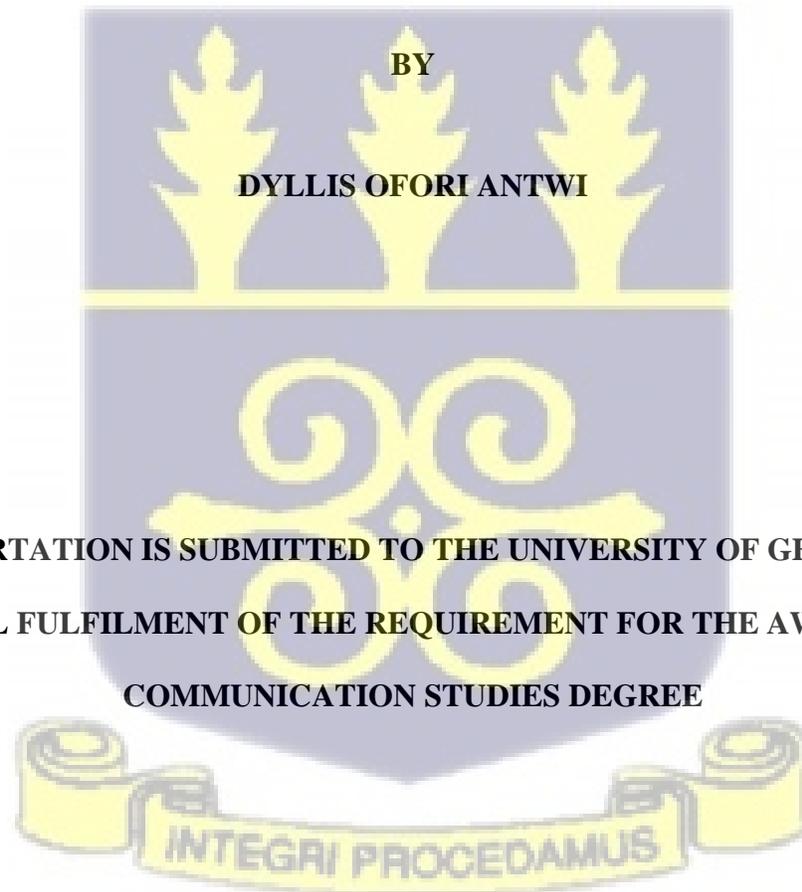


**A COMPARATIVE STUDY OF GHANAIAN ONLINE NEWSPAPER COVERAGE OF
MONKEYPOX: A CASE OF GRAPHIC ONLINE, DAILY GUIDE NETWORK AND
THE CHRONICLE NEWS ONLINE**



**THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON
IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MA
COMMUNICATION STUDIES DEGREE**

JANUARY 2023

DECLARATION

I hereby declare that this dissertation is the result of my own work undertaken by me under the supervision of Dr. Aurelia Ayisi. The entire work or any other part of it has not been presented for another degree in this university or elsewhere. All works cited in this study have been duly acknowledged.

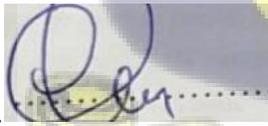
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Date:29/09/2023.....



DEDICATION

I dedicate this dissertation to the entire Ofori Antwi family, especially to my dearest father.



ACKNOWLEDGEMENT

I am forever grateful to you, Lord, for you have brought me this far. For the grace to complete this dissertation.

My gratitude also goes to my supervisor Dr. Aurelia Ayisi. Thank you for your patience and immense support throughout this study. I am also thankful for her comprehensive reviews, comments, critiques, and suggestions that helped this study take shape.

I also want to acknowledge the comments, criticisms, and suggestions made by faculty members of the School of Communication Studies, University of Ghana.

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ABSTRACT

This study investigated the extent to which the Graphic Online, Daily Guide Network and The Chronicle News Online covered the Monkeypox disease since its outbreak in Ghana in June 2022. The specific objectives of the study were to examine the prominence the Graphic Online, Daily Guide Network and The Chronicle News Online gave to stories on Monkeypox Disease, to analyze the type of stories published by the three online newspapers on the disease, to identify the sources of stories that were cited by the newspapers, and to find out the dominant frames used by the online newspapers in publishing Monkeypox Disease-related stories. The study was quantitative in nature whereby quantitative content analysis was employed to gather Monkeypox-related stories from the websites of these three online newspapers. Guided by the Agenda-setting and Framing theories, the study revealed that the three online newspapers covered few stories on the Monkeypox disease. The total number of stories covered by the online newspapers within the six months was 30 which indicated less coverage. The majority of the stories covered by the three online newspapers were accompanied by photographs to enhance the understanding of online readers. Additionally, most of the few stories featured, were treated as straight news stories.. It was revealed that the majority of Monkeypox disease related-stories were cited from the Ghana Health Service (GHS), followed by other Media Agencies and Scientists/Researchers. The frame that was most employed by the three online newspapers was the Recorded Cases on Infection and Death frame, followed by Prevention / Safety Measures frame and Government and NGO Efforts frame.





CHAPTER ONE

1.0 Introduction

The media in Ghana play an important role in the dissemination of news regarding disease outbreaks. The media acts as a two-way information channel between the Ministry of Health or government and the targeted community (Ijumba et al., 2003). There are oftentimes collaborations between health ministries and agencies, to source out and publish information on disease pandemics to create awareness, educate and inform the public about the diseases. According to Mboera and Rumisha (2004), the media is required to publish accurate and timely information on disease outbreaks to deliver reliable epidemiological information to the public on time.

In Ghana, the print media, especially newspapers contribute to the coverage of disease outbreaks. These newspapers also have online news portals which supplement the various disease stories they publish in their newspapers. Moreover, newspaper agencies have added websites (online news portals) to their routine publishing of stories in newspapers to satisfy online readers who do not have access to newspapers. As it has been posited by Mboera and Rumisha (2004), the print media whether online or offline cover stories on diseases to improve awareness and facilitate community mobilization in epidemic response. The publishing of stories on disease outbreaks alerts and prepares the public for an impending health crisis.

Two years after the outbreak of COVID-19 in 2019, the Monkeypox disease also emerged in Ghana. The first recorded case of Monkeypox disease was reported on the 8th of June 2022 (MyJoyOnline, 2022). Meanwhile, the outbreak of the disease had already started in the neighboring countries of Ghana such as Nigeria, Cameroon and Ivory Coast. Most media outlets in Ghana, reported stories to contribute to the awareness creation of the disease. The print media,

especially Ghanaian newspapers (both online and offline) contributed their quota to the fight and preventive measures that needed to be taken against the spread of the Monkeypox disease. The contribution of online news portals of Ghanaian newspapers in the coverage of diseases, serves as a backdrop for this current study, which seeks to explore the extent to which some selected Ghanaian newspapers and designated online news portals, covered the Monkeypox disease since its outbreak in Ghana. This study introduces the topic by discussing the background and identifying the study's problem. The chapter also presents the study's objectives, research questions, the significance of the study and the chapter summary.

1.1 Background of the Study

1.1.1 Outbreak of MonkeyPox Disease in Ghana

Monkeypox is an epidemic disease, prevalent in some parts of West and Central Africa, especially in countries like the DRC, Nigeria and Cameroon (Crisis24,2022). According to the WHO (2010), the disease is contracted by people who claim to have come into contact with wild monkeys or other mammals that may be carriers of the illness. In the case of Ghana, the disease has not been prevalent since the year 2003 which marked the year of the last known case of the disease (Crisis24, 2022).

As of June 8, 12 suspected instances of Monkeypox were identified by Ghana health officials in Ghana's Eastern, Greater Accra, and Western Regions, including five confirmed cases (MyJoyOnline.com, 2022). One of the patients left for the US before experiencing any symptoms. As disease surveillance and contact tracing continued. The authorities, however, found more suspected cases in the subsequent weeks of the disease outbreak.

According to the statistics provided by the Ghana Health Service, as of August 2022, thirty-four (34) cases of infection were confirmed including one death. The infection cases were detected from six regions in Ghana, namely: Ashanti, Bono, Bono East, Eastern, and Greater Accra Regions (Ghana Health Service, 2022). This indicated a 47 percent increase in the number of new confirmed cases when compared to the previous report on the infected cases. The highest number of confirmed cases were reported from greater Accra (20 cases; 59%) (Africa CDC, 2022).

The government, health and information ministries and other health agencies collaborated with the Ghanaian media to create awareness, educate and inform the general public about the causes, symptoms and prevention of Monkeypox Disease. The media reports centered on exercising fundamental health precautions, such as routinely washing hands with soap and water, covering mouth and nose when coughing, and avoiding those who are ill. Other measures included staying away from crowded places like nightclubs and using contraceptives (condoms) or other safe sexual practices. The public was advised to seek medical attention when they experience signs or symptoms of the disease.

1.1.2 The Role of the Media in Health

Due to the influence of media, the world has recently experienced tremendous changes (Salvin & Maheema, 2021). The existence of information and communication technologies, has made possible the easy access, of knowledge, facts, and information. In both developed and developing nations, the media are and have always been one of the most effective communication instruments (Bucur, 2000). They help to promote accurate information at the

appropriate time and serve as reliable sources of information, for the education and prevention of health-related issues.

The media are a very critical instrument in the communication of health-related issues. According to Noar (2006), the media have long been a tool for promoting public health. Due to the media's wide coverage, they are used in the communication of health messages to large populations (Catalán-Matamoros, 2011). The media such as television, radio, newspapers, social media and other digital platforms serve as an avenue for the communication of health-related issues to a target population, that might be at risk of contracting or being infected with a particular disease. As posited by Wakefield (2010), people are exposed to vital information about various diseases and other health issues when the media coverage of that particular disease is able to reach a wide audience.

The media serves as an efficient resource for transmitting useful information about health to a larger public. They provide the citizenry with the necessary information and also educate them on crucial health-related issues (Parvin et al., 2020). In pandemic situations such as Ebola, HIV/AIDS, H1N1, Chickenpox, and COVID-19 among others, the public received educative and preventive information from journalists, medical professionals, public health officials, and government representatives through both traditional and new media platforms.

In the communication of health and disease-related issues, the media's main focus is aimed at changing knowledge, creating awareness, and contributing to the goal of changing behavior (Catalán-Matamoros, 2011). The media's work extends beyond simply covering health-related issues, to educating the masses in order to change attitudinal patterns, for lasting results in disease prevention.

Arriaga et al. (2021) highlight that, health organizations employ media by drawing on media messages used during prior health crises like the Ebola virus and COVID-19 to provide a list of suggestions for media messages that emphasize the value of message framing, interactive public forums with up-to-date information, and open communication about what is understood and undetermined about a given disease pandemic. Raccanello et al. (2020) also acknowledges the distributive power of the media and its relevance in creating public awareness campaigns that inform and educate both the young and the old in society about disease outbreaks.

1.1.3 Print Media and Digital Media

Any media format that makes use of paper and ink is known as print media (Mautner, 2008). It is also known as paper media. Newspapers, periodical magazines, journals, posters, and flyers are all examples of print media. Print media is superior to other forms of media in that it is more permanent than most Web content and easier to gather than audiovisual data (Mautner, 2008). This is due to the fact that some online documents may be lost to viewers or readers if not saved. Newspapers are the most widely used type of print media, according to Frost (2012).

In recent times however, due to the fast-paced nature of today's world and the ease of accessibility of information and information devices, most people would much rather watch vibrant news items on their smart devices, than read newspapers. There are lesser photographs for instance, in print media, such as newspapers and magazines, with some often printed in black and white, which makes readers lose interest (Chen, 2022). Additionally, the time it takes to produce content for print media, serves as another reason for shift in consumption volumes, from print media to digital media. Print media production is a difficult process; for instance, when

creating a newspaper, the process begins with planning and continues through printing and distribution (Peri et al., 2017). Customers may have to wait for days before receiving some print media such as magazines.

The growth of digital media, is evident in the accelerating increase in the number of accounts which indicates that, a sizable portion of society now relies heavily on this type of new media (Chen, 2022). Digital media may be classified into categories, for instance television and computers are examples of traditional digital media, whereas social networking websites, smartphones, tablets, and video games are examples of new digital media.

The number of users of digital media expanded along with their use as the technology proliferated (Reid-Chassiakos et al., 2016). This is due to the several benefits of using digital media for people, such as how efficient and effective it has become for one to find and gather information. For instance, rather than visiting the library, students can find resources more easily online, by just searching for the relevant terms. It also makes it simpler for people to communicate with one another. People used to have to wait for the mailman to arrive on a bike or in a trunk to deliver messages, but now they can send messages faster via emails and other messaging apps on their smartphones.

1.1.4 Ghanaian Online News Portals

In Ghana, one of the commonest forms of print media is the newspapers and they are regarded as extremely important tools for the social, political, and economic development of many countries all over the world. Newspapers have a significant role in linking governments with their citizens (Amadu et al., 2018). Newspapers are among the earliest and most

fundamental types of mass communication (Abban & Brenyah, 2022). Newspapers convey stories that are related to politics, sports, fashion, social vices, entertainment, crimes, and health among others (Achala & Sinha, 2010). As a result of audience shift in preference to digital media, most of these newspapers in Ghana have also made available online news platforms to keep up with the times.

Contemporarily, digital electronic editions of several books, newspapers, periodicals, and newsletters are now published online (Abban & Brenyah, 2022). Currently, forty-five (45) newspapers circulate in Ghana (National Media Commission, 2022). The most prominent newspapers that are circulated in Ghana include *Daily Graphic*, *Daily Guide*, *The Ghanaian Chronicle*, *Business and Financial Times*, *Daily Statesman*, *The Finder Newspaper*, *Ghanaian Times*, *Heritage*, *The Herald*, *The Ghanaian Observer*, and *Graphic Showbiz* (National Media Commission, 2022).

Newspaper companies have taken advantage of the online space to attract large online readers. Most Ghanaian newspapers now have online news portals where they publish their news stories for their online readers. Some of the online news portals managed by these newspapers include: *Graphic Online*, *Daily Guide Network*, *The Chronicle News Online*, *Ghanaian Time online*, *Business Guide online*, and *The Finder online*



1.2 Problem Statement

To date, newspapers are still relevant. Most radio and television stations, in gathering news for broadcasting, include major newspaper headlines and stories. As earlier established,

these news stories cover up to date events that affect the populace in one way or the other such as news on disease outbreaks.

Digital media however, has created competition for newspapers and revised the way news is distributed. This has resulted in many newspapers integrating digital platforms which are online news portals into their operations. Digital media has placed the newspaper industry in a position to adopt the digital ways of story publications.

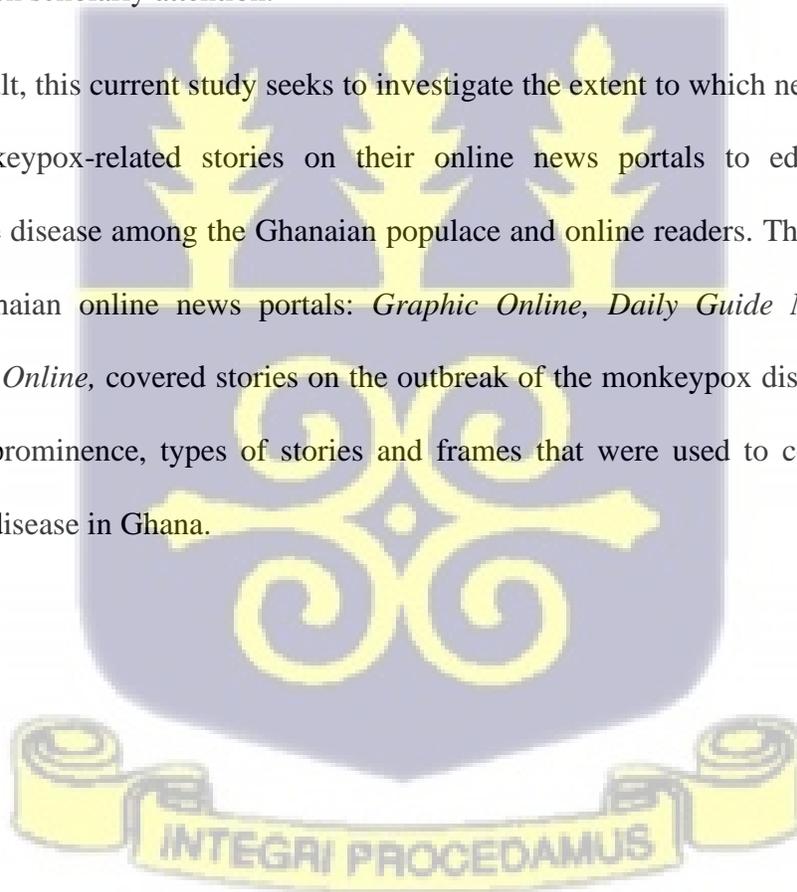
On the issue of health coverage, many newspaper agencies still cover stories on diseases on their online news portals to satisfy the information needs of their online readers. A study by Akintola et al. (2015) revealed how newspaper agencies used their online news portals to contribute to healthcare coverage. Akintola et al. (2015) examined the coverage of basic healthcare in South Africa's print media. Following the collection of stories from the Lexis-Nexis online newspaper during 16 years (1997–2012), it was found that the online newspaper prioritized primary healthcare and carried stories on clinics, community health workers, and nurses. Additionally, a lot of news articles about communicable and non-communicable diseases were often published. Similarly, a study by Smith and Tietah (2017) brings to light how online news portals are being utilized in the outbreak of diseases. Smith and Tietah (2017) researched how print media covered meningitis and other health crises. After analyzing the content of health-related stories of meningitis using My Joy Online and Graphic Online platforms which are digital newspapers, the researchers discovered that the media expanded its coverage of meningitis to generate attention and awareness as the number of deaths brought on by the illness rose.

The aforementioned studies have revealed how online newspapers or news portals are being used in the coverage of diseases and other health-related issues.

After the outbreak of COVID-19 in Ghana, another incidence of epidemic disease that brought a scare into the country was Monkeypox. As it has been one of the roles of the media, in terms of information dissemination, the outbreak of Monkeypox led many newspapers to publish stories to create awareness and educate the public on the disease.

The coverage of the Monkeypox disease however, is one of the understudied phenomena in Ghana, due to the limited literature on this disease outbreak in the country . The extent to which newspaper agencies in Ghana covered the Monkeypox disease on their online news portals for awareness creation of the disease since its outbreak in the early days of June 2022 has not received much scholarly attention.

As a result, this current study seeks to investigate the extent to which newspaper agencies published Monkeypox-related stories on their online news portals to educate and create awareness of the disease among the Ghanaian populace and online readers. This study compares how three Ghanaian online news portals: *Graphic Online*, *Daily Guide Network* and *The Chronicle News Online*, covered stories on the outbreak of the monkeypox disease in Ghana, by comparing the prominence, types of stories and frames that were used to cover news on the outbreak of the disease in Ghana.



1.3 Objectives of the Study

This study is guided by an overall goal as well as specific objectives. The aim of this study is to investigate the extent to which the Graphic Online, Daily Guide Network and The Chronicle News Online covered the Monkeypox disease since its outbreak in Ghana in June 2022.

The specific objectives of the study are:

1. To examine the prominence the Graphic Online, Daily Guide Network and The Chronicle News Online gave to stories on Monkeypox disease.
2. To analyze the type of stories published by the Graphic Online, Daily Guide Network and The Chronicle News Online on Monkeypox disease.
3. To identify the sources of stories that *Graphic Online*, *Daily Guide Network* and *The Chronicle News Online* relied on in publishing Monkeypox disease-related stories.
4. To find out the dominant frames used by online newspapers in publishing Monkeypox disease-related stories.

1.4 Research Questions

Based on the research objectives, the study seeks to answer the following research questions.

1. How often did the Graphic Online, Daily Guide Network and The Chronicle News Online cover stories that were related to the Monkeypox disease?
2. Were the stories related to Monkeypox disease published by the three online newspapers accompanied by pictures?

3. What type of stories were published by the three online newspapers on the Monkeypox disease?
4. What were the main sources of information cited by the three online newspapers in the coverage of Monkeypox diseases?
5. What are the dominant frames used by the three online newspapers in the coverage of Monkeypox diseases?

1.5 Significance of the Study

This study seeks to explore the extent to which some online Ghanaian news portals covered stories on the outbreak of the monkeypox disease in the country and is therefore, relevant to researchers, scholars, online news readers, and health institutions and workers. Additionally, this study will add to health related communication studies that have been carried out in Ghana and the world at large, by contributing to existing studies on the role of online newspapers in the coverage of health-related issues as far as disease outbreaks are concerned.

The findings will bring to light the dominant frames, types of stories and sources of stories on the Monkeypox disease that are covered by these Ghanaian online newspapers.

Since the study looked at the online newspaper coverage of Monkeypox from the Ghanaian context, it will serve the purpose of giving the government, health institutions and agencies, health workers, online news readers and other stakeholders the insight into how frequently these online newspapers publish stories to educate and create awareness whenever there is an outbreak of the disease in Ghana.

1.6 Definition of Key Terms

Communication technologies: transfer of information or messages between people through the use of digital tools.

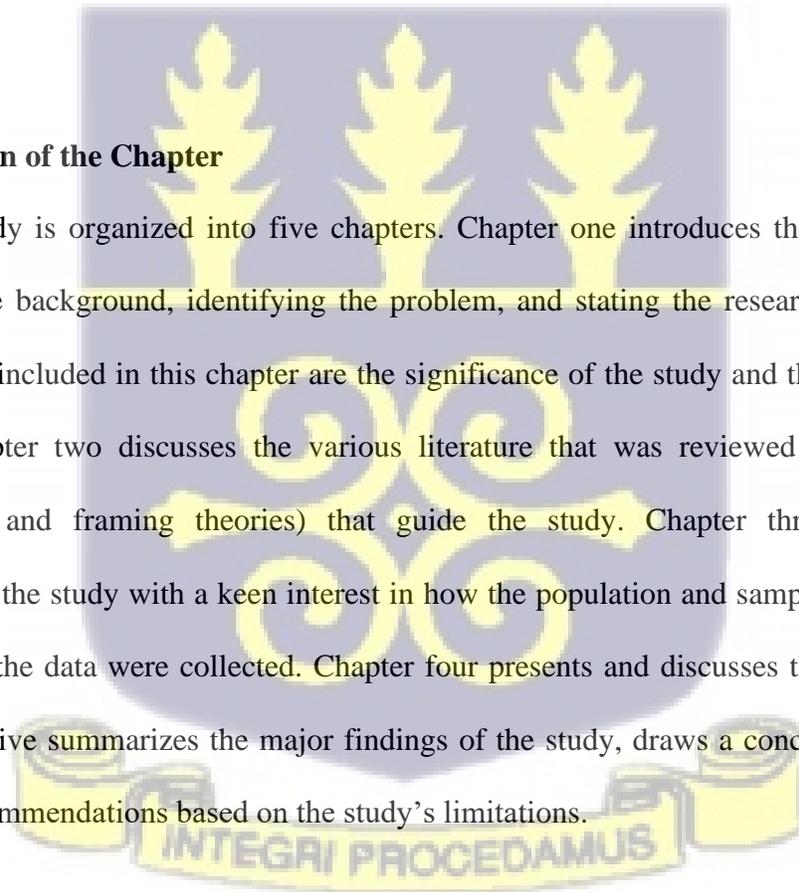
Information Age: describes an era in human history that makes it easier to access knowledge and information that was difficult or impossible in the previous era.

Media prominence: the coverage of stories by the media that involves a well-known person, place or event that has a stronger news angle that the audience are not familiar with.

Media coverage: the reporting of stories by the media.

1.7 Organization of the Chapter

This study is organized into five chapters. Chapter one introduces the study by laying emphasis on the background, identifying the problem, and stating the research objectives and questions. Also included in this chapter are the significance of the study and the organization of the study. Chapter two discusses the various literature that was reviewed and the theories (agenda-setting and framing theories) that guide the study. Chapter three discusses the methodology of the study with a keen interest in how the population and sample were generated as well as how the data were collected. Chapter four presents and discusses the findings of the study. Chapter five summarizes the major findings of the study, draws a conclusion and makes appropriate recommendations based on the study's limitations.



1.8 Chapter Summary

The chapter introduced the study by providing a discussion on the origin of Monkeypox, the role of media in health, digital and print media, and Ghanaian online news portals. The study's objectives and research questions were presented based on the identified problem. The chapter also presented the significance of the study, the definition of key terms and concluded by presenting how the study is organized.



CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.0 Introduction

This chapter has two sections. The first section is the theoretical framework. The theoretical framework discusses the theories that underpin this current study. The agenda-setting and framing theories underpin this study. The assumptions and contributions, and relevance of the two theories to this current study are elaborated on in the first section of this chapter.

The second section presents a review of the literature of the other studies that are related to this current study. The literature is discussed in three themes. The themes are; the relevance of online print media in the coverage of disease outbreaks; the manner of online print media coverage of diseases; and dominant frames in the coverage of disease outbreaks. The second section concludes the chapter by identifying the gap in the literature.

2.1 Theoretical Framework

2.1.1 Agenda-Setting Theory

The agenda-setting theory was first introduced by Walter Lippmann in his book titled *Public Opinion* which was published in 1922. In the book, Lippmann posited that news content produces an effect on people as a result of how people perceive the news. However, Lippmann did not present the idea of agenda-setting in a theoretical manner. He is considered a provider of the theory's background. In 1972, Maxwell McCombs and Donald Shaw made a further study on Lippman's assumption and provided a comprehensive description of the theory. McCombs and Shaw (1972) explained that, when news editors exercise their gatekeeping functions in deciding

which content to publish as news, they play a critical role in shaping the views of the public about issues.

McCombs and Shaw (1972) posit that the media have the power to set an agenda for the society or public. By this, the media bring to the fore, issues that are of public interest and by extension influence the public to think of the published information as the important topics to be considered for deliberation.

The theory explains that the media are widely acknowledged as an avenue that has a greater effect on the audience. The media are powerful in the society because they bring social discourse that is important to the public.

According to McQuail (2005), the argument advanced by the agenda-setting theory is that the media play an important role in influencing the way people need to think about an issue. In setting the agenda, the media make use of news content by increasing prominence through the frequency of reportage, selecting story formats that provide details about the issue as well as a variety of story sources on the issue (Gever, 2015).

In agenda setting, the gatekeepers of the news attach prominence to issues by deciding on the important ones that can be of public interest and discussion (Zain, 2014). The media publish important issues to direct public attention to create awareness or educate the public.

Freeland (2012) asserts that in setting the agenda, the media places news stories on important pages that can attract the attention of readers. Such instances leave readers to ponder over the issue when the stories occupy important pages that are easily noticeable by readers. In the case of this study, this assertion implies that stories related to the outbreak of the Monkey pox disease would be placed in places on the respective websites, that are easily noticeable.

The agenda-setting theory explains how journalists and other media organizations identify, select and develop story ideas in order to set the agenda by making the news stories prominent. The prominence can be as a result of placement, length, and weighing the importance of sources and facts in the stories that are published in newspapers (Foster et al., 2014). With regard to the placement of stories as an indicator of setting an agenda, McCombs and Bell (1996) explained that the media set the agenda for public discussion by placing stories on important pages which will attract public interest.

According to McCombs and Shaw (1994), agenda setting tells the audience what to think about, whilst the framing theory tells the public how to think about an issue. McCombs and Bell (1996) further highlighted that the indicators that distinguish the agenda-setting theory from the framing theory include attention, placement, content cues and a number of sources.

2.1.2 Framing Theory

Framing describes the way the media present information to its audience. It is a theory that was first introduced by Goffman (1974). He described framing as a communication style that involves storytelling devices, that are used by individuals and the media to understand and interpret realities of the society.

Entman in 1993 also studied the framing theory by Goffman (1974) and made modifications. Entman (1993) considered framing as a communication form by using communication texts to promote certain facts that are perceived to be realistic in a more salient way. According to Entman (1993), the media select aspects of reality and make them salient in order to influence how the audience will think about a given issue. By this, framing of stories allows the media to present problems in order to receive solutions. Entman (1993) argues that to

frame an issue is to "select some aspects of perceived reality in such a way as to promote a particular problem definition, causal interpretation, moral evaluation or treatment recommendation for the item described" (p. 52). He further argues that framing involves "selecting and highlighting some facets of events or issues, and making connections among them to promote a particular interpretation, evaluation, and or solution" (Entman 1993, p52).

According to Entman (1993), the critical aspect of media framing is salience. Salience describes how information is made noticeable, meaningful or memorable to audiences through placement or repetition or associating the information with culturally familiar symbols (Entman, 1993).

The framing theory explains that, framing of news stories directs attention towards certain aspects of the world, while shifting attention away from other aspects. The theory asserts that news receivers interpret and discuss reality based on certain stories. This means that the manner in which a story is framed affects its audience's perception (Iyengar, 1991; Scheufele, 1999). In this way, studying news framing is important to understand the public's perception of an issue or event. Scholars have also conducted analyses to study how mass media in different countries frame public health issues.

Media organizations adopt framing to simplify complex issues to make room for the audience to easily understand and form opinions about the issue through text, pictures or symbols (Tolley, 2016). Through news frames, the media provides important information and knowledge which often influence public or audience opinion and decisions (Ofori-Birikorang, 2010). Framing can sway public opinion on an issue and have significant consequences on how the public views and understands an issue, and how they respond to it (Chime-Nganya et al., 2017). How a story is framed, also shows how societal issues are portrayed and how messages

are encoded with meaning by the media so that they can be easily decoded vis-à-vis existing ideas (Chilisa, 2012).

In framing, the media devote a volume of coverage to a particular issue. The media through framing make an issue salient and direct audience's attention to specific issues, ideas and individuals while downplaying what lies outside the frame (Boykoff & Laschever, 2011). In terms of frame tone, Greenslade (2015) noted that much of media coverage tilt towards the negative than the positive.

According to Dahal and Khatri (2021), framing theory serves as an avenue for the media to situate specific angles of an event that is newsworthy to their audience. Framing is sometimes considered as the second level of agenda-setting because of their close relationships. In framing, the media organize and present information to the public on certain issues, or events and give them particular context to sway interpretation and necessitate selective influence over how members of the public view reality (Msughter & Phillips, 2020).

Goffman and Jibrin (2019) assert that in the framing theory, the frames used by the media serve as cognitive structures that guide the representation of stories. It is believed that in framing, the media dedicate a lot of coverage to some particular issues and make sure that the issues are salient and directed to the audience in order to direct attention (Boykoff & Laschever, 2011).

2.1.3 Relevance of the Agenda Setting and Framing Theories to the Study

The agenda-setting and framing theories explain how the media present or cover issues that create and direct the attention of an audience. Both theories underpin this current study and are relevant because, this study examines the extent to which the *Graphic Online*, *Daily Guide Network* and *The Chronicle News Online* covered Monkeypox disease-related stories. The

agenda-setting theory will guide the study on how these online newspapers gave prominence to monkeypox related stories, the type of stories covered and the sources of stories the news portals relied on in putting out stories related to the Monkeypox disease. The framing theory, on the other hand, will guide the study to reveal the dominant frames that were used by the aforementioned online news portals, in the coverage of stories that were related to Monkeypox disease.

2.2 Literature Review

This section presents the reviewed literature in relation to the topic of this current study. Three themes emerged after the review of related studies and these themes have been discussed to highlight how different studies were conducted in similar studies and their related findings.

2.2.1 The Relevance of Online Print Media in the Coverage of Disease Outbreaks

Since its inception, online print media (online newspapers) has complemented the role the traditional print media (printed newspapers) play in terms of the coverage of disease outbreaks or pandemics. The print media (both online and offline) have contributed to the coverage of pandemics or disease outbreaks by providing timely health information to audience, and proliferating public discussions through health communications and health information literacy (Viswanath et al., 2007). According to Uwom and Oloyede (2014), online news portals in Nigeria, complement the role of offline newspapers as a source of public health information

and health communication and as such shape the way the society perceive and act on health messages in relation to disease outbreaks.

The print media whether online or offline are an important information source and their coverage of major health issues can create strong public interest. They contribute to awareness creation whenever there is an incidence of a disease outbreak (Konfortion et al., 2012). Konfortion et al. (2012) analyzed the content of both online and offline newspaper coverage of the most common forms of cancer in the United Kingdom. The researchers focused on how the UK national newspapers created awareness in relation to the incidence of cancer. After the employment of content analysis, the study found that the newspapers were disproportionate in the coverage of the incidence of some forms of cancer. Breast cancer was the most common cancer that had the highest number of articles in terms of cancer awareness campaigns. It was also revealed that the newspapers play an important part in influencing the opinions of the general public, and their engagement in cancer awareness contributes to improving the knowledge of symptoms that lead to earlier diagnosis.

Gupta and Sinha (2010) employed content analysis to investigate health-related messages that were published in the Indian print media. The researchers focused on selecting stories from two national online newspapers within the year 2008. The findings indicated that apart from covering a lot of political news, the two newspapers provided information regarding health matters. News related to health was widely covered and useful information was placed in the important sections of the newspapers.

Akintola et al. (2015) researched the role of print media in the coverage of primary healthcare and related evidence in South Africa. The researchers employed quantitative content analysis to examine 2,077 news stories that were covered on primary healthcare from 25 South

African newspapers that were retrieved from the Lexis-Nexis online archive from 1997 to 2012. The study revealed that the newspapers were powerful tools for advocating for the health of citizens and also promoted evidence-based primary health systems that were responsive to the needs of the citizens. The stories that were analyzed indicated that the newspapers focused on stories that were related to clinics, and the activities of community health workers, and nurses. The newspapers created awareness by discussing infectious diseases, non-communicable diseases, and government and delivery arrangements for fighting the diseases.

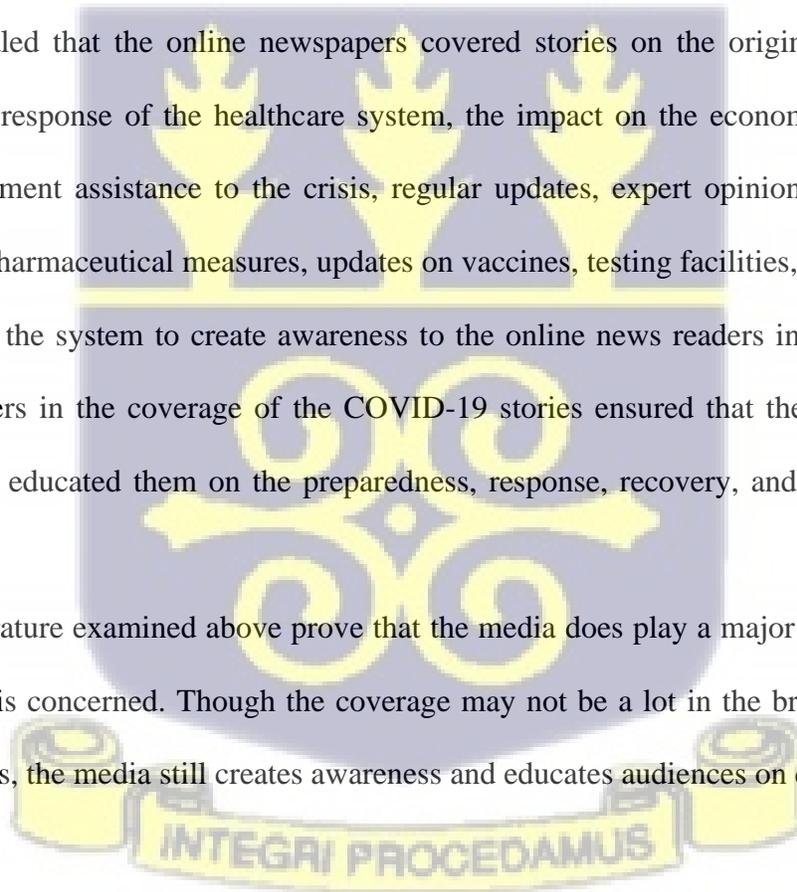
Shahid et al. (2020) examined the role the print media played during the COVID-19 pandemic and how the print media raised awareness among people about the contagion. The researchers employed quantitative content analysis to analyze the stories by combining both online and offline newspapers of the two leading newspaper agencies in Pakistan which were Daily Mashriq and Daily Aaj. A total of 62 stories were collected over a period of one month (May 2020) for the study. The study revealed that the print media played a pivotal role in spreading awareness of the COVID-19 pandemic. In the awareness creation, the stories were published on front pages and written in columns. The study also proved that print media played a positive role, and most of the stories educated the public not only on symptoms of the disease but also on how to prevent it, daily changes in the death ratio and newly infected cases, and how the public can be safe from the pandemic.

Mutua and Ong'ong'a (2020) examined the role of online news media in the framing of the COVID-19 pandemic. The study focused on how online international news media contributed to the fight against the COVID-19 pandemic that was first recorded in China. The researchers sampled stories that were related to COVID-19 from the online news portals of BBC, CNN, Al-Jazeera and the People's Daily over a period of two months (from January 1 to

February 29, 2020). The researchers analyzed the content of the stories that were gathered over two months. Though the study found that as these online news portals have often been criticized by various scholars for framing, misinformation, or exaggeration in the news information, the news portals were hailed for playing an educative and informative role to the public.

Zafri et al. (2021) examined the role of newspapers in the coverage of the COVID-19 pandemic in Bangladesh. The researchers developed a pandemic management framework through an automated content analysis of online local newspapers. They assembled and analyzed 7,209 online newspaper articles from three popular online local newspapers which were bdnews24.com, New Age, and Prothom Alo English from January 1, 2020 to October 31, 2020. The study revealed that the online newspapers covered stories on the origin and outbreak of COVID-19, the response of the healthcare system, the impact on the economy, the impact on lifestyle, government assistance to the crisis, regular updates, expert opinions, pharmaceutical measures, non-pharmaceutical measures, updates on vaccines, testing facilities, and local unusual activities within the system to create awareness to the online news readers in Bangladesh. The online newspapers in the coverage of the COVID-19 stories ensured that the readers received information that educated them on the preparedness, response, recovery, and mitigation of the disease.

All the literature examined above prove that the media does play a major role where health communication is concerned. Though the coverage may not be a lot in the broadcast of certain disease outbreaks, the media still creates awareness and educates audiences on disease outbreaks.



2.2.2 Manner of Online Print Media Coverage of Diseases

Several studies have looked at the manner in which both online and offline newspapers present disease and other health-related stories. Davidson and Wallack (2004) analyzed the discourse that surrounded the manner in which STDs were presented to the public through the print media in the United States. The study analyzed the content of nine newspapers which were the Wall Street Journal, the Atlanta Journal/Constitution, the Christian Science Monitor, the Boston Globe, the New York Times, the Chicago Tribune, the Los Angeles Times, USA Today, and the Washington Post from January to April 1998. After the analysis of a total of 462 articles, the study found that the news articles about STDs were mostly in the form of feature stories or articles which had a public interest. The least forms of news articles published were editorials, letters to the editor and columns. Moreover, the newspapers gave less prominence to the coverage of issues that were related to STDs.

Bello in 2015, investigated the coverage of health issues by newspapers that circulated in the northern part of Nigeria. The researcher focused on the extent of attention that was given to HIV/AIDS, malaria and polio. Three methods of data collection were employed to gather data. A content analysis was used to analyze 844 articles from four online and offline national newspapers from 2010 to 2013. Surveys and in-depth interviews were used to collect data from newspaper audience and journalists respectively. The study revealed that both HIV/AIDS and polio were given moderate coverage unlike malaria which received high coverage. The newspapers gave less prominence to coverage of diseases and other health-related issues in their leads, editorials and other important pages like the centre spread and front pages.

Sesenu (2016) employed quantitative content analysis to investigate the patterns and frames that were used in the coverage of HIV/AIDS and the sources that were used in the

publication of HIV/AIDS related stories. A total of 414 HIV/AIDS-related stories were analyzed from the *Daily Graphic* and *Daily Guide* between January and December in the years 2000, 2003, 2006, 2009, 2012 and 2015. The study revealed a rise-peak-decline pattern that was suggested by the issue-attention cycle since the frequency of media coverage of HIV/AIDS issues in Ghana rose from 2000, peaked in 2003, and steadily declined up to 2015. Moreover, the stories related to the disease were mostly published in straight news and were given minimal prominence in terms of placement. The sources of stories cited by the newspapers in their publications were from the Ghana AIDS Commission, health experts, scientists, health workers and health agencies.

Akpor and Alawari (2016) examined the contributions and the extent of media coverage of Ebola Virus Disease (EVD) by Nigerian newspapers. The researchers employed the content analysis method to critically analyze the manner in which *The Guardian* and *The Punch* newspapers covered stories on the Ebola outbreak. In addition, online stories from the portals of these newspapers were sampled. The study found that both newspapers paid much attention to the coverage of the disease. The two newspapers helped to enlighten the public about the deadly nature of the virus and recommended practices for dealing with the disease. The newspapers increased their coverage of the disease by reporting stories in the form of feature stories, articles, opinions, advertorials as well as editorial write up.

Smith and Smith (2016) explored how the newspapers in Nigeria reported the Ebola Virus Disease. The two researchers also focused on the role played by the newspapers in the fight against the disease. The researchers employed content analysis to analyze a total of 1,625 stories related to Ebola from four newspapers which were *The Sun*, *The Vanguard*, *The Nation* and *The Punch* newspapers. The time frame of the selection of the stories was from July to

October 2014. The findings showed that, the four newspapers covered stories to create awareness in the form of straight news (69.4%), features (16.4%), opinion (4.7%), editorials (9.2%) and interviews (0.4%). Other findings indicated that the most published stories were on Ebola cases, followed by discrimination due to Ebola, and the least published stories were on the use of salt and or Kola to cure Ebola Virus Disease.

Chinedu-Okeke et al. (2021) examined the coverage of Nigerian newspapers in the fight against COVID-19. By employing a content analysis, the researchers analyzed COVID-19 reports that were published in the four selected Nigerian newspapers (the Guardian, Daily Sun, Daily Trust, and This Day Newspapers) from March to July 2020 to determine their level of coverage, prominence and reportorial approaches given to COVID-19 issues in Nigeria. The study uncovered those Nigerian newspapers gave wide coverage to COVID-19 issues. The majority of COVID-19 stories covered in the selected Nigerian newspapers were published in the forms of hard news, features and editorials. Considering the placement of COVID-19 stories, space allocated for the stories did not give significant prominence to the COVID-19 pandemic in the country.

Ogbonne (2021) investigated how the newspapers in Nigeria, reported the impact of COVID-19 on the Nigerian economy. Four newspapers which were Leadership, Guardian, Nation and Punch were selected for the study. Related articles on the Nigerian economy were selected from February to October 2020. After a content analysis of the selected articles, the study found that the newspapers mainly utilized official sources. Additionally, a straight news format was used to report the impact of COVID-19 on the Nigerian economy.

Furthermore, Martikainen and Sakki (2021) examined newspaper photographs related to the COVID-19 pandemic in Finland. The study focused on exploring how online newspapers

used photographs to construct subjects' positions for different age groups on COVID-19-related stories. The researchers gathered data that consisted of 4,506 photographs of people published in the two largest online Finnish newspapers between 1 January and 31 August 2020. The study identified photographs that depict the stories of different age groups. Photographs of children were depicted as controlled pupils and joyful players, youth as future-oriented graduates and reckless partygoers, adults as authoritative experts, adaptive professionals, responsible caretakers and active recreationists, and elderly people as isolated loners. In addition to echoing the positions of villains, heroes and victims identified in previous studies, the photographs seemed to construct an intergroup divide between adults and the other age groups that were captured in the coverage of COVID-19-related stories.

2.2.3 Dominant Frames in the Coverage of Disease Outbreaks

The coverage of diseases by the media is sometimes dominated by frames. According to Entman (1993, p. 52), the frames define the problems and determine what a causal agent is doing associated with cost and benefits. Frames are usually measured using common cultural values, diagnostic causes (that is identifying the forces that create the problems), making moral judgements (evaluating causal agents and their effects), and suggesting remedies (offering and justifying treatments for the problems, and also predicting the likely effects) (Entman, 1993). These frames are embedded in the media because they are performative, simultaneously specify appropriate actions and eventually reflect policy agenda on the concerns and interests of different groups of people (Greer & Singer, 2017).

The media give prominence to certain stories by using frames that have certain implications for public health and public understanding of certain disease pandemics (Gislason,

2013). As indicated by several studies that focus on the relationships between the media, diseases and societies, specific frames that are mobilized and highlighted by newspapers are instrumental in shaping public perceptions of epidemics (Kott & Limaye, 2016; Rossmann et al., 2017).

Several studies have analyzed frames that are used by the media in disease outbreaks in different ways. In 2008, Shih et al. examined how the print media framed public health epidemics which were West Nile virus, Mad Cow disease and avian flu. The researchers consistently sampled the content of stories about the epidemics in the New York Times newspaper in the United States. The findings of the study indicated that the prominence of frames for publishing stories on epidemics had variations. "Action" and "consequence" were the two major frames that were consistently employed to construct the stories about epidemics. Other findings indicated that different attention was given to the cycle patterns for each disease. Moreover, the coverage of the epidemics was highly event-based which corresponded to events such as newly identified cases and governmental actions.

Smith and Tietaah (2017) explored the nature of online reportage of meningitis outbreaks in Ghana. One of the focuses of the study was to determine the news frames used by the media during the meningitis outbreak. A total of 60 stories of meningitis were selected and analyzed from Graphic online and Myjoyonline in a four-month period (December 2015 to March 2016). The findings indicated that "action" and "consequence" were the major frames the media used to report on meningitis outbreaks.

Ribeiroa et al. (2018) investigated how the Zika pandemic was covered by two Brazilian major newspapers; O Globo and Folha de São Paulo. The researchers were interested in determining the dominant frames that were used in the coverage of the Zika disease. They gathered and analyzed 186 articles that were published by the newspapers between December

2015 and May 2016. The study revealed a war frame as the main dominant frame in covering the disease. The dominant frame was supported by two sub-frames with one focused on eradicating the vector (mosquito) and another on controlling microcephaly, placing the burden of prevention on women. It was also revealed that political uncertainties in Brazil increased the power of the war frame, and this frame gave prominence and legitimacy to certain representations of disease management during the crisis, masking social and gender inequalities.

Thomas et al. (2020) investigated the key themes and frames that were placed on COVID-19 stories by the media in Australia. The study aimed at providing insights into ways in which stories were framed in relation to health action by the government and the progress of the pandemic. The researchers sampled articles from the Australian and the Sydney Morning Herald newspapers between January and March 2020. The study revealed that the framing of the pandemic was heavily based on the issues of the society and economic disruption. Blames and the causal origin of the virus were also among the frames that were identified in the newspapers.

Uribe (2020) studied the themes that were used in the news coverage of COVID-19 in the United States. The researcher analyzed the styles and changes in the framing of COVID-19-related stories when the United States declared a state of emergency on 13th March, 2020. The study analyzed the content of 90 online articles published by The New York Times, Fox News and CNN which are considered the most popular news sources for the majority of Americans. The study revealed that news coverage of COVID-19 focused on reporting the number of cases and deaths, the economic impact, and the actions governments took to prevent its spread. It was also uncovered that early coverage of the pandemic was more focused on the facts and immediate impacts of the disease rather than the personal stories of people dealing with the pandemic.

Dahal and Khatri (2021) assessed the media effect in reporting COVID-19 pandemic-related stories in Nepal. The focus of the study was to analyze the use of frames and tones in media coverage with regard to the pandemic. The researchers analyzed the content of the two most popular English language newspapers; The Kathmandu Post (privately owned media) and The Rising Nepal (state-owned media). The analysis was done on the newspaper content from May to July 2020. The study uncovered that the frame adopted by newspapers in the coverage of COVID-19 stories was an economic crisis rather than a health crisis (economic framing rather than health). Also, the tone of coverage regarding the pandemic was more negative for the privately-owned media than the state-owned media.

Rodelo (2021) studied the news frames of media coverage of the COVID-19 pandemic at the increasing stage of community transmission. The content of printed newspapers and newscasts that had national reach were analyzed. The study uncovered that, the attribution of responsibility, human interest, and political actions were the frames that dominated the flow of information about COVID-19. Moreover, frames that were related to scientific information and self-efficacy were low in the coverage of COVID-19 stories.

2.2.4 Gap in Literature

The reviewed literature has brought to light, studies that indicate the relevance of digital print media in the coverage of disease outbreaks, the manner in which the digital print media cover diseases and the dominant frames that are used in the coverage of disease outbreaks. The different studies that were reviewed from Europe, America, Asia, Africa and other parts of the world, focused on print media coverage of HIV/AIDS and other STDs, Ebola Virus Disease

(EVD), COVID-19, Zika disease, Meningitis, Mad Cow, cholera and among others. Studies that focused on online newspaper coverage of Monkeypox disease in Africa, especially Ghana were difficult to come by. Considering this situation as a gap in literature, the researcher is focused on investigating how some selected Ghanaian online newspapers covered Monkeypox disease that broke out in Ghana in the early days of June 2022.

2.3 Chapter Summary

This chapter presented two sections, which are the theoretical framework and literature review. Two theories were chosen to guide this study. The theories are the agenda-setting and framing theories. The tenets and relevance of the theories to this current study have been elaborated. In the literature review, the themes that were discussed in relation to the study's topic were the relevance of digital print media in the coverage of disease outbreaks, the manner in which digital print media cover diseases and the dominant frames that are used in the coverage of disease outbreaks. The chapter concluded by identifying the gap in literature that the researcher is interested in filling.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This study seeks to examine the extent to which the Graphic Online, Daily Guide Network and The Chronicle News Online covered the Monkeypox disease since its outbreak in Ghana in June 2022. It is imperative to devise a road map that helps to achieve the goal of this study. As a result, this chapter presents the methodology that was used in gathering data. Included in this chapter are discussions on research design, population and sample of the study, sampling technique, data collection instrument and procedure. The chapter is concluded by providing a summary.

3.1 Research Approach

This is a quantitative research study. The quantitative research approach involves the use of quantitative data, that is, data in the form of numbers and statistics (Neuman, 2014). The approach focuses on the confirmation, deductions, explanation, hypothesis testing or theory prediction of standardized collection of data, and statistical analysis (Johnson & Onwuegbuzie, 2004). For this approach, the content analysis method was employed to collect data. The numerical nature of the data gathered using this methodological approach allowed for the results of the data collected on communication texts and stories that were covered by the Ghanaian online newspapers to determine the prominence, type of stories, news sources and dominant frames that were employed in the publication of Monkeypox disease.

3.2 Profile of the Online Newspapers

3.2.1 Graphic Online

Graphic Online is a complementary online news portal to the Daily Graphic. Stories on this online news portal are the same as the news stories in the Daily Graphic newspaper. It is among the various state-owned newspapers that are managed and published by Graphic Communication Group Limited. Historically, the Daily Graphic appeared on the newsstand in 1950 and was then owned by the Daily Mirror Group of London, a private United Kingdom company. After independence, the government of Ghana acquired the company by an Act of parliament in 1962. The Daily Graphic was later transformed into a statutory corporation in 1971. Since 1999, the Daily Graphic has been the flagship publication of the Graphic Communications Group Ltd (GCGL) (Sesenu, 2016). The Daily Graphic is the flagship newspaper of the company and commands the largest readership base in the country (Ghana) – an audience share of 36.25 percent (2,290,000 readers – Q1 2017), according to GeoPoll. Due to the ever-changing trend of digital media, the newspaper agency added Graphic Online to serve news to its online readers. Hence, the agency aggressively engages in the digitization of news in order to make it possible for its readers to get news in the digital space.

3.2.2 Daily Guide Network

The Daily Guide Network is an online news portal of the Daily Guide newspaper. It is managed by Western Publications which is under the ownership of the Blay Family. It is one of Ghana's leading private newspapers which publishes news stories daily. The agency's newspaper is the highest-selling private newspaper in Ghana with an audience share of 18.9% equaling a

total readership of 1,191,000 (GeoPoll, 2017). Its content is predominantly politically-related stories. Besides politics, the agency publishes online stories that highlight issues of business, education, entertainment and sports. Both the online news portal and newspaper of the agency's readership profile, like most newspapers with a high-level political focus, include politicians, policymakers, academics and researchers.

According to Yovonoo (2015), the Daily Guide was set up in 1984 as a four-page weekly sports paper with clandestine commentaries on political issues. Currently, the newspaper is a 22-page daily that covers a wide expanse of topics like politics, health, business, social, entertainment and sports. Due to the prominence of digital media, the agency gave birth to the online news portal, the Daily Guide Network.

3.2.3 The Chronicle News Online

The Chronicle News Online is managed by The Chronicle Newspaper which is among the private newspapers in Ghana. the newspaper company was established in 1990 and has grown to become one of the respected newspapers in Ghana that publishes credible news stories. The newspaper has wide circulation and high readership within the country. The Chronicle started as a weekly newspaper in 1991 and later became a bi-weekly newspaper and is currently published daily. It has a daily publication of over 53,000 constituting 0.84 percent of the Ghanaian market audience share according to Geopoll (2017).

The Chronicle reports on a broad range of issues including politics, business, education, health, entertainment and sports. A big part of its work is devoted to investigative reporting aimed at uncovering the ills in Ghanaian society. While it has – unlike the Daily Graphic – no specific political page, its former editor, Mr. Omaboe, disclosed that "the entire newspaper is

meant to be political", although the front page contains the most political news". The Chronicle newspaper is owned by Nana Kofi Coomson. In addition, The Chronicle News Online was set up by the newspaper agency to capture online presence and readership. The online portal operates just like the offline newspaper, with the online news portal focusing mainly on readers in the digital space.

3.3 Population and Sample

A population refers to the aggregation of elements from which the sample is selected (Babbie, 2014). The population for this study consisted of all stories that are related to the Monkeypox disease published by the Graphic Online, Daily Guide Network and The Chronicle News Online in the year 2022.

The sample was drawn from the population. The sample describes elements with similar characteristics that can be drawn from and represent a population. The sample selected for this study comprised all Monkeypox disease-related stories that were published by the selected newspapers from May to October 2022 (6 months period). The sample was selected based on the fact that the first coverage of the disease started in May but Ghana recorded its first case in June 2022. After the practice of safety measures to curb the spread of the disease highlighted by the Ghanaian media, the coverage of the disease was minimized in October 2022.

3.4 Sampling Technique

In sampling the stories that were related to Monkeypox, the researcher initially planned to use the simple random sampling technique. However, in the data collection procedure, the researcher realized that the three online newspapers published a handful of stories on

Monkeypox. Hence, the employment of simple random sampling as the sampling technique became difficult for the sampling process. This resulted in the researcher purposively selecting all stories on Monkeypox to represent the samples. A purposive sample is one subjectively selected by the researcher (Wimmer & Dominick, 2013). Purposive sampling selects subjects based on specific characteristics or qualities. The method is usually used when a researcher seeks one or more specific predefined groups. This type of sampling starts with a purpose in mind and the sample is therefore selected to include people of interest and exclude those who do not suit the purpose.

This purposive technique is one in which “the units to be observed are selected on the basis of the researcher’s judgment about which ones will be the most useful or representative” (Babbie, 2014, p. 139). Since the outbreak of the disease lasted for a short period (May to October, 2022), purposive sampling was deemed fit to purposely select all stories from the period of the newspaper coverage of the disease. In this sampling technique, all publication days that had stories on Monkeypox disease were selected.

3.5 Data Collection Method

Quantitative content analysis was employed as the method of data collection for this current study. Several studies that have looked at the content of news stories on diseases covered by the media have adopted content analysis methods to gather data. Kiwanuka-Tondo et al. (2012) employed content analysis to examine how certain news media covered HIV/AIDS issues. Sesenu (2016) on the other hand, analyzed how Ghanaian newspapers covered HIV/AIDS pandemic by using content analysis as a method of data collection. Moreover, the content

analysis method is the ideal method of data collection since this current study also examined the content of newspaper stories on the Monkeypox disease.

Krippendorff (2004) describes content analysis as a research technique or method for making replicable and valid references from a set of data to their context. Also, Palmquist (2005) defined content analysis as a means of objectively examining the presence of certain words, phrases, characters, themes, concepts or any communicative language in a body of text. The content analysis could be carried out either quantitatively or qualitatively. This study adopted the quantitative approach to content analysis in order to effectively address the research questions raised. Quantitative content analysis provides accuracy and precision in the representation, summary and report of a body of messages (Wimmer & Dominick, 2013).

3.6 Data Collection Instrument

The main data collection instrument used in this study was a coding guide. The coding guide was developed based on categories and frames examined in a study by Sesenu (2016) on Ghanaian newspaper coverage of HIV/AIDS, since both studies focus on how Ghanaian media treat news on disease outbreaks. The main categories used in the coding guide include the name of the newspaper, date of publication, story type, stories with photographs, and newsmakers. Also, in order to speak to the framing of Monkeypox disease-related news stories in Ghana, the coding guide included some issue-specific frames from the study of Sesenu (2016). The categories and frames found in the coding guide are explained below:

Name of Online Newspaper: This refers to the name of the newspaper (Graphic Online, Daily Guide Network or The Chronicle News Online) within which Monkeypox-related articles are found.

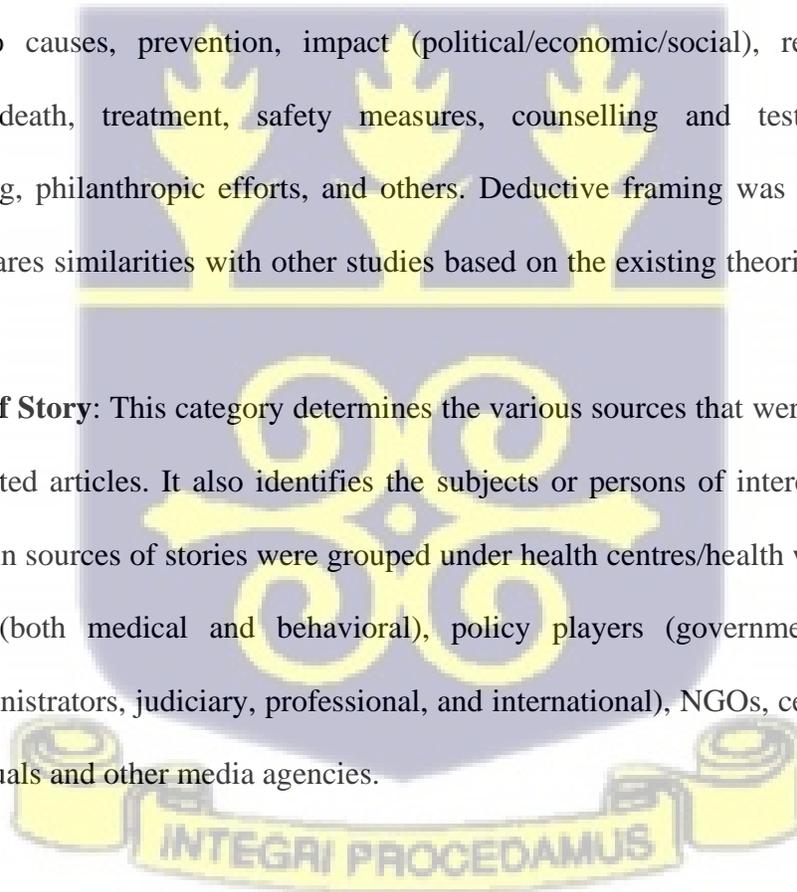
Date of Publication: This indicates the day, month and year the stories were published.

Type of Article: This category determines how the Monkeypox-related articles were presented or the appropriate genres the articles fit into. The category covered both news articles and non-news pieces such as posts made to create awareness. The articles can be straight news, features, editorials, letters, commentaries, and others.

Stories with Photographs: This refers to the stories in which Monkeypox-related articles were accompanied by photographs to enhance readers' understanding of the stories.

Frames used in News Coverage: This describes how the newspapers framed Monkeypox-related articles. The main frames of the articles were deduced from previous studies and categorized into causes, prevention, impact (political/economic/social), recorded cases of infection and death, treatment, safety measures, counselling and testing, government funding/financing, philanthropic efforts, and others. Deductive framing was used because this current study shares similarities with other studies based on the existing theories of framing and agenda setting.

Main Sources of Story: This category determines the various sources that were employed in the Monkeypox-related articles. It also identifies the subjects or persons of interest (actors) of the articles. The main sources of stories were grouped under health centres/health workers, scientists or researchers (both medical and behavioral), policy players (government organizations, politicians, administrators, judiciary, professional, and international), NGOs, celebrities, infected persons, individuals and other media agencies.



3.7 Data Collection Procedure

The data were collected by the researcher and her colleague student at the Department of Communication Studies at the University of Ghana. The researcher and her colleague undertook coding by discussing the codes to ensure a better understanding of all the categories. After this process, the researcher and her colleague visited the University ICT Centre for students at the University of Professional Studies, Accra (UPSA) to gather stories that were related to the Monkeypox disease. The researchers logged onto the online news portals of three newspapers by using the desktop computers at the ICT. After this process, the researcher keyed in keywords that were related to Monkeypox in the search box that was displayed on the home pages of the online newspapers. Upon completing this process, all stories related to Monkeypox were displayed as the results of the search procedure. With the time frame of the study in mind (May to October, 2022, 2022), all the stories were recorded based on the categories in the coding guide.

3.8 Inter-coder Reliability Test

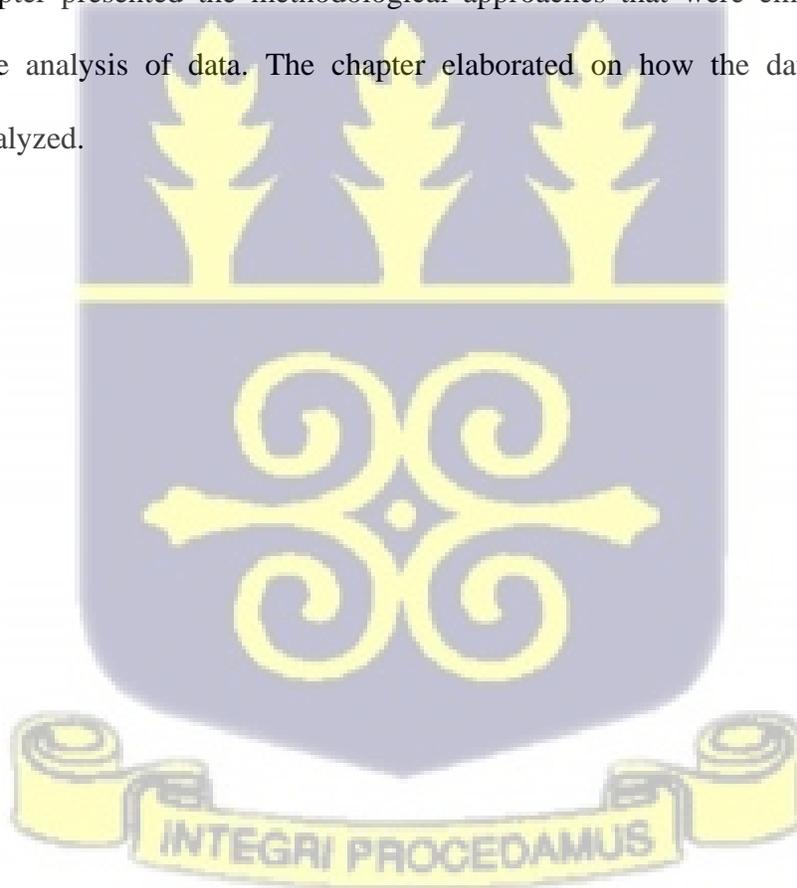
The researcher conducted an inter-coder reliability test to ensure the reliability of the data that were collected. The test was conducted by employing Cohen Kappa's inter-coder reliability test. The researcher and her colleague did a trial coding for one of the newspapers before the inter-coder test was run. The results of the trial coding were entered in the Statistical Package for Social Sciences (SPSS Version 23.0). After running the test, the Cohen's Kappa value of 0.68 was obtained. The acceptable value of the Cohen's Kappa must always be above 0.60. The Cohen's Kappa value indicated a high level of agreement between the codes which gave the researcher an assurance of the high reliability of the data collected.

3.9 Data Analysis and Analytical Tool

Statistical Package for Social Science (SPSS Version 23.0) was employed to quantitatively analyze all coded categories for various stories of Monkeypox that were collected. The data collected were coded, entered into SPSS and analyzed. After the analysis, descriptive statistics were used to address the research questions that were raised in this study. The results were presented by using frequency distribution tables.

3.10 Chapter Summary

This chapter presented the methodological approaches that were employed from data collection to the analysis of data. The chapter elaborated on how the data were sampled, collected and analyzed.



CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Introduction

This study investigated the extent to which the Graphic Online, Daily Guide Network and The Chronicle News Online covered the Monkeypox disease since its outbreak in Ghana in June 2022. The study adopted the quantitative content analysis to gather stories that were related to Monkeypox disease covered by the three Ghanaian online newspapers. A total of thirty (30) stories that were related to Monkeypox disease were gathered from May to October 2022 (six months) from the three online newspapers. The data were then analyzed by using SPSS.

Additionally, this chapter is made up of two sections. The first section presents the findings after the analysis of the data. The second section presents a discussion of the findings in relation to the reviewed literature and the theories that guide this study.

4.1 Presentation of Findings

This first section of chapter four presents the findings. The findings are presented based on the research questions that were raised in the study.

4.1.1 Frequency of Stories Covered by the Three Online Newspapers

Table 1 below presents the number of Monkeypox-related stories covered by Graphic Online, Daily Guide Network and The Chronicle News Online. A total of 30 stories were covered by the three online newspapers. Graphic Online covered 9 stories representing 30.0%,

whilst The Daily Guide Network covered 13 stories, representing 43.3%. The Chronicle News Online had the least stories with a coverage of 8 stories representing 26.7%.

Table 1: Total Stories Covered By The Three Online Newspapers

Name of Newspaper	Number of Stories	Percentage
Graphic Online	9	30.0
Daily Guide Network	13	43.3
The Chronicle News Online	8	26.7
Total	30	100

4.1.2 Enhancement Accompanying Stories By The Three Online Newspapers

Table 2 below shows stories that were accompanied by enhancements such as photographs, videos and audios, among others as they related to Monkeypox disease by the three online newspapers. All stories recorded by Graphic Online and The Chronicle News Online were accompanied by some form of enhancement, representing 100 percent. Also, the Daily Guide Network had 12 stories accompanied by photographs, whilst only 1 story was reported without a photograph. There were no other enhancements such as videos or audios attached to the stories published by the three online news papers under review.

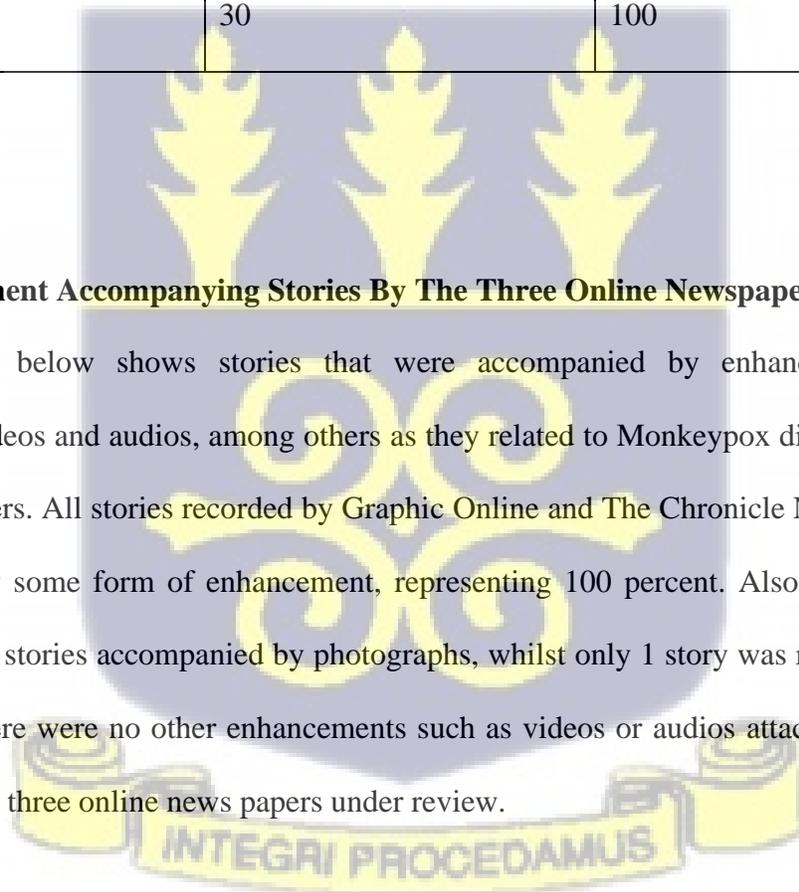


Table 2: Stories with Enhancements

Name of Online Newspaper	Colored Photograph	Black and White Photograph	No Photograph	Other enhancements	Total
Graphic Online	9 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (100.0%)
Daily Guide Network	12 (92.3%)	0 (0.0%)	1 (7.7%)	0 (0.0%)	13 (100.0%)
The Chronicle News Online	8 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	8 (100.0%)
Total	29 (96.7%)	0 (0.0%)	1 (3.3%)	0 (0.0%)	30 (100.0%)

4.1.3 Types of Stories Covered by the Three Online Newspapers

Table 3 below presents the types of stories that were covered by the three online newspapers on Monkeypox disease. Graphic Online covered 8 straight news stories and 1 opinion story. Daily Guide Network covered 12 straight news and 1 opinion story representing. The Chronicle News Online, on the other hand, covered only straight news stories which were 8 in number. None of the online news portals under review covered feature stories, editorials and letters to the respective publishers.



Table 3: Types of Stories Covered

Name of Newspaper	Format of Stories Published					Total
	Straight News	Feature Stories	Opinion/ Column	Editorial	Other	
Graphic Online	8 (88.9%)	0 (0.0%)	1 (11.1%)	0 (0.0%)	0 (0.0%)	9 (100.0%)
Daily Guide Network	12 (92.3%)	0 (0.0%)	1 (7.7%)	0 (0.0%)	0 (0.0%)	13 (100.0%)
The Chronicle News Online	8 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	8 (100.0%)

4.1.4 Main Sources of Stories cited by the Three Online Newspapers

Table 4 below presents the main sources of stories that were cited by the three online newspapers in their coverage of Monkeypox disease-related stories. Graphic Online cited 5 stories from the Ghana Health service. Daily Guide Network cited 7 stories, 5 from the Ghana Health service and 2 from health workers. The Chronicle News Online cited 5 stories from Health Workers of the Ghana Health Service whilst the Daily Guide Network only cited 2 stories from Health Scientists/Researchers. A single story was cited from NGO/Civil Societies by the Daily Guide Network. Also, Graphic Online cited a single story from Individuals, whilst Daily Guide Network cited 2 stories from individuals. Regarding stories cited from other media agencies, Graphic Online cited 3 stories, Daily Guide Network cited a single story from a media agency source, whilst The Chronicle News Online also cited 3 stories.

Table 4: Main Sources of Stories cited by the Online Newspapers

News Sources	Graphic Online	Daily Guide Network	The Chronicle News Online	Total
Ghana Health Service (GHS)/Health Workers	5 (55.6%)	7 (53.8%)	5 (62.5%)	17
Health Scientists/Researchers	0 (0.0%)	2 (15.4%)	0 (0.0%)	2
NGO/Civil Societies	0 (0.0%)	1 (7.7%)	0 (0.0%)	1
Individuals	1 (11.1%)	2 (15.4%)	0 (0.0%)	3
Media Agencies (BBC, CNBC, Aljazeera, Vanguard Nigeria)	3 (33.3%)	1 (7.7%)	3 (37.5%)	7
Total	9 (100.0%)	13 (100.0%)	8 (100.0%)	30

4.1.5 The Dominant Frames Employed by the Three Online Newspapers

Table 5 below shows the dominant frames that were employed by the three online newspapers in the coverage of Monkeypox disease-related stories. Graphic Online had 2 stories framed under Causes, Daily Guide Network had 1, whilst The Chronicle News Online had none. Graphic Online had 3 stories under the Prevention/Safety Measures Frame, Daily Guide Network had 2 stories, whilst The Chronicle News Online had none. None of the newspapers covered stories that had the Treatment of Disease Frame. Only Daily Guide Network had a story on the Impact of Disease Frame. The most employed frame was the Recorded Cases on Infection/Death Frame. For this particular frame, Graphic Online had 4 stories, Daily Guide Network had 6 stories, whilst The Chronicle News Online had 7 stories. Lastly, on the Government and NGO

Efforts Frame, Daily Guide Network had 3 stories, whilst The Chronicle News Online had 1 story.

Table 5: Dominant Frames used by the Online Newspapers

Dominant Frames	Graphic Online	Daily Guide Network	The Chronicle News Online	Total
Causes	2 (66.7%)	1 (33.3%)	0 (0.0%)	3 (100.0%)
Prevention / Safety Measures	3 (60.0%)	2 (40.0%)	0 (0.0%)	5 (100.0%)
Treatment of Disease	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Impact of Disease	0 (0.0%)	1 (100.0%)	0 (0.0%)	1 (100.0%)
Recorded Cases of Infection and Death	4 (23.5%)	6 (35.3%)	7 (41.2%)	17 (100.0%)
Government and NGO Efforts	0 (0.0%)	3 (75.0%)	1 (25.0%)	4 (100.0%)
Total	9 (30.0%)	13 (43.3%)	8 (26.7%)	30 (100.0%)

4.2 Discussion of Findings

This section of chapter four discusses the findings revealed by the study. The findings are discussed in relation to the reviewed literature and the agenda-setting and framing theories that underpinned this current study. The discussions are presented based on the research questions that were raised by the study.



4.2.1 How often did the Graphic Online, Daily Guide Network and The Chronicle News Online cover stories that were related to the Monkeypox Disease?

The study revealed that the three online newspapers covered a few stories on Monkeypox disease. The total number of stories covered by the online newspapers within the six months was thirty (30). Though, a few stories were recorded, the Daily Guide Network had the highest coverage, whilst The Chronicle News Online recorded the least coverage of stories. The agenda-setting theory explains this finding in that, the media can make use of news content by increasing prominence through the frequency of reportage on the issues of society (Gever, 2015). In the case of this study, the online newspapers gave less prominence to the coverage of Monkeypox disease as a result of the less frequency of reportage. This finding is inconsistent with that of Akpor and Alawari (2016) who examined the extent to which The Guardian and The Punch newspapers covered stories on the Ebola outbreak in Nigeria. The study found that both newspapers paid much attention to the coverage of the disease. The newspapers increased their coverage of the disease. The two newspapers helped to enlighten the public about the deadly nature of the virus and recommended practices for dealing with the disease.

4.2.2 Were the stories related to Monkeypox disease published by the three online newspapers accompanied by pictures?

The study found that the majority of the stories covered by the three online newspapers were accompanied by photographs. All stories of both Graphic Online and The Chronicle News Online were accompanied by photographs, whilst 12 out of the 13 stories covered by the Daily Guide also included photographs. This indicated that the online newspapers were interested in adding pictures to support and enhance readers' understanding of the stories published on the Monkeypox disease. This finding is well elaborated by the framing theory which asserts that

media organizations adopt framing to simplify complex issues to make room for the audience to easily understand and form opinions about the issue through text, pictures or symbols (Tolley, 2016). For this particular study, the three online newspapers focused on presenting stories with pictures to enhance the understanding of their readers. Moreover, this finding supports the assertion of Dennis (2009) that the media increase coverage to ensure prominence, place stories on important or easily noticeable pages, accompany stories with photographs and present the stories more concisely for public understanding and as a way of contributing to fighting disease outbreaks (Dennis, 2009). It also supports the finding of Martikainen and Sakki (2021) who examined newspaper photographs related to the COVID-19 pandemic in Finland. The researchers found that photographs were important in the construction of understanding of COVID-19-related stories.

4.2.3 What type of stories were published by the three online newspapers on the Monkeypox Disease?

The study showed that, the majority of stories covered by the three online newspapers were straight news. Daily Guide Network covered the majority with 12 of its stories in straight news, followed by Graphic Online and The Chronicle News Online with 8 straight news stories respectively. Both the Daily Guide Network and Graphic online had an opinion story each whilst all three online news portals had no feature stories and no editorial stories. This indicated that the three newspapers gave priority to covering straight news stories more than the other types of story formats. This finding is explained by the agenda-setting theory which asserts that the media make use of news content by increasing prominence by selecting story formats or types that provide details about the issues of society (Gever, 2015). For this study, the online newspapers

showed much interest in the coverage of straight news type/format of stories on the Monkeypox disease. Notwithstanding, this finding supports the findings of Davidson and Wallack (2004) and Ogbonne (2021). Davidson and Wallack (2004) analyzed the discourse that surrounded the manner in which STDs were presented to the public through nine newspapers in the United States. The study found that the news articles about STDs were mostly in the form of straight news stories or articles which had a public interest. The least forms of news articles published were editorials, letters to the editor and columns. Moreover, the newspapers gave less prominence to the coverage of issues that were related to STDs. Also, Ogbonne (2021) in Nigeria investigated how the newspapers (Leadership, Guardian, Nation and Punch) reported the impact of COVID-19 on the Nigerian economy. The study found that the newspapers mainly utilized official sources, and straight news format was mostly used to report the impact of COVID-19 on the Nigerian economy.

4.2.4 What are the main sources of stories cited by the three online newspapers in the coverage of Monkeypox Diseases?

The study revealed that the three online newspapers sourced their stories from the Ghana Health Service (GHS), Health Workers, Scientists/Researchers, NGO/Civil Societies, Individuals, and other Media Agencies. The majority of stories covered by the three online newspapers were cited from the Ghana Health Service (GHS), followed by other Media Agencies, Individuals and Health Scientists/Researchers. The least cited source by the three online newspapers was from NGO/Civil Societies. This finding is explained by the agenda-setting theory which explicates the importance of news sources. According to the theory, journalists and other media organizations identify, select and develop story ideas in order to set

the agenda by making the news stories prominent. One of the ways to ensure prominence is by weighing the importance of sources and facts in the stories that are published in newspapers (Foster et al., 2014). The online newspapers selected for this study published news stories related to Monkeypox disease by giving credit to their news sources or newsmakers. This current finding is consistent with that of Sesenu (2016) who employed quantitative content analysis to investigate the patterns and frames and sources that were used in the coverage of HIV/AIDS by the *Daily Graphic* and *Daily Guide*. The study uncovered that the sources of stories cited by the newspapers in their publications were from the Ghana AIDS Commission which is a health institution, health experts, scientists, health workers and health agencies.

4.2.5 What are the dominant frames used by the three online newspapers in the coverage of Monkeypox Diseases?

The last finding of the study showed that the frames that were employed in the coverage of Monkeypox disease-related stories by the three online newspapers were Causes, Prevention/Safety Measures, Treatment of Disease, Impact of Disease, Recorded Cases of Infection and Death, and Government and NGO Efforts. The frame that was most employed by the three online newspapers was the Recorded Cases on Infection and Death frame, followed by Prevention / Safety Measures frame, and Government and NGO Efforts frame. The frame that was least employed by the online newspapers was the Causes frame, followed by the Impact of Disease frame and Treatment of Disease frame. This indicated that the newspapers were interested in creating awareness on the number of infections and deaths that have been caused by the Monkeypox disease. This finding is well explained by the framing theory which describes frames as storytelling devices, that are used by individuals and the media to understand and

interpret realities of the society (Goffman, 1974). According to Entman (1993), the media select aspects of reality and make them salient in order to attract the attention of the audience. By this, framing of stories allows the media to present problems in order to receive solutions. In the case of this study, the online newspapers covered Monkeypox disease-related stories by employing important frames that attracted the attention of the audience. Moreover, the finding supports the findings of Uribe (2020) who studied the themes or frames that were used in the news coverage of COVID-19 in the United States by the print media. The study revealed that news coverage of COVID-19 focused on reporting the number of cases and deaths, the economic impact, and the actions governments took to prevent its spread. It was also found that, the initial stories covered about the pandemic were more focused on the facts and immediate impacts of the disease, rather than the personal stories of people dealing with the pandemic.

4.3 Chapter Summary

This chapter presented the findings of the study after the analysis of the data gathered. The findings were presented based on the study's research questions. Also, the chapter presented a discussion of the findings in relation to the theories that underpinned this study and reviewed literature. The findings were discussed based on the research questions that were raised in the study.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This study investigated the extent to which the Graphic Online, Daily Guide Network and The Chronicle News Online covered the Monkeypox disease since its outbreak in Ghana in June 2022. The specific objectives of the study were to examine the prominence the Graphic Online, Daily Guide Network and The Chronicle News Online gave to stories on Monkeypox Disease, to analyze the type of stories published by the three online newspapers on the disease, to identify the sources of stories that were cited by the newspapers, and to find out the dominant frames used by the online newspapers in publishing Monkeypox Disease-related stories.

This last chapter of the study presents a summary of the major findings, conclusions and limitations. Recommendations are also made based on the study's limitations.

5.1 Summary of Major Findings

The major findings of this study indicated that the three online newspapers covered few stories on the Monkeypox disease. The total number of stories covered by the online newspapers within the six months delineated for this study was 30. The majority of the stories covered by the three online newspapers were accompanied by photographs to enhance the understanding of online readers. Also, the majority of stories covered by the three online news portals were straight news stories. It was revealed that the majority of Monkeypox disease related-stories were sourced from the Ghana Health Service (GHS), followed by other Media Agencies such as international news agencies and Scientists/Researchers. The frame that was most employed by

the three online newspapers was the Recorded Cases on Infection and Death frame, followed by Prevention / Safety Measures frame and Government and NGO Efforts frame.

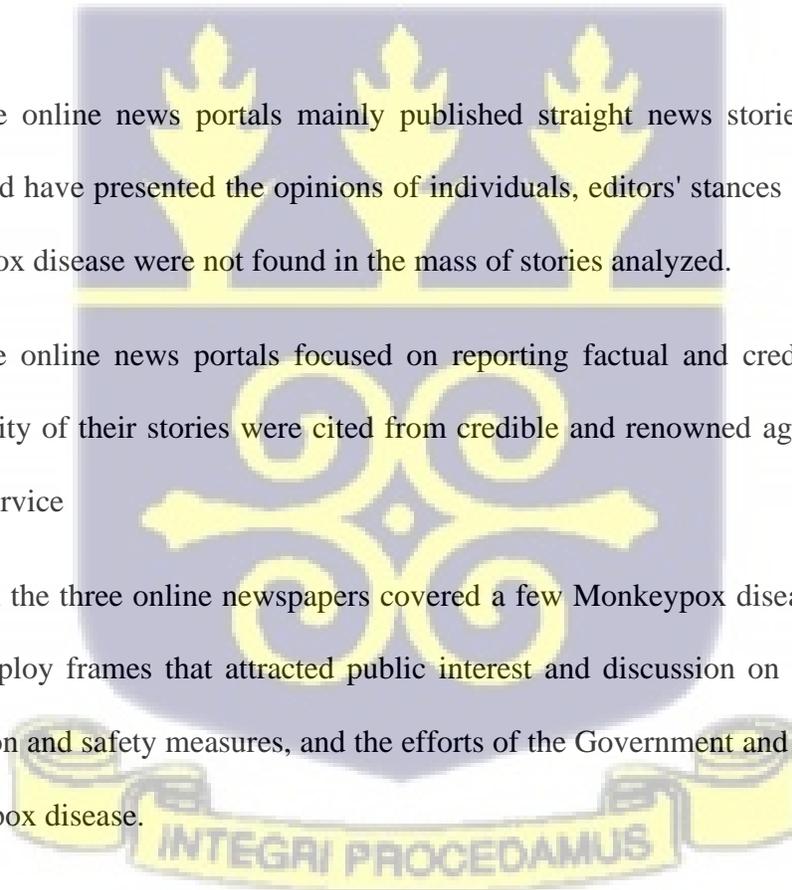
5.2 Conclusions/Implications

The study drew the following conclusions based on the findings. The three online newspapers selected for this study covered less news stories on the Monkeypox disease. The online news portals gave little prominence to creating awareness of the disease. However, in the publication of their stories, photographs were attached, to enhance the understanding of their online readers.

The three online news portals mainly published straight news stories. Other types of stories that would have presented the opinions of individuals, editors' stances and commentaries on the Monkeypox disease were not found in the mass of stories analyzed.

The three online news portals focused on reporting factual and credible stories. As a result, the majority of their stories were cited from credible and renowned agencies such as the Ghana Health Service

Although the three online newspapers covered a few Monkeypox disease-related stories, they did not employ frames that attracted public interest and discussion on the infections and deaths, prevention and safety measures, and the efforts of the Government and NGOs in the fight against Monkeypox disease.



5.3 Limitations

One major limitation of the study is that, it only focused on three Ghanaian online newspapers (Graphic Online, Daily Guide Network and The Chronicle News Online) and their extent of coverage of Monkeypox disease-related stories. The extent to which other types of media covered the Monkeypox disease pandemic was not included in the study. Hence, the findings of this current study cannot be generalized to all online print media platforms and other media in Ghana.

5.4 Recommendations

The following recommendations are made based on the study's limitations. For scholars and researchers, future studies can broaden the scope of this current study by including the coverage of other disease pandemics. Future studies can compare the coverage of other disease pandemics in relation to Monkeypox disease.

Scholars and other researchers who have an interest in broadening the scope of this study can increase the number of Ghanaian online newspapers that were selected for this current study.

Moreover, for media agencies, journalists and reporters, it is recommended that the coverage of disease pandemics should be increased in order to intensify awareness creation of such diseases. The online print media needs to place disease-related stories on feed pages such that, they can attract public interest and discussion. Online print media should also cite more credible sources for health-related stories, they publish. Lastly, in the coverage of pandemics, online print media needs to employ frames that attract public attention and generate the necessary discussions.

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APPENDIX

**DISSERTATION TITLE: A COMPARATIVE STUDY OF GHANAIAN ONLINE
NEWSPAPER COVERAGE OF MONKEY POX: A CASE OF GRAPHIC ONLINE,
DAILY GUIDE NETWORK AND THE CHRONICLE NEWS ONLINE**

Coding Sheet

Name of Online Newspaper	
Month	
Date of Publication	
Title of Story	
Story's URL	
Story Number	
Type of Stories	
Straight News	
Feature Story	
Editorial	
Opinion/Column	
Others	
Frames	
Causes	
Prevention/Safety Measures	
Impact of Disease	
Recorded Cases	
Treatment of Disease	
Government and NGO Efforts	
Stories with Photographs	
Coloured Photographs	
Black and White Photographs	
No Photographs	
Sources cited by Newspaper	
Ghana Health Service	
Other Health Agency	
Health Workers	
Health Scientists/Researchers	
Civil Societies/NGOs	
Infected Persons	
Individuals (Brand Ambassadors, Celebrities etc.)	
Other Media Agencies	

