

**PRINT MEDIA COVERAGE OF CERVICAL CANCER:
A CONTENT ANALYSIS OF *DAILY GRAPHIC* AND *DAILY GUIDE* NEWSPAPERS**

BY

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DECLARATION

I declare that this dissertation is entirely the record of my own original research except for the references and quotations which have been acknowledged, under the supervision of Dr. Sarah Akrofi-Quarcoo of the Department of Communication Studies, University of Ghana.

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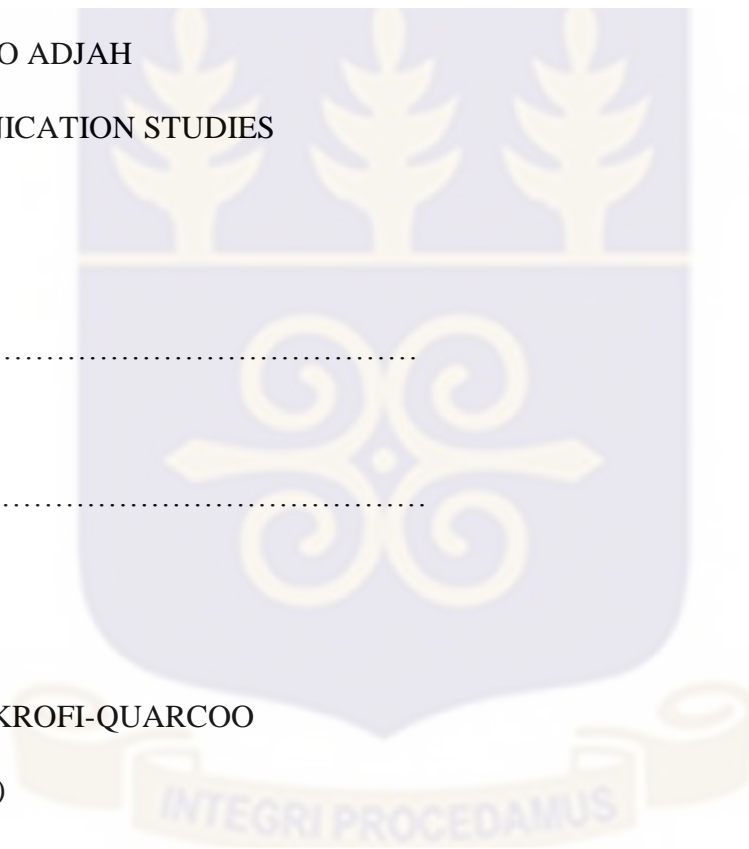
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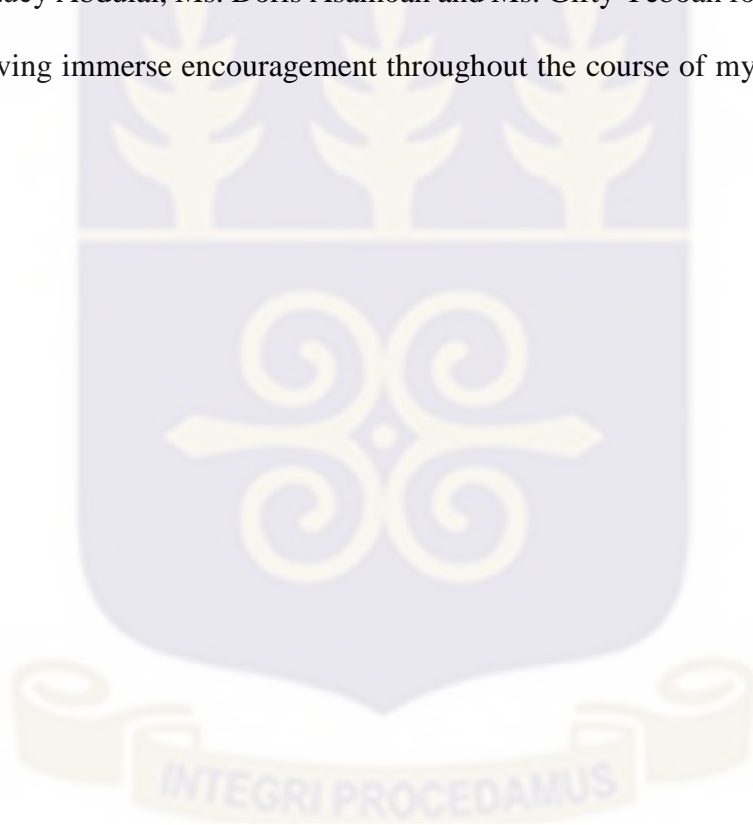


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Finally, to Ms. Lucy Abdulai, Ms. Doris Asamoah and Ms. Gifty Yeboah for standing with me in prayer and giving immense encouragement throughout the course of my study, God richly bless you.



DEDICATION

This work is dedicated to my parents and siblings.



ABSTRACT

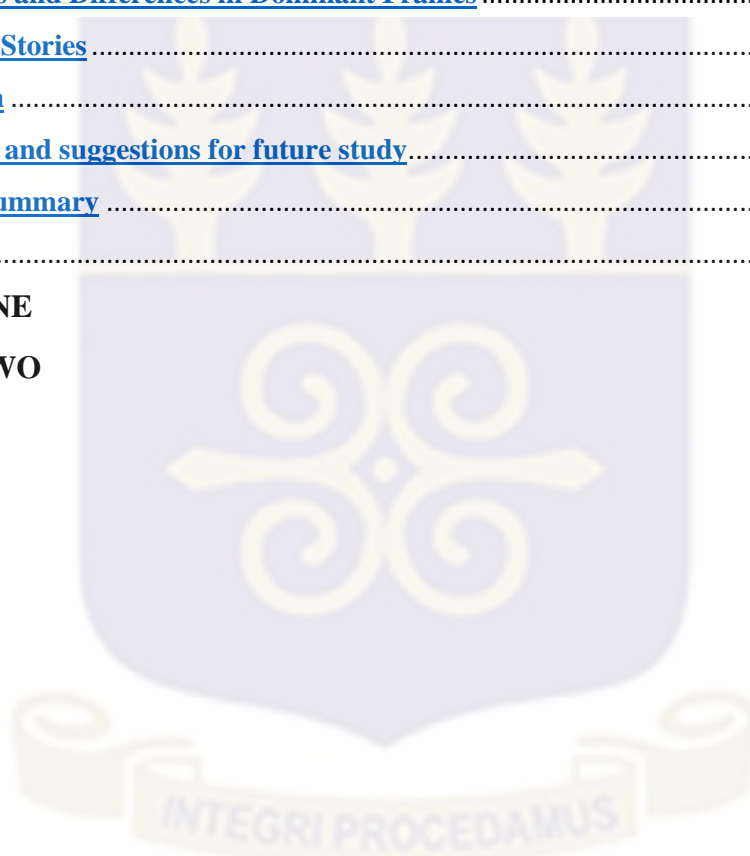
Research has shown that dissemination of health information by print media in particular is critical in shaping public beliefs and possibly behaviour. By extension, this means that depending on how the media are used, they can be hugely influential in changing health behaviours and improving health. This study conducted a quantitative content analysis of the *Daily Graphic* and *Daily Guide* newspapers from 2013 to 2016 to examine the dominant frames used in the coverage of cervical cancer in the Ghanaian print media. The study also examined the differences and similarities in the dominant frames that emerged, the sources of the stories as well as the frequency of coverage on cervical cancer. After an analysis of 52 stories, the study found that the dominant frames in the coverage of cervical cancer were action and consequences frames with the action frame emerging as the dominant frame for both the *Daily Graphic* and *Daily Guide* newspapers. The results also showed that there were not that much differences in the dominant frames used in the coverage of cervical cancer by both newspapers. The study further revealed that majority of the stories were episodic in nature and the main sources of stories on cervical cancer coverage were government scientist/officials and agencies and patient and advocacy organizations and NGOs for both newspapers. Finally, the analysis showed that the information conveyed in the articles was incomplete and devoid of the detailed information needed in covering such a health issue. The study recommends that a conscious effort be made to report health news in frames that place import on depth and detail.



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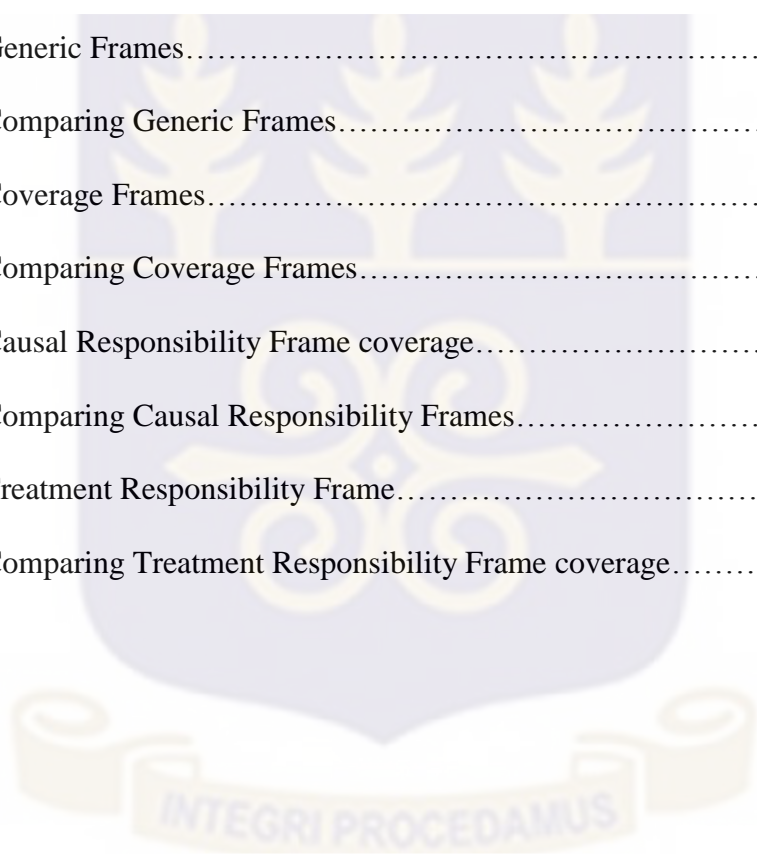
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LIST OF ABBREVIATIONS

Abbreviation	Meaning
CDC	Center for Disease Control
HIV	Human Immunodeficiency Virus
HPV	Human Papillomavirus
IARC	International Agency for Research on Cancer
NCD	Non-Communicable Disease
STI	Sexually Transmitted Infection



CHAPTER ONE

1.0 Introduction

Cancer is a disease in which cells in the body grow out of control. Cervical cancer is that cancer which occurs in the cervix and caused by the Human Papillomavirus (CDC, 2016). The World Health Organization (2017) classifies cervical cancer as a Non-Communicable disease (NCD) together with diabetes, cardiovascular diseases, respiratory diseases and others. According to the World Health Organization (2017), cervical cancer is the second most common cancer in women living in less developed regions. It was estimated that 445 thousand new cases were recorded in 2012 (84% of the new cases worldwide) and approximately 270 thousand women died from cervical cancer in that same year (WHO, 2017). Of the number of deaths that were recorded that same year more than 85% of those deaths occurred in low and middle-income countries (WHO, 2017).

In Ghana, cervical cancer is the leading cause of cancer death among women (Domfeh, Wiredu, Adjei, Ayeh-Kumi, Adiku, Tettey, Gyasi & Armah 2008). The cervical cancer mortality rate in Ghana, is nearly three times the global cervical cancer mortality rate (Wiredu, 2006). According to WHO (2016), current evaluations show that out of the 8.57 million women who are 15 years and above in Ghana, 3,052 are diagnosed with cervical cancer every year. Out of the 3,052 people diagnosed with cervical cancer, 1,556 of them die. Without an intervention, the World Health Organization (2010) estimates that by 2025, more than 5,007 new cases of cervical cancer and 3,361 deaths due to cervical cancer will occur annually in Ghana. Cervical cancer is the easiest gynaecological cancer to prevent and cure. All it takes is regular screening for early detection, vaccination and subsequent clinic check-ups. However, it remains the highest killer of women in the world. This is because, symptoms do not manifest until the disease has reached an advanced stage (UNAIDS-REFERENCE, 2016).

World Health Organization has approved some vaccines to be used in many countries (CDC, 2016; WHO, 2017) however, these screening tests and vaccines are not being accessed which can be blamed largely on the unavailability of the vaccine and the lack of awareness and knowledge about the disease that still persists (Ntekim, 2012; WHO, 2017; UNAIDS-REFERENCE, 2016). Data from the 2001 – 2002 WHO Household Survey conducted in Ghana showed that only 2.2% of women living in rural areas, and 3.2% of women living in urban areas have had cervical cancer screening within the last three years (WHO, 2010). According to Domfeh et al. (2008), the general lack of awareness and education about cervical cancer and cervical cancer screening among Ghanaian women suggests that the channels of delivering cervical cancer information have not been effective.

The media are popular and widely held sources of health information (Kenterelidou, 2012). Scholars suggest that an objective of health news articles is the provision of content that is informational and compelling presented by journalists with some level of efficiency and accuracy even in the face of inadequate resources and time pressures to deliver stories. These challenges notwithstanding, journalists have come to depend on journalistic values and rules that are used in shaping the health content reported. Very often, the public is served well with these routines by journalists. However, journalists and researchers have also noted that these practices can produce stories that are distorted or biased such that they are able to influence the public's perceptions about what is reported (Brossard, 2009; Jensen et al., 2010). This concept is referred to as media frames. These frames act as the lenses through which the public have a shared understanding of the world (Lepre, 2013). Apart from exercising those journalistic norms and values, journalists also have the task of deciding from where to gather and whom to include as sources of information (Entman & Rojecki, 1993).

Media frames sometimes function as recommendations from experts concerning an issue or act as communiques by some elite sources (Lipmann, 1922). These recommendations from these elite sources, that contribute to making the frames, are not always beneficial to the public as the ways in which the stories are told have the potential of influencing audience perception and opinion about issues either negatively or positively (Kinder, 2007). Therefore, examining the framing of cervical cancer can give an indication of how sources present information, advice and attribute responsibility on the disease.

1.1 The role of the media in Health Communication

The media have been ascribed a three-fold role of informing, educating and entertaining the public and this has contributed to the media being referred to as the fourth estate (Schramm, 1957). The media have always been an integral part of the perception building process especially through its agenda setting nature and as McCombs & Shaw (1972) suggest, the media have the capacity to influence what we think about an issue. Therefore, the media possess the ability to shape opinion as well as perception concerning issues.

The history of many countries and the world in general cannot be told without its various bouts with infectious diseases and the impact they have had and continue to have on the world (Koop, Pearson & Schwarz, 2001). The media remain a vital tool used in communicating such health concerns in order to raise the public's awareness of the issue and cause effective prevention, containment and stop the spread of the disease. Content analysis conducted on three Ghanaian newspapers on how health issues were covered revealed that majority of the health issues were reported in the informational frame which sought to create awareness about the disease and provide adequate knowledge to encourage appropriate action (Diedong, 2013).

It is further suggested that the dissemination of health information by the print media is important in shaping the public's beliefs and potentially its behaviour about the issue (Moyer, 1995). Radio has also been effective in the communication of health concerns in Ghana. Research conducted in a Ghanaian village revealed radio as the effective medium to communicate a new vitamin regimen (Hill et al., 2007). A health campaign considered a success in Ghana was the 'Stop HIV/AIDS Campaign' and this was because the campaign was able to effectively combine media including radio in its communication (Beaudoin, 2007). The 'Stop HIV/AIDS Campaign' was also considered a success because it was able to provide information on the risks, prevention and other information that changed the previously held perception about the disease (Beaudoin, 2007).

The media is also able to influence policies on health and this is because the bulk of information on diseases policy makers obtain is from the media (Wolfe, 2012). Interpersonal relationships also serve as sources of information about risks (Hesse, Moser, & Rutten, 2010). These information that are shared through the interpersonal relationships amongst people are available and accessed by most through the media which are in turn transferred unto others. This cyclical transfer relationship allows for the media to still remain an integral part of communicating risks amongst which health concerns are included. The media provides timely information about the onset of diseases and the preventive measures to take. However, falsely reporting or overstating the negative news has the potential of inducing panic and anxiety in the public which would in turn affect how the disease or health concern is perceived (Peng et al., 2010).

Notwithstanding the vital role the media plays in the public's understanding of diseases and its risks, the media are able to (by virtue of what it chooses to communicate and how it chooses to communicate the issue) shape perception either positively or negatively (Wang et al., 2014).

This double-edged nature of the media has made it such that it is advantageous to be interested in how the media frames issues like cervical cancer such that certain perceptions are built by the public.

1.2 Statement of the Problem

The media, depending on how they are used, can be hugely influential in changing health behaviours and improving health. The media constitute an important platform from which the public obtain information about health, disease outbreaks, epidemics amongst others. Indeed, research has shown that dissemination of health information by print media in particular is critical in shaping public beliefs and possibly behaviour (Moyer, 1995). Given this crucial role, it is expected that information on health and diseases disseminated by the media are accurate and devoid of biases. Literature, however, suggest that the media report health issues with incomplete information and biases either in disease status or favouring certain individuals.

In Ghana, a study conducted by Diedong (2013) revealed that there was a deficit in specialised health issues coverage. The study also revealed that the informational frame, which focused on creating awareness and dominated the coverage of most health issues, suggested a one-sided nature of coverage which lacked the detailed kind of information required for health reporting. The interest of the study, therefore was to investigate newspaper coverage of cervical cancer in Ghana and to analyse the frames used in reporting the issue.

1.3 Research Objectives

- To identify the dominant frames used in the coverage of cervical cancer in the *Daily Graphic* and *Daily Guide* newspapers

- To examine the similarities and differences in the dominant frames used in the coverage of cervical cancer between the *Daily Graphic* and *Daily Guide* newspapers.
- To identify the sources of cervical cancer information covered in the *Daily Graphic* and *Daily Guide* newspapers
- To examine the frequency of coverage of cervical cancer information by the *Daily Graphic* and *Daily Guide* newspapers

1.4 Research Questions

RQ1. What were the dominant frames used by the *Daily Graphic* and *Daily Guide* newspapers in the coverage of cervical cancer?

RQ2. What similarities or differences exist in the dominant frames used by the *Daily Graphic* and *Daily Guide* newspapers in the coverage of cervical cancer?

RQ3. What were the sources of the stories on cervical cancer in the *Daily Graphic* and *Daily Guide* newspapers?

RQ4. What was the frequency of coverage of cervical cancer by the *Daily Graphic* and the *Daily Guide* newspapers?

1.5 Significance of the Study

This study would contribute to scholarship on media framing particularly in health reporting. It would also serve as a guide to health communicators, health news reporters and editors on the nature of coverage provided on such specialised health issues and help them make the necessary adjustments.

1.6 Organization of the Study

This study is ordered into five chapters. Chapter one gives the introduction to the study. This introduction includes background on cervical cancer, the role the media plays in health communication, the statement of the problem, significance of the study, research objectives and questions. Chapter two discusses the theoretical framework that underpins this study which is the Framing theory. This chapter also presents the literature reviewed, which consists of literature on cervical cancer coverage and coverage of health issues in general.

The chapter three presents the methodology of the study. This consists of the research design, choice of newspapers, universe and sample, unit of analysis, data collection and instrument, and coding.

Chapter four presents the findings obtained from the analysis in Tables.

Chapter five concludes this study by presenting the discussion of the findings in accordance to the research objectives and questions, limitations and suggestions for future study, and a conclusion.

1.7 Chapter Summary

This chapter gave an introduction to the study where the background was given. It also discussed the role the media played in health communication, statement of the problem, significance of the study, research objectives and questions. The way the study is organized was also presented in this chapter.

CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.0 Introduction

This chapter presents the theoretical framework that underpins this study. The framing theory was discussed to this effect. Also, discussed is literature that is related to the coverage of cervical cancer, Human Papillomavirus (HPV), health issues in general and other diseases of such nature that falls within the same category of Non-Communicable Disease (NCD).

2.1 Framing Theory

According to Borah (2011) and Golan (2010), the framing theory is one of the most used theories in social research and it is particularly used by communications scholars in analysing media content. According to Goffman (1974), the basis of the framing theory is that the media focus attention on certain events and places them within a field of understanding. The framing theory in communication research is attributed to sociologist Erving Goffman who argued that an individual when faced with an event would try to make sense of the event by employing one or more schemata of interpretation or primary frameworks (Goffman, 1974; Littlejohn & Foss, 2009). These primary frameworks Goffman (1974) explained can either be natural or social. The natural frameworks recognise events that are caused by natural factors, unguided and undirected whereas the social frameworks are those that are guided such that they are influenced by the will of some intelligence either of the individual person or by some standards (Goffman, 1974).

According to Scheufele (1999), there are two types of frames. They are media frames and individual frames. Media frames refers to how the mass media deliver contents of a message

such that it influences audience understanding of the news event whereas individual frames, or pre-existing cognitive structures are those called upon in order to make sense of issues. These can either be more immediate and personal or can be one imposed globally (Scheufele, 1999). The media frames are the focus in this study. Entman (1993) defines frames as “to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (p.52). This means that media frames look at how an issue is highlighted such that a specific understanding of that issue is communicated. From Entman’s (1993) definition, he draws out four functions of a frame and that is, to define, identify the cause, make judgements and also suggestions for any issue. The ideal frame is one that has all four factors but that is usually not the case (Bryant & Oliver, 2009).

Gitlin (1980) also suggests that frames function as “persistent patterns of cognition, interpretation, and presentation of selection, emphasis, and exclusion” (p.7). Gamson and Modigliani (1987) also define a media frame as “a central organizing idea or story line that provides meaning to an unfolding strip of events. . . The frame suggests what the controversy is about, the essence of the issue” (p.143). Frames can be created in various ways. News frames can be created as a result of news production practices such as organizational pressures and constraints, external pressures like societal norms, journalistic norms and others (Bryant & Oliver, 2009; Shoemaker & Reese 1996).

Frames can also be created based on some political and corporate actors (Bryant & Oliver, 2009). These political and corporate actors include elites like politicians, experts, and government officials. Gitlin (1980) suggests that due in part to the subtle and unnoticed ways in which frames work, the ideologies of these elites and even journalists are communicated

and promoted to the audience such that they have the potential of influencing audience perception.

The ideologies of these elites are reported in the news stories through the use of concept keywords, metaphors, phrases and other devices that journalists encounter during interviews in the process of story development (Gans, 1979; Gitlin, 1980; Entman, 1993; Coleman, Thomson & Wilkins, 2011). Literature provides support for this point as it reveals that the majority of sources that the media rely on for information are made up of those of the elite class like the experts, officials, politicians, and others (Lepre, 2013). A frame can also be influenced by the cultural contexts (Bryant & Oliver, 2009). Gamson and Modigliani (1989) suggest that the understanding of what a frame communicates is not devoid of cultural influences. Therefore, a frame when presented in any context communicates the culture of that context such that it allows for a particular understanding of that issue by those individuals found within that context.

There are a number of frames that have been examined in framing research of any kind. Some of these frames include the gain vs. loss frame, conflict, human interest, episodic vs thematic frames, reassurance, uncertainty, responsibility frames and others. In health communication, the most common frame used is Kahneman and Tversky's (1984) gain vs loss frame which was adopted into health communication (Kaiser, 2013). The gain frame has to do with the benefits of certain practices in this case health whereas the loss frame includes the negative consequences that would result from accepting or denying the health practice. Another frame most commonly established in framing literature is Iyengar's distinction between episodic and thematic frames (Iyengar, 1991). He explained episodic frames as issues that are presented focused on one individual, a specific event or situation whereas the thematic frame looks at issues that present trends, previous background information and places the issue in a larger

perspective. These frames focus attention mainly on who is responsible for causing as well as treating problems.

Evidence from literature suggest that when it comes to framing health issues, they are rarely cased in news stories thematically and as such places some import on how some issues for example obesity, diabetes, and others are perceived as the individuals being responsible (Coleman et al., 2011). Other frames present are the responsibility-attribute frame which looks at how the issue is presented such that the blame or responsibility for the cause or solution is put on either the individual, government or a group. Iyengar (1996) made a further differentiation between his episodic and thematic frames with regard to the responsibility frame. He posits that when social and political issues are presented episodically, the blame or responsibility tends to be put on individuals rather than the society.

Apart from those frames of analyses stated, there are many others. Some include the disease-outcome frame, conflict frame, uncertainty frame, problem-definition frame, morality frame and others. The broad nature of the frames of analyses prove advantageous in that it affords some sort of flexibility and a variety of approaches to choose from when framing is the objective. However, this flexibility can lead to a certain amount of inconsistency in replicability. This study adopted Shih, Wijaya and Brossard's (2008) frame typology used in examining the coverage of public health issues. These frames are Action, Conflict, Consequences, New Evidence, Reassurance and Uncertainty. The study also used Iyengar's (1996) generic frames, episodic and thematic frames and the causal and treatment responsibility frames. These would enable the research questions to be answered and objectives met.

2.3 Coverage of cervical cancer

A study conducted by Vardeman (2007), sought to examine the frames that were used in the reporting of cervical cancer information in popular women's magazines. Also, investigated were the possible differences from the frames identified due in part to the different races and ethnic backgrounds the various magazines served. The framing theory of media was used to explore the two key research questions of the study and they were to investigate what frames existed in the coverage of cervical cancer information by popular women's magazines and what, if any, differences existed in the frames used in covering cervical cancer by the various popular magazines written for women of different race and ethnicities.

In order to answer the questions posed in the study, the qualitative content analysis method was used and a total of 33 articles were obtained from 12 popular women's magazines in the United States of America (U.S). These selected magazines catered to African-American, Hispanic and White women. Guided with the keyword 'cervical cancer' five databases EBSCO-Host research search engine, using Academic Search Premier, Health Source – Consumer Edition, LexisNexis Academic, and Social Sciences Abstracts were accessed in order to obtain the articles for the study.

The method used was qualitative content analysis; thus the open-coding system was employed. Therefore, frames and themes were analysed as they emerged and organised based on the similarities that were observed and this would help in answering the research questions. The study emerged with five major frames of cervical cancer information in answer to the first research question. The first frame that emerged was the *consciousness-raising* frame. Within this frame the theme that was observed was that it was the responsibility of women to acquire knowledge about cervical cancer and STD's.

Thus the articles sought to raise this consciousness in women by suggesting how to prevent HPV infections, stating the risk factors for developing cervical cancer, encouraging regular visits to gynaecologists and screening and others. The second frame that emerged was the *confusion in abnormality* frame. This frame resulted from the uncertainties that most women reported after screening for cervical cancer when results of the tests found ‘abnormalities’ that were not properly explained and this left some confusion about what cervical cancer was. The uncertainty was also about the viability of the preventive measures and the known causes of the disease. The third frame that emerged was the *controversy* frame. This frame reflected the scepticism and criticism directed towards cervical cancer new screening and preventive measures. Even though the measures were equally applauded, the type of information or misinformation communicated by gynaecologists and the suggested time lapse for cervical cancer screening were still major issues for the women. The fourth frame that emerged is the *innovation/medicalization* frame. These articles discussed new tests for improved detection and treatment whilst offering reassurances and hope of eliminating cervical cancer through these advances in technology.

The fifth frame that emerged was the *differences across identities* which revealed sexual discrimination against women. Women were considered to be more susceptible to contracting STDs than their male counterparts. This study outlined certain frames that were relevant to the current study as it seeks to also explore the dominant frames in the coverage of cervical cancer in newspapers. This study further expands Vardeman’s (2007) work by including other frames like the consequences and action frames suggested by Shih et. al., (2008).

In a similar study, Krieger et al. (2011) investigated how the media covered cervical cancer, HPV and the HPV vaccine in Appalachio Ohio region. Research conducted revealed that inadequate coverage of health issues is able to project certain health inequities in areas considered medically underserved that is characterised with very little health screening measures and even health centers. The objectives of the study were to describe how the media, particularly the newspapers, reported content on cervical cancer, HPV and the vaccine whilst also examining the differences, if any, that may exist in the coverage by the newspapers.

The study used a quantitative content analysis method and included all news articles, considered a census, published in Ohio newspapers during the year 2006. A total of 121 articles were obtained by using the keywords cervical cancer, HPV and HPV vaccine in the search engines of Newsbank, Lexis-Nexis databases and archives of newspaper websites. The extended parallel process model was the theoretical framework that underpinned the study because of its ability to help assess the quality of health risk messages. This model provided certain caveats that allowed for easy coding and acted as the frames by which every article was coded. The articles were first coded as either a *news story* being an article that contains factual information about cervical cancer, HPV or HPV vaccine from a scientific perspective, an *opinion article* being an article which was commentary related to cervical cancer, HPV or the vaccine and 'other' when the article did not fall into any of the other categories previously stated.

The model further provided four categories by which the articles were coded against. The first being *severity* which describes any article that provides statistical information regarding cervical cancer mortality and discusses the association between cervical cancer and HPV. The second category is *susceptibility* which was to code articles that used the cervical cancer

incidence data, mentioned the disease as an STI with females at the most risk and mentioned those risk factors.

The third is the *response-efficacy* category that coded articles with information on who was able to receive the preventive and/or treatment measures, the effectiveness of the treatment and the side effects and the fourth category was *self-efficacy*. The self-efficacy category coded articles that provided information about assistance programmes available locally for those uninsured and underinsured, economic information like the cost of the vaccine, financial assistance for the treatment, sources of additional information and also how the vaccine was to be administered.

The results of the study revealed that out of the four categories coded for, the most commonly used theme for newspapers was severity amounting to 21% of the articles. These articles provided information on the causes of cervical cancer. The next theme was the susceptibility category that amounted to 17% of the articles. Information like how females were susceptible to HPV and that cervical cancer was an STI made up the bulk of the articles. Recognizable though was the fact that information about there being a vaccine, who was able to receive the vaccine and places where additional information could be obtained. Very little information on the cost of the prevention and treatment, what the risk factors were, financial assistance for those uninsured and underinsured, and how to administer the vaccine were provided (Krieger, et al., 2011). This means that the categories of response-efficacy and self-efficacy were under represented.

This implies that the amount of cervical cancer information like the risk factors and the vaccine provided by the media particularly the newspapers were inadequate to serve the needs of especially those in medically underserved regions (Krieger, et al., 2011). Two of the themes in the model that facilitated the coding process mirrors two of the frames identified by Vardeman (2007). The innovation/medicalization frame identified mirrors the response-efficacy category

that talks about what innovations and technology available like the vaccines for prevention and treatment whereas the differences across identities similar to the susceptibility category suggests that women are susceptible to acquiring STD's and STI's therefore fall victim to the consequences being cervical cancer.

2.4 Coverage of health issues

Diedong (2013) conducted a content analysis of three Ghanaian newspapers to examine the way health issues were framed to the Ghanaian public such that they were empowered to indulge in good health behaviours. A sample of 154 articles were drawn from three newspapers covering the period between 2003-2005. The newspapers were the Daily Graphic, the Ghanaian Times and the Public Agenda with the first two newspapers selected for their national reach and readership and the latter selected because it slightly focused more on covering social and health issues than the other private Ghanaian newspapers. Diedong (2013) set out in his study with three objectives and they were to find out what image newspapers portrayed of the health sector, to examine how Ghanaian newspapers framed a shared understanding of health issues such that the public is empowered to indulge in good health behaviours and to find out what definitions of health issues and problems were given and what solutions were offered. The framing theory of the media was the theoretical foundation of the study and Entman's (2003) definition of frames that they "define problems, diagnose causes, make moral judgements and suggest remedies" offered a typology by which the articles were analysed.

The articles were coded according to the categories of *article headline*, *news sources* being those who provided the news items, *informational and medical frame* with the former coding for articles that provided information to create awareness in a straight news format that would lead the public into taking the necessary actions and the latter coding for articles that suggested

some medical interventions and information like the definitions of a disease, the causes, prevention and treatment.

Results from the study conducted revealed that majority of the news articles cited government official sources as their main source of news items. Closely followed were the media, professionals and interest groups and Non-Governmental Organizations (NGO) (Diedong, 2013). Those sources least cited were medical experts and individuals. The most discussed diseases or ailments that were highlighted were HIV/AIDS and certain cardiovascular diseases like stroke and malaria with the former receiving more coverage with it being mentioned 37 times more as compared to the latter appearing only four times.

Across all the three newspapers the most dominant frame was the informational frame and very little information about what a disease was, causes of a disease, treatment and preventive measures like the incorporation of exercise regimes were provided. This means that the lack of the medical frame used makes for a one-sided style of reporting on issues that is inadequate in providing the necessary empowering force that the public needs to take action (Diedong, 2013). Diedong (2013) suggests that this informational focus by the Ghanaian newspapers is indicative of their not adhering to the basic framing process as suggested by Entman (2003). Another revelation from the study was that most of the articles seemed to suggest that the government and health care workers were responsible for the state of the health sector in Ghana (Diedong, 2013).

It was recommended therefore that governmental organizations and other concerned bodies engage in constant dialogue that would prove mutually beneficial. It was also suggested that the newspapers in Ghana implicitly the journalists make a concentrated effort at covering health issues in meaningful frames that values quality and depth over journalistic rules and organizational styles.

Shih et al. (2008) examined how one American newspaper, the New York Times, framed public health issues with focus on three diseases Mad Cow Disease, West Nile virus and Avian Flu from the year 1995-2015. The public turn to the media to provide shortcuts or lenses through which they try to have an understanding of issues considered complicated more so when it comes to understanding diseases with the potential of becoming epidemics (Shih et al., 2008). The quantitative content analysis method was used and a total of 688 news stories were included in the study. These stories were obtained through an online search of NexisLexis an academic database. The overarching objective of the study was to find out whether media frames reflected the inherent differences amongst the three diseases or if it surpassed the particular issue specification as previous studies have suggested that in reporting issues of risks, journalists tend to focus on specific events that looks at the potentially infectious situation in a vacuum and projecting short-term consequences rather than looking at the issue (Singer & Endreny, 1994).

The study was underpinned by two theoretical frameworks. They were the framing theory and the issue-attention cycle that explain how the public give attention to an issue in the course of its progression (Downs, 1972). These enabled answers to be sought of these research questions; of what frames , if any, consistently appeared in the coverage across the three diseases and if the relative importance of a specific frame varied across the diseases. Articles were coded against the *Consequences* frame being used to code articles that reported on the outcomes or consequences of the disease either there were economic or social consequences, the *Uncertainty* frame coded for articles that reported uncertainties in any part of the disease like the cause, transmission, the *Action* frame being any article that reported on efforts or measures taken by governments concerning the disease, the *Reassurance* frame which coded articles that offer some sort of reassurances to the public that the disease is being handled, *Conflict* frame that coded articles that portrayed some sort of disagreements or differing thoughts people were

having concerning the disease and finally the *New Evidence* frame that coded articles that gave information about new research or innovations in improving understanding of the issue like vaccines, treatment measures, improved screening technology and others.

The consequence and action frames were revealed to be the most dominant frames across the three diseases. Looking individually amongst the three, the conflict frame was the most used frame when reporting on Mad Cow diseases than the others. This was attributed in part to the fact that Mad Cow Disease had been placed in some political lights which led to the differing opinions thus the conflict frame which was confirmation of what was suggested that once an issue moves from the administrative environment into a more business and political environment the conflict frame would be used (Shih et al. 2008; Nisbet and Huge 2006).

Shih et al. (2008) concluded that the differences that occurred in the dominant frames across the disease may be as a result of the specificity or difference of each disease not on the journalistic values of the different media establishment as the study focused on only one media establishment. This current study would look at the frames that were used in the reporting of cervical cancer across the two media establishments, *the Daily Graphic* and *Daily Guide* newspapers. Therefore, any differences or similarities between the two media establishments would be examined.

Riles et al. (2015) conducted a study to identify the frames that were prominent in communicating cancer in online news and to find out how these frames were able to influence popular perceptions of cancer. In a multi-method study with the first being the content analysis of major online news sites was to find out what dominant frame was used in the reporting of cancer. The sample yielded 972 articles drawn from four popular online websites MSNBC.com, CNN.com, GoogleNews and Yahoo! News. The sampling technique used was the constructed week sampling technique done for the years 2008 and 2012. The articles were coded against these three frames adopted from Clarke and Everest's (2006) study. They were

lifestyle which coded articles that placed the responsibility of contracting cancer on the victim and his or her life choices.

The second frame being the *Political/Economic frame* also referred to as the *Environmental frame* coded stories that placed the blame on the environment mostly things that were external to the victim and very little control could be exerted on them. The third frame being the *Medical frame* coded for articles that assigned blame for contracting the disease to biological or genetic factors. The results of the content analysis revealed that the medical frame was the dominant frame used which was followed by the lifestyle frame and then the environmental frame. These results confirmed the first hypothesis (H1) that stated that the medical frame would be the most represented in the online news coverage of cancer which would then be followed by the lifestyle frame and then the environmental frame.

Atkin et al. (2008) examined news covered on breast cancer reported in leading media outlets in the United States of America to determine the way in which it was covered to the public focusing mainly on environmental risks and preventive factors. The sample included 231 stories obtained from three newspaper establishments, three news magazines and three television networks. These stories were collected from the Lexis-Nexis academic database and the archives of the various newspapers.

Articles were coded according to the measures designed from its focus on environmental risks and the preventive factors associated with breast cancer. The first being the *Environmental risks* coded stories that mentioned external factors, like exposure to chemical pollutants, not biological factors as causing breast cancer. *Individual prevention* coded stories that reported individual's behaviours to minimise the practices that posed as risks to contracting the disease. *Parental protection* coded for stories that reported how parents encouraged their female children to minimise risky practices and adopt good practices like exercising, avoiding

unhealthy foods and others. *Collective prevention* coded stories with actions at societal level, like environmental reforms, to minimise the disease.

Detection coded articles that provided key information on how to detect breast cancer and how effective the measures were. *Cancer treatments* coded articles that referred to any form of treatment measures. *Source citations* coded stories that were sourced to either individuals like experts, organizations, governmental agencies and others whilst *structural and narrative attributes* coded the length and location of the story and whether there was any controversy. Results of the content analysis revealed that the treatment, detection and breast cancer prevalence received the most coverage. Very little information about the environmental risks like exposure to chemical pollutants, parental protection like information about how parents could protect their daughters from contracting breast cancer, individual and collective prevention were provided (Atkin et al.,2008). Individually amongst the nine media outlets included in the study, stories in the newspapers were lengthier than the others.

The majority of the sources cited for the news items were expert medical professionals, researchers or organizations. A large proportion of the stories were personal narratives thus narrated by either survivors, patients or advocates and a slightly less proportion provided some sort of statistical information. Henderson and Kitzinger (1999) posit that reporting using the 'human interest' angle is able to engage the audience interest and shape understanding of issues. Atkin et al. (2008) recommended that such information should be considered by communication professionals when designing communication messages about breast cancer, especially in trying to fill the gap in preventive actions and the environmental risks, that would accompany the journalistic stories reported.

In a study similar to that which was conducted by Atkin et al (2008), Hurley, Riles and Sangalang (2014) examined the trends with regards to the article type, specific cancers and the cancer continuum in online cancer news.

A quantitative content analysis of four popular websites (Google News, Yahoo! News, MSNBC.com, and CNN.com) in the US was conducted. A total of 862 articles were included in the analysis. Articles were coded according to the categories of *Article type* which coded stories that were either person profiles, events or fundraisers descriptions, policy, diseases awareness or education; *Specific cancers* which coded articles according to what type of cancer was mentioned and how much emphasis it received and *Prevention* which coded articles that suggested ways of reducing the risky practices in order not to contract the disease, *Treatment* coded articles that suggested ways of medically removing cancer lesions, *Detection* which coded articles that mentioned screening, *Survivorship* which coded articles that reported overcoming cancer and the *End of life* which looked at any article that reported any death cancer-related. The risk and uncertainty-related information coded articles that reported on any form of uncertainties about a treatment while the clinical trials category was also coded for.

Hurley, Riles and Sangalang (2014) found that treatment information received the most attention in online cancer news coverage and breast cancer was the most reported cancer in the articles analysed with sufficient information provided as compared to the other cancers. The representation of breast cancer as the most reported cancer echoes what previous research had found that certain cancers were either under or over reported and these inconsistencies could lead people to having certain perceptions (Jensen et al., 2014). Closely followed in representation is detection and survivorship. There was a lack of information on the prevention of the diseases in the articles analysed. A majority of the articles were reports from research and person profiles mostly focusing on celebrities. There were certain risks and uncertainties communicated about cancer with some of the stories also focusing on clinical trials.

It was recommended therefore to maximise reporting on such discrepancies as a failure to deal with the lack of awareness and preventive information would focus attention on treatment rather than on prevention.

Jensen et al. (2014) conducted a study to compare what the public's perception of cancer incidence was to media reportage of cancer. A total of 400 adults were questioned in the areas of cancer incidence, news consumption and attention to health news.

Findings from the study showed that there was a similarity between what the public perceived about cancer and the distortions disseminated in the news even though both were contrary to the reality. Multiple content analysis had revealed that cancer was reported with distortions and these distortions were either through the under or over representation of certain types of cancers or the journalistic routines that guided in the reporting. These distortions further have implications for how the public would perceive such issues and the public funding such diseases attract. Jensen et al. (2014) recommended that educationists, health care professionals and journalists should pay particular attention to such distortions and their subsequent effects on the public so that a balance in reporting is strived for.

2.5 Chapter Summary

This chapter discussed the theoretical framework where the framing theory was the main focus. Also presented was an overview of literature and studies related to cervical cancer coverage as well as on general coverage of health issues.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodology that guided this study. Information presented here include the research design where content analysis is discussed in detail, choice of newspapers for the study, the universe and sample, unit of analysis, data collection and instrument and coding.

3.1 Research Design

This study used the quantitative content analysis method to find out the dominant frames used by two Ghanaian newspapers, in the coverage of cervical cancer, what similarities and differences exist between the coverage by the selected newspapers and the newsmakers or sources of the news stories.

Content Analysis

Most of the extant literature on framing research have employed the use of content analysis. Shih et al. (2008) used content analysis to examine the dominant frames in the media coverage of three public health epidemics: Mad Cow disease, West Nile Virus and Avian Flu, between 1996 and 2005. Diedong (2013) also conducted content analysis to find out how three Ghanaian newspapers covered health issues between 2003 and 2005. Vardeman (2007) studied how cervical cancer information was framed in popular women's magazines between January 2000 and May 2005 and also employed the content analysis method. These give an indication that content analysis is a reliable method for the study of media coverage. Therefore, this study employed the use of quantitative content analysis to help answer the research questions as it allows for large units of data to be analysed.

Newspaper articles on cervical cancer by the *Daily Graphic* and *Daily Guide* newspapers between 2013 – 2016 were analysed. Content analysis is defined by Wimmer and Dominick (2011) as the method of studying and analysing communication in a systematic and quantitative manner for the purpose of measuring variables.

According to Krieger et al. (2011), quantitative content analysis sets out to assign numbers to communication texts, and symbols in line with a laid down system in order to describe what happens in communication, making results easy to summarize and allowing for concise analyses. Wimmer and Dominick (2011) outlined 10 steps to be followed when conducting content analysis. They are: formulation of research questions or hypothesis, definition of population, selection of an appropriate sample from the population, selection and definition of unit of analysis, construction of the categories of content to be analysed, establishment of quantification system, training of coders and pilot study, coding the content according to established definitions, analysis of collected data and conclusion. These steps guided the current study.

3.2 Choice of Newspapers

Brodie et al. (2003) asserts that because newspapers regularly report on health and medical issues, people still look to newspapers as their source of health information. The *Daily Graphic* and *Daily Guide* newspapers were therefore chosen for this study based on circulation and reach as these have the highest circulation as well as influence in Ghana.

Daily Graphic

The *Daily Graphic* is one out of the six newspapers published by the Graphic Communication Group Ltd (Graphic Annual Report, 2012). It was established in 1952 by the Daily Mirror Group of Britain but was later bought by Dr. Kwame Nkrumah's government in 1962 and it became a state asset (Asante & Gadzekpo, 2000).

The *Daily Graphic* is the oldest and leading state-owned newspaper with the highest circulation rate in Ghana (African Media Development Initiative-BBC, Ghana Context; Amponsah, 2012). The *Daily Graphic* is published on Monday to Saturdays except Sundays. *Daily Graphic* distributes about 200,000 copies daily, which represents 45% of Ghana's daily newspaper market in all 10 regions (Azanu, 2012). It publishes a variety of sections including health, world news, business, sports, gender and children, politics and many others (Graphic, 2011).

Daily Guide

Daily Guide is a privately owned newspaper published by the Western Publications Limited. It began publication in 1991 as a four-page weekly paper. By 2005, it turned into a 16-page daily newspaper except Sundays and is considered the second largest newspaper in Ghana (African Media Barometer, 2013; Aमेvor, 2014). *The Daily Guide* circulates about a 100,000 newspapers daily to all the 10 regions and produces sections which includes politics, health, business, international news and others that mirrors what the *Daily Graphic* newspaper also offers (Azanu, 2012).

3.3 Universe and Sample

The study was a census of all the editions of the *Daily Graphic* and *Daily Guide* newspapers published from January, 2013-December, 2016. According to Wimmer and Dominick (2011) and Macnamara (2011), the ideal sampling technique to use in content analysis is a census as this allows for all the texts and content related to the variable of significance to be included in the analysis. Therefore, the sample comprised of all editions of the *Daily Graphic* and *Daily Guide* newspapers published from January 1, 2013- December 31, 2016. A total of two thousand three hundred and four (2,304) editions of the *Daily Graphic* and the *Daily Guide*

newspapers were reviewed and analysed. The *Daily Graphic* published six times a week and four weeks in a month.

This amounted to 24 editions per month and 288 editions per year. This totalled one thousand one hundred and fifty-two (1,152) for the four years. The same process was repeated for the *Daily Guide* which also yielded a total of one thousand one hundred and fifty-two (1,152) editions.

3.4 Unit of Analysis

Babbie (2014) defines unit of analysis as “those things we examine in order to create summary description of all such units and to explain differences amongst them”. The unit of analysis was the stories on cervical cancer in the *Daily Graphic* and *Daily Guide* newspapers during the selected study period.

3.5 Data Collection and Instrument

The data for this study were obtained from the selected newspapers in the libraries. Each newspaper was thoroughly read for any story on cervical cancer and coded thereafter. Included in the coding were stories that dealt with other topics like Non-communicable diseases (NCD) and HPV that devoted parts of the article or story to cervical cancer. Excluded in the coding were stories that mentioned cervical cancer in passing without providing further information. In total 52 stories on cervical cancer were coded for the study.

3.6 Coding

Krippendorff (2004) suggests that coding allows for the object of a study to be grasped such that other researchers are able to perform the same processes reliably to obtain the same results. Therefore, coding enables for data collected to be reduced into confined attribute set

that makes it easy to analyze. For this reason, the coding must be done in such a way as to make it possible to re-search for its patterns.

A coding guide was developed with categories and frames that were informed by literature, the objectives of the study, research questions and the theoretical framework in order to allow for data collection and analysis. As stated earlier, Shih et al's (2008), Iyengar's (1991) generic frames and causal and treatment responsibility frames aided in the coding. The categories that were coded for are:

Type of Article: this documents the genre or format in which the news story is presented. The type of article could be straight news, features, opinion piece or other.

Straight News: Any article that contains factual information about cervical cancer presented in an inverted pyramid style. These stories answer the question of who, when, what, why, where and how questions.

Features: These include long critical stories on cervical cancer and related issues that often had a personal slant and written in individual style. They are sometimes clearly labelled as feature stories.

Opinion piece: They are the stories or commentaries related to cervical cancer that are expressions of individual's thoughts about the disease. These include opinion pieces, editorials, letters to the editor and columns.

Other: Stories that cannot be clearly classified under any of the formats of news identified above.

Subject matter of the story: indicates the central theme of the story

Risk/Threat – stories that portray and emphasize on cervical cancer as a risk/threat

Awareness Creation/Education/Action – Stories that focused on education, creating awareness and actions taken concerning cervical cancer

Skills Training/Capacity Building – stories focused on skills training and capacity building of people towards fighting cervical cancer.

Donation/Fundraising – stories on fundraising and donation aimed at fighting cervical cancer.

Disease Statistics – stories containing new figures, status of patients, successes, impact of the disease

Other: Stories that cannot be classified under any of the subject matter identified above.

Source of Story: examined those individuals who gave information that constituted the news stories or on whom the news stories were written. The sources studied for were *Government Scientist/Officials and Agencies* - stories that originate from government officials and related agencies like the health services; *Patient and Advocacy Organisations and NGOs* – stories about groups that have contributed one way or the another to cervical cancer; *Individuals and Expert Opinions* – news stories that were on individuals like medical doctors who do not belong to any of the earlier categories mentioned but some are considered as experts on cervical cancer; and *Other* – which referred to news that cannot be categorised under any of the above described newsmakers.

Generic frames: Looked at news stories presented as *Episodic* – stories with little background information or those presented as *Thematic* – stories placed in a context with enough background information.

Coverage Frames: this category looked at the frames used by the *Daily Graphic* and *Daily Guide* newspapers in covering cervical cancer. The frames are based on those of Shih et al. (2008). The frames studied for were:

Action – action(s) against the disease eg. Potential solutions, prevention strategies (quarantines), provision of health interventions/facilities

Conflict– differences in opinions, arguments/disagreements, antagonism between opposing opinions

Consequences – impact of the disease (economic, political, human lives, environmental, social)

New Evidence – new findings/results, discovery of new methods to prevent /cure/treat the disease

Reassurance –This frame looks at how the story offers assurances of success against the disease, conveying hope, alleviating fears of the public and the successes in the fight against the disease.

Uncertainty – This frame looks at all aspects of uncertainties about the disease like the cause, cure, possible spread, how it is shown as unknown as such further research is necessary

Other – stories that cannot be classified under any of the frames stated above

Causal Responsibility Frame: this frame sought to identify where the media assigned the cause of the problem. This includes whether it is *Individual Responsibility* - where the blame is put on the individual *or societal responsibility* - where the responsibility was placed on the society in which the individual lives, or *other*, that is, where it is not clear where to place the responsibility among the specific categories mentioned above.

Treatment Responsibility Frame: just like the causal responsibility frame, this frame explored who was identified in the stories as responsible for treatment. If the issue is caused by an individual the treatment is an *individual responsibility* however if it was caused by the society, particularly in its failure to provide a solution then the responsibility is *Societal/*

Government Action. Other codes explored in this category were *International Donor Intervention, Other, and None*.

3.7 Chapter Summary

This chapter justified why the content analysis method was used for this study. Also, a description of the processes involved in the data collection and instrument construction for this study were provided.



CHAPTER FOUR

FINDINGS

4.0 Introduction

This chapter presents the findings of the study. The objectives of the study were to identify the dominant frames that were used in the coverage of cervical cancer in the selected newspapers, to examine the similarities or differences in the frames that were identified in the coverage of cervical cancer by the selected newspapers, to identify the sources of the news on cervical cancer in the selected newspapers and the frequency of coverage. The data collected was fed to the Statistical Package for Social Sciences (SPSS) software and tables were generated and used for the analysis presented in this chapter.

4.1 Distribution of Cervical Cancer news coverage

A total of 52 stories on cervical cancer were obtained from the *Daily Graphic* and *Daily Guide* newspapers covering the period from 1st January, 2013 to 31st December, 2016. More than half of the stories 59.6%, which amounted to 31 stories, were covered by the *Daily Graphic* newspaper whereas the rest of the stories 40.4%, that is 21 stories, were covered by the *Daily Guide* newspaper.

4.2 Table 1: Type of Article

Article Type	Frequency	Valid Percent (%)
Straight News	50	96.2
Features	1	1.9
Opinion piece	1	1.9
Total	52	100.0

The type of article tells how news is presented on cervical cancer. There are different ways in which news can be presented. However, this study analysed the stories based on whether they were straight news stories, features or opinion pieces. It was found that almost all the stories 96.2%, which amounted to 50 stories, on cervical cancer covered by *Daily Graphic* and *Daily Guide* newspapers were presented as straight news stories as is illustrated in Table 1. Also analysed were a feature story (1.9%) and an opinion story (1.9%).

Table 2: Comparing type of article

Type of Article	Name of Media	
	Daily Graphic	Daily Guide
Straight News	30 (96.8%)	20 (95.2%)
Features	0	1 (4.8%)
Opinion piece	1 (3.2%)	0
Total	31 (100.0%)	21 (100.0%)

From Table 2, it is seen that more than half of the stories from the *Daily Graphic*, that is, 30 (96.8%) stories were straight news stories while the *Daily Guide* also had a considerably large number of stories 20 (95.2%) stories, falling under this category. The *Daily Graphic* newspaper had an opinion piece (3.2%) and no feature story. Conversely, the *Daily Guide* newspaper reported a feature story (4.8%) and no opinion piece.

4.3 Table 3: Subject matter of Story

Subject Matter of Story	Frequency	Valid Percent (%)
Risk/Threat	9	17.3
Awareness Creation/Education/Action	16	30.8
Skills Training/Capacity Building	7	13.5
Donation/Fundraising	3	5.8
Disease Statistics	11	21.2
Other	6	11.5
Total	52	100.0

The subject matter of the story refers to the central or main idea the story sought to convey. The data analysed revealed that the main subject matter of the stories on cervical cancer, which amounted to 16 (30.8%) stories, was Awareness creation/Education/Action stories. From the table, it is seen also that Disease Statistics, which had 11(21.2%) stories, was the second major theme. Risk/Threat to human life had nine (9) stories, that is 17.3%, and Skills Training/Capacity Building, had seven (7) stories, which amounted to 13.5% of the stories on cervical cancer.

The ‘other’ subject matter had 6 or 11.5% of stories. The ‘other’ category of the subject matter, contained stories whose main or central ideas were not clearly recognisable and thus could not be classified against the previous specified categories. The donation/fundraising category received the least coverage in the study with only three (3) or 5.8% of the stories.

Table 4: Comparing Subject Matter of Story

Name of Media	Subject Matter of Story						Total
	Risk/Threat	Awareness Creation/Education/Action	Skills Training/Capacity Building	Donation/Fundraising	Disease Statistics	Other	
Daily Graphic	5 16.1%	8 25.8%	4 12.9%	2 6.5%	7 22.6%	5 16.1%	31 100.0%
Daily Guide	4 19.0%	8 38.1%	3 14.3%	1 4.8%	4 19.0%	1 4.8%	21 100.0%
Total	9 17.3%	16 30.8	7 13.5%	3 5.8%	11 21.2%	6 11.5%	52 100.0%

As presented in Table 4, Awareness Creation/Education/Action with 25.8% and Disease Statistics with 22.6% were the categories of most significance for the *Daily Graphic*. Similarly, the *Daily Guide* newspaper also had Awareness Creation/Education/Action (38.1%) and Disease Statistics (19.0%) as their major focus of attention. In *Daily Graphic*'s case, the 3rd and 4th categories of also of importance were Risk/Threat (16.1%) and 'other' (16.1%) whereas *Daily Guide* also had Risk/Threat (19.0%) but unlike *Daily Graphic*, had Skills Training/Capacity Building (14.3%) as their fourth major subject matter category.

4.4 Table 5: Source of Story

Source of Story	Frequency	Valid Percent (%)
Government Scientist/Officials and Agencies	18	34.6
Patient and Advocacy Organisations and NGOs	18	34.6
Individuals and Expert Opinions	7	13.5
Other	9	17.3
Total	52	100.0

The source of story identifies those individuals who gave the information that made up the news stories on cervical cancer in the newspapers or those individuals on whom the stories were written. From the table, it is seen that an equal number of the stories, 18 (34.6%) stories each, were on Government Scientists/Officials and Agencies, and Patient/Advocacy Organizations and NGOs. The 'other' category had nine (9) stories that is 17.3%, as the 3rd source of story of significance. The 'other' category was used for stories whose sources were not readily recognised. Individuals and Expert Opinions had the least with 13.5% of the stories.

Table 6: Comparing Source of Story

Name of Media	Government Scientist/Officials and Agencies	Patient /Advocacy Organisations and NGOs	Individuals and Expert Opinions	Other	Total
Daily Graphic	8 25.8%	13 41.9%	4 12.9%	6 19.4%	31 100.0%
Daily Guide	10 47.6%	5 23.8%	3 14.3%	3 14.3%	21 100.0%
Total	18 34.6%	18 34.6%	7 13.5%	9 17.3%	52 100.0%

Comparing the sources of stories of the two newspapers, it was found that out of the 31 stories obtained from the *Daily Graphic* newspaper, almost half of the stories 13 (41.9%) were sourced from Patient/Advocacy Organizations and NGOs. Closely followed were Government Scientist/Officials and Agencies sources with 8 (25.8%) stories and ‘other’ with 6 (19.4%) stories. For the *Daily Guide* newspaper however, almost half of the stories, that is 10 (47.6%), were from Government Scientist/Officials and Agencies. Patient /Advocacy Organizations and NGOs as sources also contributed 23.8% stories.

Individuals and Expert Opinion as illustrated, with 4 (12.9%) stories from the *Daily Graphic* newspaper and 3 (14.3%) stories from the *Daily Guide* newspaper contributed the least sourced news stories.

4.5 Table 7: Generic Frames

Generic Frames	Frequency	Valid Percent (%)
Episodic Frames	43	82.7
Thematic Frames	9	17.3
Total	52	100.0

Episodic and Thematic frames were studied as they give information on whether cervical cancer was covered by placing the stories within a context with enough background information (thematically) or as individual or isolated events with little background information (episodically). Findings presented in Table 7 shows that out of the 52 stories obtained, almost five out of every six stories (82.7%) were episodic in nature whilst the remaining 17.3% which amounted to nine (9) stories were thematic. This indicates that majority of cervical cancer stories were covered with little background information, as they were presented as isolated events.

Table 8: Comparing Generic Frames

Name of Media	Generic Frames		Total
	Episodic Frames	Thematic Frames	
Daily Graphic	25 80.6%	6 19.4%	31 100.0%
Daily Guide	18 85.7%	3 14.3%	21 100.0%
Total	43 82.7%	9 17.3%	52 100.0%

In comparing episodic and thematic framing across the *Daily Graphic* and *Daily Guide*, findings presented in Table 8 indicates that, of the 43 stories on cervical cancer that were framed episodically, 80.6% which translates into 25 stories, were from the *Daily Graphic* newspaper while the remaining 18 stories were by the *Daily Guide* newspaper. This indicates that the *Daily Graphic's* cervical cancer stories were dominated by episodic frames, meaning that most of their stories were without enough background information. Also, of the nine (9) stories that were thematic in nature, six (19.4%) stories, were obtained from the *Daily Graphic* newspaper whilst the remaining 3 (14.3%) stories were from the *Daily Guide* newspaper.

4.6 Table 9: Coverage Frames

Coverage Frames	Frequency	Valid Percent (%)
Action	23	44.2
Conflict	1	1.9
Consequences	8	15.4
New Evidence	3	5.8
Reassurance	3	5.8
Uncertainty	6	11.5
Other	8	15.4
Total	52	100.0

The coverage frame identifies the dominant frames that were used in the coverage of cervical cancer in the selected newspapers. This typology was adopted from a study by Shih et al. (2008) on how three public health epidemics were covered. It was found that close to half (44.2%) of the stories were presented with action frames.

This was followed by consequence frame with eight (15.4%) stories and uncertainty frame six (11.5%) stories, making up the top three frames. The ‘other’ frame category with eight (15.4%) stories, new evidence and reassurance frames with three (5.8%) stories each and conflict frame with one (1.9%) story made up the rest of the frames in the category. Comparing coverage frames across the *Daily Graphic* and *Daily Guide* newspapers, it was found, as illustrated in Table 10 below, that almost half of the stories of both newspapers, that is, 14 (45.2%) for the *Daily Graphic* and nine (42.9%) for the *Daily Guide*, were action framed stories. The uncertainty frame with six (19.4%) stories and ‘other’ with four (12.9%) stories together with action, make up the top three frames for the *Daily Graphic* newspaper whilst for the *Daily Guide*, consequences with seven (33.3%) stories and ‘other’ with four (19.0%) stories were added to the action frame to make up the top three. This means that the dominant frames of coverage of the newspapers were the action frame, which focused on the actions taken against the disease; the uncertainty frame, which expresses uncertainties with regards to various things such as the cause, and cure for cervical cancer and ‘other’. The ‘other’ category was used to classify stories that were not easily categorized under the identified coverage frames.

The *Daily Graphic* had one (3.2%) story covered in conflict frame, one story in the consequences frame, two stories amounting to 6.5% in new evidence, and three (9.7%) stories in the reassurance frame whereas the *Daily Guide* had one (4.8%) story in the new evidence frame, and no stories in the conflict, reassurance and uncertainty frames.

Table 10: Comparing coverage frames

Name of Media	Coverage Frames							Total
	Action	Conflict	Consequences	New Evidence	Reassurance	Uncertainty	Other	
Daily Graphic	14 45.2%	1 3.2%	1 3.2%	2 6.5%	3 9.7%	6 19.4%	4 12.9%	31 100.0%
Daily Guide	9 42.9%	0 .0%	7 33.3%	1 4.8%	0 .0%	0 .0%	4 19.0%	21 100.0%
Total	23 44.2%	1 1.9%	8 15.4%	3 5.8%	3 5.8%	6 11.5%	8 15.4%	52 100.0%

4.7 Table 11: Causal responsibility frame coverage

Causal Responsibility	Frequency	Valid Percent
Individual Responsibility	20	38.5
Societal Responsibility	1	1.9
Other	31	59.6
Total	52	100.0

The causal responsibility frame identifies where the cause of the disease or the blame is attributed. From Table 11, findings show that more than half of the stories, that is, 59.6% which translates into 31 stories, fell under the 'other' category. The 'other' category was used to classify stories that were unclear as to who to attribute the blame for the disease, thus were unable to be grouped under any of the specified frames in this category. Closely followed is the individual responsibility frame with 20 (38.5%) stories. Societal responsibility had one (1.9%) story.

Table 12: Comparing causal responsibility frames

Name of Media	Causal Responsibility Frame			Total
	Individual Responsibility	Societal Responsibility	Other	
Daily Graphic	10 32.3%	0 .0%	21 67.7%	31 100.0%
Daily Guide	10 47.6%	1 4.8%	10 47.6%	21 100.0%
Total	20 38.5%	1 1.9%	31 59.6%	52 100.0%

Looking at the causal responsibility across the *Daily Graphic* and *Daily Guide* newspapers, the former had more than half of its stories, which is 67.7%, falling under the ‘other’ frame and the remaining 32.3% stories attributed causal responsibility to individuals. The ‘other’ category constituted close to half, that is 10 (47.6%) stories, of *Daily Guide* newspaper’s causal responsibility stories. The *Daily Graphic* and *Daily Guide* had an equal number of stories, that is 10 (32.3%) and 10 (47.6%) respectively falling under the individual responsibility frame. Whereas the *Daily Graphic* had no story under the societal responsibility frame, which means that the society was not blamed for the disease, *Daily Guide* had one (4.8%) story falling under the societal responsibility frame.

4.8 Table 13: Treatment Responsibility frame

Treatment Responsibility	Frequency	Valid Percent (%)
Individual Responsibility	15	28.8
Societal/Government Action	23	44.2
International Donor Intervention	8	15.4
Other	2	3.8
None	4	7.7
Total	52	100.0

The treatment responsibility frame examines those who have been identified in the stories as responsible for the treatment of the disease. It was found that almost half (44.2%) which translates to 23 stories attributed responsibility of treatment to societal/government action. Individual responsibility with 15 (28.8%) stories and international donor intervention were also attributed as agents of treatment responsibility. It was also found that four (7.7%) stories attributed treatment responsibility to no one and the 'other' category had two (3.8%) stories coming under it.

Table 14: Comparing treatment responsibility frames

Comparing the treatment responsibility across *Daily Graphic* and *Daily Guide* newspapers, it is seen in Table 14 that the trend of attribution treatment was similar. The *Daily Graphic* had more than a quarter that is 38.7%, of its stories attributing treatment responsibility to societal/government action. Similarly, the *Daily Guide* newspaper had more than half, which is 52.4%, of its stories attributing treatment responsibility to the same category.

Name of Media	Treatment Responsibility					Total
	Individual Responsibility	Societal Government Action	International Donor Intervention	Other	None	
Daily Graphic	9 29.0%	12 38.7%	6 19.4%	0 .0%	4 12.9%	31 100.0%
Daily Guide	6 28.6%	11 52.4%	2 9.5%	2 9.5%	0 .0%	21 100.0%
Total	15 28.8%	23 44.2%	8 15.4%	2 3.8%	4 7.7%	52 100.0%

From the table above, it can be seen that the individual responsibility frame had nine (29.0%) stories for the *Daily Graphic* newspaper and six (28.6%) stories for the *Daily Guide* newspaper. International donor intervention, where responsibility for the treatment of the disease was attributed to international or joint effort had 19.4% and 9.5% stories by the *Daily Graphic* and *Daily Guide* newspapers respectively. The *Daily Guide* had two (3.8%) of its stories falling under the ‘other’ category but had no story for the none category while the *Daily Graphic* had four (12.9%) stories in which no one was attributed responsibility for treatment and no story under the ‘other’ category.

4.9 Chapter Summary

This chapter presents the findings from the analysis in tables. These findings include that the *Daily Graphic* newspaper had the highest frequency in cervical cancer coverage. Also found was that majority of the stories on cervical cancer were presented as straight news. Almost all the stories were episodic in nature and the main subject matter of the stories was awareness creation/education/action. Government scientist/officials and agencies and patient advocacy organizations and NGOs constituted the most cited as sources of stories on cervical cancer. These findings would aid in the ensuing discussion.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Introduction

In this study, a quantitative content analysis was conducted of the *Daily Graphic* and *Daily Guide* newspapers to investigate how cervical cancer was covered from the year 2013-2016. The objectives of the study were to identify the dominant frames used in covering cervical cancer by the two newspapers, to examine the similarities or differences in the dominant frames used in the covering of cervical cancer by the two newspapers, to identify the sources of cervical cancer information and to examine the frequency of cervical cancer coverage by the two newspapers. The findings as presented in chapter four and the research objectives and questions would guide the presentation and discussions in this chapter.

5.1 Dominant Frames

RQ 1: The first research question the study sought to answer was: What were the dominant frames used by the *Daily Graphic* and *Daily Guide* newspapers in their coverage of cervical cancer? The findings of the analysis revealed that the dominant frames used in the coverage of cervical cancer were action and consequences frames with the action frame being the most dominant. The action and consequences frames amounted to almost 45% and 16% which translates into 31 stories. This means that a large majority (31) of the stories on cervical cancer talked about the actions, like the provision of health interventions such as cervical cancer vaccination drives, national strategies developed by government to fight the disease and others that have been taken to fight against the disease.

The findings further suggest that the stories on cervical cancer also talked about the consequences of the disease such as the loss of human lives (human lives impact) which could subsequently affect the workforce to lower output (economic impact).

These results are consistent with the finding of Shih et al.'s (2008) study of public health issues which also found the action and consequences frames as the dominant frames with the dominant frame being the action Frame. These findings also indicate deficits in information geared at allaying the fears and uncertainties of the disease. Thus information like how and where to receive treatment, the causes, symptoms, and others were lacking which means that incomplete information were presented to the public. Other (15.4%), uncertainties (11.5%), new evidence (5.8%), reassurance (5.8%) and conflict (1.9) were the other coverage frames analysed.

The finding was however contrary to Vardeman (2007) who's study of the frames used in covering cervical cancer in popular women's magazine revealed the consciousness-raising frame and confusion in abnormality as the dominant frames. The result of the analysis is also contrary to Krieger et al's (2011) finding from investigating the media coverage of cervical cancer, HPV and the HPV vaccine that revealed the dominant frames of coverage as severity and susceptibility. Severity focused on offering disease statistics with explanation or elaboration while susceptibility focused on how women were susceptible to contracting STDs.

The analysis also revealed that almost all the stories (50) on cervical cancer were covered episodically. This translates also to mean that the scope of understanding that the audiences would have of cervical cancer would be limited and potentially influence how the disease is viewed. Additionally, meaning that the kind of detailed and contextual information the public needs were not provided. This finding is consistent with the assertion made by Coleman et al. (2011) that, health news is rarely framed thematically and also corresponded with Iyengar's (1991) finding that there is a bias of daily news towards episodic framing as a result of newsroom practices like news production

5.2 Similarities and Differences in Dominant Frames

RQ 2: The second research question that the study sought to address was: What similarities or differences exist in the dominant frames used by the *Daily Graphic* and *Daily Guide* newspapers in their coverage of cervical cancer? Results showed that the dominant frames used by the *Daily Graphic* and *Daily Guide* newspapers in the coverage were not that different. The similarities were seen in the order in which the dominant frames were found. It was found that both the *Daily Graphic* and *Daily Guide* newspapers had their dominant frame being the Action Frame. The differences in the frames were seen at the subsequent frames that were also analysed. Where the *Daily Guide* newspaper had action and consequences frames as its dominant frames, the *Daily Graphic* newspaper had action and uncertainty frames. This means that whereas the majority of stories on cervical cancer covered in the *Daily Graphic* newspaper focused on the actions taken to fight the disease, focus was also placed on the uncertainties of the disease like causes, possible cures and many others.

Vardeman (2007) found the dominant frames of consciousness-raising and confusion in abnormality frame in a study examining the coverage of cervical cancer by popular women's magazines. On the other hand, Krieger et al. (2011) found from studying how cervical cancer, HPV, and the vaccine were covered, severity and susceptibility as the dominant frames. This means that there is a varied response in literature when it comes to discussing coverage frames. Similarly, both the *Daily Graphic* and *Daily Guide* newspapers had a large majority of their stories being episodic. The *Daily Graphic* had almost all its stories (80.6%) being episodic in nature with the remaining 19.4% thematic in nature. Equally, this trend is repeated for the *Daily Guide* newspaper where almost all the stories (85.7%) were episodic in nature and the rest were thematic (14.3%). This means that overall the stories on cervical cancer were without previous knowledge or background or context that allows for a fuller picture to be grasped by the audiences.

Results also showed that in attributing causal responsibility, the *Daily Graphic* newspaper had more than half of its stories (21) attributing to ‘other’ and the remaining distributed to Individual responsibility. On the other hand, the *Daily Guide* newspaper had an equal distribution between individual responsibility (10) and ‘other’ (10) with the remaining one story attributing responsibility to the society. The treatment responsibility by the two newspapers were not different from the whole treatment responsibility found for this study. This means that as with the whole treatment responsibility which was dominated by societal/government action, the *Daily Graphic* and *Daily Guide* newspapers also had a significant number of stories (38.7% and 52.5% respectively) attributing responsibility to societal /government action. Closely followed were individual responsibility (*Daily Graphic* 29.0%, *Daily Guide* 28.6% and international donor intervention (*Daily Graphic* 19.4%, *Daily Guide* 28.6%).

The differences were seen at the subsequent categories of the frames and the sources of the stories on cervical cancer. Whilst the *Daily Graphic* had the most cited source of story being patient/advocacy organizations and NGOs, the *Daily Guide* had government scientists/officials and agencies.



5.3 Sources of Stories

RQ 3: The third research question the study sought to answer was: What were the sources of the stories on cervical cancer in the *Daily Graphic* and *Daily Guide* newspapers? It was also found that government scientist/officials and agencies and patient and advocacy organizations and NGOs were the major sources of the stories on cervical cancer. This finding is consistent with Diedong's (2013) result from examining how health issues were covered. Diedong's (2013) result was that the main source of news items were government official sources.

However, results of this study that the major sources of cervical cancer stories were government scientist/officials and agency and patient and advocacy organizations and NGOs were contrary to Atkin et al.'s (2008) findings. Atkin et al. (2008) found from examining breast cancer coverage in leading U.S. media outlets that the major sources cited were expert medical professionals, researchers or organizations. Atkin et al.'s (2008) findings were those frames that were the least cited as sources in this study. Diedong et al. (2013) also found that the least cited as sources of stories were medical experts and individuals which is consistent with the finding of this study. This implies that the major sources of health stories are not always the same but varied.

Results showed that while patient and advocacy organizations and NGOs was the most cited source of cervical cancer stories for the *Daily Graphic* newspaper, government scientist/officials and agency was the most cited for the *Daily Guide* newspaper. On the other hand, while government scientist/officials and agency was the second most sourced for the *Daily Graphic* newspaper, patient and advocacy organizations and NGOs was the second for the *Daily Guide* newspaper. Individual and expert opinions and 'other' were the least cited source of stories for both newspapers.

5.4 Frequency of Coverage

RQ 4: The fourth research question was: What was the frequency of coverage of cervical cancer by *the Daily Graphic* and the *Daily Guide* newspapers? The results of the study showed that the *Daily Graphic* newspaper had 31 stories on cervical cancer and the *Daily Guide* newspaper had 21 stories. This indicates that the *Daily Graphic* newspaper produced 10 times more stories than the *Daily Guide* newspapers. The difference in the frequencies in the coverage of cervical cancer could be as a result of the different media, particularly the size of the organization. The *Daily Graphic* is a state-owned newspaper that produces on average 60 pages.

These pages publish a variety of sections including sports, health, gender, business, general news and others. It has an estimated circulation rate of 200 thousand copies that are distributed throughout the country daily. On the other hand, the *Daily Guide* newspaper is a privately owned newspaper which produces on average 16 pages. Similar to the *Daily Graphic* newspaper, the *Daily Guide* newspaper also functions as a daily newspaper that publishes on Monday through to Saturday with the exception of Sunday. It also publishes a variety of sections including the business, health, gender, general news and others which mirror that of the *Daily Graphic* newspaper. The circulation rate of the *Daily Guide* newspaper is estimated at about 100 thousand copies which are also distributed throughout the country daily (Azanu, 2012).

The circulation rate of the *Daily Graphic* newspaper is twice and some the circulation rate of the *Daily Guide* newspaper as it stands (Azanu, 2012). Also, the number of pages published by the *Daily Graphic* is almost quadruple the number of pages published by the *Daily Guide* newspaper. This could be translated to mean that more stories can be published by the *Daily Graphic* newspaper than the *Daily Guide* newspaper. These reasons put together allow for the *Daily Graphic* to be considered larger than the *Daily Guide* newspaper. Therefore, the

differences in the frequency of coverage by the two newspapers could be attributed to the aforementioned reasons.

5.5 Conclusion

This study sought to examine how the print media, particularly *Daily Graphic* and *Daily Guide* newspapers, covered cervical cancer by conducting a quantitative content analysis from the period January, 2013-December, 2016. Overall, the media's coverage of cervical cancer was positive as it sought to educate and inform the public.

This position is indicated by the emergence of awareness creation, education and action as the dominant subject matter of the stories on cervical cancer.

Additionally, the study found that the functions of a frame as suggested by Entman (2003), that are to define the problem, identify the cause, make judgements and propose suggestions, were hardly used by the selected Ghanaian newspapers in reporting cervical cancer. This position is indicated in how the action and consequences frames emerged as the dominant frames of coverage which means that the stories on cervical cancer focused on the actions taken against the disease like cervical cancer vaccination drives and the impacts of the disease. This finding suggests gaps in information on how and where to receive treatment, the causes, symptoms, and risk factors, status of the disease and patients as well as the successes or otherwise realised as a result of the actions and interventions executed to deal with the disease.

The study also found that the dominant frames by the *Daily Graphic* and *Daily Guide* newspapers were not that different. Similarities were seen in the order of the frames of dominance such as the action and episodic frames for both newspapers.

The *Daily Graphic* newspaper was found to have reported the highest number of cervical cancer stories than the *Daily Guide*. The *Daily Graphic* is a state-owned newspaper with organizational size and structure, news production practices and styles that are different from

those adopted by the *Daily Guide* newspaper. These differences may contribute to the reason why the *Daily Graphic* reported the highest frequency of stories on cervical cancer.

It was also found that majority of the stories on cervical cancer were reported as straight news stories. However, presenting articles in such ways can lead to a one-sided coverage. Therefore, reporting such health information through the straight news style may take away extensive and vital information that is needed for such specialised health coverage.

These findings suggest that there were some deficits in the information on cervical cancer reported by the media implying that the Ghanaian newspapers provided biased and incomplete information on cervical cancer. Therefore, it is recommended that a conscious effort be made by journalists to report health news in frames that place import on depth and detail.

5.6 Limitation and suggestions for future study

Firstly, due in part to the fact there were limited instances of news reported on cervical cancer, the validity of the study is low.

Secondly, the results of this study cannot be generalised as it looked at how only two newspapers, out of the many newspapers in Ghana, covered stories on cervical cancer. Therefore, it is recommended that the number of newspapers be increased in order to obtain a thorough presentation of such specialised health reportage.

Secondly, it is recommended that a mixed method which would add qualitative element to this study. This combination would allow for a comprehensive understanding.

5.7 Chapter Summary

This chapter presents the discussion of the findings obtained from the analysis. The objectives of the study were analysed and the research questions answered.

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APPENDIX ONE

CODING SHEET

1. Name of Media

1. Daily Graphic
2. Daily Guide

2. Date of Story.....

3. Story Headline.....

4. Type of Article

1. Straight News
2. Features
3. Opinion piece
4. Other

5. Subject matter of the story

1. Risk / Threat
2. Awareness Creation / Education / Action
3. Skills Training / Capacity Building
4. Donation / Fundraising
5. Disease Statistics
6. Other

6. Source of Story

1. Government Scientist/Officials and Agencies
2. Patient and Advocacy Organisations and NGOs

3. Individuals and Expert Opinions

4. Other

7. Generic frames

1. Episodic frames

2. Thematic frames.

8. Coverage Frames

1. Action

2. Conflict

3. Consequences

4. New Evidence

5. Reassurance

6. Uncertainty

7. Other

9. Causal Responsibility Frame

1. Individual Responsibility

2. Societal responsibility

3. Other

10. Treatment Responsibility Frame

1. Individual responsibility

2. Societal / Government Action

3. International Donor Intervention

4. Other

5. None



APPENDIX TWO

CODING GUIDE

1. Name of Media

1. Daily Graphic
2. Daily Guide

2. Date of Story: This refers to the day, month and year in which the news story was published

3. Story Headline: This refers to the headline of the story being analysed

4. Type of Article: This documents the genre or format in which the news story is presented.

1. *Straight news*: Any article that contains factual information about cervical cancer presented in an inverted pyramid style. These stories answer the question of who, when, what, why, where and how questions.
2. *Features*: These include long critical stories on cervical cancer and related issues that often has a personal slant and written in individual style. They are sometimes clearly labelled as feature stories.
3. *Opinion Piece*: They are the stories or commentaries related to cervical cancer that are expressions of individual's thoughts about the disease. These include opinion pieces, editorials, letters to the editor and columns.
4. *Other*: Stories that cannot be clearly classified under any of the formats of news identified above.

5. Subject matter of the story

1. Risk / Threat: stories that emphasize on the disease as a risk / threat

2. Awareness Creation / Education / Action: Stories focused on education, creating awareness and actions taken concerning the disease
3. Skills Training / Capacity Building: stories focused on skills training and capacity building of people on the disease
4. Donation / Fundraising: stories on fundraising and donation aimed at fighting the disease
5. Disease Statistics: stories containing new figures, status of patients, successes, impact of the disease
6. Other: Stories that cannot be classified under any of the subject matter identified above.

6. Source of Story

1. Government Scientist/Officials and Agencies: stories that originate from government officials and related agencies like the health services.
2. Patient and Advocacy Organisations and NGOs: stories about groups that have contributed one way or the another to cervical cancer.
3. Individuals and Expert Opinions: news stories that were on individuals like medical doctors who do not belong to any of the earlier categories mentioned but some are considered as experts on cervical cancer.
4. Other: which referred to news that cannot be categorised under any of the above described newsmakers.

7. Generic frames

1. Episodic frames: stories with little background information
2. Thematic frames: stories placed in a context with enough background information.

8. Coverage Frames

1. Action: action(s) against the disease eg. potential solutions, prevention strategies (quarantines), provision of health interventions / facilities
 2. Conflict: differences in opinions, arguments / disagreements, antagonism between opposing opinions
 3. Consequences : impact of the disease (economic, political, human lives, environmental, social)
 4. New Evidence : new findings / results, discovery of new methods to prevent / cure / treat the disease
 5. Reassurance: This frame looks at how the story offers assurances of success against the disease, conveying hope, alleviating fears of the public and the successes in the fight against the disease.
 6. Uncertainty: This frame looks at all aspects of uncertainties about the disease like the cause, cure, possible spread, how it is shown as unknown as such further research is necessary
 7. Other: stories that cannot be classified under any of the frames stated above
9. Causal Responsibility Frame
1. Individual Responsibility: where the blame is put on the individual
 2. Societal responsibility: where the responsibility was placed on the society in which the individual lives
 3. Other: where it is not clear where to place the responsibility
10. Treatment Responsibility Frame
1. Individual responsibility: Individuals are responsible for solving the problem
 2. Societal / Government Action : government and institutions are responsible for solving the problem

3. International Donor Intervention: donors and international community are responsible for solving the problem.
4. Other: other listed as responsible
5. None : no one is identified as responsible

