nigeria. Goodwill is a form of monetary appreciation that a newsmaker willingly extends to a journalist. This could be in forms of transport fare or other financial appreciation. The health reporters interviewed argue that goodwill, though not official or journalistically ethical, is acceptable among them since it is done by newsmakers willingly. They, however, admit that it is a form of ‘brown envelope,’ but it is preferred over

a deliberate act of requesting money or specifically placing a price tag on news stories, which is done by other journalists.

This study has found that in Nigeria, “journalism is not a job covered by insurance despite the risks involved. This is a significant challenge as it limits the scope and the level of our commitment to professional duties.” (*Business Day* health reporter, 2014) Despite the fact that job insurance cover is not a common practice in Nigeria, it is further argued that “this is one of the reasons why journalists in developed countries are excelling in their careers than journalists from developing countries.” (*The Guardian* health reporter, 2014)

Moreover, *The Guardian* health reporter states that, in terms of professional gadgets and equipment, health reporters in Nigeria provide them independently except for a few media organisations that assist their reporters in this regard. “What is common in journalism practice in Nigeria is that most media organisations employ journalists but they do not facilitate how journalists do the job. Most journalists have to provide the needed gadgets themselves such as the midget, camera and mobility in terms of transport.” (*The Guardian* health reporter, 2014) The *National Mirror* health reporter (2014) also corroborates this view that:

Health reporters and journalists in general are challenged in Nigeria; they are poorly remunerated and most media organisations do not support them with the needed gadgets to work and other logistics to achieve the best results on the job. This situation is so bad in Nigeria that, despite the poor remuneration and lack of organisational supports, media organisations can issue a query or suspension letter to a health reporter who fails to report an alarming health stories reported by other newspapers.

Most of the health reporters interviewed, therefore, argue that poor remuneration and lack of organisational supports to journalists in Nigeria have contributed to the prevalence of the practice of ‘brown envelope’ among Nigerian journalists. The state of insecurity in Nigeria

and lack of adequate attention to the health sector by the government are other challenges identified by the health reporters interviewed in this study. *The Hallmark* health reporter (2014) maintains that:

Another challenge is the issue of insecurity, especially in the northern part of the country. Tied to this is the fact that, journalists in Nigeria do not have insurance cover in case of eventualities in the line of duty. So, when you are thinking of doing a story on issue that involves polio, which may take you to the north, you are reluctant due to the state of insecurity in the region.

According to *The Union* health reporter (2014), “the fact that the government does not give adequate attention to the health sector also affects the level of priority newspaper editors place on health stories in general.” This health reporter notes further that “in Nigeria, government funding of the health sector is poor as the national budget on health is less than 6% while the World Health Organisation recommends at least 15%.” (*The Union* health reporter, 2014) Consequently, “health stories are not given prominence in newspapers. So, when you bring in a health story, it is not considered a selling story that can be projected in the front page and it is not attractive to the editor except when an alarming issue is involved” (*The Union* health reporter, 2014). This view is also supported by the *Daily Trust* health reporter (2014) who contends that “health does not sell newspapers in Nigeria except when there is a national or international health outbreak.” This, according to this health reporter, explains why health reporters become frustrated after working hard on health stories and editors do not consider such stories important enough to be given a prominent space in newspapers.

6.4 Managing the general challenges in health reporting: The place of self-motivation and passion among health reporters in Nigeria

Given the general challenges such as the state of insecurity, poor remuneration/general working condition, lack of job insurance cover, non-professionalisation of health beat and lack of current data that health reporters encounter in Nigeria, *The Guardian* health reporter (2014) states that “journalists in Nigeria are not generally motivated to give the very best to their professional practice.” Interestingly, all the health reporters interviewed contend that they are only motivated to do their job because of the perceived impact they make in the lives of the reading public. “Those health reporters and journalists that excel in their professional career in Nigeria are only self-passionate and self-motivated. We are not motivated by our salary, working conditions and the Nigerian system as a whole.” (*Daily Independent* health reporter, 2014).

This same health reporter notes that, “this is because in my own case, I see journalism as a humanitarian call. I had liked to be a teacher and I think health reporting is a teaching art as it affords me to teach people about their health and wellbeing. So, writing for health as far as I am concerned is like teaching.” (*Daily Independent* health reporter, 2014) According to that same health reporter, “each time I receive positive feedback on my health stories from the reading public, I feel fulfilled. Whenever I receive calls from people thanking me for my health reports, I feel fulfilled. The situation is like a teacher who impacts knowledge and feels fulfilled on the success of his or her students. That is it for me. I am not fulfilled by the salary and the working conditions because if I am to give consideration to all these factors, then I should have left journalism practice many years back.” (*Daily Independent* health reporter, 2014)

This view is also supported by *The Nation* health reporter (2014) who states that:

I am very passionate and self-motivated about my job regardless of the challenges that we face in Nigeria. So I am not deterred to excel in my career because I deliberately chose to practice journalism. I was once into sport, football to be precise, but I realised journalism can give me more fulfilment than any other profession, so I decided to come back. This is because health reporting affords me more opportunities to impact lives than anything else.

The Hallmark health reporter (2014) contends that “in health reporting, passion is my watchword. It is the secret of my little success in the profession. If I should give consideration to money or salary, then I wouldn’t have stayed this long.” This same health reporter notes further that “I remember, I quitted at a time and I was working for an NGO but because the fulfilment was not there, I had to make it back to health reporting.” (*The Hallmark* health reporter, 2014) *The Hallmark* health reporter argues further that:

The fact that I am impacting lives through my health stories makes me fulfilled. Many readers call from various parts of the country to give testimonies of what they benefit from my health stories and that makes me feel fulfilled. Even if it is only one soul that comes across my health stories and he or she is able to benefit from it, it is an achievement as far as I am concerned.” (*The Hallmark* health reporter, 2014)

Furthermore, the *Daily Trust* health reporter learns credence to the fact that health reporters are only motivated by passion in Nigeria despite several challenges they often encounter in the health reporting field. According to this health reporter, “the opportunity to impact lives makes us to be fulfilled. There are many people that call to get medical help through me, especially those who could not afford medical bills for a particular disease. We help them to mobilise fund from the public. There are those who also call to appreciate for the health contents and their usefulness in their lives. So, that public impact is sufficient as a

motivating factor for me regardless of the challenges that Nigeria poses to us.” (*Daily Trust* health reporter, 2014).

Similarly, *The Sun* health reporter explains that the passion that motivates health reporters and journalists in general in their practice makes the field of health reporting to be described as priesthood.

Health reporting and journalism as a profession is a calling and that is why it is described as priesthood. This means that if you studied mass communication and you are not called, you may not practise journalism, but if you are called to practice journalism without studying mass communication, you would find yourself in the profession. Being ‘called to priesthood’ in this context means having the passion and the motivation to do the job.” (*The Sun* health reporter, 2014)

From the experience of this health reporter, it is stated that “in my own case, I didn’t study mass communication, but today I practise journalism. In the priesthood, if you are called to be a priest, no matter the challenges, you would find yourself as a priest. No matter the challenges in health reporting in Nigeria, the passion we have for the job and the impacts we make in peoples’ lives increasingly motivate us to be in the profession.” (*The Sun* health reporter, 2014)

6.5: Health reporting and specialised code of ethics: The Nigerian experience

This study found that there is no specific code of ethics and other similar measures for health reporting in Nigeria. All the health reporters interviewed in this study confirmed this. According to the *Daily Independent* health reporter (2014), “we don’t have anything like a specific code of ethics for health reporting in Nigeria. But now that you have said this, I think it is time we started to work on something of that nature. But the fact is that, at the moment and as far as my experience over twenty-five years is concerned, there is nothing like that in Nigeria.” The *National Mirror* health reporter (2014) further maintains “for health reporting,

there is no code of ethics in Nigeria. If this is to be put in place, it will really cover a wide range of issues like: who is a health reporter? What qualifies someone as a health reporter? Under what condition do you report health? It would really cover many other important issues.”

Consequently, all the health reporters interviewed state that compliance to the general code of ethics for journalism practice is the guiding principle for health reporting in Nigeria. *The Nation* health reporter, however, contends that “individual self-regulation” is another important principle that health reporters in Nigeria have adopted. *The Nation* health reporter further provides a clear perspective on the practice of the principle of self-regulation. According to that same health reporter:

There are no specific codes for health reporters in Nigeria except your individual self-regulation. Through self-regulation, I know that there are some expressions that I am not meant to use in health reporting. For instance, you don’t refer to people with HIV/AIDS as HIV patients, rather, you say people living with HIV because HIV is no longer a death sentence. So, with the principle of self-regulation, you can minimise professional errors and earn more public honour as a health reporter. (*The Nation* health reporter, 2014)

Generally in health reporting in Nigeria, “we also observe medical ethics in relation to patients and hospital environments in order to maintain professional integrity and earn public confidence.” (*The Sun* health reporter, 2014) This same health reporter states that:

Despite the fact that there are no specialised code of ethics in health reporting in Nigeria, I am aware that each beat or desk has some similar and peculiar requirements that should be fulfilled by any journalist designated to work on such a beat. In the case of health reporting, we often talk to patients in different pathetic conditions and in doing that, we must exercise some caution and carefulness. If we are to interview a cancer patient for instance, looking at the tumour is a difficult task, but because we need the story, we must not show any sign of irritation while

conducting the interview. The same thing is applicable if we are to interview the parent of a deformed baby; we must comport ourselves as health reporters so much that the interviewee does not feel more depressed about his or her condition. (*The Sun* health reporter, 2014)

Furthermore, *The Vanguard* health reporter supports this view that:

Of course there is no specialised code of ethics in the practice of health reporting in Nigeria. But a health reporter who wants to conform to international requirements vis-à-vis health reporting must place certain obligations upon himself. For instance, HIV has its specific language and other nomenclatures, as a reporter, one must be conversant with all these. That is why in reporting HIV, we do not describe someone as an HIV victim. There is nothing like HIV victim. What we are trained to say is ‘people living with HIV.’ Things like these are very common in health reporting and any health reporter who wants to have international reputation must then familiarise himself or herself with all of that. (*The Vanguard* health reporter, 2014)

The experiences of the health reporters interviewed suggest that the practice of health reporting in Nigeria is not regulated by a formal code of ethics. However, it may be interpreted that health reporters in Nigeria apply self-regulations in their practice in order to demonstrate social responsibility in the line of duty. It may be suggested further that the application of such self-regulation may be a reflection of the many training sessions (short courses, seminars and workshops) that these health reporters have attended over the years in and outside Nigeria.

6.6 The influence of global health campaigns in the coverage of HIV/AIDS, malaria and polio by Nigerian newspapers

As noted in chapter four of this thesis, HIV/AIDS, malaria and polio consistently made the list of the ten most frequently reported health issues in Nigerian national newspapers from 2010-2013 (Table 4.2). It was also found that these three diseases were reported at a

relatively high level in northern Nigeria rather than other regions covered (Table 4.3). These findings also reflect in the opinions of all the health reporters interviewed in this study. All the health reporters interviewed believe that HIV/AIDS, malaria and polio are well reported by Nigerian newspapers in general. This also may be in response to the stated opinions of newspaper readers who identified HIV/AIDS, malaria and polio among health issues they mostly seek information about from Nigerian newspapers (Figure 5.11). The health reporters from *The Guardian*, the *Daily Independent*, *The Vanguard* and the *Business Day* identified global health campaigns as a major reason for their attention on these three diseases in the coverage of health issues in Nigeria.

The *Business Day* (2014) states that, “the burdens of HIV/AIDS, malaria and polio in terms of mortality and morbidity have increased global health campaigns in the recent past. These campaigns, which often attract media attention in Nigeria as elsewhere, are being championed by various international health and funding agencies.” The prominent among them, according to this health reporter and other health reporters interviewed are the World Health Organisation (WHO), the World Bank and the United Nations Children’s Education Fund (UNICEF). Consequently, the *Daily Independent* health reporter (2014) states that “there have been several grants and funds provided by these international funding agencies to national governments and non-governmental organisations to create awareness about HIV/AIDS, malaria and polio in order to reduce their burdens in Nigeria.”

As stated by the *Business Day* health reporter (2014), “in the case of HIV/AIDS, there have been a lot of grants provided globally for several national governments and non-governmental organisations in order to fight the virus. So, this makes HIV/AIDS to be well reported by the media, including Nigerian newspapers.” Furthermore, “the global health campaigns on HIV/AIDS became necessary because of the global concern of the stigmatisation and discrimination of those who are living with HIV” (*Business Day* health

reporter, 2014). Also, the *Daily Independent* health reporter (2014) states that “the dangers and burdens of HIV/AIDS make global health campaigns necessary, which have largely influenced the level of attention it has consistently received in Nigerian newspapers. This is because Nigeria is not isolated; it is part of the world, and it is influenced by the global trends on health issues.”

The *Daily Independent* health reporter (2014) describes malaria as “the number one killer disease in Nigeria because most people are affected severally within a close interval.” According to this health reporter, “most people in Nigeria are said to belong to the ‘AA blood genotype,’ which implies that many people in Nigeria suffer from malaria regularly. This, therefore, makes it a national issue that calls for the attention of the media.” (*Daily Independent* health reporter, 2014). The health reporter from the *Business Day* puts the issue of malaria disease in a perspective. This health reporter states that “malaria continues to attract national attention because low labour productivity in Nigeria has been tied to malaria. This, therefore, has made malaria to enjoy media attention in Nigeria.” (*Business Day* health reporter, 2014)

The deadly nature of HIV and malaria, which according to the health reporter from *The Guardian* “can wipe out entire communities, is responsible for the global attention these diseases have received over the years from the media in general.” (*The Guardian* health reporter, 2014) That same health reporter notes further that “many non-governmental organisations receive funding from international health and funding agencies to create awareness about these health issues and they have to communicate what they are doing. The more they communicate, the more they attract media attention and enjoy media coverage.” (*The Guardian* health reporter, 2014). Furthermore, the health reporter from *The Union* (2014) emphasises that “as far as Nigeria is concerned, we have two critical health issues that dominate Nigerian newspapers. They are HIV/AIDS and malaria.”

The global health campaigns on polio championed by the World Health Organisation, the World Bank, and The Bill and Melinda Gates Foundation have consistently focused attention on Nigeria in order to completely eradicate the disease in the country and the two other countries currently affected (Afghanistan and Pakistan). The *Business Day* health reporter argues that this disease has attracted more attention in Nigeria because of the religious and cultural beliefs that are attached to it in the northern part of the country. That same health reporter states that “most advocacies have focused on re-orientating people towards changing their beliefs so as to make Nigeria a polio-free country.” (*Business Day* health reporter, 2014) This resonates with the opinion of *The Union* health reporter (2014) who states that “in relation to polio disease in Nigeria, this is very endemic in the northern part of the country because most of them claim that their religious beliefs do not allow the administration of polio vaccine on their children. There is a religious undertone to the issue of polio in the north, and that is why they prevent their children from taking the polio vaccine.” The health reporter argues that “Nigeria would have eradicated polio over the years if religious coloration was not added to it in the north. After all, in spite of our poor health system, Nigeria was able to eradicate guinea worm because it was accepted and supported by all segments of Nigerian society.” (*The Union* health reporter, 2014)

Furthermore, the *Daily Trust* health reporter and *The Sun* health reporter confirm that Nigerian newspapers have consistently been influenced by the global health campaigns in the coverage of health issues by giving more attention to HIV/AIDS, malaria and polio. This, according to these health reporters, is due to the fact that the United Nations has annual designated dates for each of the global killer diseases such as HIV/AIDS, malaria, cancer, hypertension, and tuberculosis. Therefore, “when those designated health days are coming closer, we are able to get information, updates, breakthroughs and other new things in relation to the health issue in question. This consequently influences newspaper coverage of

such health issues at that time.” (*Daily Trust* health reporter, 2014) It is further noted that “when a disease is of global concern like HIV/AIDS, malaria and polio, every country has a responsibility to take it serious and the media in general have a significant role to play.” (*Daily Independent* health reporter, 2014)

The health reporter from *The Sun* notes that media attention to diseases like HIV/AIDS, malaria and polio on their designated United Nations days is a practical way of participating in the ongoing global health campaigns on these diseases because it is part of the social responsibility of the media in general. According to *The Sun* health reporter (2014), “on such days, if a newspaper does not publish stories on the disease concerned, then the sense of social responsibility of the health reporter and the entire editorial crew of the newspaper is questionable. That is why you have a lot of stories on malaria, HIV/AIDS and other killer disease from time to time.” That same health reporter confirms that, “the global campaigns and public awareness on the burdens of HIV/AIDS, malaria and polio continue to shape the direction of their coverage in Nigerian newspapers because there are some non-governmental organisations that specifically focus attention on these diseases.

This consequently increases the media coverage of these health issues beyond the United Nations designated days.” (*The Sun* health reporter, 2014) *The Sun* health reporter (2014) further stresses that, “these agencies and non-governmental organisations create awareness at all times by organising events and journalists across the media are invited to cover the events. This increases newspaper coverage of such health issues.” Other platforms identified by the health reporters interviewed that facilitate the coverage of HIV/AIDS, malaria and polio is the existence of some health professional associations and media groups, which focus attention on some of these health problems, thereby creating awareness about their burdens through the media.

6.7 Concluding remarks

The experiences of newspaper health reporters in Nigeria in the field of health reporting, as shown in this chapter, may be a further reflection on the fact that Nigeria has the most vibrant and robust mass media systems and journalism practice in Africa (Oso et al., 2011; African Media Barometer, 2011). This is because despite the various challenges health reporters encounter in Nigeria, they are still able to perform their professional duties to such an extent that members of the public feel the impacts on their health lifestyles. Members of the Nigerian public who have benefited from various health reports on the pages of newspapers call or send emails to health reporters to appreciate them. This is what many of the health reporters interviewed in this thesis regard as one of their motivating factors.

Furthermore, it is important to clarify that the influence of global health campaigns on the coverage of HIV/AIDS, malaria and polio in Nigerian newspapers reported in this chapter, is contextualised to imply that international health and funding agencies, health advocate groups and non-governmental health-based organisations also shape the direction of health reportage in Nigeria. This is done through organising seminars, workshops and health campaign awareness on various health issues in Nigeria, thereby attracting media attention and a wider coverage.

CHAPTER SEVEN

Discussion of Findings

7.1 Introduction

This chapter discusses the findings of this study as a whole. It covers findings from the research hypothesis I and research question 1; both of which relate to the content analysis aspect of the study. The chapter further discusses findings from the research hypothesis II, which is related to the survey and the research questions 2-4, which were answered through the in-depth interview data. This chapter is considered vital as it underpins a resonance between this study and previous studies in health communication research. In view of this, the chapter is anchored on the following subthemes.

- i. Relationship between the coverage of malaria, HIV/AIDS and polio in Nigerian newspapers in relation to northern region: Discussion of findings
- ii. The frequency of reporting malaria, HIV/AIDS and polio compared to other diseases in Nigerian newspapers: : Discussion of findings.
- iii. Relationship between dissemination of health information in Nigerian newspapers and the health behaviours of newspaper readers in Nigeria: Discussion of findings.
- iv. Newspaper coverage of health issues in Nigeria: the challenges involved and the influence of global health campaigns: Discussion of findings.

7.2 The coverage of malaria, HIV/AIDS and polio in Nigerian newspapers in relation to northern region: Discussion of findings

In relation to Hypothesis I of this study (*The amount of coverage of malaria, HIV/AIDS and polio will not be related to the coverage of northern region in Nigerian newspapers*), this study has specifically found that Nigerian newspapers have given a relatively significant attention to northern Nigeria in the coverage of malaria, HIV/AIDS and polio more than all

other geographical areas covered (Table 4.3 and Figure 4.1). This is premised on the fact that these three health issues were frequently reported in relation to northern Nigeria by the four Nigerian national newspapers studied except in the south west, where newspapers reported malaria more than the north. More importantly, the overall frequency of reporting malaria, HIV/AIDS and polio in relation to the north was more than the frequency of reporting them in relation to south west, where Nigerian newspapers are mostly located, and other regions (south south, south east and foreign countries) covered in this study (Table 4.3). In other words, it can be argued that within the context of all the geographical areas covered in this study, Nigerian national newspapers significantly reported HIV/AIDS, malaria and polio in relation to the north from 2010-2013 than other areas. This is contrary to the trend in the reportage of general health issues in all the geographical areas studied, whereby south western Nigerian and foreign countries were more reported than the north and other geographical regions by Nigerian newspapers (Table 4.5 and Figure 4.2).

Therefore, it may be suggested that perhaps, the prevalence of malaria, HIV/AIDS and polio in the north than other regions in Nigeria may have attracted the attention of Nigerian newspapers to have given more coverage to the north than other regions vis-à-vis these three diseases. This argument can be further supported by the fact that over 50% malaria cases occur in the north, where all the species of malaria parasites are predominantly found in Nigeria (Federal Ministry of Health, 2012). Furthermore, statistics show that Benue State, which is located in the north central geopolitical zone, has consistently recorded the highest prevalence rates of HIV/AIDS in the country and the entire north accounts for 49.5 percent of the total prevalence of HIV/AIDS in Nigeria (Federal Ministry of Health, 2012). The north has the highest prevalence rate of polio cases in the country with more than 95 percent of all polio cases occurring in the eight northern states, which consist of Borno, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe and Zamfara (Renne, 2010; Tran, 2013).

Overall, it is essential to state that if Nigerian newspapers can consciously, consistently and strategically give prominent attention to HIV/AIDS, malaria and polio in Nigeria through their the lead stories and other important sections, it may go a long way setting agenda on these diseases in Nigeria thereby creating more awareness about them. This is because the survey component of this study has found that malaria, HIV/AIDS and polio are among the ten health issues that newspaper readers mostly seek information about in Nigerian newspapers (Figure 5.11).

More importantly, Nigerian populace may be more informed about the deadly nature of these diseases and this may further translate into more precautionous and preventive culture against HIV/AIDS, malaria and polio. In this case, newspaper readers who have access to newspapers and possess the literacy capability to read and understand health information on the pages of newspapers may have a better advantage. Those who are educationally disadvantaged may also benefit from health information disseminated by Nigerian newspapers through a network of social and family relationships. This is because it has been found that considering the archival quality of newspapers, past health reports could readily be accessed by an individual looking for specific health information (Sissors & Bumba, 1977), which could be shared with family members, friends, nurses, or doctors (Dutta-Bergman, 2005). This underscores the dynamics of interpersonal communication and its potential to further extend the reach of mass media messages and to influence/shape media contents among people. Studies have noted the importance of interpersonal communication in extending the reach of mass media messages and its potential to shape the opinions of people in relation to the media contents earlier exposed to (see Robinson & Davis, 1990; Southwell & Yzer, 2008).

In other words, despite the popular use of the media by people in the 21st century to meet various needs, including health, interpersonal communication is still regarded as very

effective in influencing the thought of people in relation to the information they receive from the media. This is because people mostly subject 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)

Given this argument, this study contends that the prevalence of high illiteracy in northern Nigeria may not undermine the essence of focusing attention on the region in this thesis vis-à-vis malaria, HIV/AIDS and polio and the coverage of health issues in general by Nigerian newspapers. The total number of 26,111,973 literate northerners (United Nations Education Scientific and Cultural Organisation, 2012), which is 28 percent of the entire northern population (United Nations Education Scientific and Cultural Organisation, 2012) and 34 percent among whom are newspaper readers in Nigeria (Dragomir & Thompson, 2012), may in one way or the other, discuss the health information accessed from Nigerian newspapers with the illiterate northerners through family or social networks. This argument is further supported with the findings of the survey component of this thesis whereby about 59 percent of survey respondents agreed at varied degrees that they discuss health information accessed from Nigerian newspapers with friends, family members, professional colleagues and other people (Table 5.15 and Figure 5.12).

Furthermore, the fact that newspapers are a strategic medium of mass communication to draw the attention of national governments to pressing issues of national interest (American Public Health Association, 2000) is also a considerable factor for this study to have focused attention on northern Nigeria despite the high illiteracy level in the region. Various government agencies, including ministry of health across the world, place important concern on media monitoring. This is demonstrated by designating specific officers to monitor media events and general media contents in both print and electronic media in order to integrate issues from media reports, public yearnings and aspirations into the policy formulation process (American Public Health Association, 2000).

Therefore, the health condition of northern Nigeria, including HIV/AIDS, malaria and polio, can be improved through newspaper attention on the region in the coverage of health issues in Nigeria. In other words, if the north is given prominent attention in the coverage of general health issues by Nigerian newspapers, analysing the socio-economic implications of the prevalence of health issues in this region, the attention of the governments at all levels (federal, state and local) may be drawn more to the deplorable health condition of northern Nigeria. This may consequently facilitate formulation of more health policies and action plans than what the three tiers of government in Nigeria are doing at the moment and this may facilitate an improvement of health situation in the north.

7.3 The frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases: Discussion of findings

As noted by Torwel and Rodney (2010) and in relation to the findings of research question I of this study (*What is the frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases?*), newspapers disseminate information on various health issues to members of the public to inform them of health risks, disease

outbreaks and other prevalent health issues. The dissemination of information on various health issues by newspapers make people, particularly those who are literate, to seek health information from newspapers. Therefore, it has become a common practice among people in both developing and developed countries to seek health information from newspapers (Gasher et al., 2007). The coverage of health issues by newspapers in general is further confirmed in Nigerian newspapers through the findings of this study, which is also similar to the work of Gasher et al. (2007). Gasher et al. (2007) state that health is a prominent daily topic in Canadian newspaper reporting so much that on a daily basis, Canadian newspapers report various health issues that engage the general Canadian population.

Furthermore, the findings of this thesis in relation to research question 1 (*What is the frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases?*), is similar to the study of Catalan-Matamoros et al., (2007). Catalan-Matamoros et al., (2007) found that members of the public in Sweden effectively receive health information through newspapers because of the descriptive analyses related to the presentation of health issues. The authors note that in Sweden, newspapers are very notable in conveying health news and scientific breakthroughs to members of the public. Similarly and in relation to the findings of this thesis, it was previously found that newspapers disseminate health information to members of the American public and Americans who identify themselves as health conscious and health oriented often consider newspapers in their sources of health information (Dutta-Bergman, 2004; Hoover & Cross, 2009).

In general, newspapers are seen to be highly reliable sources of health information (Dutta-Bergman, 2004) because they connect members of the public with relevant health information (Atkin & Wallack, 1990). More importantly, the archival quality of newspapers, which makes it possible for members of the public to access past health reports (Sissors & Bumba, 1977) and share such health information with other people further accounts for the

popularity of newspapers as channels of disseminating information on various health issues (Dutta-Bergman, 2005).

Though this thesis did not analyse the coverage of a particular disease or health issue in Nigerian newspapers, a general framework was adopted to determine the level of coverage given to HIV/AIDS, malaria and polio among other health issues. Related previous studies have investigated the reportage of specific health issues to determine their level of coverage and portrayal in newspapers. In this regard, Rachul et al. (2011) investigated the coverage of A/H1N1 vaccination programme in Canadian newspapers and found that it was widely covered. Davidson and Wallack (2004) examined the coverage of non-HIV STDs in American newspapers and found that their coverage was low, and the authors recommended increased attention by American newspapers to this health issue.

Furthermore, Gollust and Lantz (2009) examined the coverage of type-2 diabetes in American newspapers and found behavioural factors and obesity as the predominant explanation in newspapers as the causes of the disease. In New Zealand, Lawrence et al. (2007) studied the portrayal of tuberculosis in New Zealand newspapers and found that the portrayal and presentation of tuberculosis in newspapers were partial, mirroring the reality of tuberculosis in New Zealand. Okidu (2013) also studied the newspaper coverage of HIV/AIDS in Nigeria and found that HIV was frequently reported by Nigerian newspapers. Similar to these previous studies, the findings of this thesis in relation to research question I (*What is the frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases?*) suggests that Nigerian newspapers disseminate information on various health issues to members of the Nigerian public. While this study found the coverage of HIV/AIDS as relatively high, which is similar to the work of Okidu (2013) and Uwom and Oloyede (2014), the coverage of Nigerian newspapers on malaria and polio may be regarded as relatively medium within the context of the 45 health issues content analysed in this study.

However, considering the high prevalence and the economic implications of HIV/AIDS, malaria and polio in Nigeria, this study holds that Nigerian newspapers need to improve the coverage of malaria, HIV/AIDS and polio as well as other health issues in Nigeria. Nigerian newspapers need to give prominence to malaria, HIV/AIDS and polio in their important and strategic sections/pages, such as the lead stories, other front page stories, centre and back pages and editorials. This is because all these important sections of Nigerian newspapers reported health issues at an extremely low level, which implies that health issues in Nigerian newspapers are not been given significant prominence. This finding resonates with the study of Uwom and Oloyede (2014). Uwom and Oloyede (2014) studied the reportage of health issues in Nigerian newspapers and found that Nigerian newspapers did not give prominent attention to health issues in their coverage because health stories on the front page and editorials were very low.

The need for the Nigerian national newspapers to give significant prominence to the coverage of malaria, HIV/AIDS and polio, as well as other health issues is emphasised in this study, because statistics from the federal government of Nigeria on the prevalence of malaria, HIV/AIDS and polio are overwhelming and necessitate that Nigerian newspapers need to improve their level of coverage on them. For instance, it is reported in Nigeria that there are 70-110 million malari cases diagnosed per year and annual malaria-related deaths for children under five years of age are estimated at around 300,000 in Nigeria (Federal Ministry of Health, 2012). Furthermore, 11 percent of maternal mortality is due to malaria. This has an enormous annual economic cost of approximately N132 billion (\$714m) in the form of treatment costs, prevention and loss of manpower hours (Federal Ministry of Health, 2009b). The country bears 25 percent of the malaria disease burden in Africa whereby children and women are the most affected. Malaria accounts for 30 percent of under age-five mortality and

contributes to about 60 percent of outpatient visits and 30 percent of admissions annually in Nigeria (Federal Ministry of Health, 2012).

Similarly, the prevalence of HIV/AIDS in Nigeria is portrayed through the available statistics. The disease was first discovered in Nigeria in 1986, five years after it was discovered globally. As at 2010, HIV/AIDS has affected 3.1 million people in Nigeria and the country is ranked second in the world with the highest number of people living with HIV/AIDS (Federal Ministry of Health, 2012). Since its discovery in 1986 in Nigeria, the prevalence of the virus is reflected in its huge cumulative death, which is estimated at 2.1 million (Federal Ministry of Health, 2012). In the same vein, records indicate that polio has remained almost perpetual in Nigeria as it is yet to be eradicated alongside Afghanistan and Pakistan (World Health Organisation, 2013b). In 2006, Nigeria was declared the country with the highest number of polio cases, with continuous increase in number of polio cases, while the two other countries continue to record decrease in number of polio cases (World Health Organisation, 2013b). The World Bank and the Bill and Melinda Gates Foundation have spent millions of US dollars towards the eradication of polio in Nigeria (World Health Organisation, 2013b).

Recently, however, it was widely reported by the Polio Global Eradication Initiative (2015) and various national and international media that 24th July 2015 marked one year whereby no new cases of polio were reported in Nigeria. The last 6 polio cases in Nigeria, according to the Polio Global Eradication Initiative (2015) was reported on the 24th of July, 2014. The full 12-month data of these 6 polio cases is awaiting final laboratory classification from all environmental samples and acute flaccid paralysis (AFP) cases collected until 24 July 2015. The result of this laboratory examination was to be released in September, 2015. Based on the World Health Organisation procedure, if the results come out negative, then Nigeria will have to wait for the next two years (2016-2017) without recording any polio

cases before the country can be declared and certified polio-free by the World Health Organisation the (Polio Global Eradication Initiative, 2015).

Based on this development, the media in general, with particular emphasis to newspapers, need to increase the level of attention given to the coverage of polio and other health problems in Nigeria so that the country can get rid of polio in 2017. Nigerian newspapers need to create more awareness by prominently and strategically disseminating information about the deadly nature of these diseases, their social and economic consequences in order to make members of the Nigerian public improve their health preventive attitudes.

7.4 Dissemination of health information in Nigerian newspapers and the health behaviours of newspaper readers in Nigeria: Discussion of findings

The findings of the Hypothesis II of this study: *Perceived dissemination of health information by Nigerian newspapers will not be related to the self-reported health behaviour of newspaper readers in Nigeria*, further corroborate previous studies in health communication research within the context of newspaper. Several studies have indicated that people turn to the news media including newspapers for health information because health is important in human society and the media have been found as placing relative importance on the coverage of health issues (Carducci et al., 2011; Alexander, 2005; Moyer, 1995; Thorson, 2006). This thesis shows that survey participants seek health information from Nigerian newspapers and perceive such a practice as a means of improving their health behaviours. This is in line with the study of Gasher et al. (2007), Gollust and Lantz (2009), and Westwood and Westwood (2009).

These authors found 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 & Chevront, 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 & Frosch, 2009; Pierce & 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 surveyed in the country.

This thesis also confirms the findings of the study 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 among people. Furthermore, Hertog and Fan (2005), who studied how press coverage of HIV influences social beliefs in the United States, found a strong correlation between press contents and the social beliefs of the public. 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 J. Bertrand et al. (2006) and Hertog and Fan (2005), as also demonstrated by the findings of this thesis with particular reference to Hypothesis II (*Perceived dissemination of health information by Nigerian newspapers will not be related to the perceived health behaviour of newspaper readers in Nigeria*), show how dissemination of health information in newspapers can influence the health beliefs and behaviours of members of the public. Ahmed and Bates (2013) similarly posit 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. (p. 5)

The findings of this thesis further support the work of Wakefield et al. (2010) who assert that media campaigns in newspapers have affected various health behaviours in society. 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 among 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.

Although Nigerian national newspapers significantly restrict the reportage of health issues to health/inside pages, it may still be suggested that Nigerian newspapers make use of priming in disseminating health information. This is because it may be observed that health issues seem to have been presented in Nigerian newspapers (on the inside pages) in such a way that it primed the thoughts of newspaper readers, thereby bringing the health information accessed by readers from newspapers later to their cognitive system. This may have, therefore, shaped their perception that health information in newspapers is beneficial and it is a means of improving their health behaviours. This argument is also supported with various headlines of some of the health stories analysed in the content analysis component of this study. Examples of such headlines are highlighted below (Table 7.1).

Table 7.1: Priming through headlines of health stories in Nigerian national newspapers from 2010-2013

| SN | Headlines | Newspaper | Date | Page |
|----|---|-------------------------|------------------|------|
| 1 | “40% of Nigerians have stroke” | <i>The Punch</i> | October 31, 2010 | 59 |
| 2 | Nigeria tops tuberculosis list in Africa | <i>The Guardian</i> | February 4, 2011 | 6 |
| 3 | Over 200,000 infected with HIV/AIDS in Borno | <i>Nigerian Tribune</i> | October 6, 2011 | 51 |
| 4 | Tobacco kills six million people yearly, says WHO | <i>The Guardian</i> | June 6, 2013 | 32 |
| 5 | “Prostate cancer kills 14 Nigerian men daily” | <i>The Punch</i> | October 31, 2012 | 61 |
| 6 | Mini stroke may cause vision loss | <i>Nigerian Tribune</i> | October 6, 2011 | 38 |
| 7 | Why it is important to prevent anaemia in pregnancy? | <i>Nigerian Tribune</i> | August 30, 2012 | 38 |
| 8 | Paediatricians urge labels on food that can cause choking | <i>The Punch</i> | June 30, 2010 | 64 |
| 9 | Sleeping disorder can lead to sudden death | <i>The Punch</i> | March 28, 2012 | 54 |
| 10 | Red meat consumption increases risk of death | <i>The Punch</i> | March 20, 2012 | 3 |
| 11 | Diabetes: Why people should walk more | <i>Nigerian Tribune</i> | November 21 2011 | 35 |
| 12 | Sterilise your water with portable ultraviolet purifiers | <i>The Punch</i> | February 3, 2012 | 8 |
| 13 | Coffee, tea may improve life expectancy | <i>The Guardian</i> | July 1, 2010 | 35 |

McCombs and Shaw (1993) state that priming is a psychological process whereby media projection on particular issues not only increase the salience of those issues, but also activate in people's memories their own previously acquired information about those issues. The outcome of this are changes or modifications in the actions, dispositions and general behavioural patterns of media audiences in relation to the media content. Though Nigerian newspapers mostly restrict the coverage of health issues to the designated inside/health pages, it may be suggested that the headlines highlighted above were cast in such a way that might have psychologically primed the thought of newspaper readers, which could have activated their memories later in relation to the contents of the headlines. Most of the headlines above were cast and primed in a way that readily sends negative signals and consequences to the cognitive system of newspaper readers, thereby having the likelihood of increasing their conscious and preventive attitudes in relation to their contents. This, perhaps, may have reflected in the opinions and preceptions of survey participants that seeking health information in Nigerian newspapers is beneficial to them as they perceived such a practice as a means of improving their health behaviours.

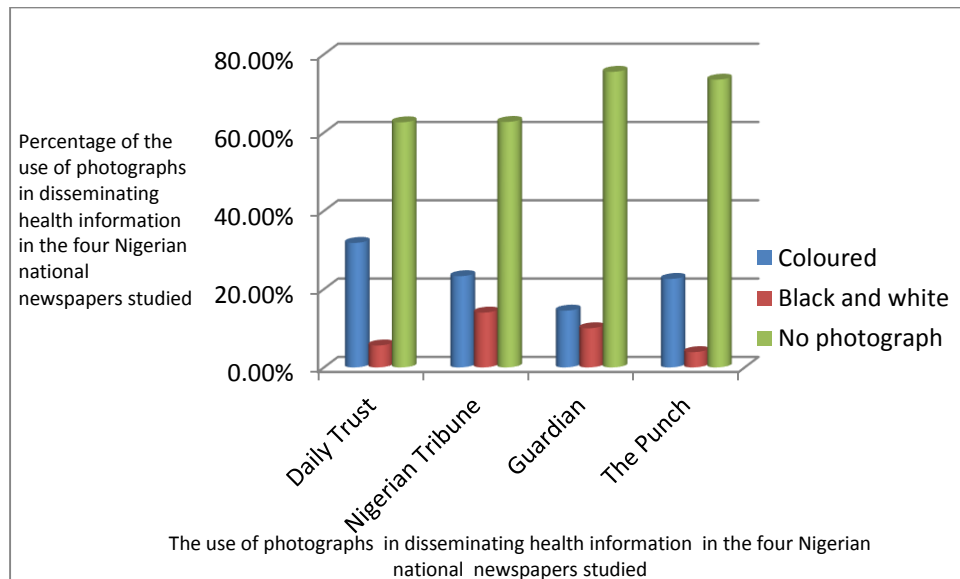
Furthermore, it can be argued that Nigerian newspapers make use of framing to draw attention of newspaper readers to health stories. This is demonstrated in the use of photographs to make the stories attractive to readers. Though health stories published without photographs were more than health stories published with photographs, the interesting point is that Nigerian newspapers published health stories with coloured photographs than black and white photographs (Table 7.2 and Figure 7.1). This study coded the use of photographs in health reportage in Nigerian newspapers since it is one of the framing techniques to draw the attention of media audiences to media contents in order to influence their perceptions. Batziou (2011) argues that framing through photojournalistic practices in newspapers is

capable of transmitting newspaper messages in ways that can influence the receptions of newspaper readers in interpreting news, regardless of the accompanying text.

Table 7.2: The use of photographs in the coverage of health issues in Nigerian national newspapers from 2010-2013

| Types of Pictures | <i>Daily Trust</i> | <i>Nigerian Tribune</i> | <i>The Guardian</i> | <i>The Punch</i> |
|---------------------|--------------------|-------------------------|---------------------|------------------|
| Coloured | 31.8 | 23.3 | 14.5 | 22.6 |
| Black and white | 5.6 | 14.0 | 10.0 | 3.9 |
| No photographs used | 62.6 | 62.7 | 75.5 | 73.5 |
| Total n | 100% 478 | 100% 670 | 100% 489 | 100% 699 |

Figure 7.1: The use of photographs in the coverage of health issues in Nigerian national newspapers from 2010-2013



Therefore, it may be suggested that the use of photographs, especially coloured ones, as a framing technique may have also contributed to the correlation or relationship between

seeking health information from Nigerian newspapers and the perception of survey participants that health information is beneficial and it is a means of improving their health behaviours. This is because Weaver (2007) argues that “the perspectives and frames that journalists employ to draw attention to certain attributes of the objects of news coverage, as well as the objects themselves, influence how we think about the objects.” (p. 147) This may have overbearing effects on the attitudes and behaviours of media consumers. In other words, how health issues were defined and characterised by Nigerian newspapers through framing techniques (the use of pictures) may have increased the importance which newspaper readers placed on health information accessed on the pages of newspapers. This, therefore, may have resulted in a perceived improvement in their health attitudes and health behaviours in general.

However, Nigerian newspapers still need to improve the level of coverage given to health issues in general. Nigerian newspapers need to be more strategic in using priming and framing in communicating health issues in order to facilitate a high improvement in health behaviours among the Nigerian public. This is connected to the fact that this research has found a medium positive correlation in the dissemination of health information and the health behaviours of newspaper readers. This may be related further to the findings of the content analysis of this study where health issues were mostly reported on the inside pages of newspapers. In this case, the important pages such as the front, back and centre spread in Nigerian newspapers reported an extremely few health stories (Table 4.10). This situation is further supported by all health reporters interviewed in this study who contend that health stories are not given high priority in newspaper reporting. These health reporters note that health issues are only given conditional or occasional prominence when there is an alarming health-related issue or during national and international health emergencies. The health reporters, in their opinions, also attributed the non-prominence given to health reporting by

Nigerian newspapers to the failure of the Nigerian government in providing adequate funding as well giving desired attention to the health sector in general.

Furthermore, the demographic data of this study 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 & Blekesaune, 2008; Fourie, 2001). In this study, it was found that newspapers were read more by male than female and this is similar to previous studies, which found that men read newspapers than women (see Hallin & Mancini, 2004; Lauf, 2001; Weibull, 2005). This study has further confirmed that higher education is one of the major characteristics that influence newspaper readership because survey respondents who had National Diploma, Higher National Diploma, Bachelor, Master and PhD Degrees read newspapers than those who had lower degrees such as Diploma Certificate, Secondary School Certificate Examination and Primary School Certificate. 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, Lauf, McLeod, & Scheufele, 1999; Vaage, 2006).

The fact that most of the survey participants belong to the age range of 20-29 (74.4 percent) and the level of education of survey participants, whereby most of them had Bachelor Degree (55.9 percent) may have influenced why majority of the respondents (54.4 percent) prefer the choice of online newspaper over the hardcopy newspaper. 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 and thus, read more of traditional/hardcopy newspaper while the younger generation is inclined to the Internet and other electronic media.

7.5 Newspaper coverage of health issues in Nigeria: the challenges involved and the influence of global health campaigns: Discussion of findings

In relation to the research question: *Does health and science training influence health reporting among newspaper health reporters in Nigeria?*, this study appears to confirm that health and science background training affects health reporting in Nigeria as found in previous studies. For instance, the study of Schwitzer et al. (2005) holds that health reporting is one of the most difficult and sensitive areas of coverage in journalism because of its specialised and technical nature. This is why Schwitzer et al. (2005) emphasise the need for medical journalists to comply with professional code of ethics for journalism practice as guiding principles, which is also similar to what health reporters in Nigeria do in order to minimise conflicts with health researchers and to enjoy more public confidence in Nigeria.

Studies of A. Cassels et al. (2002) and Hayes et al. (2007), as further demonstrated by this thesis, have shown that accuracy and completeness of health stories are often questioned by health and science researchers in health stories due to a lack of health and science background by many health reporters. Research has also shown that health and science researchers often accuse health reporters of reporting health stories out of context (Kua, Reder & Grossel, 2004). Another issue often raised against health reporters is the publication of misleading information about health and scientific findings because most health reporters lack the required health and science training (Weeks et al., 2007). This thesis has further confirmed these issues through the in-depth interviews conducted with 13 newspaper health reporters in Nigeria.

In health reporting, two major issues often raised by health researchers and professionals are the misrepresentation of health and scientific facts and inaccurate as well as misinterpreted health and scientific findings, statistics and terminologies (A. Wilson et al.,

2009). These two issues have also been admitted by health reporters themselves and attributed these inadequacies to their restricted knowledge on health and science (Schwitzer et al., 2005). All the health reporters interviewed in this research, especially those who have no background in health and science, confirm these issues as a major source of conflict between them and health researchers in Nigeria. Furthermore, compared to what is obtainable in Australia, health reporting in Nigeria is not guided by any specialised code of ethics. Other guiding measures like the *Science Media Centres* established in Australia and the United Kingdom as well as *The Media Doctor* established in Australia, Canada and the United States, aimed at improving the standard of health reporting, are not applicable in the practice of health reporting in Nigeria.

The health reporters in Nigeria state that they only adhere to the general code of ethics for journalism practice and adhere to their own principle of self-regulation. The code of ethics for Nigerian journalists comprise 15 points that guide the practice of journalism in Nigeria (Appendix vii). These points include: editorial independence, accuracy and fairness, respect for privacy, privilege/non-disclosure of information, decency, non-discrimination in media reports, prohibition of accepting reward and gratification and prohibition of glorifying any act of violence in media reports. Other provisions in the code of ethics as detailed in appendix vii are: protection of the identity of children and minor, the use of open and honest access to information, protection of public interest, social responsibility, prohibition of plagiarism, protection of copyright and press freedom/responsibility.

In regards to the research question: *what are the challenges involved in health reporting among newspaper health reporters in Nigeria?*, it was found in this study, as noted by several previous studies, that health reporters encounter many general challenges in health reporting. While this may not necessarily be due to a lack of health and science training, such challenges are determined by the environment of coverage (MacDonald & Hoffman-Goetz,

2002; Milazzo & Ernst, 2006; Ooi & Chapman, 2003; Pellechia, 1997). In other words, general challenges may not be regarded as universal. This is because the general challenges being encountered by health reporters in developing countries are mostly different, as found in this study, from the challenges that health reporters may encounter in developed countries of the world. However, most of the health reporters in developing countries encounter more severe challenges than their counterparts in the developed nations of the world.

In Nigeria, this thesis has confirmed that newspaper health reporters confront several general challenges, reflecting the socio-political and economic system of Nigerian nation. This is different from the situation in many developed countries, such as the United States, the United Kingdom, Australia and Canada. For instance, one of the major general challenges noted by the health reporters interviewed in Nigeria is the non-availability of current data on many disease conditions to support health stories. This is not the case in many developed nations of the world. Health journalists in developed countries have almost unlimited access to an array of sources where they can readily access current health data and statistics. A few examples include the *National Centre for Health Statistics*, which is being managed by the Centre for Diseases Control and Prevention and the *Health Data Tools and Statistics*, which is being managed by Partners in Information Access for Public Health Workforce- a collaboration of the United States government agencies, public health organisations and health science libraries.

In addition, current health data and statistics can be sourced in the United States through the *National Information Centre on Health Services Research and Health Care Technology* under the management of the United States National Library of Medicine. The *Digestive Diseases Statistics for the United States* is another archive through which health reporters and other members of the public can access health information. This is being managed by the National Institute of Diabetes and Digestive and Kidney Diseases. In

Canada, similar sources where health reporters and members of the public can access current health data and statistics include: the *Statistics Canada*, which is being managed by the Public Health Agency of Canada. Other archives for health data and statistics in Canada include: the *Global Public Health Intelligence Network*, and the *Health Canada for Public Health Informaticians*. The *Health Canada for Public Health Informaticians* is regarded as the best source for Canadian public on aggregated health data and statistics at the national level (Frisch, Borycki, Capron, Mawudeku, & St. John, 2014).

The major difference in the cases of the United States, Canada and Nigeria, as developed countries, is portrayed in the opinion of *The Nation* health reporter. This health reporter states that “health journalists in developed countries have unlimited access to health information and they can readily access health data and statistics through many archives without restrictions.” (*The Nation* health reporter, 2014) Another mark of distinction for Nigeria is that while there are current health data and statistics and easy access in most developed nations, in Nigeria, “there are cases of obsolete data and statistics, which are not relevant to current health situations, and there are other cases whereby there are no aggregated statistics on some disease conditions in Nigeria and in a few situations where these statistics are available, those in charge may decide not to release them.” (*The Punch* health reporter, 2014)

Compared to the improved conditions of practice that health reporters in developed countries have and enjoy, it is clear that despite the various challenges that health reporters encounter in Nigeria, they are still motivated to do their job. The passion for their jobs appears to increase because of their perception that they are having an impact on lives through their health stories. This, according to them, is manifested in the various forms of positive feedback they receive from their general readers. They, therefore, consider these

various forms of feedback as more valuable over and above the challenges they encounter in the job. It is, however, critical to note that while general readers applaud health stories in Nigerian newspapers, health experts and professionals sometimes complain about the quality of health stories in Nigeria. This situation may imply that while general newspaper readers consider what health information can be of benefit to them in Nigerian newspapers, health experts and professionals are more critical about the contents/quality of health stories and the expertise demonstrated by health reporters in reporting various health issues.

By extension, the challenges that health reporters are faced with in Nigeria in the course of discharging their professional duty may be regarded as the summation of the challenges involved in journalism practice in Nigeria. This resonates with the study of (African Media Barometer (2011)), which found that:

Working conditions for Nigerian journalists in both state and privately-owned media organisations are simply deplorable. Not only are salaries very low, but they are also paid intermittently, with a cross section of private media journalists being owed arrears of up to ten months. Corruption is eating deep into the fabric of the Nigerian media, and is unfortunately condoned by media proprietors, who sometimes encourage reporters to extort money from news sources in lieu of salaries.

Despite the challenges that health reporters and journalists in general encounter, journalism practice in Nigeria has been described as the most robust and vibrant in Africa (Oso et al., 2011, African Media Barometer, 2011). This may then imply that, if health reporters and journalists in Nigeria can have a good and more enabling environment within media organisations and the larger society, health reporters in Nigeria may be able to compete favourably with their counterparts in the developed countries.

The global health campaigns through which awareness is created on various diseases and health issues in order to reduce their burdens and gradually achieve total eradication in some cases, has a major influence in the newspaper coverage of HIV/AIDS, malaria and

polio in Nigeria. This addresses the research question: *Do global health campaigns influence the coverage of HIV/AIDS, malaria and polio in Nigeria?* According to the health reporters interviewed in this study, the establishment of the World Health Organisation (WHO) and other international health agencies such as the United States Agencies for International Development (USAID) and the Centre for Disease Control and Prevention (CDC), has made the global health campaigns on HIV/AIDS, malaria and polio massive and has consequently influenced the coverage of these diseases in Nigeria.

It may be argued that the global health campaigns, which have consistently been championed by several international health and funding agencies over the last few decades, is a testimony to the primacy of health in society. Such global efforts toward the eradication of health epidemics across the world, have resulted into some positive outcomes. An example of these outcomes is the influence of global health campaigns on the coverage of HIV/AIDS, malaria and polio in Nigeria. Another example is the professional empowerment that many health reporters across the world have received through health reporting trainings and seminars often sponsored by these international health agencies. It may be contended further that the ongoing global health campaigns on many global health problems, is a re-echo of the classic of the great thinker and philosopher, Aristotle, who espouses that society's obligation to maintain and improve health is grounded in the ethical principle of human flourishing. This principle holds that society is obligated to enable human beings to live flourishing, and thus healthy lives (cited in Ruger et al., 2001).

Similarly, it is critical to state that the ongoing health campaigns against global epidemics have the potential to contribute to societal development in general. This is because if diseases are reduced or eradicated, this will improve individuals' wellbeing in society and can facilitate development. It has been argued that "a nation is healthy if the mental and physical needs of the generality of its citizens are adequately met. These needs include good

nutrition, elimination of poverty, hygienic environment, infrastructural facilities such as good water supply and housing, as well as efficient health services and medical personnel.” (Agbonifo, 1983, p. 2003) This also resonates with the contention of scholars who emphasise the health status of individual members of society as an integral part of development (see Habte, 1983; Hamelink, 1983; Mabogunje, 1980; Sant’Ana, 2008). These scholars contend that development should not only be addressed from an economic point of view of gross domestic product (GDP), gross national product (GNP) and income per capita (Habte, 1983; Hamelink, 1983; Mabogunje, 1980; Sant’Ana, 2008). Rather, the health system and general health status of the citizenry are all key indices in measuring development in human society (Habte, 1983; Hamelink, 1983; Sant’Ana, 2008).

Therefore, concerns for the health of individual members of society and the need to improve the health systems in general across the world led to the establishment of the World Health Organisation (WHO). Other international health agencies that proliferated as a result of the global concerns for health in societies include: the United States Agencies for International Development (USAID), the United Nations Children’s Fund (UNICEF), Centres for Diseases Control and Prevention (CDC) (USA), Global Health Research Initiative (GHRI) (Canada), Pan American Health Organisation (PAHO) (USA), the United Nations Development Programme (UNDP), Global Fund to Fight AIDS, Tuberculosis and Malaria (GFFATM); the Global Alliance for Vaccines and Immunisation (GAVI); the United Nations Population Fund (UNPF); the World Bank's Human Development Network; Joint United Nations Programme on HIV/AIDS/UNAIDS and; the Global Health Program of the Bill & Melinda Gates Foundation.

Many of these international health and funding agencies have been involved in massive campaigns to address many global health scourges such as malaria, HIV/AIDS, polio and other global health problems. These campaigns have led to various action programmes such

as the Global Malaria Action Plan (GMAP), Roll Back Malaria Partnership (RBM), European Action Plan for HIV/AIDS 2012–2015 (World Health Organisation, 2011); Comprehensive Mental Health Action Plan 2013–2020 (CMHAP) (World Health Organisation, 2013a), Global Vaccine Action Plan 2011–2020 (GVAN), (World Health Organisation, 2013b) and Global Health Programme (Bill & Melinda Gates Foundation, n.d.). The Bill and Melinda Gates Global Health Programme covers such health issues as enteric and diarrheal diseases, family planning, HIV/AIDS, malaria, maternal, neonatal, and child health, neglected and other infectious diseases, nutrition, pneumonia, polio, tobacco, tuberculosis and global health discovery.

Another piece of remarkable evidence for global health campaigns was the adoption of the Millennium Development Goals (MDGs) in the year 2000 as a blueprint for building a worthwhile human society in the 21st century. This further underscores the primacy of health in human society. Three of the eight goals focus attention on health related issues, namely goal 4: reduce child mortality, goal 5: improve maternal health, goal 6: combat HIV/AIDS, malaria and other diseases, clearly demonstrates the paramount importance of health in society. This study has shown that all these efforts, which are geared towards reducing many health problems, eradicating many other disease conditions and ultimately to improve the health status of individual members of society and the health systems in general, may have influenced the coverage of HIV/AIDS, malaria and polio in Nigerian national newspapers.

7.6 Concluding remarks

Having discussed the findings of this thesis in this chapter, one important point needs to be stressed. The fact that it is essential for Nigerian newspapers to prominently report health issues on their important pages may not guaranty absolute or powerful effects on the health behaviours of newspapers readers. In health communication, several studies have found that

mass media in general are not, on their own, capable of achieving absolute health outcomes on the health behaviours of individuals and communities (Tomori et al., 2014; LaCroix et al., 2014; Ishikawa & Kiuchi, 2010; Nacinovich & Langdon-Neuner, 2011). Rather, mass media are regarded as an important component in public health campaign process through which desirable health outcomes can be achieved among people (Tomori et al., 2014; LaCroix et al., 2014; Nacinovich & Langdon-Neuner, 2011). Therefore, health communication researchers and professionals have unanimously espoused what is regarded as integrated health communication approach (Tomori et al., 2014; LaCroix et al., 2014). In this context, mass media are used with the combination of other forms of communication, especially interpersonal communication, to effectively change the health behaviours of people.

CHAPTER EIGHT

Summary, Conclusion and Recommendations

8.1 Introduction

This chapter concludes this study and is, therefore, a reflection of the entire thesis. It contains a summary of this thesis, emphasising its purpose and the unique values it offers in terms of contributions to the body of knowledge in health communication research, especially in Nigeria. The chapter eight of this research further justifies the triangular methodological approach adopted in this thesis. In light of the theoretical framework, the research argues the relevance of priming and framing, within the framework of agenda setting theory, to the central focus of the study. While this chapter makes some conclusions, based on the findings of this thesis and within the context of Nigerian environment, it further identifies the limitations of the study and then ends with recommendations for further studies.

8.2 This study in summary

The important nature of health in human society and the need to manage health systems by national governments and international health agencies across the world have been demonstrated by several bodies of literature (see Agbonifo, 1983; Ruger, Jamison, & Bloom, 2001; Sen, 1999). It is argued that as a necessary further step to complement the global efforts in improving health systems around the world, health communication as a field of study and specialisation has evolved significantly (Nutbeam, 1998; Rimal & Lapinski, 2009). Consequently, for quite a long time, health communication scholars have examined the communication variables in healthcare delivery (see Bandura, 1969; Feldman, 1966; Kosa, Antonovsky & Zola, 1969; McGuire, 1984). These studies gave impetus to other scholars to investigate the role of communication in healthcare delivery and health promotion through

mass media (see Klapper, 1960; Tichenor, Donohue, & Olien, 1970; Wade, Davidson, & O'Dea, 2003).

This thesis is a further effort in health communication research, especially within the context of Nigerian scholarship. The state of health in Nigeria is such that it remains perpetually poor in terms of prevalence of various diseases and the general health system (Federal Ministry of Health, 2012), and this has generated consistent global attention over the years. The health condition in Nigeria has also necessitated interventions from various social institutions including the media. This is because the media have the potential to improve the health lifestyles of members of Nigerian society and the health sector of the nation at large through the dissemination of health information.

Consequently, health communication scholars in Nigeria have conducted several studies examining the role of the media in delivering health information and creating awareness about health issues (see Batta, 2012; Okidu, 2013; Torwel & Rodney, 2010; Uwom & Oloyede, 2014; Umana & Ojebode, 2010). Meanwhile, little has been done in the area of examining the potential effects of disseminating that health information through the media on the health behaviours of newspaper readers in Nigeria. Similarly, it has also been observed that little has been done in the area of newspaper coverage of health issues within the contexts of HIV/AIDS, malaria, polio despite the prevalence of these health problems in Nigeria, especially in the north. Furthermore, health communication studies in Nigeria have not examined the general challenges being encountered by reporters in newspaper coverage of health issues. It is also been observed that health communication scholars in Nigeria have not examined the influence of health and science training in health reporting among newspaper health reporters. These gaps in the research persist despite several studies identifying mass media in Nigeria as a powerful force in disseminating health information to

members of the Nigerian public (see Torwel & Rodney, 2010, Umana & Ojebode, 2014; Uwom & Oloyede, 2014).

In view of this, the central idea of this thesis was conceived, which underpins newspaper coverage of health issues in Nigeria: what is the frequency of reporting malaria, HIV/AIDS and polio and what are the reported effects of seeking health information on the health behaviours of newspaper readers? This thesis is considered as a further contribution to health communication scholarship in Nigeria as the study specifically examined how Nigerian national newspapers have reported health issues with particular emphasis on HIV/AIDS, malaria and polio—the three global scourges (United Nations Children’s Education Fund, n.d.). This study was interested on how Nigerian newspapers have given attention to these major health problems in their coverage considering the high prevalence of these health problems in the country, especially in the north. The emphasis on these three health issues is borne out of the fact that they are having devastating social and economic consequences in Nigeria.

Furthermore, the situation in northern Nigeria in terms of high prevalence of HIV/AIDS, malaria and polio, as well as other health problems, was of interest to the researcher. More importantly is the fact that northern Nigeria is strategically important given its 53.4 percent of the national population, which means that its state of affairs has overbearing impacts on the socio-economic and political systems of the entire country. Therefore, the thesis examined how Nigerian newspapers have given attention to the north in their coverage of malaria, HIV/AIDS and polio as well as other health issues between 2010 and 2013.

One major area of interest among health communication researchers has been to examine the effects of health information in the media on the health orientation, attitudes and

health behaviours of members of society (see Wakefield et al., 2010; Hayes et al., 2007; Feeley & Vincent, 2007; A. Wang et al., 2009; J. Bertrand et al., 2006). Some of these studies have found the media as having influence in changing and improving the health behaviours of members of society. This study, therefore, investigated the correlation between disseminating health information in Nigerian newspapers and the health behaviours of newspaper readers in Nigeria. This aspect of the study is considered worthwhile because it has been argued that the health behaviours of individual members of society determine their health status more than social and environmental factors (World Health Organisation, 2011; Singhal, 2003; United Nations Children's Education Fund, 2005; Glanz et al., 2008).

Health reporting in the media is undertaken by health reporters who are regarded as major gatekeepers. This is because they map the territory of health issues and gate-keep in and out health information considered important, which may help members of the public achieve positive health outcomes. Despite the fact that there are various sources through which health reporters gather health information and news, they ultimately decide what health information is disseminated to members of the public. Given this important role that health reporters traditionally perform and the challenges they often encounter in the process of health reporting (Caulfield, 2004; McDonald & Hoffman-Goetz, 2002; Pellechia, 1997; Week et al. 2007), this study, therefore, examined the general challenges newspaper health reporters in Nigeria encounter and how they are managing these challenges. In the same vein, this study examined the influence of health and science training in health reporting among newspaper health reporters in Nigeria.

In collating all of these areas together to communicate valuable research ideas, this study set two research hypotheses and a research question, which were tested and answered quantitatively. This study also set three other research questions, which were answered qualitatively. These are re-stated below.

Research Hypotheses.

- i. **H₀**: The amount of coverage of malaria, HIV/AIDS and polio will not be related to the coverage of northern region in Nigerian newspapers.

H₁: The amount of coverage of malaria, HIV/AIDS and polio will be related to the coverage of northern region in Nigerian newspapers.

- ii. **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.

Research Questions

- i. What is the frequency of reporting malaria, HIV/AIDS and polio in Nigerian newspapers compared to other diseases?
- ii. Does health and science training influence health reporting among newspaper health reporters in Nigeria?
- iii. What are the general challenges involved in health reporting among newspaper health reporters in Nigeria?
- iv. Do global health campaigns influence newspaper coverage of malaria, HIV/AIDS and polio in Nigeria

These study hypotheses and research questions led to a triangular methodological approach adopted by the research in order to achieve the overall goals of the study. In other words, this thesis stands on a methodological tripod, which is considered as one of its major strengths. This means that data was gathered from three different pools (content analysis, survey and in-depth interviews), which complemented one another and added to the values of the thesis. The theoretical framework of the study underpins priming and framing within the

spectrum of agenda setting. It is, however, important to note that this study is not a true agenda-setting study given the time displacement of the content analysis that focused 2010-2013 and the survey that was done in 2014. Therefore, the theoretical framework of the study was mainly anchored on the core propositions of priming and framing, although this study is not in and of itself an agenda setting study.

Having introduced the study in chapter one with its research gaps, statement of problem and background information, which defined the purpose and central focus of the study, the research presented relevant literature in chapter two. In chapter two, the study explored the historical background of newspapers in Nigeria because newspapers as a medium of mass communication is a key variable in this study. The historical insight into the birth, growth and development of newspapers in Nigeria shows that the first newspaper in Nigeria, *Iwe Iroyin*, reported health issues in its first edition published on the 3rd of December 1859 (Aina, 2003). This further emphasises that the birth of the media in Nigeria occasioned by *Iwe Iroyin*, actually considered health as an important issue in society.

Health as a major component of this study was also given an attention in the literature review in order to emphasise the important nature of health in all human endeavours. This section of the literature review explored the interrelationship of health and economic growth, labour productivity, environmental sustainability, achievement of sound education and overall societal development. The importance of health in human society as reviewed by this research was the basis for the establishment of the World Health Organisation by the United Nations, and other international health agencies. It has also led to other global health initiatives, action plans and programmes across the world.

This research specifically reviewed relevant literature on the major health issues in Nigeria with particular emphasis on HIV/AIDS, malaria and polio. This attempt revealed the

devastating impacts of HIV/AIDS, malaria and polio on the socio-economic life of the Nigerian state. It further revealed the mortality and morbidity rates of these diseases in the country, and the various efforts that the government and other international health and funding agencies have put in place over the years, which have not yielded significant results. This, therefore, brings to the fore why the media, and specifically newspapers in this context, are considered as an integral part of the ongoing efforts to reduce the social and economic havocs caused by these three diseases.

Furthermore, the literature review outlined the three aspects of newspaper coverage of health issues discussed in this study. These include newspapers as a means of informing the public about various health issues, and the effects of disseminating health information in newspapers on the perceptions and health behaviours of newspaper readers. The third aspect underpins the challenges encountered by health reporters in the practice of health reporting as a result of the specialised and technical nature of health reporting field. This review revealed how previous studies in health communication scholarship across the world have engaged these three aspects. This consequently served as a basis for this study to examine the Nigerian environment. The previous studies also set the theoretical framework and methodological approach adopted in this study.

Chapter three of this study outlined the three research methodologies adopted, justifying the appropriateness of each of them to the central ideas of the thesis. The study argued why content analysis is best suitable for examining the coverage of health issues in Nigerian newspapers between 2010 and 2013. The chapter also discussed why survey is the appropriate method to determine the correlation between the dissemination of health information in newspapers and the health behaviours of newspaper readers in Nigeria. The study further argued the need to use in-depth interviews to gather the experiences of newspaper health reporters in Nigeria. In-depth interviews were conducted with 13 health

reporters, one each from 13 national newspapers out of the 20 national newspapers in Nigeria. This was done to determine the challenges being encountered in health reporting and the influence of health and science training in the process of performing their professional duties. The in-depth interview method was further used to examine the influence of global health campaigns on the coverage of HIV/AIDS, malaria and polio among newspaper health reporters in Nigeria. It is contended in chapter three of this study that in-depth interviews could better reveal the experiences of health reporters in a comprehensive manner than what could be gathered using a survey method. Overall, the chapter clearly defined the methodological approach of the study as mixed—combining quantitative and qualitative methods.

Chapters four, five and six of this study were devoted to the analysis and interpretation of findings while chapter seven discussed the entire findings of the thesis. Chapter four discussed data analysis and interpretation from the content analysis of the study, which showed that Nigerian newspapers did disseminate information on various health issues, including HIV/AIDS, malaria and polio. This study further shows that malaria, HIV/AIDS and polio were among the ten most frequently reported health issues within the context of the 45 health issues covered in Nigerian national newspapers from 2010-2013. While it was found that HIV/AIDS ranked third, polio sixth and malaria eighth among the 45 health issues included in the analysis, it was, however, found that these health problems were not prominently and strategically reported in Nigerian newspapers. This is because the four national newspapers studied from 2010-2013 did not significantly report HIV/AIDS, malaria and polio in their lead stories, other front page stories, editorials and other important sections of newspapers. The reportage of these diseases, like other health problems in Nigeria, were mainly restricted to their traditional designated health pages (inside pages) despite the fact

that malaria, HIV/AIDS and polio are prevalent in Nigeria with huge social and economic consequences.

Conversely, the coverage of malaria, HIV/AIDS and polio by Nigerian newspapers in relation to northern Nigeria was relatively significant, though still restricted to the health pages or inside pages of these newspapers. The correlation coefficient value between the coverage of northern Nigeria and malaria, HIV/AIDS and polio showed a moderate positive correlation, meaning that northern Nigeria was more reported in relation to malaria, HIV/AIDS and polio than other geographical areas covered in the study, especially south west and foreign countries (Table 4.3 and Figure 4.1). This finding is more important given that south west and foreign countries consistently dominated the geographical context of the general health coverage in Nigerian newspapers (Table 4.5 and Figure 4.2). But specifically and in relation to malaria, HIV/AIDS and polio, Nigerian national newspapers gave attention to northern Nigeria than southwest and foreign countries as well as other geographical areas covered in this study.

Chapter five of the study found that newspaper readers in Nigeria sought health information from Nigerian newspapers, and that those who did seek this information out also perceived such health information as beneficial to their health lifestyle and a means of improving their general health behaviours. This finding further confirms the findings of previous studies that have investigated the relationship between dissemination of health information in newspapers and other forms of media and the health behaviours of newspaper readers (see A. Cassell et. al., 1998; Ahmed & Bates, 2013; Niederdeppe & Frosch, 2009; Pierce & Gilpin, 2006; J. Bertrand et al. 2006; Hertog & Fan, 2005). This chapter also showed how demographic variables such as age, education and gender influence newspaper readership in Nigeria, including the mode of newspaper readership (online or hardcopy).

Furthermore, in chapter six, the findings of the in-depth interviews conducted with 13 health reporters were presented. This chapter, as confirmed by previous studies, indicated that health reporters in Nigeria encounter a wide range of challenges as a result of the specialised and technical nature involved in health reporting field. These challenges accordingly, are two-dimensional in nature. Firstly, many health reporters encounter challenges in health reporting due to a lack of health and science background training. This has consistently led to conflicts, particularly between reporters and health experts and professionals in Nigeria. Given that health reporting should be done without making excuses for the lack of a background in science, health reporters manage the situation through attending training courses, seminars and workshops on health reporting within and outside Nigeria. They also engage in reading and research as well as seeking assistance from their colleagues who have a background in health and science. They generally seek clarifications from health researchers on issues of a technical nature.

Chapter six also reported other challenges that health reporters in Nigeria often encounter in the practice of health reporting. These include non-availability of data, obsolete data and refusal by health experts and professionals to speak to health reporters. Other challenges include non-professionalisation of health beat, poor working conditions and inadequate remuneration, general insecurity in Nigeria, and the inability of media organisations to provide timely training courses on health reporting to reporters. This chapter further reported how global health campaigns have influenced the reportage of HIV/AIDS, malaria and polio in Nigerian newspapers. Health reporters in Nigeria state that HIV/AIDS, malaria and polio are among the major health issues that dominate the health pages of Nigerian newspapers. According to those interviewed for this study, this is largely connected to how the ongoing global health campaigns by international health agencies such as the World Health Organisation (WHO) and the United Nations Children's Education Fund

(UNICEF) have shaped the direction of health reportage among them. Other international agencies identified by newspaper health reporters include the United Nations Development Programme (UNDP), the Centre for Disease Control and Prevention (CDC), various national governments and other relevant agencies.

Given the burden of HIV/AIDS, malaria and polio in Nigeria, health reporters argue that the global health campaigns are tailored towards the reduction of the mortality and morbidity rates of these diseases and eradication in the case of polio and other similar diseases. In an attempt to achieve this, international funding agencies, national governments and non-governmental organisations create awareness about HIV/AIDS, malaria and polio, which readily attracts media attention, thereby increasing the space and air time given to the coverage of these three global health problems in Nigerian media in general.

In general, the conceptual framework of this thesis examined the degree and frequency to which Nigerian newspapers have reported HIV/AIDS, malaria and polio, the effect of health reporting on the health behaviour of newspaper readers and the nature of challenges involved in health reporting in Nigeria. The findings from all of these, as summarised above, indicate that despite the important nature of health in the socio-economic development of a nation, the Nigerian state, as reported by the health reporter interviewed, has not given the much needed attention to the health sector.

Similarly, many media organisations in Nigeria, based on the opinions of the health reporters interviewed, do not give important attention to sponsoring health reporters on health reporting training sessions. This situation, consequently led to varied challenges that health reporters in Nigeria have had to contend with in the field of health reporting. This further reflects in the findings of the content analysis of this thesis, which show that health issues in general, were not given a prominent coverage in Nigerian newspapers through important

pages such as leads, other front page stories, editorials, centre spread and back page. However, northern Nigeria was specifically reported in Nigerian newspapers more than other regions covered in relation to HIV/AIDS, malaria and polio except the south west where Nigerian newspapers report malaria than the north. South west and foreign countries were given more attention in Nigerian newspapers in the coverage of general health issues than the north despite the fact that northern region is noted for most of the health problems in Nigeria.

Despite the challenging circumstances of health reporters in Nigeria, they still manage to project health information in Nigerian newspapers in such a way that newspaper readers, especially those with higher education qualifications, perceived that health information in Nigerian newspapers are beneficial to them and a means of improving their health behaviours. Some of these newspaper readers also reported that they share health information with other people within their family and social networks. These findings collectively show that health information in Nigerian newspapers has the potential to facilitate health changes among individual members of Nigerian society. This may further contribute or accelerate the overall development of the Nigerian society. This is because health has been described as a major index for national development (Habte, 1983; Hamelink, 1983; Mabogunje, 1980; Sant'Ana, 2008; World Health Organisation 2005). This may mean that the more health reporters have an enabling environment in Nigeria to practice health reporting, within their media organisations and Nigeria at large, the likely it is better for the health of individuals and the nation.

Therefore, media organisations in Nigeria need to facilitate best global practices among health reporters by sponsoring them on health training sessions, improving their conditions of service as well as having a favourable policy prescriptions to prominently project health issues on the strategic pages of Nigerian newspapers. The policy prescriptions should also prioritise northern Nigeria in the coverage of health issues in the country. The Nigerian

gouvernement also has important roles to play by ensuring adequate and current health data and statistics, which should readily be accessible to health reporters. The government should make efforts to address the question of insecurity in the country to facilitate easy movement or mobility of health reporters across Nigeria, especially in the north, where major health issues are prevalent.

8.3 Conclusion

Having summarised this thesis and its key findings, it may be concluded that newspapers in all societies remain veritable means of informing people and creating awareness about health issues. This further confirms the resourceful value noted of newspapers since their emergence in the 17th century (George, Curran, & Wingate, 1978; Tom 2012; J. Weber, 2006). Despite the evolution of information communication technologies, which have widened the communication platforms in the 21st century, it may be asserted based on the findings of this study that newspapers are still important to members of the public in obtaining health information to improve their health. Furthermore, newspapers may still be noted as one of the leading media channels that promote health information on various health issues for the benefit of society. Given this fact, it may be posited further that regardless of the advancement in information communication technologies, newspapers will continue to be relevant to people of all ages in seeking information on various health issues.

Considering the enduring nature of newspapers and the potential effect newspaper messages can have on readers, it is pertinent to note that they (newspapers) need to strategically give prominent attention to the coverage of HIV/AIDS, malaria and polio, as well as other health issues that are ravaging the socio-economic life of the Nigerian nation. This should be done through their lead stories, other front page stories, editorials and other important sections of newspapers. The need for Nigerian newspapers to strategically report

HIV/AIDS, malaria and polio in Nigeria is emphasised in this study because newspapers have the potential to change the health orientation, attitudes and the general health behaviours of the populace.

Despite the fact that this study is not a true agenda-setting study and the fact that Nigerian newspapers have not prominently projected health issues in their reportage, it may be argued that Nigerian newspapers have the potential to set the agenda on health issues in Nigeria based on the response offered by newspaper readers and the perspective of newspaper reporters. Increasing health coverage may consequently influence the priority or the level of importance attributed to those health issues by members of the Nigerian public. This assertion is also supported through other findings of this study, which found most of the health issues that dominate health pages in Nigerian newspapers among those that newspaper readers mostly seek health information about (Figures 4.3 and 5.11). As such, this perceived level of health reporting correlates with a perceived improvement in their health behaviours. Therefore, this study suggests that newspapers, like other mass media, may be used to set the health agenda, which may influence the health behaviours of individual members of the Nigerian public and the health sector at large.

However, this finding does not ascribe powerful or absolute effects to newspapers and other mass media in changing the health behaviours of individual members of society. Given the individual differences perspective of media effects whereby individuals, especially adults, possess such personality traits and individual characteristics which may enable them to negotiate and filter media contents, it is contended that the media may not have powerful effects on media consumers in changing their health behaviours (Tomori et al., 2014; Ishikawa & Kiuchi, 2010). In addition, the social categories framework of media effects show that individuals in societies belong to various social relations and networks which may empower them to filter and negotiate with media messages. All of these arguments are related

to the two-step flow hypothesis model of communication, the uses and gratification theory of the media, encoding and decoding and reception analysis theories (see Lazasfeld, Berelson & Gaudet, 1944; Dutton et al., 1994; Belnaves et al., 2009; De Fleur & Ball-Rokeach, 1989; McQuail, 2010, McQuail, 1998; Curran, 1998; Livingstone 1993; Hall 1980; Hall 1981). Therefore, for effective public health campaigns to achieve good health outcomes among people, the practice of integrated health communication approach (combining mass media and other forms of communication, especially interpersonal communication) has been widely advocated, accepted and practised among health communication practitioners.

Based on the findings of this study, it may be concluded that health reporting in general is more effectively done by journalists who have a background in health and science training. This is because the expertise involved in learning journalism skills is generally not technical and does not take as much time when compared to the intellectual requirements of learning health and science skills. In other words, while it is possible to learn journalism skills after first completing a degree in the sciences, it is perhaps more difficult to learn science skills after first completing an arts or social science degree. In light of this and based on the experiences of health reporters who have no health and science background training in Nigeria, it may be concluded that health reporting is more productive and result oriented with health reporters who have a background in health and science as those who do not have that background would presumably be far less likely to then attain those skills.

It may also be concluded that without the ongoing global health campaigns, the consequences of endemic diseases would likely be much worse in Nigeria and many other developing countries across the world. The influence of these global health campaigns in the media coverage of health issues cannot be overemphasised. Today, this is manifested in the level of attention the media across all levels pay to health issues. Both print and electronic media have designated more space and air time for the coverage of health issues because of

the influence of global health campaigns. Furthermore, the influence and impact of the ongoing global health campaigns on the coverage of health issues by the media is manifested in the sponsorship of various seminars, workshops and other short courses by international health and funding agencies for the benefits of health reporters across the world. These health empowerment programmes are meant to sharpen the health reporting skills of health reporters. These training sessions also provide a way of setting public agenda by influencing health reporting toward giving more emphasis to various epidemics advocated by the international health and funding agencies.

8.4 Limitations of the study

It is important to note that for every study conducted within the framework of certain objectives, a defined timeframe, geographical context and other considerable factors, there are bound to be limitations. This study is not an exception. Therefore, it is pertinent to note the following points as the limitations of this thesis.

- i. One of the major limitations identified in this study is the fact that it is not a true agenda-setting study. This is because the content analysis was done within the timeframe of 2010-2013 while the survey aspect of the study was carried out in 2014. A concurrent timeframe approach would have made the study a true agenda-setting study. Therefore, the conclusions on causality here can only be regarded as the effects on how newspaper readers perceive the health information they seek out in Nigerian newspapers on their health behaviours, which was investigated in this study, through a correlation analysis.
- ii. Another major limitation identified in this study is the difficulty involved in using a simple random sampling technique or systematic sampling technique in the survey aspect of the study. The strengths of a simple random sampling and systematic

random techniques in terms of strong generalisability and replicability, over other sampling techniques, are considered as limitations in this study as a simple random sampling was not conducted for this study. In Nigeria, the population of newspaper readers is estimated at 26,800,200, who are also widely distributed across the geographical zones of the country. This made it difficult for the study to generate a sampling frame from which a simple random approach could be operationalised.

This, therefore, led to the use of stratified (probability), purposive, quota and convenience (non-probability) sampling techniques. It is important to note that this limitation was complemented with the use of other research methods, namely: content analysis and in-depth interview because the results of the three research methods were integrated to enrich the findings of the thesis. However, in not using a simple random sampling method, the findings of this study can only be limited to the scope of this thesis and may not be regarded as a study that represents national coverage in Nigeria.

- iii. None of the previous health communication studies carried out in Nigeria were conducted beyond a two-year timeframe, which drove the decision to adopt a four-year timeframe (2010-2013) for this content analysis. It is, however, important to note that there is no scientific basis for choosing a four-year timeframe. This is only justified as an effort over the existing studies in health communication scholarship in Nigeria.
- iv. This study interviewed health reporters, but not health professionals, to determine the challenges they often encounter in health reporting in Nigeria. Having found that there is a consistent conflict between health reporters and health experts and professionals in Nigeria, the study did not interview health professionals to confirm some of their complaints against health reporters. The reason being that it was not in

the scope of the thesis and, therefore, it is considered as a study that can be explored separately and independently of this thesis.

- v. It may be considered as a limitation that, newspapers are a medium of the literate, whereas illiteracy is sometimes associated with the prevalence of diseases as also being witnessed in northern Nigeria. But the fact that newspaper readers who have the literacy competence to read and understand health information on the pages of newspapers may also share such information with those who are educationally disadvantaged through social, family and other networks cannot undermine the reason for the choice of newspapers in this thesis. Furthermore, if Nigerian newspapers, in their agenda setting function, can consistently and strategically give more attention to the north in the coverage of health issues, this can consequently influence policymakers in the health sector in Nigeria to focus more and consistent attention on the northern region. This may further lead or facilitate formulation of more health policies in order to improve the health status of this important region in Nigeria.
- vi. Another area of limitation identified in this study is the issue of the resources allocated for the research. The researcher tried to utilise the resources judiciously but the cost of travelling to Nigeria from New Zealand for data collection, travelling across Nigeria for the survey, meeting with health reporters in different states in Nigeria for interviews, paying the research assistants their allowances, hotel accommodation costs, obtaining past editions of newspapers and other logistics, were much more than the estimated budget. This is considered as a limitation in this study as the financial expenses involved in conducting interviews with health reporters across Nigeria were huge. These include expenses in contacting them through mobile phone, which is expensive in Nigeria, and transportation fare. Consequently, the researcher could not interview more than thirteen (13) health reporters.

8.5 Recommendations for further studies

This study is not a true agenda-setting research because of the time displacement of 2010-2013 of the content analysis and the survey that was carried out in 2014. Therefore, a true agenda-setting study, which would concurrently content analyse health stories in Nigerian newspapers and conduct a survey to sample the opinions of newspaper readers is recommended. It is also important to note that the current study focused on newspapers alone. Other studies could explore the coverage of health issues on radio and television, and the promotion of health information on social media. This could be used to determine the level of attention these types of media give to HIV/AIDS, malaria and polio and northern Nigeria in their health coverage.

It is recommended that a study be carried out to examine the opinions of health experts and professionals in Nigeria specifically about their perceptions on the quality of health stories being published in Nigerian newspapers. This could reveal and confirm the conflicts (as reported by health reporters interviewed in this study) that health professionals often have with health reporters. Another important area of recommendation is a study that might examine the influence of newspaper coverage of health issues on the formulation of health policies in Nigeria as this thesis did not focus attention on this area. Given the prevalence of HIV/AIDS, malaria and polio in Nigeria, especially in the north, it is recommended that health communication scholars should investigate the relationship between the newspaper coverage of these three health problems and their prevalence in Nigeria. In doing this, national data and statistics on the prevalence of HIV/AIDS, malaria and polio should be correlated with the frequency of reportage of these three diseases in Nigeria newspapers.

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Appendix i

CODING SHEET FOR DATA COLLECTION

Programme: PhD Media and Communication

Coder:

| | | |
|-----|---|--------------------------|
| SMB | 1 | <input type="checkbox"/> |
| BJM | 2 | |

Story Identity: Newspaper

| | |
|---------|--------------------------|
| Year | <input type="checkbox"/> |
| Month | <input type="checkbox"/> |
| Week | <input type="checkbox"/> |
| Day | <input type="checkbox"/> |
| Item no | <input type="text"/> |

Type of story

| | | |
|-----------------------|---|--------------------------|
| News story | 1 | |
| Editorial | 2 | |
| Feature article | 3 | <input type="checkbox"/> |
| Column / commentary | 4 | |
| Letters to the editor | 5 | |

Position of story

| | | |
|------------------|---|--------------------------|
| Lead story | 1 | |
| Other front page | 2 | |
| Back page | 3 | <input type="checkbox"/> |
| Inside page | 4 | |
| Centre spread | 5 | |

Geographical context of story

| | | |
|-------------------|---|--------------------------|
| North central | 1 | |
| North west | 2 | |
| North east | 3 | <input type="checkbox"/> |
| South south | 4 | |
| South east | 5 | |
| South west | 6 | |
| Foreign countries | 7 | |
| Not indicated | 8 | |

Health topics/themes

| | |
|---|----|
| Malaria | 1 |
| HIV/AIDS | 2 |
| Polio | 3 |
| Tuberculosis | 4 |
| Diabetes | 5 |
| Hypertension | 6 |
| Asthma | 7 |
| Nutrition and balance diet | 8 |
| Mental illness | 9 |
| Cholera | 10 |
| Glaucoma | 11 |
| Ulcer | 12 |
| Meningitis | 13 |
| Measles | 14 |
| Skin infection | 15 |
| Diarrhoea | 16 |
| Insomnia | 17 |
| Lassa fever | 18 |
| Whooping cough | 19 |
| Leprosy | 20 |
| Haemophilia | 21 |
| Cancer | 22 |
| Stroke | 23 |
| Infertility/Reproductive health | 24 |
| Heart disease | 25 |
| Arthritis | 26 |
| Neo/Ante- natal care | 27 |
| Infant /health mortality | 28 |
| Maternal health/mortality | 29 |
| Ebola virus | 30 |
| Health care delivery | 31 |
| Health systems administration | 32 |
| Launch of new drugs/treatment | 33 |
| Policies, facilities, personnel, allowances | 34 |
| Parkinson | 35 |
| Bacterial / Viral infection | 36 |
| Hepatitis | 37 |
| Botulism | 38 |
| Traditional/Herbal medicine | 39 |
| Eyes related disease | 40 |
| Nose related disease | 41 |
| Ears infection | 42 |
| Mismanagement of ailment/health | 43 |
| Alcohol, tobacco and Drug intake | 44 |
| Other | 45 |



Photo Diversity

Coloured

1

Black and white

2

No photograph used



Appendix ii

CODING INSTRUCTION FOR CONTENT ANALYSIS

Programme: PhD Media and Communication

CODER

| | |
|----------|---|
| Semi | 1 |
| Benjamin | 2 |

STORY IDENTITY

| | | |
|-------------|------------------|----|
| Newspapers: | Daily Trust | 1 |
| | Nigerian Tribune | 2 |
| | The Guardian | 3 |
| | The Punch | 4 |
| Year: | 2010 | 1 |
| | 2011 | 2 |
| | 2012 | 3 |
| | 2013 | 4 |
| Month: | January | 1 |
| | February | 2 |
| | March | 3 |
| | April | 4 |
| | May | 5 |
| | June | 6 |
| | July | 7 |
| | August | 8 |
| | September | 9 |
| | October | 10 |
| | November | 11 |
| | December | 12 |
| Day: | Monday | 1 |
| | Tuesday | 2 |
| | Wednesday | 3 |

| | |
|----------|---|
| Thursday | 4 |
| Friday | 5 |

TYPES OF STORY

News story: This simply implies the conventional news stories as defined and understood in journalism. That is, the editorial item that reports daily events or happenings newspapers.

Editorial: The official position or comment of a newspaper organisation on an issue of national importance. This is usually published on the OP-ED page.

Feature Article: This could be news analysis, news feature, feature stories written by any of the staff of the newspaper editorial crew. This is different from independent writers outside the organisation.

Column Writing/Commentary: Opinions of independent writers published on newspapers. These could be a medical professionals or any member of the public in and outside Nigeria.

Letters to the Editor: Short piece of letter usually sent to the editor of newspaper on issues of general concern by members of the public. Letters to the editor are published on the OP-ED page as well.

POSITION OF STORY

Lead story: The most important story of the day in newspapers. Such a story is usually published on the front page of newspapers with the boldest or biggest headline. It dominates all other stories on the front page of newspapers.

Other front page: Any other stories on the front page of the newspapers different from the lead story.

Back page: Any stories found on the back page of newspapers.

Inside page: Any stories found inside newspapers different from the centre spread, front and back pages.

Centre spread: Stories found in the centre or the middle of the newspapers.

GEOGRAPHICAL CONTEXTS OF HEALTH STORY

Health stories are defined according to the geographical contexts defined below:

North Central: Kogi, Niger, Benue, Kwara, Plateau, Nasarawa and Abuja

North East: Taraba, Borno, Bauchi, Adamawa, Gombe and Yobe

North West: Kaduna, Kebbi, Zamfara, Sokoto, Kano, Jigawa and Kastina

South South: Akwa Ibom, Bayelsa, Edo, Cross River, River and Delta

South East: Enugu, Anambra, Imo, Abia and Ebonyi

South West: Lagos, Ogun, Oyo, Ondo, Ekiti and Osun

Foreign countries: Any health stories whose location is outside Nigeria.

Not indicated: Where stories fail to indicate a location, i.e. the geographical origin and focus of a story.

HEALTH TOPICS/THEMES

General rule: As a general rule, this coding instruction holds that the first identified health topic in any story will only be considered in case of stories that have more than one health topic. Health topics are identified in stories as long as the stories are based on them. That is, the health topic forms the main discussion of the story. Examples are listed below.

Malaria

HIV/AIDS

Polio

Tuberculosis

Diabetes

Hypertension

Asthma

Nutrition and balance diet

Mental illness

Cholera

Glaucoma

Ulcer

Meningitis

Measles

Skin infection

Diarrhoea

Insomnia
Lassa fever
Whooping cough
Leprosy
Haemophilia
Cancer
Stroke
Infertility/Reproductive health
Heart disease
Arthritis
Neo/Ante- natal care
Infant health/ mortality
Maternal health/mortality
Ebola virus
Health care delivery
Health systems administration
Launch of new drugs/treatment
Policies, facilities, personnel, allowances
Parkinson
Bacterial /Viral infection
Hepatitis
Botulism
Traditional/Herbal medicine
Eyes related disease
Nose related disease
Ears infection
Mismanagement of ailment/health
Alcohol, tobacco and drug intake
Other: Any other disease different from the ones identified above

PHOTO DIVERSITY

Coloured: Any coloured pictures that accompany a story in order to communicate the theme of the story to readers. These also include any graphical illustration used to illustrate any health related issues.

Black and white: Any black and white pictures that accompany a story in order to communicate the theme of the story to readers. These also include any graphical illustration used to illustrate any health related issues.

No photograph used: A story without any picture or graphical illustration.

Appendix iii

IN-DEPTH INTERVIEW GUIDE FOR DATA COLLECTION

Programme: PhD, Media and Communication

Questions

1. Could you please introduce yourself in detail? Your educational background and professional experience in health reporting in Nigeria.
2. Does health and science training influence health reporting in Nigerian newspaper?
3. What effects do health and science training have in the discharge of your professional duties as a newspaper health reporter in Nigeria?
4. What are the common reactions or complaints that health reporting in Nigerian newspapers usually generate among science and health researchers in the country?
5. What strategies do you adopt in managing health and science issues involved in newspaper health reporting in Nigeria?
6. What are the general challenges involved in health reporting among newspaper health reporters in Nigeria?
7. What are the major and minor sources of health information or health news in Nigeria?
8. What models or approaches do you use in confirming the veracity of health claims from sources before publishing stories?
9. Are there specific codes of ethics for health reporters in Nigeria as obtainable in other countries?
10. Do global health campaigns influence the coverage of epidemics such as malaria, HIV/AIDS and polio in the newspaper coverage of health issues in Nigeria?
11. What are the factors that continue to motivate you in health reporting despite its attendant challenges?
12. What is your general assessment of health reporting in Nigeria?
13. Follow up questions as demanded by the situation.

Appendix iv

QUESTIONNAIRE DESIGN FOR DATA COLLECTION

Programme: PhD Media and Communication

Dear respondent,

I am Semiu Bello, Lecturer and Researcher in the Department of Mass Communication, Olabisi Onabanjo University, Ago Iwoye, Ogun State, Nigeria and PhD Candidate in the Department of Media and Communication, University of Canterbury, Christchurch, New Zealand. I am currently researching *Newspaper Coverage of Health Issues in Nigeria from 2010-2013* and I hereby humbly solicit for your permission to be part of this study by completing this questionnaire as candidly as possible. The questionnaire is a research instrument for collecting relevant data to examine the effects health reporting in newspapers on the health behaviours of newspaper readers in Nigeria. While confidentiality would be maintained by ensuring anonymity in the data analysis and presentation, it is however important to note that the data collected through this instrument will be analysed to generate results. These results will be published in my PhD thesis and lodged with the University of (UC) Canterbury Library, New Zealand. It is also anticipated that several journal articles will be published from this study as a way of contributing to the body of knowledge in my discipline and global scholarship.

Thank you for your anticipated understanding and co-operation.

SECTION A

Instruction: Kindly read each question carefully and choose among the options provided. While options are rated from **4 (highest)** – **1 (lowest)**, kindly tick your option appropriately.

1. What is the degree of access you have in reading newspapers? That is, the opportunity you have in reading newspapers.
 - a. Highest 4
 - b. High 3
 - c. Low 2
 - d. Lowest 1
 - e. None 0

2. At what degree do you read newspapers?
 - a. Highest (Everyday) 4
 - b. High (Three times a week) 3
 - c. Low (Once a week) 2
 - d. Lowest (Once a month/ occasionally) 1
 - e. None 0

3. What is the highest degree of time you dedicate to reading newspapers weekly?
 - a. Highest (10-15 hours) 4
 - b. High (6-9 hours) 3
 - c. Low (3-5 hours) 2
 - d. Lowest (1-2 hours) 1
 - e. None 0

4. Which mode of newspapers do you read more?
 - a. Hard copy version
 - b. On-line version
 - c. None

5. At what degree would you agree that newspapers disseminate information on various health issues and provide health information for the benefits of the public?
 - a. Highest 4
 - b. High 3
 - c. Low 2
 - d. Lowest 1
 - e. None 0

6. At what degree do you seek health information from newspapers?
 - a. Highest 4
 - b. High 3
 - c. Low 2
 - d. Lowest 1
 - e. None 0

7. Which of the following health issues have you sought information about from Nigerian newspapers? *You can choose as many as possible options in this case.*
 - a. Nutrition: balance diet and healthy living
 - b. HIV/AIDS
 - c. Malaria
 - d. Polio
 - e. Tuberculosis
 - f. Asthma
 - g. Hypertension
 - h. Diabetes

- i. Mental illnesses
- j. Cholera
- k. Glaucoma
- l. Ulcer
- m. Meningitis
- n. Measles
- o. Skin infection
- p. Diarrhoea
- q. Insomnia
- r. Lassa fever
- s. Whooping cough
- t. Leprosy
- u. Haemophilia
- v. Cancer
- w. Stroke
- x. Infertility
- y. Ebola virus
- z. Heart disease
- aa. Arthritis
- bb. Neo/Ante- natal care
- cc. Infant health/mortality
- dd. Maternal health/mortality
- ee. Health care delivery
- ff. Health systems administration
- gg. Policies, facilities, personnel, allowances
- hh. Specify: _____

8. At what degree would you agree that seeking health information from newspapers has improved your general health behaviours?
- a. Highest 4
 - b. High 3
 - c. Low 2
 - d. Lowest 1
 - e. None 0
9. At what degree do you discuss health information or information on health issues accessed from newspapers with friends, family members, colleagues in office, parents etc.?
- a. Highest 4
 - b. High 3
 - c. Low 2
 - d. Lowest 1
 - e. None 0

SECTION B

Demographic Variables

10. Gender

- a. Male
- b. Female

11. Age

- a. 20-29
- b. 30-39
- c. 40-49
- d. 50-59
- e. 60-69
- f. 70 and above

12. Education

- a. PhD
- b. M.Sc/M.Ed/M.A/MBA/MPH/MPA
- c. B.Sc/B.A/MBBS, BL
- d. HND
- e. NCE/OND
- f. Diploma/Grade 11
- g. Secondary School Certificate
- h. Primary School Leaving Certificate
- i. Other

Appendix v

Tables of composite technique performed on the 48 months covered in four prominent Nigerian national newspapers from January to December, 2010-2013.

2010 Newspaper Editions

| Month | 1 st Week/Day | 2 nd Week/Day | 3 rd Week/Day | 4 th Week/Day | 5 th Week/Day |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| January | Fri: 01/01 | Mon: 04/01 | Tue: 12/01 | Wed: 20/01 | Thur: 28/01 |
| February | Fri: 06/02 | Mon: 08/02 | Tue: 16/02 | Wed: 24/02 | |
| March | Thur: 04/03 | Fri: 12/03 | Mon: 15/03 | Tue: 23/03 | Wed: 31/03 |
| April | Thur: 01/04 | Fri: 09/04 | Mon: 12/04 | Tue: 20/04 | Wed: 28/04 |
| May | Fri: 07/05 | Mon: 10/05 | Tue: 18/05 | Wed: 26/05 | |
| June | Thur: 03/06 | Fri: 11/06 | Mon: 14/06 | Tue: 22/06 | Wed: 30/06 |
| July | Thur: 01/07 | Fri: 09/07 | Mon: 12/07 | Tue: 20/07 | Wed: 28/04 |
| August | Fri: 06/08 | Mon: 09/08 | Tue: 17/08 | Wed: 25/08 | |
| September | Thur: 02/09 | Fri: 10/09 | Mon: 13/09 | Tue: 21/09 | Wed: 29/09 |
| October | Thur: 07/10 | Fri: 15/10 | Mon: 18/10 | Tue: 26/10 | |
| November | Wed: 03/11 | Thur: 11/11 | Fri: 19/11 | Mon: 22/11 | Tue: 30/11 |
| December | Wed: 01/12 | Thur: 09/12 | Fri: 17/12 | Mon: 20/12 | Tue: 28/12 |
| Total | 52 Editions | | | | |

2011 Newspaper Editions

| Month | 1st Week/Day | 2nd Week/Day | 3rd Week/Day | 4th Week/Day | 5th Week/Day |
|--------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| January | Mon: 03/01 | Tue: 11/01 | Wed: 19/01 | Thur: 27/01 | |
| February | Fri: 04/02 | Mon: 07/02 | Tue: 15/02 | Wed: 23/02 | |
| March | Thur: 03/03 | Fri: 11/03 | Mon: 14/03 | Tue: 22/03 | Wed: 30/03 |
| April | Thur: 07/04 | Fri: 15/04 | Mon: 18/04 | Tue: 26/04 | |
| May | Wed: 04/05 | Thur: 12/05 | Fri: 20/05 | Mon: 23/05 | TUE: 31/05 |
| June | Wed: 08/06 | Thur: 16/06 | Fri: 24/06 | Mon: 27/06 | |
| July | Tue: 05/07 | Wed: 13/07 | Thur: 21/07 | Fri: 29/07 | |
| August | Mon: 08/08 | Tue: 16/08 | Wed: 24/08 | | |
| September | Thur: 01/09 | Fri: 09/09 | Mon: 12/09 | Tue: 20/09 | Wed: 28/09 |
| October | Thur: 06/10 | Fri: 14/10 | Mon: 17/10 | Tue: 25/10 | |
| November | Wed: 02/11 | Thur: 10/11 | Fri: 18/11 | Mon: 21/11 | Tue: 29/11 |
| December | Wed: 07/12 | Thur: 15/12 | Fri: 23/12 | Mon: 26/12 | |
| Total | 51 Editions | | | | |

2012 Newspaper Editions

| Month | 1st Week/Day | 2nd Week/Day | 3rd Week/Day | 4th Week/Day | 5th Week/Day |
|--------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| January | Mon: 02/01 | Tue: 10/01 | Wed: 18/01 | Thur: 26/01 | |
| February | Fri: 03/02 | Mon: 06/02 | Tue: 14/02 | Wed: 22/02 | |
| March | Thur: 01/03 | Fri: 09/03 | Mon: 12/03 | Tue: 20/03 | Wed: 28/03 |
| April | Thur: 05/04 | Fri: 13/04 | Mon: 16/04 | Tue: 24/04 | |
| May | Wed: 02/05 | Thur: 10/05 | Fri: 18/05 | Mon: 21/05 | Tue: 29/05 |
| June | Wed: 06/06 | Thur: 14/06 | Fri: 22/06 | Mon: 25/06 | |
| July | Tue: 03/07 | Wed: 11/07 | Thur: 19/07 | Fri: 27/07 | |
| August | Mon: 06/08 | Tue: 14/08 | Wed: 22/08 | Thur: 30/08 | |
| September | Fri: 07/09 | Mon: 10/09 | Tue: 18/09 | Wed: 26/09 | |
| October | Thur: 04/10 | Fri: 12/10 | Mon: 15/10 | Tue: 23/10 | Wed: 31/10 |
| November | Thur: 01/11 | Fri: 09/11 | Mon: 12/11 | Tue: 20/11 | Wed: 28/11 |
| December | Thur: 06/12 | Fri: 14/12 | Mon: 17/12 | Tue: 25/12 | |
| Total | 52 Editions | | | | |

2013 Newspaper Editions

| Month | 1st Week/Day | 2nd Week/Day | 3rd Week/Day | 4th Week/Day | 5th Week/Day |
|--------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| January | Tue: 01/01 | Wed: 09/01 | Thur: 17/01 | Fri: 25/01 | Mon: 28/01 |
| February | Tue: 05/02 | Wed: 13/02 | Thur: 21/02 | | |
| March | Fri: 01/03 | Mon: 04/03 | Tue: 12/03 | Wed: 20/03 | Thur: 28/03 |
| April | Fri: 05/04 | Mon: 08/04 | Tue: 16/04 | Wed: 24/04 | |
| May | Thur: 02/05 | Fri: 10/05 | Mon: 13/05 | Tue: 21/05 | Wed: 29/05 |
| June | Thur: 06/06 | Fri: 14/06 | Mon: 17/06 | Tue: 25/06 | |
| July | Wed: 03/07 | Thur: 11/07 | Fri: 19/07 | Mon: 22/07 | Tue: 30e/07 |
| August | Wed: 07/08 | Thur: 15/08 | Fri: 23/08 | Mon: 26/08 | |
| September | Tue: 03/09 | Wed: 11/09 | Thur: 19/09 | Fri: 27/09 | |
| October | Mon: 07/10 | Tue: 15/10 | Wed: 23/10 | Thur: 31/10 | |
| November | Fri: 01/11 | Mon: 04/11 | Tue: 12/11 | Wed: 20/11 | Thur: 28/11 |
| December | Fri: 06/12 | Mon: 09/12 | Tue: 17/12 | Wed: 25/12 | |
| Total | 52 Editions | | | | |

Appendix vi: Crosstabulation tables

Health themes/topics * Geographical context of story Crosstabulation

| | | Geographical context of story | | | | | | Total | |
|-----------------------|----------------------------|--|-------------|------------|------------|-------------------|---------------|-------|------|
| | | North | south south | south east | south west | foreign countries | not indicated | North | |
| Health themes /topics | malaria | Count | 25 | 4 | 0 | 37 | 21 | 6 | 93 |
| | | % within Geographical context of story | 4.4% | 5.1% | .0% | 4.9% | 3.0% | 2.7% | 3.9% |
| | | Adjusted Residual | .7 | .6 | -1.3 | 1.7 | -1.6 | -1.0 | |
| | HIV/AIDS | Count | 69 | 13 | 2 | 55 | 39 | 11 | 189 |
| | | % within Geographical context of story | 12.2% | 16.7% | 5.1% | 7.3% | 5.5% | 4.9% | 8.0% |
| | | Adjusted Residual | 4.3 | 2.9 | -.7 | -.9 | -2.9 | -1.8 | |
| | Polio | Count | 67 | 1 | 2 | 19 | 10 | 10 | 109 |
| | | % within Geographical context of story | 11.9% | 1.3% | 5.1% | 2.5% | 1.4% | 4.5% | 4.6% |
| | | Adjusted Residual | 9.4 | -1.4 | .2 | -3.3 | -4.8 | -.1 | |
| | Tuberculosis | Count | 9 | 0 | 1 | 8 | 11 | 1 | 30 |
| | | % within Geographical context of story | 1.6% | .0% | 2.6% | 1.1% | 1.6% | .4% | 1.3% |
| | | Adjusted Residual | .8 | -1.0 | .7 | -.6 | .8 | -1.2 | |
| | Diabetes | Count | 5 | 1 | 1 | 16 | 22 | 5 | 50 |
| | | % within Geographical context of story | .9% | 1.3% | 2.6% | 2.1% | 3.1% | 2.2% | 2.1% |
| | | Adjusted Residual | -2.3 | -.5 | .2 | .0 | 2.2 | .1 | |
| | hypertension | Count | 1 | 0 | 0 | 6 | 7 | 6 | 20 |
| | | % within Geographical context of story | .2% | .0% | .0% | .8% | 1.0% | 2.7% | .8% |
| | | Adjusted Residual | -2.0 | -.8 | -.6 | -.2 | .5 | 3.2 | |
| | asthma | Count | 2 | 0 | 0 | 6 | 10 | 1 | 19 |
| | | % within Geographical context of story | .4% | .0% | .0% | .8% | 1.4% | .4% | .8% |
| | | Adjusted Residual | -1.4 | -.8 | -.6 | .0 | 2.2 | -.6 | |
| | nutrition and balance diet | Count | 8 | 2 | 0 | 19 | 62 | 23 | 114 |
| | | % within Geographical context of story | 1.4% | 2.6% | .0% | 2.5% | 8.8% | 10.3% | 4.8% |
| | | Adjusted Residual | -4.3 | -.9 | -1.4 | -3.6 | 5.9 | 4.0 | |
| | mental illness | Count | 1 | 0 | 0 | 6 | 10 | 0 | 17 |
| | | % within Geographical context of story | .2% | .0% | .0% | .8% | 1.4% | .0% | .7% |
| | | Adjusted Residual | -1.7 | -.8 | -.5 | .3 | 2.6 | -1.3 | |
| | cholera | Count | 18 | 0 | 0 | 11 | 9 | 7 | 45 |
| | | % within Geographical context of story | 3.2% | .0% | .0% | 1.5% | 1.3% | 3.1% | 1.9% |
| | | Adjusted Residual | 2.6 | -1.2 | -.9 | -1.1 | -1.5 | 1.4 | |
| | glaucoma | Count | 2 | 0 | 0 | 0 | 1 | 0 | 3 |

| | | | | | | | | | |
|--|---------------------------------|--|------|------|-------|------|-------|------|------|
| | | % within Geographical context of story | .4% | .0% | .0% | .0% | .1% | .0% | .1% |
| | | Adjusted Residual | 1.7 | -.3 | -.2 | -1.2 | .1 | -.6 | |
| | ulcer | Count | 2 | 0 | 0 | 0 | 3 | 1 | 6 |
| | | % within Geographical context of story | .4% | .0% | .0% | .0% | .4% | .4% | .3% |
| | | Adjusted Residual | .5 | -.5 | -.3 | -1.7 | 1.1 | .6 | |
| | meningitis | Count | 5 | 0 | 0 | 0 | 1 | 1 | 7 |
| | | % within Geographical context of story | .9% | .0% | .0% | .0% | .1% | .4% | .3% |
| | | Adjusted Residual | 3.0 | -.5 | -.3 | -1.8 | -.9 | .4 | |
| | measles | Count | 2 | 0 | 0 | 0 | 2 | 0 | 4 |
| | | % within Geographical context of story | .4% | .0% | .0% | .0% | .3% | .0% | .2% |
| | | Adjusted Residual | 1.2 | -.4 | -.3 | -1.4 | .9 | -.6 | |
| | skin infection | Count | 1 | 0 | 0 | 2 | 5 | 5 | 13 |
| | | % within Geographical context of story | .2% | .0% | .0% | .3% | .7% | 2.2% | .5% |
| | | Adjusted Residual | -1.4 | -.7 | -.5 | -1.3 | .7 | 3.6 | |
| | diarrhoea | Count | 3 | 0 | 0 | 5 | 3 | 0 | 11 |
| | | % within Geographical context of story | .5% | .0% | .0% | .7% | .4% | .0% | .5% |
| | | Adjusted Residual | .3 | -.6 | -.4 | 1.0 | -.2 | -1.1 | |
| | lassa fever | Count | 7 | 1 | 1 | 2 | 0 | 0 | 11 |
| | | % within Geographical context of story | 1.2% | 1.3% | 2.6% | .3% | .0% | .0% | .5% |
| | | Adjusted Residual | 3.1 | 1.1 | 1.9 | -1.0 | -2.2 | -1.1 | |
| | whooping cough | Count | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| | | % within Geographical context of story | .0% | .0% | .0% | .3% | .0% | .0% | .1% |
| | | Adjusted Residual | -.8 | -.3 | -.2 | 2.1 | -.9 | -.5 | |
| | leprosy | Count | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| | | % within Geographical context of story | .0% | .0% | .0% | .0% | .1% | .0% | .0% |
| | | Adjusted Residual | -.6 | -.2 | -.1 | -.7 | 1.5 | -.3 | |
| | cancer | Count | 13 | 2 | 4 | 37 | 74 | 11 | 141 |
| | | % within Geographical context of story | 2.3% | 2.6% | 10.3% | 4.9% | 10.5% | 4.9% | 6.0% |
| | | Adjusted Residual | -4.2 | -1.3 | 1.1 | -1.5 | 6.1 | -.7 | |
| | stroke | Count | 3 | 0 | 0 | 8 | 13 | 1 | 25 |
| | | % within Geographical context of story | .5% | .0% | .0% | 1.1% | 1.8% | .4% | 1.1% |
| | | Adjusted Residual | -1.4 | -.9 | -.7 | .0 | 2.4 | -.9 | |
| | infertility/reproductive health | Count | 8 | 1 | 0 | 24 | 16 | 8 | 57 |
| | | % within Geographical context of story | 1.4% | 1.3% | .0% | 3.2% | 2.3% | 3.6% | 2.4% |
| | | Adjusted Residual | -1.8 | -.7 | -1.0 | 1.7 | -.3 | 1.2 | |
| | heart disease | Count | 3 | 0 | 1 | 10 | 38 | 5 | 57 |
| | | % within Geographical context of story | .5% | .0% | 2.6% | 1.3% | 5.4% | 2.2% | 2.4% |
| | | Adjusted Residual | -3.3 | -1.4 | .1 | -2.4 | 6.1 | -.2 | |

| | | | | | | | | | |
|--|---|--|-------|-------|-------|-------|------|------|-------|
| | arthritis | Count | 1 | 0 | 0 | 1 | 7 | 1 | 10 |
| | | % within Geographical context of story | .2% | .0% | .0% | .1% | 1.0% | .4% | .4% |
| | | Adjusted Residual | -1.0 | -.6 | -.4 | -1.5 | 2.8 | .1 | |
| | neo/ante-natal care | Count | 2 | 0 | 0 | 5 | 3 | 1 | 11 |
| | | % within Geographical context of story | .4% | .0% | .0% | .7% | .4% | .4% | .5% |
| | | Adjusted Residual | -.4 | -.6 | -.4 | 1.0 | -.2 | .0 | |
| | infant health/mortality | Count | 12 | 2 | 2 | 20 | 30 | 12 | 78 |
| | | % within Geographical context of story | 2.1% | 2.6% | 5.1% | 2.6% | 4.2% | 5.4% | 3.3% |
| | | Adjusted Residual | -1.8 | -.4 | .6 | -1.2 | 1.7 | 1.8 | |
| | maternity health/mortality | Count | 31 | 0 | 1 | 27 | 25 | 13 | 97 |
| | | % within Geographical context of story | 5.5% | .0% | 2.6% | 3.6% | 3.5% | 5.8% | 4.1% |
| | | Adjusted Residual | 1.9 | -1.9 | -.5 | -.9 | -.9 | 1.4 | |
| | ebola virus | Count | 0 | 1 | 0 | 0 | 2 | 0 | 3 |
| | | % within Geographical context of story | .0% | 1.3% | .0% | .0% | .3% | .0% | .1% |
| | | Adjusted Residual | -1.0 | 2.9 | -.2 | -1.2 | 1.4 | -.6 | |
| | healthcare delivery | Count | 87 | 16 | 5 | 126 | 13 | 4 | 251 |
| | | % within Geographical context of story | 15.4% | 20.5% | 12.8% | 16.7% | 1.8% | 1.8% | 10.6% |
| | | Adjusted Residual | 4.3 | 2.9 | .5 | 6.6 | -9.0 | -4.5 | |
| | health systems administration | Count | 82 | 13 | 7 | 97 | 9 | 13 | 221 |
| | | % within Geographical context of story | 14.5% | 16.7% | 17.9% | 12.8% | 1.3% | 5.8% | 9.3% |
| | | Adjusted Residual | 4.9 | 2.3 | 1.9 | 4.0 | -8.8 | -1.9 | |
| | launch of new drugs/treatment | Count | 4 | 1 | 0 | 0 | 17 | 0 | 22 |
| | | % within Geographical context of story | .7% | 1.3% | .0% | .0% | 2.4% | .0% | .9% |
| | | Adjusted Residual | -.6 | .3 | -.6 | -3.2 | 4.9 | -1.5 | |
| | policies, facilities, personel, allowance | Count | 8 | 2 | 2 | 14 | 2 | 0 | 28 |
| | | % within Geographical context of story | 1.4% | 2.6% | 5.1% | 1.9% | .3% | .0% | 1.2% |
| | | Adjusted Residual | .6 | 1.1 | 2.3 | 2.1 | -2.6 | -1.7 | |
| | Parkinson | Count | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | % within Geographical context of story | .0% | .0% | .0% | .0% | .0% | .4% | .0% |
| | | Adjusted Residual | -.6 | -.2 | -.1 | -.7 | -.7 | 3.1 | |
| | bacterial/viral infection | Count | 0 | 1 | 0 | 1 | 3 | 3 | 8 |
| | | % within Geographical context of story | .0% | 1.3% | .0% | .1% | .4% | 1.3% | .3% |
| | | Adjusted Residual | -1.6 | 1.5 | -.4 | -1.2 | .5 | 2.7 | |
| | hepatitis | Count | 0 | 0 | 0 | 4 | 1 | 1 | 6 |

| | | | | | | | | | |
|--|----------------------------------|--|--------|--------|--------|--------|--------|--------|--------|
| | | % within Geographical context of story | .0% | .0% | .0% | .5% | .1% | .4% | .3% |
| | | Adjusted Residual | -1.4 | -.5 | -.3 | 1.8 | -.7 | .6 | |
| | traditional/herbal medicine | Count | 2 | 0 | 0 | 10 | 3 | 4 | 19 |
| | | % within Geographical context of story | .4% | .0% | .0% | 1.3% | .4% | 1.8% | .8% |
| | | Adjusted Residual | -1.4 | -.8 | -.6 | 1.9 | -1.3 | 1.7 | |
| | eye disease | Count | 8 | 1 | 1 | 40 | 12 | 1 | 63 |
| | | % within Geographical context of story | 1.4% | 1.3% | 2.6% | 5.3% | 1.7% | .4% | 2.7% |
| | | Adjusted Residual | -2.1 | -.8 | .0 | 5.4 | -1.9 | -2.2 | |
| | nose related disease | Count | 1 | 0 | 0 | 5 | 0 | 0 | 6 |
| | | % within Geographical context of story | .2% | .0% | .0% | .7% | .0% | .0% | .3% |
| | | Adjusted Residual | -.4 | -.5 | -.3 | 2.7 | -1.6 | -.8 | |
| | ears infection | Count | 1 | 0 | 2 | 2 | 5 | 2 | 12 |
| | | % within Geographical context of story | .2% | .0% | 5.1% | .3% | .7% | .9% | .5% |
| | | Adjusted Residual | -1.3 | -.6 | 4.1 | -1.1 | .9 | .9 | |
| | mismanagement of ailment/health | Count | 4 | 1 | 1 | 6 | 6 | 1 | 19 |
| | | % within Geographical context of story | .7% | 1.3% | 2.6% | .8% | .8% | .4% | .8% |
| | | Adjusted Residual | -.3 | .5 | 1.2 | .0 | .2 | -.6 | |
| | alcohol, tobacco and drug intake | Count | 7 | 2 | 0 | 13 | 41 | 5 | 68 |
| | | % within Geographical context of story | 1.2% | 2.6% | .0% | 1.7% | 5.8% | 2.2% | 2.9% |
| | | Adjusted Residual | -2.7 | -.2 | -1.1 | -2.3 | 5.6 | -.6 | |
| | other | Count | 60 | 13 | 6 | 112 | 170 | 60 | 421 |
| | | % within Geographical context of story | 10.6% | 16.7% | 15.4% | 14.8% | 24.0% | 26.8% | 17.8% |
| | | Adjusted Residual | -5.1 | -.3 | -.4 | -2.6 | 5.2 | 3.7 | |
| | Total | Count | 564 | 78 | 39 | 756 | 707 | 224 | 2368 |
| | | % within Geographical context of story | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Health themes/topics * Type of story Crosstabulation

| | | | Type of story | | | | | |
|----------------------|----------------------------|------------------------|---------------|-----------|-----------------|----------------------------|--------------------------|-------|
| | | | news story | Editorial | Feature article | Column writing/com mentary | Letters to the editorial | Total |
| Health themes/topics | malaria | Count | 62 | 2 | 22 | 6 | 1 | 93 |
| | | % within Type of story | 4.1% | 8.0% | 3.6% | 3.3% | 7.1% | 3.9% |
| | | Adjusted Residual | .4 | 1.1 | -.5 | -.5 | .6 | |
| | HIV/AIDS | Count | 153 | 1 | 25 | 8 | 2 | 189 |
| | | % within Type of story | 10.0 % | 4.0% | 4.1% | 4.3% | 14.3% | 8.0% |
| | | Adjusted Residual | 4.9 | -.7 | -4.2 | -1.9 | .9 | |
| | Polio | Count | 90 | 1 | 15 | 3 | 0 | 109 |
| | | % within Type of story | 5.9% | 4.0% | 2.4% | 1.6% | .0% | 4.6% |
| | | Adjusted Residual | 4.0 | -.1 | -3.0 | -2.0 | -.8 | |
| | Tuberculosis | Count | 22 | 0 | 7 | 1 | 0 | 30 |
| | | % within Type of story | 1.4% | .0% | 1.1% | .5% | .0% | 1.3% |
| | | Adjusted Residual | 1.0 | -.6 | -.3 | -.9 | -.4 | |
| | Diabetes | Count | 30 | 1 | 18 | 1 | 0 | 50 |
| | | % within Type of story | 2.0% | 4.0% | 2.9% | .5% | .0% | 2.1% |
| | | Adjusted Residual | -.7 | .7 | 1.6 | -1.5 | -.6 | |
| | hypertension | Count | 11 | 0 | 4 | 5 | 0 | 20 |
| | | % within Type of story | .7% | .0% | .6% | 2.7% | .0% | .8% |
| | | Adjusted Residual | -.9 | -.5 | -.6 | 2.9 | -.3 | |
| | asthma | Count | 9 | 0 | 5 | 5 | 0 | 19 |
| | | % within Type of story | .6% | .0% | .8% | 2.7% | .0% | .8% |
| | | Adjusted Residual | -1.6 | -.5 | .0 | 3.0 | -.3 | |
| | nutrition and balance diet | Count | 43 | 0 | 65 | 6 | 0 | 114 |
| | | % within Type of story | 2.8% | .0% | 10.6% | 3.3% | .0% | 4.8% |
| | | Adjusted Residual | -6.1 | -1.1 | 7.7 | -1.0 | -.8 | |
| | mental illness | Count | 10 | 0 | 7 | 0 | 0 | 17 |
| | | % within Type of story | .7% | .0% | 1.1% | .0% | .0% | .7% |
| | | Adjusted Residual | -.5 | -.4 | 1.4 | -1.2 | -.3 | |
| | cholera | Count | 31 | 3 | 8 | 1 | 2 | 45 |
| | | % within Type of story | 2.0% | 12.0% | 1.3% | .5% | 14.3% | 1.9% |
| | | Adjusted Residual | .6 | 3.7 | -1.3 | -1.4 | 3.4 | |
| | glaucoma | Count | 2 | 0 | 1 | 0 | 0 | 3 |
| | | % within Type of story | .1% | .0% | .2% | .0% | .0% | .1% |
| | | Adjusted Residual | .1 | -.2 | .3 | -.5 | -.1 | |
| | ulcer | Count | 3 | 0 | 3 | 0 | 0 | 6 |
| | | % within Type of story | .2% | .0% | .5% | .0% | .0% | .3% |
| | | Adjusted Residual | -.7 | -.3 | 1.3 | -.7 | -.2 | |
| | meningitis | Count | 5 | 0 | 1 | 1 | 0 | 7 |
| | | % within Type of story | .3% | .0% | .2% | .5% | .0% | .3% |
| | | Adjusted Residual | .4 | -.3 | -.7 | .6 | -.2 | |

| | | | | | | | | |
|--|---------------------------------|------------------------|------|------|------|------|------|------|
| | measles | Count | 3 | 0 | 1 | 0 | 0 | 4 |
| | | % within Type of story | .2% | .0% | .2% | .0% | .0% | .2% |
| | | Adjusted Residual | .4 | -.2 | .0 | -.6 | -.2 | |
| | skin infection | Count | 4 | 0 | 7 | 2 | 0 | 13 |
| | | % within Type of story | .3% | .0% | 1.1% | 1.1% | .0% | .5% |
| | | Adjusted Residual | -2.6 | -.4 | 2.3 | 1.0 | -.3 | |
| | diarrhoea | Count | 6 | 0 | 2 | 3 | 0 | 11 |
| | | % within Type of story | .4% | .0% | .3% | 1.6% | .0% | .5% |
| | | Adjusted Residual | -.7 | -.3 | -.6 | 2.4 | -.3 | |
| | lassa fever | Count | 10 | 1 | 0 | 0 | 0 | 11 |
| | | % within Type of story | .7% | 4.0% | .0% | .0% | .0% | .5% |
| | | Adjusted Residual | 1.8 | 2.6 | -2.0 | -1.0 | -.3 | |
| | whooping cough | Count | 1 | 0 | 1 | 0 | 0 | 2 |
| | | % within Type of story | .1% | .0% | .2% | .0% | .0% | .1% |
| | | Adjusted Residual | -.4 | -.1 | .8 | -.4 | -.1 | |
| | leprosy | Count | 0 | 0 | 1 | 0 | 0 | 1 |
| | | % within Type of story | .0% | .0% | .2% | .0% | .0% | .0% |
| | | Adjusted Residual | -1.4 | -.1 | 1.7 | -.3 | -.1 | |
| | cancer | Count | 83 | 2 | 44 | 11 | 1 | 141 |
| | | % within Type of story | 5.4% | 8.0% | 7.1% | 6.0% | 7.1% | 6.0% |
| | | Adjusted Residual | -1.5 | .4 | 1.4 | .0 | .2 | |
| | stroke | Count | 12 | 0 | 9 | 4 | 0 | 25 |
| | | % within Type of story | .8% | .0% | 1.5% | 2.2% | .0% | 1.1% |
| | | Adjusted Residual | -1.7 | -.5 | 1.1 | 1.5 | -.4 | |
| | infertility/reproductive health | Count | 26 | 1 | 22 | 7 | 1 | 57 |
| | | % within Type of story | 1.7% | 4.0% | 3.6% | 3.8% | 7.1% | 2.4% |
| | | Adjusted Residual | -3.0 | .5 | 2.2 | 1.3 | 1.2 | |
| | heart disease | Count | 27 | 1 | 23 | 6 | 0 | 57 |
| | | % within Type of story | 1.8% | 4.0% | 3.7% | 3.3% | .0% | 2.4% |
| | | Adjusted Residual | -2.7 | .5 | 2.5 | .8 | -.6 | |
| | arthritis | Count | 5 | 0 | 5 | 0 | 0 | 10 |
| | | % within Type of story | .3% | .0% | .8% | .0% | .0% | .4% |
| | | Adjusted Residual | -1.0 | -.3 | 1.7 | -.9 | -.2 | |
| | neo/ante-natal care | Count | 6 | 0 | 5 | 0 | 0 | 11 |
| | | % within Type of story | .4% | .0% | .8% | .0% | .0% | .5% |
| | | Adjusted Residual | -.7 | -.3 | 1.5 | -1.0 | -.3 | |
| | infant health/mortality | Count | 40 | 1 | 29 | 8 | 0 | 78 |
| | | % within Type of story | 2.6% | 4.0% | 4.7% | 4.3% | .0% | 3.3% |
| | | Adjusted Residual | -2.5 | .2 | 2.3 | .8 | -.7 | |
| | maternity health/mortality | Count | 61 | 0 | 30 | 6 | 0 | 97 |
| | | % within Type of story | 4.0% | .0% | 4.9% | 3.3% | .0% | 4.1% |
| | | Adjusted Residual | -.4 | -1.0 | 1.1 | -.6 | -.8 | |
| | ebola virus | Count | 2 | 0 | 0 | 1 | 0 | 3 |
| | | % within Type of story | .1% | .0% | .0% | .5% | .0% | .1% |
| | | Adjusted Residual | .1 | -.2 | -1.0 | 1.7 | -.1 | |

| | | | | | | | | |
|--|---|------------------------|--------|-------|-------|-------|-------|-------|
| | healthcare delivery | Count | 220 | 1 | 20 | 9 | 1 | 251 |
| | | % within Type of story | 14.4 % | 4.0% | 3.2% | 4.9% | 7.1% | 10.6% |
| | | Adjusted Residual | 8.1 | -1.1 | -6.9 | -2.6 | -.4 | |
| | health systems administration | Count | 188 | 2 | 24 | 4 | 3 | 221 |
| | | % within Type of story | 12.3 % | 8.0% | 3.9% | 2.2% | 21.4% | 9.3% |
| | | Adjusted Residual | 6.7 | -.2 | -5.4 | -3.5 | 1.6 | |
| | launch of new drugs/treatment | Count | 13 | 1 | 8 | 0 | 0 | 22 |
| | | % within Type of story | .9% | 4.0% | 1.3% | .0% | .0% | .9% |
| | | Adjusted Residual | -.5 | 1.6 | 1.1 | -1.4 | -.4 | |
| | policies, facilities, personel, allowance | Count | 25 | 1 | 1 | 1 | 0 | 28 |
| | | % within Type of story | 1.6% | 4.0% | .2% | .5% | .0% | 1.2% |
| | | Adjusted Residual | 2.8 | 1.3 | -2.7 | -.8 | -.4 | |
| | Parkinson | Count | 1 | 0 | 0 | 0 | 0 | 1 |
| | | % within Type of story | .1% | .0% | .0% | .0% | .0% | .0% |
| | | Adjusted Residual | .7 | -.1 | -.6 | -.3 | -.1 | |
| | bacterial/viral infection | Count | 3 | 0 | 5 | 0 | 0 | 8 |
| | | % within Type of story | .2% | .0% | .8% | .0% | .0% | .3% |
| | | Adjusted Residual | -1.6 | -.3 | 2.4 | -.8 | -.2 | |
| | hepatitis | Count | 2 | 0 | 1 | 3 | 0 | 6 |
| | | % within Type of story | .1% | .0% | .2% | 1.6% | .0% | .3% |
| | | Adjusted Residual | -1.6 | -.3 | -.5 | 3.9 | -.2 | |
| | traditional/heabal medicine | Count | 10 | 0 | 6 | 3 | 0 | 19 |
| | | % within Type of story | .7% | .0% | 1.0% | 1.6% | .0% | .8% |
| | | Adjusted Residual | -1.1 | -.5 | .6 | 1.3 | -.3 | |
| | eye disease | Count | 31 | 0 | 9 | 23 | 0 | 63 |
| | | % within Type of story | 2.0% | .0% | 1.5% | 12.5% | .0% | 2.7% |
| | | Adjusted Residual | -2.6 | -.8 | -2.2 | 8.6 | -.6 | |
| | nose related disease | Count | 5 | 0 | 1 | 0 | 0 | 6 |
| | | % within Type of story | .3% | .0% | .2% | .0% | .0% | .3% |
| | | Adjusted Residual | 1.0 | -.3 | -.5 | -.7 | -.2 | |
| | ears infection | Count | 3 | 0 | 6 | 2 | 1 | 12 |
| | | % within Type of story | .2% | .0% | 1.0% | 1.1% | 7.1% | .5% |
| | | Adjusted Residual | -2.9 | -.4 | 1.9 | 1.2 | 3.5 | |
| | mismanagement of ailment/health | Count | 11 | 0 | 6 | 2 | 0 | 19 |
| | | % within Type of story | .7% | .0% | 1.0% | 1.1% | .0% | .8% |
| | | Adjusted Residual | -.6 | -.5 | .6 | .5 | -.3 | |
| | alcohol, tobacco and drug intake | Count | 36 | 1 | 28 | 3 | 0 | 68 |
| | | % within Type of story | 2.4% | 4.0% | 4.5% | 1.6% | .0% | 2.9% |
| | | Adjusted Residual | -2.0 | .3 | 2.9 | -1.0 | -.6 | |
| | other | Count | 224 | 5 | 141 | 49 | 2 | 421 |
| | | % within Type of story | 14.7 % | 20.0% | 22.9% | 26.6% | 14.3% | 17.8% |

| | | | | | | | | |
|-------|--|------------------------|------------|--------|--------|--------|--------|--------|
| | | Adjusted Residual | -5.4 | .3 | 3.9 | 3.3 | -.3 | |
| Total | | Count | 1529 | 25 | 616 | 184 | 14 | 2368 |
| | | % within Type of story | 100.0 % | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Health themes/topics * Position of story Crosstabulation

| | | Position of story | | | | | Total | |
|----------------------|----------------------------|----------------------------|------------------|-----------|-------------|---------------|-------|------|
| | | lead story | other front page | back page | inside page | center spread | | |
| Health themes/topics | malaria | Count | 0 | 1 | 0 | 92 | 0 | 93 |
| | | % within Position of story | .0% | 2.9% | .0% | 4.0% | .0% | 3.9% |
| | | Adjusted Residual | -.6 | -.3 | -.9 | 1.0 | -.3 | |
| | HIV/AIDS | Count | 1 | 6 | 6 | 176 | 0 | 189 |
| | | % within Position of story | 12.5% | 17.1% | 31.6% | 7.6% | .0% | 8.0% |
| | | Adjusted Residual | .5 | 2.0 | 3.8 | -3.7 | -.4 | |
| | Polio | Count | 0 | 4 | 3 | 102 | 0 | 109 |
| | | % within Position of story | .0% | 11.4% | 15.8% | 4.4% | .0% | 4.6% |
| | | Adjusted Residual | -.6 | 1.9 | 2.3 | -2.5 | -.3 | |
| | Tuberculosis | Count | 0 | 0 | 1 | 29 | 0 | 30 |
| | | % within Position of story | .0% | .0% | 5.3% | 1.3% | .0% | 1.3% |
| | | Adjusted Residual | -.3 | -.7 | 1.6 | -.2 | -.2 | |
| | Diabetes | Count | 0 | 2 | 0 | 48 | 0 | 50 |
| | | % within Position of story | .0% | 5.7% | .0% | 2.1% | .0% | 2.1% |
| | | Adjusted Residual | -.4 | 1.5 | -.6 | -.6 | -.2 | |
| | hypertension | Count | 0 | 0 | 0 | 20 | 0 | 20 |
| | | % within Position of story | .0% | .0% | .0% | .9% | .0% | .8% |
| | | Adjusted Residual | -.3 | -.6 | -.4 | .7 | -.1 | |
| | asthma | Count | 0 | 0 | 0 | 19 | 0 | 19 |
| | | % within Position of story | .0% | .0% | .0% | .8% | .0% | .8% |
| | | Adjusted Residual | -.3 | -.5 | -.4 | .7 | -.1 | |
| | nutrition and balance diet | Count | 0 | 2 | 0 | 112 | 0 | 114 |
| | | % within Position of story | .0% | 5.7% | .0% | 4.9% | .0% | 4.8% |
| | | Adjusted Residual | -.6 | .3 | -1.0 | .6 | -.3 | |
| | mental illness | Count | 0 | 0 | 0 | 17 | 0 | 17 |
| | | % within Position of story | .0% | .0% | .0% | .7% | .0% | .7% |
| | | Adjusted Residual | -.2 | -.5 | -.4 | .7 | -.1 | |
| | cholera | Count | 0 | 1 | 0 | 43 | 1 | 45 |
| | | % within Position of story | .0% | 2.9% | .0% | 1.9% | 50.0% | 1.9% |
| | | Adjusted Residual | -.4 | .4 | -.6 | -.7 | 5.0 | |
| | glaucoma | Count | 0 | 0 | 0 | 3 | 0 | 3 |
| | | % within Position of story | .0% | .0% | .0% | .1% | .0% | .1% |
| | | Adjusted Residual | -.1 | -.2 | -.2 | .3 | -.1 | |
| | ulcer | Count | 0 | 0 | 0 | 6 | 0 | 6 |
| | | % within Position of story | .0% | .0% | .0% | .3% | .0% | .3% |
| | | Adjusted Residual | -.1 | -.3 | -.2 | .4 | -.1 | |
| | meningitis | Count | 0 | 0 | 1 | 6 | 0 | 7 |
| | | % within Position of story | .0% | .0% | 5.3% | .3% | .0% | .3% |

| | | | | | | | | |
|--|---------------------------------|----------------------------|-------|-------|------|------|-----|------|
| | | Adjusted Residual | -2 | -3 | 4.0 | -1.9 | -1 | |
| | measles | Count | 0 | 0 | 0 | 4 | 0 | 4 |
| | | % within Position of story | .0% | .0% | .0% | .2% | .0% | .2% |
| | | Adjusted Residual | -1 | -2 | -2 | .3 | -1 | |
| | skin infection | Count | 0 | 0 | 0 | 13 | 0 | 13 |
| | | % within Position of story | .0% | .0% | .0% | .6% | .0% | .5% |
| | | Adjusted Residual | -2 | -4 | -3 | .6 | -1 | |
| | diarrhoea | Count | 0 | 0 | 0 | 11 | 0 | 11 |
| | | % within Position of story | .0% | .0% | .0% | .5% | .0% | .5% |
| | | Adjusted Residual | -2 | -4 | -3 | .6 | -1 | |
| | lassa fever | Count | 0 | 0 | 0 | 11 | 0 | 11 |
| | | % within Position of story | .0% | .0% | .0% | .5% | .0% | .5% |
| | | Adjusted Residual | -2 | -4 | -3 | .6 | -1 | |
| | whooping cough | Count | 0 | 0 | 0 | 2 | 0 | 2 |
| | | % within Position of story | .0% | .0% | .0% | .1% | .0% | .1% |
| | | Adjusted Residual | -1 | -2 | -1 | .2 | .0 | |
| | leprosy | Count | 0 | 0 | 0 | 1 | 0 | 1 |
| | | % within Position of story | .0% | .0% | .0% | .0% | .0% | .0% |
| | | Adjusted Residual | -1 | -1 | -1 | .2 | .0 | |
| | cancer | Count | 0 | 5 | 1 | 135 | 0 | 141 |
| | | % within Position of story | .0% | 14.3% | 5.3% | 5.9% | .0% | 6.0% |
| | | Adjusted Residual | -7 | 2.1 | -1 | -1.2 | -4 | |
| | stroke | Count | 0 | 0 | 0 | 25 | 0 | 25 |
| | | % within Position of story | .0% | .0% | .0% | 1.1% | .0% | 1.1% |
| | | Adjusted Residual | -3 | -6 | -5 | .8 | -1 | |
| | infertility/reproductive health | Count | 0 | 1 | 0 | 56 | 0 | 57 |
| | | % within Position of story | .0% | 2.9% | .0% | 2.4% | .0% | 2.4% |
| | | Adjusted Residual | -4 | .2 | -7 | .4 | -2 | |
| | heart disease | Count | 0 | 0 | 0 | 57 | 0 | 57 |
| | | % within Position of story | .0% | .0% | .0% | 2.5% | .0% | 2.4% |
| | | Adjusted Residual | -4 | -9 | -7 | 1.3 | -2 | |
| | arthritis | Count | 0 | 0 | 0 | 10 | 0 | 10 |
| | | % within Position of story | .0% | .0% | .0% | .4% | .0% | .4% |
| | | Adjusted Residual | -2 | -4 | -3 | .5 | -1 | |
| | neo/ante-natal care | Count | 0 | 0 | 0 | 11 | 0 | 11 |
| | | % within Position of story | .0% | .0% | .0% | .5% | .0% | .5% |
| | | Adjusted Residual | -2 | -4 | -3 | .6 | -1 | |
| | infant health/mortality | Count | 1 | 0 | 1 | 76 | 0 | 78 |
| | | % within Position of story | 12.5% | .0% | 5.3% | 3.3% | .0% | 3.3% |
| | | Adjusted Residual | 1.5 | -1.1 | .5 | .1 | -3 | |
| | maternity health/mortality | Count | 1 | 1 | 0 | 95 | 0 | 97 |
| | | % within Position of story | 12.5% | 2.9% | .0% | 4.1% | .0% | 4.1% |

| | | | | | | | | |
|--|--|----------------------------|-------|-------|-------|-------|-------|-------|
| | | Adjusted Residual | 1.2 | -.4 | -.9 | .4 | -.3 | |
| | ebola virus | Count | 0 | 0 | 0 | 3 | 0 | 3 |
| | | % within Position of story | .0% | .0% | .0% | .1% | .0% | .1% |
| | | Adjusted Residual | -.1 | -.2 | -.2 | .3 | -.1 | |
| | healthcare delivery | Count | 2 | 0 | 0 | 248 | 1 | 251 |
| | | % within Position of story | 25.0% | .0% | .0% | 10.8% | 50.0% | 10.6% |
| | | Adjusted Residual | 1.3 | -2.1 | -1.5 | 1.6 | 1.8 | |
| | health systems administration | Count | 1 | 4 | 2 | 214 | 0 | 221 |
| | | % within Position of story | 12.5% | 11.4% | 10.5% | 9.3% | .0% | 9.3% |
| | | Adjusted Residual | .3 | .4 | .2 | -.4 | -.5 | |
| | launch of new drugs/treatment | Count | 0 | 0 | 0 | 22 | 0 | 22 |
| | | % within Position of story | .0% | .0% | .0% | 1.0% | .0% | .9% |
| | | Adjusted Residual | -.3 | -.6 | -.4 | .8 | -.1 | |
| | policies, facilities, personnel, allowance | Count | 0 | 0 | 0 | 28 | 0 | 28 |
| | | % within Position of story | .0% | .0% | .0% | 1.2% | .0% | 1.2% |
| | | Adjusted Residual | -.3 | -.7 | -.5 | .9 | -.2 | |
| | Parkinson | Count | 0 | 0 | 0 | 1 | 0 | 1 |
| | | % within Position of story | .0% | .0% | .0% | .0% | .0% | .0% |
| | | Adjusted Residual | -.1 | -.1 | -.1 | .2 | .0 | |
| | bacterial/viral infection | Count | 0 | 0 | 0 | 8 | 0 | 8 |
| | | % within Position of story | .0% | .0% | .0% | .3% | .0% | .3% |
| | | Adjusted Residual | -.2 | -.3 | -.3 | .5 | -.1 | |
| | hepatitis | Count | 0 | 0 | 0 | 6 | 0 | 6 |
| | | % within Position of story | .0% | .0% | .0% | .3% | .0% | .3% |
| | | Adjusted Residual | -.1 | -.3 | -.2 | .4 | -.1 | |
| | traditional/herbal medicine | Count | 0 | 0 | 0 | 19 | 0 | 19 |
| | | % within Position of story | .0% | .0% | .0% | .8% | .0% | .8% |
| | | Adjusted Residual | -.3 | -.5 | -.4 | .7 | -.1 | |
| | eye disease | Count | 1 | 0 | 0 | 62 | 0 | 63 |
| | | % within Position of story | 12.5% | .0% | .0% | 2.7% | .0% | 2.7% |
| | | Adjusted Residual | 1.7 | -1.0 | -.7 | .6 | -.2 | |
| | nose related disease | Count | 0 | 0 | 0 | 6 | 0 | 6 |
| | | % within Position of story | .0% | .0% | .0% | .3% | .0% | .3% |
| | | Adjusted Residual | -.1 | -.3 | -.2 | .4 | -.1 | |
| | ears infection | Count | 1 | 0 | 0 | 11 | 0 | 12 |
| | | % within Position of story | 12.5% | .0% | .0% | .5% | .0% | .5% |
| | | Adjusted Residual | 4.8 | -.4 | -.3 | -1.2 | -.1 | |

| | | | | | | | | |
|-------|--|----------------------------|--------|--------|--------|--------|--------|------------|
| | mismanage ment of ailment/hea lth | Count | 0 | 0 | 0 | 19 | 0 | 19 |
| | | % within Position of story | .0% | .0% | .0% | .8% | .0% | .8% |
| | | Adjusted Residual | -.3 | -.5 | -.4 | .7 | -.1 | |
| | alcohol, tobacco and drug intake | Count | 0 | 1 | 2 | 65 | 0 | 68 |
| | | % within Position of story | .0% | 2.9% | 10.5% | 2.8% | .0% | 2.9% |
| | | Adjusted Residual | -.5 | .0 | 2.0 | -.9 | -.2 | |
| | other | Count | 0 | 7 | 2 | 412 | 0 | 421 |
| | | % within Position of story | .0% | 20.0% | 10.5% | 17.9% | .0% | 17.8% |
| | | Adjusted Residual | -1.3 | .3 | -.8 | .8 | -.7 | |
| Total | | Count | 8 | 35 | 19 | 2304 | 2 | 2368 |
| | | % within Position of story | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0 % |

Health themes/topics * Photo diversity Crosstabulation

| | | | Photo diversity | | | |
|----------------------|----------------------------|--------------------------|---------------------------|-----------------------------|--------------------|-------|
| | | | coloured with clear faces | black and white clear faces | no photograph used | Total |
| Health themes/topics | malaria | Count | 17 | 14 | 62 | 93 |
| | | % within Photo diversity | 3.2% | 6.2% | 3.9% | 3.9% |
| | | Adjusted Residual | -1.0 | 1.8 | -.2 | |
| | HIV/AIDS | Count | 16 | 17 | 156 | 189 |
| | | % within Photo diversity | 3.0% | 7.5% | 9.7% | 8.0% |
| | | Adjusted Residual | -4.9 | -.3 | 4.5 | |
| | Polio | Count | 19 | 4 | 86 | 109 |
| | | % within Photo diversity | 3.5% | 1.8% | 5.4% | 4.6% |
| | | Adjusted Residual | -1.3 | -2.1 | 2.6 | |
| | Tuberculosis | Count | 8 | 3 | 19 | 30 |
| | | % within Photo diversity | 1.5% | 1.3% | 1.2% | 1.3% |
| | | Adjusted Residual | .5 | .1 | -.5 | |
| | Diabetes | Count | 14 | 5 | 31 | 50 |
| | | % within Photo diversity | 2.6% | 2.2% | 1.9% | 2.1% |
| | | Adjusted Residual | .9 | .1 | -.9 | |
| | hypertension | Count | 6 | 4 | 10 | 20 |
| | | % within Photo diversity | 1.1% | 1.8% | .6% | .8% |
| | | Adjusted Residual | .8 | 1.6 | -1.7 | |
| | asthma | Count | 6 | 2 | 11 | 19 |
| | | % within Photo diversity | 1.1% | .9% | .7% | .8% |
| | | Adjusted Residual | .9 | .1 | -.9 | |
| | nutrition and balance diet | Count | 44 | 19 | 51 | 114 |
| | | % within Photo diversity | 8.2% | 8.4% | 3.2% | 4.8% |
| | | Adjusted Residual | 4.2 | 2.6 | -5.4 | |
| | mental illness | Count | 2 | 2 | 13 | 17 |
| | | % within Photo diversity | .4% | .9% | .8% | .7% |
| | | Adjusted Residual | -1.1 | .3 | .8 | |
| | cholera | Count | 4 | 3 | 38 | 45 |
| | | % within Photo diversity | .7% | 1.3% | 2.4% | 1.9% |
| | | Adjusted Residual | -2.2 | -.7 | 2.4 | |
| | glaucoma | Count | 0 | 0 | 3 | 3 |
| | | % within Photo diversity | .0% | .0% | .2% | .1% |
| | | Adjusted Residual | -.9 | -.6 | 1.2 | |
| | ulcer | Count | 2 | 1 | 3 | 6 |
| | | % within Photo diversity | .4% | .4% | .2% | .3% |
| | | Adjusted Residual | .6 | .6 | -.9 | |
| | meningitis | Count | 1 | 0 | 6 | 7 |
| | | % within Photo diversity | .2% | .0% | .4% | .3% |
| | | Adjusted Residual | -.5 | -.9 | 1.0 | |
| | measles | Count | 1 | 1 | 2 | 4 |

| | | | | | | |
|--|---------------------------------|--------------------------|------|------|-------|-------|
| | | % within Photo diversity | .2% | .4% | .1% | .2% |
| | | Adjusted Residual | .1 | 1.0 | -.8 | |
| | skin infection | Count | 4 | 2 | 7 | 13 |
| | | % within Photo diversity | .7% | .9% | .4% | .5% |
| | | Adjusted Residual | .7 | .7 | -1.1 | |
| | diarrhoea | Count | 1 | 2 | 8 | 11 |
| | | % within Photo diversity | .2% | .9% | .5% | .5% |
| | | Adjusted Residual | -1.1 | 1.0 | .4 | |
| | lassa fever | Count | 1 | 0 | 10 | 11 |
| | | % within Photo diversity | .2% | .0% | .6% | .5% |
| | | Adjusted Residual | -1.1 | -1.1 | 1.6 | |
| | whooping cough | Count | 1 | 1 | 0 | 2 |
| | | % within Photo diversity | .2% | .4% | .0% | .1% |
| | | Adjusted Residual | .9 | 1.9 | -2.1 | |
| | leprosy | Count | 1 | 0 | 0 | 1 |
| | | % within Photo diversity | .2% | .0% | .0% | .0% |
| | | Adjusted Residual | 1.8 | -.3 | -1.4 | |
| | cancer | Count | 32 | 11 | 98 | 141 |
| | | % within Photo diversity | 6.0% | 4.8% | 6.1% | 6.0% |
| | | Adjusted Residual | .0 | -.7 | .5 | |
| | stroke | Count | 8 | 3 | 14 | 25 |
| | | % within Photo diversity | 1.5% | 1.3% | .9% | 1.1% |
| | | Adjusted Residual | 1.1 | .4 | -1.3 | |
| | infertility/reproductive health | Count | 20 | 7 | 30 | 57 |
| | | % within Photo diversity | 3.7% | 3.1% | 1.9% | 2.4% |
| | | Adjusted Residual | 2.3 | .7 | -2.5 | |
| | heart disease | Count | 22 | 6 | 29 | 57 |
| | | % within Photo diversity | 4.1% | 2.6% | 1.8% | 2.4% |
| | | Adjusted Residual | 2.9 | .2 | -2.8 | |
| | arthritis | Count | 4 | 1 | 5 | 10 |
| | | % within Photo diversity | .7% | .4% | .3% | .4% |
| | | Adjusted Residual | 1.3 | .0 | -1.2 | |
| | neo/ante-natal care | Count | 4 | 1 | 6 | 11 |
| | | % within Photo diversity | .7% | .4% | .4% | .5% |
| | | Adjusted Residual | 1.1 | -.1 | -.9 | |
| | infant health/mortality | Count | 25 | 8 | 45 | 78 |
| | | % within Photo diversity | 4.7% | 3.5% | 2.8% | 3.3% |
| | | Adjusted Residual | 2.0 | .2 | -1.9 | |
| | maternity health/mortality | Count | 30 | 4 | 63 | 97 |
| | | % within Photo diversity | 5.6% | 1.8% | 3.9% | 4.1% |
| | | Adjusted Residual | 2.0 | -1.9 | -.6 | |
| | ebola virus | Count | 1 | 1 | 1 | 3 |
| | | % within Photo diversity | .2% | .4% | .1% | .1% |
| | | Adjusted Residual | .4 | 1.4 | -1.3 | |
| | healthcare delivery | Count | 31 | 20 | 200 | 251 |
| | | % within Photo diversity | 5.8% | 8.8% | 12.5% | 10.6% |

| | | | | | | |
|-------|---|--------------------------|--------|--------|--------|--------|
| | | Adjusted Residual | -4.1 | -9 | 4.3 | |
| | health systems administration | Count | 41 | 10 | 170 | 221 |
| | | % within Photo diversity | 7.6% | 4.4% | 10.6% | 9.3% |
| | | Adjusted Residual | -1.5 | -2.7 | 3.1 | |
| | launch of new drugs/treatment | Count | 4 | 3 | 15 | 22 |
| | | % within Photo diversity | .7% | 1.3% | .9% | .9% |
| | | Adjusted Residual | -.5 | .6 | .0 | |
| | policies, facilities, personel, allowance | Count | 4 | 1 | 23 | 28 |
| | | % within Photo diversity | .7% | .4% | 1.4% | 1.2% |
| | | Adjusted Residual | -1.1 | -1.1 | 1.6 | |
| | Parkinson | Count | 0 | 0 | 1 | 1 |
| | | % within Photo diversity | .0% | .0% | .1% | .0% |
| | | Adjusted Residual | -.5 | -.3 | .7 | |
| | bacterial/viral infection | Count | 4 | 2 | 2 | 8 |
| | | % within Photo diversity | .7% | .9% | .1% | .3% |
| | | Adjusted Residual | 1.8 | 1.5 | -2.6 | |
| | hepatitis | Count | 2 | 1 | 3 | 6 |
| | | % within Photo diversity | .4% | .4% | .2% | .3% |
| | | Adjusted Residual | .6 | .6 | -.9 | |
| | traditional/heabal medicine | Count | 5 | 4 | 10 | 19 |
| | | % within Photo diversity | .9% | 1.8% | .6% | .8% |
| | | Adjusted Residual | .4 | 1.7 | -1.4 | |
| | eye disease | Count | 10 | 5 | 48 | 63 |
| | | % within Photo diversity | 1.9% | 2.2% | 3.0% | 2.7% |
| | | Adjusted Residual | -1.3 | -.5 | 1.5 | |
| | nose related disease | Count | 0 | 0 | 6 | 6 |
| | | % within Photo diversity | .0% | .0% | .4% | .3% |
| | | Adjusted Residual | -1.3 | -.8 | 1.7 | |
| | ears infection | Count | 7 | 1 | 4 | 12 |
| | | % within Photo diversity | 1.3% | .4% | .2% | .5% |
| | | Adjusted Residual | 3.0 | -.1 | -2.6 | |
| | mismanagement of ailment/health | Count | 6 | 4 | 9 | 19 |
| | | % within Photo diversity | 1.1% | 1.8% | .6% | .8% |
| | | Adjusted Residual | .9 | 1.7 | -1.9 | |
| | alcohol, tobacco and drug intake | Count | 18 | 6 | 44 | 68 |
| | | % within Photo diversity | 3.4% | 2.6% | 2.7% | 2.9% |
| | | Adjusted Residual | .8 | -.2 | -.5 | |
| | other | Count | 111 | 48 | 262 | 421 |
| | | % within Photo diversity | 20.7% | 21.1% | 16.3% | 17.8% |
| | | Adjusted Residual | 2.0 | 1.4 | -2.7 | |
| Total | | Count | 537 | 227 | 1604 | 2368 |
| | | % within Photo diversity | 100.0% | 100.0% | 100.0% | 100.0% |

Appendix vii

CODE OF ETHICS FOR NIGERIAN JOURNALISTS

CODE OF ETHICS

For

Nigerian Journalists

Approved By Nigerian Press Organisation

Code of Ethics for Nigerian Journalists

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FOREWORD

AN Ethical code is without doubt a sine qua non in any profession. Journalism today faces an increasing need for critical reporting, accuracy fairness and objectivity. The Code of Ethics is therefore, the companion of the practicing journalist as well as the informed public in providing ethical guidelines by which practitioners can judge and be judged.

This Code is new and comes after a painstaking and collective effort of Nigerian Journalists represented by the Nigerian Press Organization (NPO) and the Nigerian Press Council (NPC)

whose adjudications are predicted entirely on the interpretations and provisions of the Code. The old Code of Ethics put together and adopted by the NPO since 1979 was clearly deficient in many vital areas. It lacked boldness, forthrightness and clarity and looked more of a gratuitous contrivance which could compound and obfuscate judgement of any perceived wrong doing in journalism practice.

The new Code is a consensus document. It is bold, detailed and evinces clarity for practitioners and the public alike. It is a credit to Nigerian Journalists that they could set so clear and unambiguous yardstick for their own practice and judgement. This review process began in March 1996, when the Press Council held a National workshop in Ota, Ogun State in collaboration with the Nigerian Union of Journalists (NUJ) and the Nigerian Guild of Editors (NGE) which successfully reviewed the old Code of Conduct to make it more responsive to violations in Journalism practice. The amended Code was adopted by the central working committee of the NUJ in an in-house conference held in Abuja, shortly after the Ota Workshop. To give it yet the widest possible acceptance, the NPC finally organized the Ilorin Forum, from March 18-20, 1998 where the NPO made up of NUJ, NGE and Newspaper Proprietors Association of Nigeria formally ratified and gave impetus for the implementation of the new Code.

This publication also contains the Ilorin Declaration and illustration of relevant sections of the enabling law of the Nigerian Press Council on qualification for registration of the Nigerian Journalists. We believe the New Code should be the practitioners' companion and delight.

HADJ ALADE ADUNEWU, CHAIRMAN.

THE ILORIN DECLARATION

HAVING reviewed the Code of Ethics drafted at Ota, Ogun State in March 1996, delegates at the Forum for the Implementation of the Code of Ethics, held at Ilorin, Kwara State, affirm and declare as follows:

That we:

ACCEPT the imperative of a Code of Ethics as a vital pillar of Journalism and the necessity for the application of ethics tie ace standards;

AFFIRM that self-regulation through a Code of Ethics and other structures drawn up by professionals would best serve the interest of both the profession ad the public;

ENJOIN the Nigerian Union of Journalists, the Nigerian Guild of Editors and the Newspaper Proprietors Association of Nigeria to ensure the implementation of the eligibility criteria for entry into and practice of journalism in Nigeria, as contained in the Nigeria Press Council Decree No 85 of 1992;

PLEDGE to abide by the Code of Ethics and to promote the observance of its provisions by all journalists; and

URGE the Nigerian Press Council to collaborate with the Nigerian Press Organization to publicize the Code of Ethics for the benefit of the press and the public, and ensure compliance with its provisions hereafter.

SIGNED THIS DAY, MARCH 20, 1998 BY:

Mr Lanre Ogundipe
General Secretary Nigerian Union of Journalists
Association of Nigeria

Mallam Garba Shehu
Chairman Nigerian Guild of Editors

Mr Ray Ekpu National President
Newspapers Proprietors

Hadj Alade Odunewu President
Nigerian Press Council

CODE OF ETHICS FOR NIGERIAN JOURNALISTS

PREAMBLE

Journalism entails a high degree of public trust. To earn and maintain this trust, it is morally imperative for every journalist and every news medium to observe the highest professional and ethical standards. In the exercise of these duties, a journalist should always have a healthy regard for the public interest.

Truth is the cornerstone of journalism and every journalist should strive diligently to ascertain the truth of every event.

Conscious of the responsibilities and duties of journalists as purveyors of information, we, Nigerian journalists, give to ourselves this Code of Ethics. It is the duty of every journalist to observe its provisions.

1. EDITORIAL INDEPENDENCE

- Decisions concerning the content of news should be the responsibility of a professional journalist.

2. ACCURACY AND FAIRNESS

i. The Public has a right to know. Factual accurate, balanced and fair reporting is the ultimate objective of good journalism and the basis of earning public trust and confidence.

ii. A journalist should refrain from publishing inaccurate and misleading information. Where such information has been inadvertently published, prompt correction should be made. A journalist must hold the right of reply as a cardinal rule of practice.

iii. In the course of his duties, a journalist should strive to separate facts from conjecture and comment.

3. PRIVACY As a general rule, a journalist should respect the privacy of individuals and their families unless it affects public interest.

A. Information on the private life of an individual or his family should only be published if it impinges on public interest.

B. Publishing of such information about an individual as mentioned above should be deemed justifiable only if it is directly at:

i. Exposing crime or serious misdemeanour

ii. Exposing anti-social conduct

iii Protecting public health, morality and safety

iv Preventing the public from being misled by some statement or action of the individual concerned.

4. PRIVILEGE/NON DISCLOSURE

i. A journalist should observe the universally accepted principle of confidentiality and should not disclose the source of information obtained in confidence.

ii. A journalist should not breach an agreement with a source of information obtained as “off the record” or as “back ground information”

5. DECENCY

i. A journalist should dress and comport himself in a manner that conforms with public taste.

ii. A journalist should refrain from using offensive, abusive, or vulgar language.

iii. A journalist should not present lurid details, either in words or picture, of violence, sexual acts, abhorrent or horrid scenes.

iv. In cases involved in personal grief or shock, enquiries should be carried out and approaches made with sympathy and discretion.

v. Unless it is in the furtherance of the public's right to know, a journalist should generally avoid identifying relatives or friends of persons convicted or accused of crime.

6. DISCRIMINATION A journalist should refrain from making pejorative reference to a person's ethnic group, religion, sex, or to any physical or mental illness or handicap.

7. REWARD AND GRATIFICATION

i. A journalist should neither solicit nor accept bribe, gratification or patronage to suppress or publish information.

ii. To determine payment for publication of news is inimical to the notion of news as fair, accurate, unbiased and factual report of an event.

8. VIOLENCE

A journalist should not present or report acts of violence, armed robberies, terrorist activities or vulgar display of wealth in a manner that glorifies such act in the eyes of the public.

9. CHILDREN AND MINORS

A journalist should not identify, either by name or picture, or interview children under the age of 16 were involved in cases concerning sexual offences, crimes and rituals or witchcraft either as victims, witnesses or defendants.

10. ACCES TO INFORMATION

A journalist should strive to employ open and honest mans in the gathering of information. Exceptional methods may be employed only when the public interest is at stake.

11. PUBLIC INTEREST

A journalist should strive to enhance national unity and public good.

12. SOCIAL RESPONSIBILITY

A journalist should promote universal principles of human rights, democracy, justice, equity, peace and international understanding.

13. PLAGIARISM

A journalist should not copy, wholesale, or in part, other people's work without attribution and/or consent.

14. COPYRIGHT

i. Where a journalist reproduces a work, be it in print, broadcast, art work or design, proper acknowledgement should be accorded to the author. ii. A journalist should abide by all rules of copyright, established by national and international laws and conventions.

15. PRESS FREEDOM AND RESPONSIBILITY

A journalist should strive at all times to enhance press freedom and responsibility.

WHAT THE NIGERIAN PRESS COUNCIL LWA SAYS ABOUT REGISTRATION OF JOURNALISTS

Section 17: (1) Subject rules made under this decree, a person is entitled to be fully registered under this Decree if: (a) He had attended a course of training recognized by the Nigerian Union of Journalists so acquired with the cognate experience recognized by the Nigerian Union of Journalists; or (b) The course was conducted at an institution so approved, or partly at one such institution and partly at another or others; or (c) He holds a qualification as

approved; or (d) He holds a certificate of experience issued in pursuance of section 22 of this Decree.

(2) Subject as aforesaid, a person shall be entitled to be registered as a journalist if he satisfies the Council that immediately before the commencement of this Decree he has not less than five years experience as a journalist. (3) An applicant for registration shall, in addition to evidence of qualifications, satisfy the council that: (a) He is of good character; (b) He has attained the age of 18 years. (c) He has not been convicted in Nigeria or elsewhere of an offence involving fraud or dishonesty;

(d) He has been trained at an approved mass media institution. (e) He has a general professional orientation which covers the basic requirements of information art leading to a qualification not less than a diploma; and (f) Has good knowledge of politics and socio economic affairs of his society acquired from an approved institution.

Section 22:

CERTIFICATE OF EXPERIENCE

(1) A person who after obtaining an approved qualification, satisfies the conditions specified in subsection (2) of this section shall be entitled to receive free of charge a certificate of experience in the prescribed form from the person in charge of the institution. (2) The conditions referred to in subsection (1) of this section are that (a) he shall have served his time for employment. The prescribed period in Nigeria with a view to obtaining a certificate of experience; or (b) he shall have acquired, during his employment practical experience under the personal supervision and guidance of one or more registered journalists for such periods as may be prescribed; (c) the manner in which he carried out the duties of his employment and his conduct during the period of his employment shall have been satisfactory. (3) It shall be the duty of the employer, being a registered journalist supervising

the training of the person employed with a view to obtaining a certificate of experience, to ensure that the person is afforded proper opportunities of acquiring the practical experience required for the purpose of paragraph (b) of the subsection (2) of this section. (4) Where after having served his time as referred to in paragraph (a) of subsection (2) of this section, a person is refused a certificate of experience, he shall be entitled (a) to receive from his employer the particulars in writing of the grounds of the refusal; and (b) to appeal from the refusal to a committee of the Council in accordance with rules made by the Council in that behalf (including rules as to the time within which appeals are to be brought) and on any such appeal the committee of the Council shall have power to either dismiss the appeal or itself issue the certificate of experience in question or give such other direction on the matter as it considers just.

(5) The Minister may make for the issuance of certificate of experience in respect of employment and institutions outside Nigeria.

INTERPRETATION

As contained in the Nigerian Press Council Law.

Journalist- means any person (not being less than 18 years of age) engaged in the collection, processing and dissemination of information for use in the Press and who has been accredited by the Nigerian Union of Journalists;

Newspaper- means any paper containing public news, intelligence or occurrence in any remarks, observations or comments printed therein for sale and published periodically, or in parts, or numbers.

News Agencies- means any agency engaged in the collection and dissemination of news, pictures and features;

Press- includes radio, television, wire services, newspapers, magazines and such other channels of communication involved in the collection and dissemination of information.

Radio and Television- includes electronic means of mass communication which share in the formation of public opinion.