EVALUATING HEALTH COMMUNICATION CAMPAIGNS OF THE COVID-19 PANDEMIC IN UGANDA

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Declaration

I, Nalugya Dorothy, declare that this research report is my original and independent investigation. It has never been submitted to any institution of learning for an award. Omissions and commissions in this dissertation are entirely mine.

Signature: 

Date: 22th April, 2025

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Approval

This research report thesis has been done under my supervision and is now ready for submission to the Uganda Christian University Academic Board.

Signature:…… Date:……12-05-25……

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Abstract

The purpose of the study was to analyze the effectiveness of the COVID-19 health communications campaign in Uganda. The information processing theory was used to evaluate the understanding of the effectiveness the COVID-19 messages. The study used descriptive quantitative research approach, specifically a survey was administered to 320 participants selected using simple random. The health communication campaign theoretical framework requires target audience attention to the message, comprehension of the message preposition and acceptance of the message content. The results indicated that people were exposed to covid-19 health campaign messages on vaccination, wearing masks, washing hands, social distance and use of sanitizer on television, radio, WhatsApp and TikTok during the lockdown. The results further indicated that social distancing and wearing of masks were familiar hygienic measures to public. In addition, dangers; fever, cough and difficulty breathing forced public to comply on the pandemic preventive measures with support of President of Uganda directives. Nonetheless, health campaign messages were; communicated in English and other local known language such as Luganda supplemented with enforcement through canning, shooting people and statistics of infected people and death cases captured in President speech. The keep distance "Tonsemberera" and vaccination health campaign dominated during covid-19. The study recommended that government should communicate educative content that combine video and audios, engage partners like religious and cultural leaders; use local language to circulate the health messages by MoH. The President directives should provide clear scope on enforcement to facilitate public adoption, transparency and trust on health campaign information on pandemic in future. In addition, it is vital to use only trusted sources and persuasive messages in health communication in the campaigns to support acceptance by target audience.

Chapter one

Introduction

1.0 Introduction

The study evaluated health communication campaigns of the COVID-19 pandemic in raising awareness in Uganda. This chapter presents the background of the study, problem statement, purpose of the study, objectives, and research questions, significance of the study, justification, and theoretical framework.

1.1 Background of the study

Based on experience from developed countries, a substantial body of available literature shows that exposure to communication campaigns via the mass media plays a greater role in producing changes in behavior (Paisley, 2001; Ritterband, et al., 2006; Rice & Atkin, 1994; McGuire, 2001; Bracht, 2001; Dervin & Frenette, 2001; Dozier, Grunig, & Grunig, 2001). Communication campaigns have been found to reinforce attitudes and produce changes in beliefs, and campaign messages can convert people from one opinion to another (Guttmann, 2003; Dervin & Frenette, 2001). Furthermore, Cox (2006), reports that the effects of communication campaigns on people's behavior, and attitude are direct only when the messages are consistent.

Westoff and Rodriguez (1995) assert that in developing countries, there is a strong association between exposure to communication campaign messages and people's attitudes and beliefs. For example, Kim and Marangwanda (1997) stated that communication campaign messages disseminated via the mass media played a bigger role in influencing the uptake of contraceptives in Equatorial Guinea, and Chad. Similarly, Kane et al., (1998) and Jato et al. (1999) also agree that

communication campaign messages about the use of contraceptives had a greater impact in changing people's behavior towards birth control, with many women in Ghana adopting the use of contraceptives to control childbirth. In addition, Sherry (1997) also admits that communication campaigns for long have played important roles in influencing attitudes toward HIV/AIDS in Uganda, and Tuberculosis in Nigeria.

On the other hand, diffusion of innovations scholars also postulate that communication campaigns strongly affect the target audience's behavior, attitude, perceptions, and beliefs on health challenges (Klapper, 1969). In addition, Ndyabangi (2020) empathizes that language embedded in content affect the target audience's behavior with communication campaigns. For example, studies show that communication information campaigns on HIV/AIDS, malaria, maternal health, and tuberculosis have had a strong impact on reducing contractions with messages (Stephenson & Witte, 2001; Cappella, eta al., 2001). As DiClemente and Norcross (1992) assert, campaign messages arouse conversations, and information sharing among the target audience, and thus creating more understanding leading to the adoption of the desired behavior intended by the communicators.

In Uganda, Covid-19 health campaigns intended to harmonize government communication efforts in response to the pandemic, raise awareness and popularize simple actionable behaviors (MoH Report, 2021). The citizens, leaders and popular influencers were involved in health campaigns to disseminate Covid-19 information. The Ministry of Health (MOH) developed and launched a mass and social media campaign called keep a distance "Tosemberera". The keep a distance health campaign encourages Ugandans to stay at home, maintain a distance of at

least two meters from others, wash hands frequently, and take other precautionary measures recommended by government.

The rapid test health campaign was emphasized when the five signs; flue and running noise, dry cough and sore throat, fever (body temperature high than normal), difficulty in breathing and having direct contact with somebody suspected or confirmed with covid-19 were observed to a person (Ritterband, et al., 2006). The mentioned areas of emphasis were warning signs communicated in the health campaign for covid-19 in Uganda. The MOH circulated tool free telephone numbers 0800-100-066 or 0800-203-033, 0800-220-333, 0800-200-600 or dial the short code 919 as well as sending a free SMS to WhatsApp 0770 818 139 (MoH, 2021). The numbers were used by people to report suspected victim of Covid-19 in the community for evaluation to be subjected for rapid test. However, 75 percent of victims of covid-19 died during the first lockdown. The recovery after being admitted on covid-19 kept increasing in the second lock down or wave in Uganda. People feared being tested and quarantined in the government health controlled facilities due to low survival rate and high burial cost which left victim families poor. Getachew-Smith (2022) stated that the covid-19 shocked the economy since victims died after expensive medications and subjected to costly burial program.

The health campaign found that older people and those living with HIV, TB, high blood pressure, heart problems, cancer, kidney disease or diabetes are more likely to develop serious illness need more protection not to contract with covid-19 (Alkursheh, 2024). The MoH and WHO urged people to use masks wisely to cover mouth and nose when cough and sneeze, regularly wash hands with soap and running water, handkerchief or tissue or bent elbow, keep a distance of at least 2

meters from other people and stay at home as much as possible to prevent spread of Covid-19 (MoH, 2021). Thus, in the discussion about communication campaigns, and COVID-19 health behavior, it is important to ascertain whether the target audience was exposed to the campaign messages.

1.2 Problem Statement

There is a generally agreed narrative that some health communication campaigns have failed to achieve the intended goals which deter its effectiveness (Getachew-Smith, King, Marshall, & Scherr, 2022). Other scholars Evans et al., 2008; Snyder and Hamilton (2002) argue that those that have failed to achieve results did not pay much attention to the many factors that contribute to successful health communication campaigns. In addition, Bala, Strzeszynski and Cahill (2008) emphasizes that an ideal public health communication campaign should have a goal with objectives that are clearly stated. Furthermore, Schweitzer et al., (2015) assert that successful health communication campaigns have a clear scope and a clear health issue that the campaign intends to address followed by a well-determined audience. The COVID-19 communication campaign was meant to disseminate information about the epidemic, communicate mitigation strategies, and make people aware of the disease's existence, and its adverse effects on human life (Evans, Davis & Zhang, 2008). Moreover, Getachew-Smith, Marshall and Scherr (2022), a campaign like this must have various interpersonal and media channels to increase behavior change through multiple channels, one of which must be the mass media to provide multiple opportunities for exposure. Additionally, Kiwanuka-Tondo and Snyder (2002), assert that effective campaigns should match campaign design, audience exposure, campaign

planning, outcome data and execution to provide desired content to target audience.

The outbreak of COVID-19 prompted governments and health authorities worldwide to employ various health communication campaigns to disseminate information, promote public understanding, and foster compliance with preventive measures (Taecharungroj & Avraham 2022; Nowak & Cacciatore 2022). In Uganda, as the pandemic evolved, the community received information through diverse channels and methods (Yang, 2023) but it remains unclear which campaigns whether most effective, how they influenced public perceptions and to what extent they facilitated compliance to information campaign. However, a study conducted by Mathooko (2021) found that the mass media helped to expose campaign information to the target audience. The author further stated that the use of indigenous languages to communicate COVID-19 preventive measures helps people understand the pandemic in their languages.

Irrespective of all the above, Scannell (2007) clarified that the impact of a communication campaign is felt when the receiver correctly interprets the messages. In earlier study by Haines et al. (2004) argue that when the audience is repeatedly exposed to a variety of data-based messages in the campaign, the beliefs that sustain problem behavior are reduced, and a greater majority start to behave in accord with the perceived norms of health, protection, and safety. Thus a health communication campaign with such unique, credible, and sustainable messages, slogans, logo, colors, signature music, and characters among others has a greater reach and impact because it stands out from other campaigns (Kotler and

Lee, 2007; Lagarde & Banks, 2007). The how and whether communicated messages in health campaign provide clear action and appeal to audience is contestable.

The essence of the study, therefore, was to evaluate the effectiveness of the health communication campaigns during the COVID-19 pandemic in Uganda, and Central Division, Mukono Municipality was deployed as a case to be studied. The researcher sought to evaluate whether the health campaign's goals and objectives were clearly stated (WHO, 2021). In addition, evaluation was conducted to establish whether campaign had a clear scope and clear health issue, and whether the target audience was well identified during Covid-19 (MoH, 2021). The way in which Covid-19 health campaigns and target audience were attended during circulation of information necessitated evaluation. The study further evaluated the success of the COVID-19 health communication campaign in Uganda.

3.0 Purpose of the Study

The purpose of the study was to evaluate the effectiveness of the health communication campaigns of the COVID-19 pandemic in Central Division, Mukono Municipality.

1.4 General Objective of the Study

To evaluate the health communication campaigns of the COVID-19 pandemic in Kauga Division, Mukono Municipality.

1.4.1 Specific Objectives

I. To analyze the extent to which people were exposed to campaign messages.
II. To analyze the target audience's understanding of the campaign messages
III. To evaluate the effectiveness of the COVID-19 messages in changing people's attitudes

1.5 Research Questions

I. To what extent were the people exposed to COVID-19 communication messages?

II. To what extent did people understand the COVID-19 campaign message?

III. How effective were the COVID-19 messages in changing people's attitudes?

1.6 Scope of the Study

The scope of the study covered three dimensions, that is the geographical, content, and time scope whose details are further discussed below.

1.6.1 Geographical Scope

This study was carried out in the Central Division, Mukono Municipality in Uganda. The rationale for selecting the Central division was that the area is densely populated, and located in Mukono municipality, Mukono District, an area with in the proximity of Kampala the capital City of Uganda where most media houses are located, and thus the concentration of information.

1.6.2 Content Scope

As far as the content scope is concerned, this study was guided by the study variables which are health communication campaigns and, the COVID-19 pandemic. The major focus of the study was hinged on communication as a general term, then health communication as a special field of study based on the major strand of communication. Thereafter, the study focused on the concept of health communications campaigns, and an overview of the pandemic was discussed.

1.6.3 Time Scope

In terms of time scope, the study was conducted over 4 months from July to December 2024. This time was enough for the researcher to complete the process of data collection, data analysis, and finally presentation of the research findings.

1.7 Theoretical Framework: Information Processing Theory

This study was guided by the information processing theory propounded by Maguire (1981). This theory developed at a time when research on artificial intelligence was becoming popular with communication psychologists and scientists were trying to create a computer model of intelligence that could perform tasks that a human brain performs (Smith, Langston, & Nisbett, 1992). However, Nisbett, Peng, Choi and Norenzayan (2001) pointed out that experts and research about information processing studies flourished during the 1960s and 1970s.

The theory suggested that the impact of persuasive communication is mediated by three message-processing phases (Anderson, 1985; Atkinson & Shiffrin, 1968; Craik &Lockhart, 1972; Gagne, 1985). These phases include; attention to the message, comprehension of the message preposition, and acceptance of the message content (Gagne, 1985). In this context, Glover, Bruning and Filbeck (1983) assert that variations in communication sources, messages, channels, receivers and target audience behaviors impact the persuasion process by affecting attention, comprehension, or acceptance of the message. It is on this account that Biehle & Snowman (1986), and Brown (1975) assert that if one is to understand the effects of communication campaigns such as communicator trustworthiness, fear, and received intelligence, one should explore how each of

the campaign variables affects better, or worse, attention, comprehension, and message acceptance.

According to Brown (1975), social psychologist William McGuire built the ideas of the information processing theory on a series of essays. In his assertion, McGuire identifies twelve steps in processing persuasive communication. In these steps, McGuire (1968) points out that step one requires that the target audience should be exposed to a message, attend to it, take enough interest to process it further, comprehend the message, acquire taught skills, yield to the message, store the message content, retrieve the information at later times, make decisions based on the retrieved information, behave by that decision, receive positive reinforcements, and make new positions as part of new behavior (Anderson, 1985; Atkinson & Shiffrin, 1968; Craik &Lockhart, 1972; Gagne, 1985). The theory supported the way individual, community and society attend to the health campaign message. The comprehension of the message preposition and acceptance of the Covid-19 health campaign message content.

In the context of health communication campaigns, the theory suggests that a campaign will fail if it is unable to succeed with the audience at any of the above-mentioned steps. For instance, Anderson (1985) points out that extensive campaigns that grab the attention of everyone will fail if the message is incomprehensible to the audience. Furthermore, Shiffrin and Shiffrin (1968) also argue that a campaign may gain attention, and comprehension by the audience, but still fail if the position advocated for is too extreme to prompt a yielding from the target audience. It is from this perspective that Lockhart and Locasserts (1972) assert that a communication campaign is like a chain, where each part is important

for the chain to function. It is from this perspective that Biehle, and Snowman (1986), and Brown (1975) point out that the success of any health communication depends on its ability to incorporate twelve steps proposed by McGuire (1968).

Based on the above foundation, the information processing theory guided the researcher in the current study to investigate whether the people in Central Division, Mukono Municipality were exposed to the COVID-19 communication campaign, whether they comprehended the campaign messages, and how effective the messages influenced their behavior.

Chapter two

Literature review

2.0 Introduction

In this section, the researcher reviewed the literature on the majority of the topics relating to the subject matter under investigation. The literature reviewed looked at the evolution of health communication, health communication campaigns, as well as COVID-19 health communication in Uganda.

2.1 Theoretical foundation

The study adopted information processing theory propounded by Maguire (1981) as earlier mentioned. This theory advocated for the flow of information by communication psychologists and scientists with use computer model of intelligence to support instant sending and receiving of messages (Smith, Langston, & Nisbett, 1992). The information processing theory provides that information undergoes input, encoding, storage, and retrieval, and is characterized by sensory memory, short-term memory, and long-term memory on computer which is similar to human mind(Gouëdard et al., 2020). The information content clarity supports the understanding of messages by the receiver. The Covid-19 information embedded clear content that enhance the flow and under stability by the receivers in Uganda (MoH, 2021). However, unclear content distracts the flow and conceptualization of messages by the target audience.

The theory profiled that attention to the message, comprehension of the message preposition, and acceptance of the message content support the effectiveness of communication to target audience (Karo, 2020). In this context, Covid-19 health campaigns entailed messages from various communication sources

and channels to persuaded target audience comprehend and accept information on preventive measures such as keep a distance and rapid test. The theory suggests that persuasive communication with clear content support the conceptualization and understanding of information by target audience in Uganda.

2.2 Evolution of Health Communication

The importance of health communication has grown globally as a response to the shifts in global health policies, global pandemics, and global health, and treatment services (Schiavo, 2014). In sub-Saharan Africa, Kungu (2013) states that the health communication concept has evolved due to changes in the medical system, and a strong belief that health information is important in mitigating serious health conditions. In this context, Thomas (2006), argued that while health systems differ globally, focus on equity in health care, and preventive measures present an opportunity for the evolution, and prominence of health communication. However, Basavanthappa (2000) argues that, in Africa, global health policies led by the World Health Organization, and sister United Nations agencies have increased the importance of health communication as a mechanism or strategy to mitigate disease and promote better health. Furthermore, Kusumandyoko, and Islam (2020) opine that, the prominence of health communication in Africa is a response to conditions, and epidemics like Ebola, HIV/AIDS, and other health-threatening conditions like maternal health among others, that have, and continue to ravage the continent. It is also articulated that the 1986 Ottawa Charter for Health Promotion, a United Nations global conference on health promotion buttressed the significance of health communication as a

strong strategy in combating diseases, and epidemics (Citrasiwi, Hafiar & Sjoraida, 2017).

According to Kamenkes (2020), Africa, more than any other region in the world lagged in efforts to embrace health communication, much as there was a need to combat diseases and promote better health. In agreement, Proverawati, and Rahmawati (2012) argue that, even after the Ottawa Charter, many African countries did not adopt health communication as a strategy to supplement treatment in mitigating health challenges. They argue that it was not until the WHO global conference on health promotion held in 1997 in Jakarta that some African countries started embracing health communication as a strategy to mitigate emerging health issues the year 2000, many Africans took an interest in health communication after many leaders attended the Mexico City conference.

2.3 Understanding Health Communication

In broader terms, communication is regarded as the exchange of information or ideas in rotating shared meanings about all aspects of social life, including health, and human well-being (Nazione, Pace, Russell, & Silk, 2013). According to Obono (2011), communication generates awareness as well as builds approval, and encourages healthy attitudes and behaviors. Oleribe *et al*., (2018) assert that in health communication, health is the acceptable state of physical, mental, emotional, economic, and social well-being. They believe that this state of affairs should be contained or maintained function in their day-to-day activities. It is from this context that the United States Department of Health, and Human Services (2010) report articulated that health communication which serves to mitigate challenges to human health continues to receive attention in scholarly circles.

Based on the above background, Freimuth, and Quinn (2004) define health communication as the study, and adoption of strategies to inform, and influence individuals, and communities to make informed decisions to improve health. However, Thomas (2006) defined health communication from the perspective of the roles communication plays, arguing that health communication is a function that involves the study, and use of communication strategies to influence all issues associated with health, and healthcare knowledge, attitudes, and practices. Following this perspective, Kreps, Bonaguro, and Query (2003) noted that health communication is a multi-disciplinary field of study encompassing human and mediated communication in healthcare delivery and health promotion. In this respect, Kreps *et al*., (2003) also argue that healthcare delivery, and health promotion form two major branches of health communication research, with healthcare delivery focusing on the influence of communication on the delivery of healthcare services

Meanwhile, Karo (2020) notes that scholars interested in the health promotion branch of health communication focus on the persuasive use of communication to promote positive public health behaviors. It is from this perspective, that the definition of health communication advanced by the United States Department of Health, and Human Services (2010) gains credence because it enunciates that health communication involves the skills, and methods of informing, influencing, and motivating target audiences on vital health issues, with the scope of communication involving disease prevention, health promotion, health care policy, and improved quality of individual lives, and health in the community (Yasa, 2020). From this understanding, Karuniawati, and Putrianti (2020), argue that the goal of health communication reflects the approaches taken

in health communication campaigns, with the major objective of health communication aiming at improving health outcomes through the sharing of health-related information (Schiavo, 2007).

In this perspective, Liu, and Chen (2010) view health communication as a field that focuses on disease prevention, and health promotion to address health concerns through media interventions that create health awareness and prevent high risks. It is therefore important to note that, all the scholars that have tried to define health communication have a meeting point with all definitions noting that the field aims at influencing people's health attitudes, and behaviors dynamics which influenced their health lifestyles in community (Saputra, 2016; Robandi, 2020; Iskandar, Mansur, & Ritonga, 2020). Thus, Namkoong, Nah, Record, and Van Stee (2017), agree that these multifaceted definitions, roles, and objectives of health communication highlight its multi-disciplinary nature, which calls for a generally agreed stand on what health communication is.

This generally agreed definition of health communication is captured by Schiavo (2007) defined the field as a multifaceted, and multi-disciplinary means of reaching different target audiences by sharing health-related information. The information is aimed at influencing, engaging, and supporting stakeholders including individuals, communities, health professionals, and policymakers towards engaging in appropriate behaviors, and actions, which in the long run translates into improved health outcomes. From this definition, it is evident that, the concept of health communication is generally a wide area that covers several areas of health, and that it can apply to many academic disciplines such as sociology,

psychology, mass communication among and others (Rimal & Lipinski, 2009; Snyder, 2007; Peng, Pei, Zheng, Wang, & Zhang, 2020).

The broad nature of health communication according to Freithmuth, and Quinn (2004) traces its background to the evolution of the old itself. Agreeing with them, Kreps *et al.*, (2003) argue that the development of health communication is fundamentally rooted in the social science disciplines such as sociology and psychology as well as the medical field in the early 1960s. During this period, Kreps et al., (2003) note that communication variables were studied from the sociological perspective, while literature in the medical field examined doctor-patient relationships. From the above definitions, it can be concluded that health communication programs are aimed at improving awareness, and understanding of health-related issues. According to Wright, Sparks, and Dan (2012), health communication aims at influencing individuals, and communities in making informed health decisions. This serves to inform us about the importance of health communication in today's world where diseases such as HIV/AIDS, Tuberculosis, anthrax, avian influenza, Ebola, and most recently COVID-19, threaten the very existence of human society (Airhihenbuwa & Webster, 2004). Although it is evident in the literature that all health communication strands are interwoven, that is health care delivery, health promotion, and disease prevention (Schiavo, 2003), this present study on evaluating health communications campaigns is viewed concerning the health promotion strand of health communication.

2.4 Health Communication Campaigns

Literature on health communication campaigns points out that, they are a planned effort on behalf of the sender to influence an individual, community, or

group in a society with a particular message or a set of messages (Windham, 1993). Additionally, Finnegan and Viswanath, (1990), say that health communication campaigns have a bigger role in informing people about a particular health issue. They further assert that health communication campaigns are developed because of a crucial health issue with communication fueling health education and promotion of the issue with a major focus on eliminating the health challenge (Rogers & Storey, 1987). According to Humphrey, Rodgers and Flabouris (2013), a health communication campaign is associated with the following features 1) they are aimed at large audiences, 2) it is purposive, 3) it has a, or less specifically defined timeframe, and 4) they are an organized set of communication activities.

Furthermore, Mody (2003) explains that health communication campaigns are developed as part of a concerted effort to address a health challenge. He says that, in the field of health communication campaigns usually take on two types of activities, that is they help social transformation and enhance communication channels by providing information. Mody (2003) further explains that channel enhancement includes an increase in the accessibility of communication platforms, enhancing the social skills of people to confront the situation, establishing networks between people, and generating new establishments to boost the flow of information. According to Southwell, Reynolds and Fowler (2013), the information provided comprises communication promotion, popular culture communication, educational, and instructional programs, advocacy, and supporting health efforts among the public.

In sub-Saharan Africa, Kungu (2013) argues that health communication campaigns operate in a very difficult environment. He points out that encouraging

and supporting people to adopt health behavior, and encouraging policymakers, and professionals to introduce new policies and practices is not an easy task. For this reason, Schiavo (2014) admits that for health communication campaigns to have an impact on the target audience, the mode of communication should be carefully thought after to achieve the desired outcomes. According to Noar (2012), factors such as media use, source likeableness, audience attitude, risk perception, and social-cultural orientations should be prioritized for health communication campaigns to achieve desired results. However, in Uganda, Okaka (2009) holds the view that the liberalization of the media has led to the development of various mass media outlets which has fragmented health communication campaign audiences. Based on this line of thought, Basavanthappa (2006) concludes that since health communication campaigns are directed at individuals, groups, communities, and the general public, the selection of the media to use should be in line with the target audience's cultural patterns and customs.

Accordingly, Okaka (2009) posits that the current policy and regulatory framework for media operations in Uganda are favorable to allow communicators to carry on their social responsibility role. This means that the mass media in Uganda can play a big role in elevating development initiatives, including the health, and well-being of the people by allowing the free flow of health communication messages to the target audience. As conceptualized by scholars, experts, and professionals, health communication campaigns apply to individuals, and the community (Healthy, 2010). On the individual level, Okaka (2009) argues that campaigns can help raise awareness of health risks, and solutions, provide the motivation, and skills needed to reduce health risks, and help individuals find support from other people. Additionally, he points out that campaigns increase

demand for appropriate health services among other positive mitigating health behaviors.

Meanwhile, at the community level, Davie et al., (1996) assert that health communication campaigns help to influence the public agenda, advocate for policies, and programs that promote positive health changes in the physical environment, improve the delivery of public health, and health care services, encourage social norms that benefit health, and the quality of life. It is on this account that, Obregon (2014) comments that health communication campaigns over the years have contributed to health promotion and disease control. This is perhaps the reason why during the pandemic of COVID-19, health communication in the form of media campaigns was used to educate the public on health issues concerning the deadly coronavirus.

2.4.1 Effectiveness of Health Communication Campaigns

Despite minimal scholarly consensus on the effectiveness of health communication campaigns, there is a general agreement that communication interventions are an indispensable tool in bringing about and maintaining behavior, and social change among communities (Suruchi, Corrinne, Joanna Skinner, 2014). Thus, Wakefield, Loken, and Hornik (2010) assert that designing, implementing, and evaluating health communication campaigns is a difficult task, especially in developing countries where several bottlenecks exist. Wakefield et al., (2010) further contend that these complexities are multiplied by a lack of technical, monetary, and infrastructural assets in developing countries. In this context, Rice, and Atkins (2012) argue that, except for birth control and child survival campaigns, evidence of effective health communication campaigns has been generated from

developed countries where most campaigns implemented are subjected to greater research capacity.

Since many life-threatening pandemics occur in developing countries, particularly sub-Saharan Africa (Wakefield, Loken & Hornik, 2010) argue that there is a need to adopt predictors of successful health communication campaigns at an early stage of the campaign. Thus, Kiwanuka-Tondo and Snyder (2002) agree that several variables are associated with the success of communication campaigns. These include campaign planning through conducting research, analyzing channel availability, targeting appropriate audiences, selecting messages relevant to a particular audience segment, and the ability of the target audience to process the message. Meanwhile, other predictors of campaign success have been identified as message reach, and quality of the message among others (Wakefield, et al., 2010)

The study adopted Kiwanuka-Tondo, and Snyder's (2002) predictors to evaluate the success of the COVID-19 health communication campaign in Uganda.

2.5 COVID-19 Health Communication Campaigns

The COVID-19 pandemic became one of the most-deadly health challenges to be witnessed in the 21st century (CDC, 2020). First reported in 2019 in Wuhan, China, the infection spread rapidly to all parts of the world infecting and killing millions of people (Fox, 2020). The effects of the pandemic were very disastrous beyond the death of millions, but also affected the social lives of people across the globe (Frieden, 2014). Thus, the need to control the disease became the focus of the international community and individual governments as well.

In all efforts, the Centers for Disease Control (CDC) recommended that developing, and testing communication concepts, messages, and materials as key elements of the health communication control strategy was a must (CDC, 2020). The Center proposed that the health communications plan was to create change by influencing the attitudes of others through modifying behaviors. According to the Institute of Medicine (2020), developing an effective health communications campaign to combat the spread of the deadly COVID-19 necessitated putting in place some key elements. These key elements included, understanding the problem, the target audience, and the effectiveness of messages. This assertion was supported by the Institute of Medicine (US) Committee on Communication for Behavior Change, which argued that the most efficient way to use communication to combat the spread of the coronavirus was to get the message out to the intended audience, the message to be marketed, and communicated through the use of the mass media to promote health behavior (Frieden, 2014). This decision was based on the advice of the CDC which asserted that the mass media was the most efficient way to pass on the message to diverse, and scattered audiences all over the world (Fox, 2020)

Furthermore, Porter et al., (2021), also pointed out that the adoption of the communication approach to combat COVID-19 was based on the fact that research has shown that communication campaigns have a substantial impact on health behavior. Similarly, Wakefield et al., (2010) had advised that health communication campaigns delivered through the mass media had proved to be efficient in helping to increase uptake of immunization services, maternal health care services, and HIV/AIDS in Africa. Thus, the CDC reasoned that in the case of COVID-19, health communication campaigns would promote healthy behaviors, and

decisions in an understandable, and relatable manner (CDC, 2020). In conjunction with the World Health Organization, health communication campaigns through the mass media were viewed as the most effective tool to disseminate educational, and informative content surrounding preventive measures for the disease (Fox, 2020). The aim was to influence health behavior towards COVID-19. According to Friedman (2020), this was achieved through both written, and verbal tools, and, the creation of communication campaigns with comprehensible and relevant messages informed the world about the deadly disease, and how easy it was to prevent infections.

2.6 COVID-19 Health Communication Campaign Messages in Uganda

In their research on health communications, and COVID-19 prevention, Anfinrud et al., (2020) documented that, the most critical part of a communications campaign is to disseminate effective messages regarding the health problem with the overall goal of influencing health behavior. In Uganda, Ajari, Kanyike, Ojilong, and Olawale (2020), the campaign message involved masks, focusing on how wearing a mask would help protect the wearer, and others from the spreading of the disease. This message was displayed in three steps, with the first step showing the steps that could be taken to protect oneself, and others, the second step explained to properly wear the mask, and the third step showing that homemade masks worked efficiently (Fischer et al., 2020). Based on advice from the CDC, and the World Health Organization, this campaign message rotated around the narrative that when used properly, no droplets were expelled through the mouth, and the nose thus offering efficient protection against COVID-19 (Fox, 2020).

The second campaign message in Uganda involved hand hygiene focusing on the significance of washing hands (Ajari et al., 2020). This message implied that hands were an easy form of infection through contact such as handshaking. This message was chosen based on Aiello et al., (2012) study which documented that transmission of viruses from one person to another can be significantly decreased by interventions of frequently washing hands during a pandemic. Thus, the message implied that hand washing was a preventive measure, but could only be effective when practiced together with mask-wearing.

According to Ajari et al., (2020), social distancing was another message of Uganda's COVID-19 prevention communications campaign. Surrounding this message was the narrative that keeping six feet of distance between oneself, and others, as well as an increase in distance between people equated to a decrease in the possible risks of spreading COVID-19. This message also focused on the significance of avoiding crowded areas to reduce the possibility of person-to-person infection. According to the CDC (2020), and Qureshi (2020), safe distance equated decreasing risks of contracting the coronavirus.

Lastly, the testing message of the campaign emphasized the importance of self-isolation if one thought they had come into contact with COVID-19 (Ajari et al., 2020). The message showcased that one may have the virus, but be asymptomatic, or pre-symptomatic (Ajari et al., 2020). Furthermore, the message explained that if one was COVID-19 positive, there was a need for isolation, and separate oneself from others to prevent transmission. However, Musoke (2019) argues that the message also stated that even if one was negative, it was still important to practice preventive measures such as wearing a mask, washing hands,

and social distancing. The symptomatic messages were drafted based on Wang et al., (2020) who had stated that symptoms can appear within a few days of contracting COVID-19, but show up many days after the encounter with the deadly virus. This meant that testing was important as it allowed measuring how safe one was. This campaign message portrayed the simple steps one would take to get tested.

2.7 Evaluating Health Communication Campaigns

According to Ethel (2002), interventions such as health communication campaigns vary greatly in terms of design, and exposure, thus evaluating such campaigns is a complex process. In Africa, and Uganda in particular, Ndyanabangi et al., (1994) note that the situation is made more difficult because campaigns are conducted among people with diverse cultures, languages, and the resources available. Irrespective of the difficulty, Mody (2002) says that a wide range of evaluation methods exist. These include systematic and exploratory reviews, experimental, and randomized studies, non-randomized studies, time-series studies, longitudinal studies, post-test studies, content analysis, and target audience surveys among others (Bauman, 2002)

Communication campaign evaluation looks at the effectiveness of the messages within a campaign, and this can be reflected through random surveys completed by members of the target audience Rychetnik, Frommer, Hawe, and Shiell (2002). These surveys assess improved knowledge about the health problem, as well as whether the individuals in the target audience encountered the campaign messages, and where or which channel they encountered the messages from (National Cancer Institute, 2009; Thorogood & Coombes, 2010; Green &

South, 2006). In addition, Noar, Palmgreen, and Zimmerman (2009) note that surveys question the overall perceptions of the campaign, and its messages by examining the community's knowledge, attitudes, and perceptions of the behavior of campaign messages. In the case of this study, the behaviors of wearing masks, hand washing, social distancing, and testing will be covered. Surveys also cover issues on how the messages were interpreted, as well as basic demographic information (Valente, 2001). Since the goal of a health communication campaign is to influence behavior change, this study will set out to evaluate the health communication campaign of the COVID-19 pandemic in Uganda, taking Kauga Division, in Mukono Municipality as a case study.

Skjesol and Tritter (2020) in their study about Norwegian way: COVID-19 vaccination, sanitation policy and practice and established that vaccination of people is effective whenever supplemented with high level of hygiene through washing hands and wearing masks to control the spread of Covid-19 pandemic. This trust of health campaign messages is provided by Helsingen et al. (2020) in the study on COVID-19 pandemic in Norway and Sweden threats, trust, and impact on daily life: a comparative survey and discovered that wash hands and sanitizer make the covid-19 health message trusted which fostered change of peoples' attitudes to accept the implementation of preventive measures, and perceived impact of the pandemic and implemented control measures on life in Norway and Sweden. Familiarity of health information makes it adopted and contextualized by the public which ease the implementation.

Neelam et al. (2020) in their study about United States' Response to COVID-19: A Case of the First Year and stated that President full involvement with United

States Department of Health and Human Services (HHS) to present reports on Covid-19 accelerated the trust in the health campaign messages. It was presented that “U.S. reports more than 28 million cases and 500,000 deaths, accounting for 25% of global cases and 20% of global deaths despite comprising only 4% of the world's population. Life expectancy in the U.S. shrank by a full year in 2020. The trust on health campaign relied on the source. Further, Ding and Zhang (2022) stated that isolation preventive strategy advocated by the president and WHO limit the spread of the global pandemic. It can only spread to the caretaker although wearing masks and observation of other preventive measure assisted protection of family members from infections. The magnitude to which this health campaign met the objectives of preventing Covid-19 necessitated investigation.

Cucinotta and Vanelli (2020) established that instant spread of health information on daily basis to the public enhance their conceptualization and implementation. Communication became effective whenever frequently circulated with clear and simplified health information. The instant message circulation is articulated by Dengand Grépin (2024) stated that instant communication of importance of vaccinating elders with covid-19 vaccines enhanced its implementation in the community in China. Making people aware necessitated instant communication on daily basis changed their mind and attitude to comply to the health campaign initiatives in the World. This universal finding required validation in the context to this study.

Ibrahim and Sanda (2024) who stated that television provide visual presentation with audio which make point clear to the viewers to enhance the conceptualization of the health campaign initiatives. The television teaches people

on the Covid-19 preventive measures through visual messages that communicated messages clearly to the public. As earlier mentioned by Smith et al. (2011) stated that television visualize the information content clearly to the viewers since it combine pictures and audio. The choice of radio and television conduced in Malaysia discovered that 75% of respondents accepted television compared to the radio media to receive the health messages (Joo & Teng, 2023). People with access to television preferred to access health information on it unlike the radio, although those with only radio lack option. This manifestation need verification in the context to the developing countries with engagement of those with television at households.

Dye (2020) stated that information for covid-19 health campaign was edited to suit the public in Brazil. The health messages were covered threaten content with evidence from death numbers from the hospital and across the world which made communication clearly to the public. de-Anda-Jáuregui et al. (2023) stated that clearly written health messages provide understandable content to support the conceptualization of the practices in Maxico. Covod-19 was a threat to the public and states across the global involve in the struggle to prevent the spread and avoid re-occurrence.

The health campaign information clarity in vital to address the knowledge gap to inform the public on the preventive measures desired to practice the measures. As noted recently, Guan et al. (2024) in the study on Rally Effect of the COVID-19 Pandemic and the White Paper Movement in China established that that clarity of covid-19 health campaign was prioritized in all forms of communication to support the information conceptualization to pandemic preventive measures.

Lubinga and Sitto-Kaunda, (2023) stated that use of local and international language by government officials supported with tailored and mixed multi-phased communication strategy mirroring fear and pro-social appeal messages to the intensity understandability of the COVID-19 waves. The earlier study in second wave by Mweri (2021) established that use of language known by majority of people communicated to social media, daily newspapers and other writings support conceptualization around the issue of COVID-19 preventive measures.

The entire sensitization was dominated by vaccination of people to lift the lockdown. Kelly et al. (2023) in his study in Canada, stated that vaccination of people is vital measure to prevent spread of Covid-19. The careful consideration in the development of publicly available for vaccination is necessary in supporting COVID-19 uptake, while reducing the prevalence of misinformation against vaccination. The Woodard And Mann (2023) stated that vaccination campaign dominated the health measures to prevent the spread of vaccine and death of victims of Covid-19.

Mweri (2021) pointed out that mask wearing (MW), washing hands with soap (WS) and social distancing (SD) were the cheap affordable measures to prevent the spread of the Covid-19 pandemic. The masking and washing hands are purely affordable locally source items to prevent spread of Covid-19, this analogy is communicated by Kshatri et al., (2022), provided that washing hands with soap and masking mouth with any clothe became ease practice within the means of public. This fostered prevention to the Covid-19 and well as created business to tailored of masks at domestic level in the community.

Salahshoori et al. (2023) stated that health campaign on Covid-19 educated the public effectively on health issues, decision-makers should employ experts in message design to provide reliable content which change their attitudes. The fear of covid-19 facilitated adoption and practice of the preventive measures which has enable people to learn how to manage the pandemic. In addition, Lubinga and Sitto-Kaunda, (2023) stated that health campaign conceived people to accept the dangers and risk associated with covid-19 which created fear, threat and high level of compliance.

Velavan et al., (2021) stated that COVID-19 host genetics and compile genetic variants associated with susceptibility to COVID-19 and disease severity. The associations and provide insights relevant to pathogenesis, risk classification, therapy response, precision medicine, and drug repurposing which forced compliance to Covid-19 preventive measures. Guan et al. (2024) stated that conversations on Covid-19 educated people to accept and believe in preventive measures to stay negative.

2.8 Summary of Literature

This study has reviewed the literature on the evolution of the health communication concept and found out that, the concept has grown globally as a response to the shifts in global health policies, global pandemics, and global health, and treatment services, and a strong belief that health information is important in mitigating serious health condition (Schiavo, 2014; Kungu, 2013; Thomas, 2006; Basavanthappa, 2000; Kusumandyoko & Islam, 2020; Kamenkes Rai, 2020). The study also reviewed the literature on understanding the concept of health communication and found out that it belongs, to the greater, broad, and

complex term communication, and that it is a difficult concept to define. Literature also found that there are many scholarly definitions of the term, all with a common meeting point where the concept is associated to influence people's behavior on a certain health challenge (Nazione, Pace, Russell, & Silk, 2013; Obono, 2011; Oleribe et al., 2018; Department of Health, and Human Services, 2010; Freimuth, & Quinn, 2004; Thomas, 2006; United States Department of Health, and Human Services, 2010; Yasa, 2020; Liu, and Chen, 2010; Saputra, 2016; Robandi, 2020; Iskandar, Mansur, & Ritonga, 2020; Namkoong, Nah, Record, & Van Stee, 2017; Rimal & Lipinski, 2009; Peng, Pei, Zheng, Wang, & Zhang, 2020).

Literature on health communication campaigns was also explored and it found that they were a planned effort on behalf of the sender to influence an individual, community, or group in a society with a particular message, or a set of messages (Windham, 1993; Finnegan, & Viswanath, 1990; Rogers & Storey, 1987; Humphrey, Rodgers, & Flabouris 2013; Mody, 2003; Southwell, Reynolds, & Fowler, 2013; Kungu, 2013; Schiavo, 2014; Noar, 2012; Basavanthappa, 2006; Okaka, 2009; Healthy, 2010; Davie et al., 1996; Obregon (2014). Literature on COVID-19 health communication campaign messages in Uganda was also explored, and the study found that it rotated around a four-dimensional message that is masks, washing hands, social distancing, and testing (Anfinrud et al., 2020; Ajari, Kanyike, Ojilong, & Olawale, 2020; Fischer et al., 2020; Fox, 2020; Aiello et al., 2012; Ajari et al., 2020); CDC, 2020 Qureshi, 2020; Musoke, 2019; Wang et al., 2020). Lastly, literature on how health communications campaigns are evaluated was also explored and the study found it as a difficult endeavor, even when various methods of evaluation exist (Ethel, 2002; Mody, 2002; Bauman, 2002; National Cancer Institute, 2009; Thorogood, & Coombes, 2010; Noar & Zimmerman, 2009).

From the literature reviewed above, the researcher found out that no study in Uganda has taken up the responsibility to evaluate the COVID-19 health communication campaign, and its associated messages of wearing a mask, washing hands, social distancing, and testing. The studies reviewed suggest that for a campaign to succeed a right audience must be identified, messages must be understandable to the target audience, and also the target audience must be exposed to the campaign messages, as well as the campaign must be effective to influence behavior change Rychetnik, Frommer, Hawe, and Shiell (2002), Frieden, (2014), Windham (1993); Rogers, and Storey (1987), Humphrey, Rodgers, and Flabouris (2013), Southwell, Reynolds, and Fowler (2013), Kungu (2013), Schiavo (2014), Noar (2012), Okaka (2009), Healthy (2010), Obregon (2014), Kiwanuka-Tondo, and Snyder (2002). This is the gap the current study will try to bridge.

Although Uganda conducted an integrated communications campaign to combat COVID-19, for example, mask-wearing, social distancing, and testing, this study examined the mask-wearing campaign. The literature reviewed, indicated that Uganda implemented an integrated communication strategy with multiple campaigns carried out concurrently. For example, wash hands campaign, the social distancing campaign, the mask-wearing campaign, and the testing campaign. However, none of the literature reviewed has taken a front to evaluate the success of these campaigns. It is from this background that the current study undertook an investigation to evaluate the components of the campaign such as mask-wearing, hand washing, social distancing, and testing campaigns to find out how successful they were in informing citizens in Uganda, and Mukono Central division in Particular to use masks to address the COVID-19 challenge

Chapter three

Research Methodology

3.0 Introduction

This chapter presents the methodology that was used in conducting the research. It describes how this study was conducted. It includes the study design, the study setting, the study population, and the sample size. It also describes the sampling procedure definition of variables, research instruments, data analysis, ethical considerations, and the proposed limitations of the study.

3.1 Research Approach

According to Saunders et al., (2009) the research approach helps in understanding how the research objectives rightly apply to the study. Based on this knowledge, the current study adopted a deductive approach. According to Silverman (2013), research assumptions, and methodology of a deductive approach help build on existing theoretical assumptions. In this case, the positivist paradigm suits this study because the deductive technique aligned the study findings with the theoretical assumptions, as well as the statistical evaluation of the projected results to an acceptable degree of probability (Sneider & Larner, 2009)

Hence a quantitative approach was used in this study. According to Dawadi et al., (2021), a quantitative approach employs a statistical way of understanding a research phenomenon. It allows understanding of the issues under study by quantification of responses. The study employed a quantitative approach because as Dawadi et al., (2021) also assert that it enables the researcher to gather data from a large number of participants in a short time and that the approach is less costly to a study like this which has no external funding.

3.2 Research Design

The study employed a positivism research paradigm which allowed use of quantitative design. Positivism research paradigm states that knowledge is revealed from a neutral and measurable (quantifiable) observation of activity, action or reaction with support of statistical data (Creswell, 2014). This paradigm underpinned empirical knowledge and favors quantitative methods. However, this paradigm seeks on measurable realities which ignores qualitative interpretation. In addition, the study employed a descriptive quantitative research design, a method that seeks to describe the current status of an identified variable (Dawadi, et al., 2021). With this design, research projects are designed to provide systematic information about a phenomenon. The researcher does not usually begin with a hypothesis but develops one after collecting data (Dawadi et al., 2021). In this context, the analysis, and synthesis of data provide the test of the hypothesis. Furthermore, Dawadi et al., (2021) also affirm that researchers use quantitative designs to observe situations or events that affect people. The rationale behind the employment of a quantitative design in this study is that it helped the researcher produce objective data that was communicated through statistics. This systematic and objective manner of data presentation also allowed room for someone else to replicate the study. The survey method was used to capture quantitative data which informed the study.

3.3 Study Area

The study was carried out in the Central Division, Mukono Municipality, central Uganda, where participants were drawn. The reason behind this area is that it is characterized by informal settlements of low, and middle-income,

earners, whose lifestyles provide a fertile platform for spreading diseases such as COVID-19. Mukono district was among the districts dominated with victims charged with non-compliance to the health communication during Covid-19 which make the findings transferable and reflection in other areas in Uganda. This supported generalization of the findings in the study.

In addition, Mukono district area is ideal for this study because of its proximity to Uganda's capital, Kampala an area where the highest number of COVID-19 infections were reported, and an area where many people from the surrounding areas descend every morning to make out a living. Such an area makes the inhabitants vulnerable to the causes of COVID-19.

3.4 Target Population

A target population refers to all members who meet the set criteria for a research study (Alvi, 2016). It can either homogenous or heterogeneous. A homogenous population is one where all individual members of the population (elements) have similar aspects while a heterogeneous population is where members have different aspects. These can be aspects such as age, gender, employment status, and ethnicity among others.

Therefore, the target population for this study were all the people aged between 18 to 65 years living in Central Division, Mukono Municipality. For one to qualify for selection in this study, he or she must have lived in Centra Divisio, Mukono Municiplaity at the time when the first case of COVID-19 was declared in Uganda. The researcher was of the view that this time is long enough for at least every one to have come across information communication messages about COVID-

19. According to the Uganda Bureau of Statistics 2023 report, Mukono has a total population of approximately 701,400 people, and out of this Central division has over 2 million people, most living in an informal setting and vulnerable to contagious diseases like COVID-19.

3.5 Sample Size Determination

According to Onwuegbuzie and Collins (2007), the size of a sample was guided by the objective of the research, the research questions and the research design. The sample size for this study was determined by following minimum sample size recommendations by Creswell (1998), Morse (1994), and Onwuegbuzie and Collins (2007). Creswell (1998) as quoted in Onwuegbuzie and Collins recommends a sample size of 10 or fewer participants for a phenomenological design. Similarly, Morse (1994) is quoted in the same text recommending a sample of six or more participants for a phenomenological design study. Onwuegbuzie and Collins (2007) recommend a minimum of 64 participants in a descriptive design study.

The sample size was determined using the infinite population sample size calculation method proposed by Cochran (1963) calculated as:

Sample size-infinite population

Sample size = $Z^2 \times P \times (1\text{-}P) \div 0.052$

$1.960^2 \times 0.5 \times (1\text{-}0.5) \div 0.052$

Sample size = 384.16

Z = Z-score-based on the confidence level

P =Population proportion

M = Margin of error

Based on the minimum sample size recommendations, the study used a sample size of 384 participants. The participants were selected from the central division. These included both women and men aged 18 to 65 and of sound mind. This sample size was informed by the minimum size recommendations of Onwuegbuzie and Collins (2007), Creswell (1998), and Morse (1994) explained above. This sample size fits the study as it is in line with the pragmatism paradigm where a researcher goes for techniques that he believes are most likely to work for that particular study. Additionally, the choice of sample size was guided by the objectives, research questions and research design of this study.

3.5.1 Sampling Method

Sampling refers to the process of selecting a portion to represent a whole. This study used probability sampling technique to come up with a quantitative sample. To effectively carry out a quantitative survey, the study used simple random sampling. Each of the five Local areas one village of Kauga, Butebe, Nabuti, Nasuuti and Wantone formed a stratum, and a random sample was picked from each. In random sampling, every member of the population had an equal chance of being selected as part of the sample (Teddlie & Yu, 2007). Participants were given equal opportunities to participate in this study.

3.6 Data Source

Primary data are important for all areas of research because they are accurate information about the results of an experiment or observation. Primary data from the field was obtained through interviewer-administered questionnaires

to selected respondents to get their opinions. Primary data helped the researcher in collecting information for the specific purposes of the study. The researcher collected the data herself with help of research assistants, using self-administered questionnaires.

3.6.1 Data Collection Method

In this study, data was obtained from 384 participants, both male and female aged between 18 to 65 years. The questionnaire survey method was used to collect data from all respondents who should have lived in the Central Division by the time the first case of COVID-19 was declared in Uganda. The researcher distributed questionnaires by hand and they were self-administered by the respondents. According to Mathers et al., (2009), questionnaires are less costly compared to other methods of data collection such as personal interviews. They are especially convenient when the participants were many and widely dispersed. Additionally, questionnaires make it easier to collect information such as age and education level which are important during analysis. In this study, the participants were dispersed across the Central Division.

Therefore, questionnaires were convenient for the study because Mathers et al., (2009) assert that hand-delivered questionnaires have a higher response rate than posted ones, the more reason why the researcher in this study hand-delivered questionnaires to participants. To ensure efficiency in data collection, the questionnaires used in this study were devised by the researcher as opposed to using those pre-existing online. The rationale behind this is based on the advice given by Mathers et al., (2009) who argued that researcher questionnaires can capture full information that answers the research questions. The mixed

structured questionnaire had open and close ended question to evaluate the effectiveness of health campaign.

The close ended questions with familiar options regarding Covid-19 health campaigns were used to gather data. The questions were set using known terms that were adopted during Covid-19 health communication campaigns. This made respondents to easily recall what happened during covid-19 health communication campaigns.

Data was collected based on the choices selected by the respondents from demographic factors followed by those set in line with objectives and research questions. The nominal and ordinal scales was used to measure the provided responses on the set questions which were in line with the research objectives of the study. The scale recommends 2-point, and 5-point scales as the least for categorical and continuous variables respectively. The responses measured the effectiveness of health campaign during Covid-19.

3.7 Data Analysis

SPSS software Version 25 was used to analyze data gathered through questionnaires. The SPSS is highly preferred when data is gathered using stratified random sampling from larger population. Data in this study is presented in tabular, graphical and numerical forms. Tables and graphs were used to summarize data. These included frequency distribution tables, pie charts and bar graphs. This being categorical data, numerical representation of data in form of percentages, a measure of central tendency.

3.8 Limitations

First and foremost, some respondents were not willing to provide information because of being suspicious of where the information was to be taken even though the researcher presented an introductory letter from the university.

Finally, the researcher is likely to be limited by funds needed to facilitate the research such as motivating the respondents, printing fees, and even daily transport to the organization to collect data. However, the researcher used self-initiatives and strategies to mobilize financial in advance for the study.

The study faced the recall challenge because Mathooko (2021) acknowledges that, evaluating health communication campaigns produces better results when the campaign is ongoing, or immediately after the campaign is done. This study captured data retrospectively and prospectively to track the events since it was conducted almost three years after the campaigns and the likelihood that some participants would have forgotten what transpired. This was solved by probing respondents with reflective questions to mitigate the likely effect on quality of data collected on the research problem.

3.9 Validity and Reliability

Validity and reliability in the current study ensured as explained in the following section.

3.9.1 Validity

Validity refers to the degree to which a concept is correctly measured in a study (Heale & Tycross, 2015). It has to do with ensuring that a study is believable and true and that the instrument evaluated what it was supposed to evaluate. A

measuring instrument measured the behavior or quality it is intended to measure. Hence, the researcher makes meaningful, useful, and appropriate aspects for them to be termed as valid.

The study used content validity. Content validity considers whether a study instrument adequately covers all it is supposed to cover about a variable (Heale & Tycross, 2015). Both face validity – a subjective measure of the extent to which the instrument measured what it is supposed to measure and sampling validity – the degree to which an instrument adequately samples the subject matter – were considered. Methodological errors such as errors in the selection of participants were identified and corrected. Content validity index (CVI) was ensured after pretesting the questionnaire using this formula = Relevant questions divided by total number of questions. The CVI coefficient on questions set was 0.95 which was the cut off of 0.75 recommended by Creswell (2014). The re-phasing of question was done and revised by the supervisor for cleanup and endorsement for data collection. The face validity was ensured following the feedback on questionnaires administered to three experts for a review during the pre-testing. The issues and areas of improvement were handled and corrected in final data collection tool. Both open and close ended questions were made simple and clearly with no ambiguous words or terminologies to ensure that they measure the actual intention on effectiveness of communication health campaign.

3.9.2 Reliability

Reliability refers to how precise the measuring instrument is. It refers to the extent to which an instrument produces the same result when in the same situation over and over again (Heale & Twycross, 2015). It confirmed the

consistency and replicability over time. Hence, a reliable study needs to be free of measurement errors, and in this study, quantitative data was in numeric form. For quantitative data, reliability was achieved by ensuring internal consistency which checks for the degree of homogeneity among items in an instrument. A pre-test was employed to test the reliability of questionnaires before actual data is collected. This helped the researcher to re-edit ambiguous questions.

3.10 Ethical Considerations

The study was conducted in a professional academic manner. Before embarking on fieldwork, the researcher received an introductory letter from the university to facilitate the research. The researcher sought verbal consent from the selected respondents before beginning the fieldwork of data collection. Additionally, the study does not expose the respondents to any harm, and the process of collecting and analyzing data observed high levels of integrity as well and participation by the respondents was voluntary devoid of coercion. If a respondent wished to withdraw from the study, he/she was at will to do so without any repercussions. Anonymity was observed where respondents had right to refuse participation in the study. Privacy was considered as well as referencing the scholars used to avoid plagiarism.

Chapter four
Presentation and interpretation of results

4.0 Introduction

This chapter provides an analysis and interpretation of data about the impact of COVID-19 health communication initiatives in Central Division, Mukono Municipality. The results are organized according to the study's objectives, which encompass assessing the population's exposure to campaign messages, comprehension of the content and the beneficial effects of the messages in improving attitudes toward preventive health practices. Descriptive statistics, including frequencies and percentages, are employed to present the data, with tables and charts enhancing clarity.

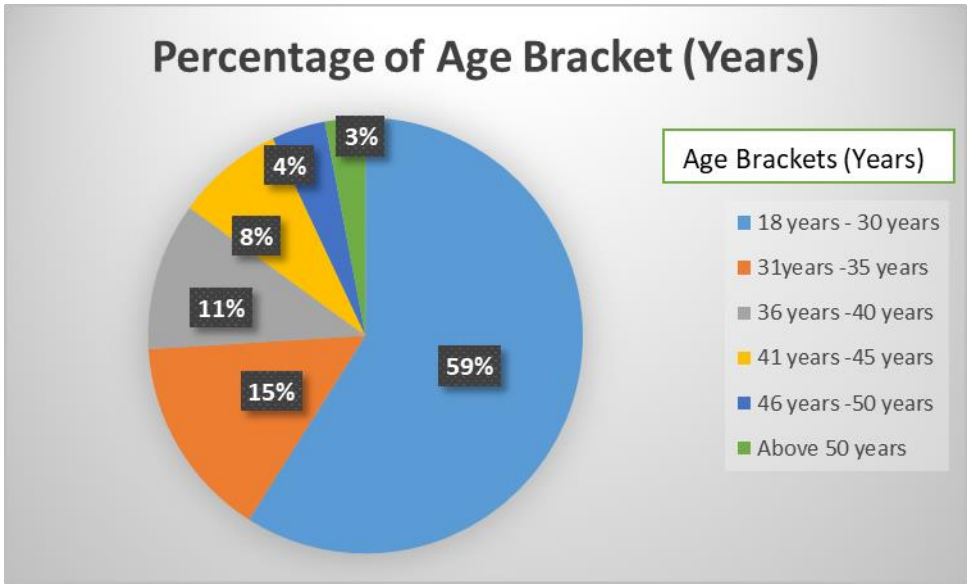
4.1 Demographics factors

This section gives an outline of the demographic information about the people who took part in the study. The demographics metrics like gender, age, level of education and employment informs the way people received, perceived, understand and react to health communication initiatives as indicated in figures below.

4.1.1 Age of Respondents

The age of respondents is grouped in range bracket; 18 years to 25 years, 31 years to 35 years, 36 years to 40 years, 41 years to 45 years, 46 years to 50 years and those above 50 years. Age distribution looks at how people of different ages reacted to the health campaigns, which could show differences in how messages are received and how powerful they are across generations. The reactions to health campaign vary per age bracket due to fear, body immune and diffusion to

technology where media circulates content for Covid-19 to people. The age distribution is set out below.



Source: Primary Data (2020)

Figure 4.1: Age Distribution of Respondents

Figure 4.1 reveals that significant majority of respondents (59%) were aged 18 to 25, signifying that a considerable component of the sample is classified as youth. The 31-35 age group comprises 15% of the respondents, while the 36-40 age group constitutes 11%. The percentage of responders in the older age categories progressively diminishes, with 8% aged 41-45, 4% aged 46-50, and merely 3% aged over 50. This distribution indicates a younger sample, potentially affecting the reception and interpretation of health communication messages, as younger persons may possess distinct media consumption habits relative to older age groups. The uptake to immunization Covid-19 services and maternal health care services depend on age bracket. The adults above 26 years at 35% were immunized due to threats from employment opportunities and travel where vaccination card temporarily become a requirement compared to the youth below 25 years

represented by 5%. The age distribution defines the immune and life expectancy of people which informs the perception and understanding of content in the Covid-19 health campaigns.

Technology adoption and enforcement dominated health campaign which were associated with quarantine and death where key determinant on how people with different age group perceived and complied to the Covid-19 health messages. The threats to death dominated the contents for Covid-19 which was audio visual and audio circulated health message that were perceived and interpreted based on the; source or media used, age bracket of the bearer and receiver of the health message. The different age group discusses health messages differently with attention to the sources of information and expected health outcomes.

4.1.2 Education

The education level determines risk perception, perceived effectiveness, trust and preventive behaviour in the onset of the COVID-19 pandemic in Uganda. Education levels show how different levels of formal education affected how the interviewees understood and interpreted the health messages. The education distribution informs the decision taken by people on the health campaigns. The accessibility to circulated Covid-19 health messages and adherence to preventive behaviour differ by educational status as set out below.

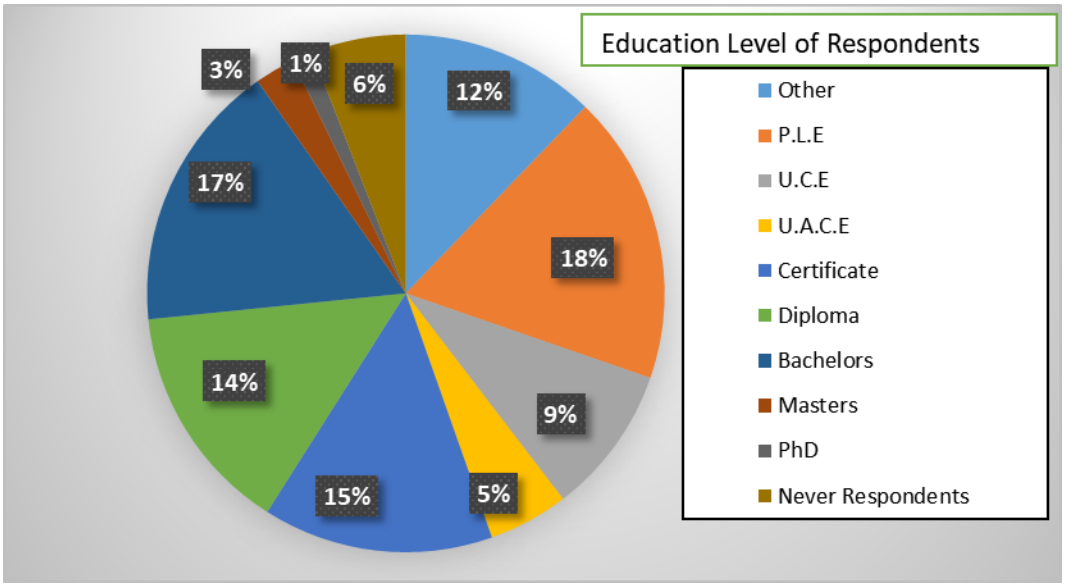


Figure 4.2: Education Level of Respondents

The responders exhibit a variety of educational backgrounds. The predominant category, at 18%, consists of those who have completed the Primary Leaving Examination (PLE). Individuals possessing a Bachelor's degree constitute 17%, and those holding a diploma or certificate each comprise 14%. A lesser percentage of respondents have attained the Uganda Certificate of Education (UCE) (10%) and the Uganda Advanced Certificate of Education (UACE) (5%). Minority possessed postgraduate qualifications, with 3% holding a Master's degree and 1% possessing a PhD. Furthermore, 12% were classified as "Other," while 6% of the respondents abstained from answering the education question. In the case of COVID-19, health communication campaigns promote healthy behaviors and decisions in an understandable, and relatable manner largely rely on age of people.

This level of education distribution indicates significant variability in educational attainment, potentially affecting respondents' comprehension and compliance with health communication initiatives. The successful containment of

the pandemic by appropriate preventive behaviours depends perception driven by level of education. The level at which public Covid-19 health measures is conceptualization depends on risk perception, perceived effectiveness of interventions and trust towards individuals and institutions handling the pandemic. The level of education determined the way people accessed and evaluated the pandemic health messages in relation to sources in terms of media and who initiated it whether Ministry of Health, World Health Organisation, Covid-19 task force or Presidential (The President of Republic of Uganda) directives among others which are level of education. The local authorities at district, municipality and village spear headed the validation of the circulated health content with support of enforcement.

4.1.3 Employment

The respondents' employment status was established in terms of formal, self-employed and unemployed. It is looked at whether professional or social status played a part in accessibility to health messages and adoption to preventive practices by looking at employment status. The results are set out below.

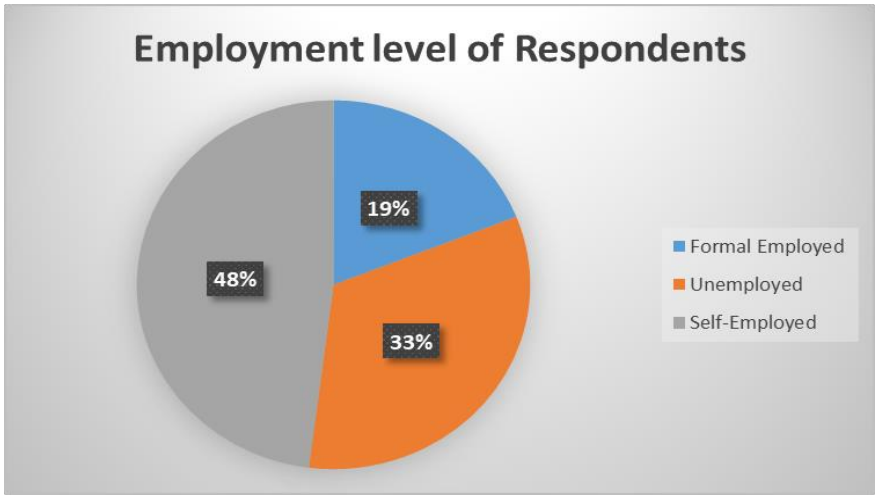


Figure 4.3: Employment Level of Respondents

Concerning employment, about 48% of respondents were self-employed, indicating a significant degree of entrepreneurial engagement within the sample. A notable percentage, 33%, were unemployed, potentially indicating economic difficulties or youth unemployment in the region. Formal employment constituted the least prevalent group, with just 19% of respondents reporting formal employment. The elevated levels of self-employment and unemployment may be pertinent when evaluating the economic obstacles to health behavior modification and access to health-related information.

The employment records were stated based on what respondents currently status quo since there was limited scope of work allowed during Covid-19 due to lock down. People in the health, enforcement specifically police and army, classified-team who worked half a day dominated by staff retrenchment as technology usage close the gap to comply with social distance health campaign. The unemployed people are quite many represented 106 people, thus encountered limitations to access the health information circulated on social media (WhatsApp, TikToK), radio and television. The community's knowledge, attitudes, and perception behavior about the health challenge justifies the way people respond to the health campaign. The threats associated with the Covid-19, forced people to forcefully listen and comply to all forms of the health campaign within their means that are determined by the demographic composition. This informs the status of communication flow in Uganda.

4.1.4 Gender

The respondents were asked to state their gender categorized in form of male or female. Gender distribution helps figure out if there were significant

variations in how the health messages were received and how people changed their behavior between male and female respondents. The perception to health communication campaign during Covid-19 was unique and dominated with enforcement. The results on gender distribution are set out below.

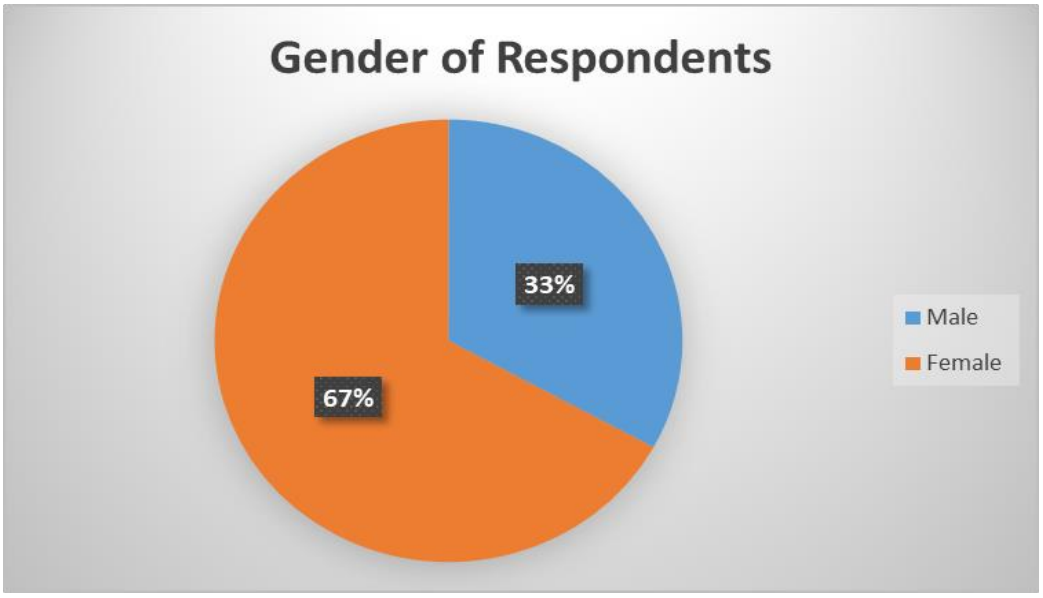


Figure 4.4: Gender of Respondents

The sample was primarily female, with women comprising 66.9% of the respondents, and men accounted for only 33.1%. The increased representation of females may impact the findings, as gender disparities frequently influence health communication receipt, the adoption of preventative behaviors, and overall health-seeking behaviors. Female and male participation was vital in sharing their Covid-19 health communication campaign experience dominated by social media specifically WhatsApp. The infusion to technology dominate the spread of information to people during the pandemic health campaign.

The conceptualization of shared health information and conversation varies between female and male although it became universal during Covid-19. The Covid-19 health information was widely spread on social media, radio and

television supported with the enforcement bundled with fear, threats and canning to educate people to stay at home. Movement was limited as people were forced to stay at home "dominated with quarantine or making people not to leave their home district or where Covid-19 found them". The media specifically those with license stickers to work during lockdown period was at the center of the communication with support of Covid-19 task force at district.

4.2 Forms of communication campaigns during the COVID-19 pandemic.

Communication campaigns during the covid-19 were circulated in English, Luganda, Kiswahili on media. The health communication campaigns depend on the reaction of people on the preventive measures during covid-19. In addition, the spread of the covid-19 pandemic paved way for MoH to invite an additional health campaign which were benchmarked from what was adjudicated by the WHO. The communication campaigns during covid-19 include.

Keep a distance "Tonsemberera Campaign" was the key health communication campaign used during covid-19. The campaign intended to harmonize government communication efforts in response to the pandemic, raise awareness and popularize simple actionable behaviors (MoH, 2021). It invites citizens, leaders, and popular influencers to share stories through social and mass media about how they are protecting themselves and others. The MoH endeavored to share accurate information about the disease and the government's recommendations for prevention and treatment. People were encouraged to keep a distance of about 2 metres from a victim of cough or sneezing.

The national task force was formed with subcommittee to manage the official national campaign for the Uganda COVID-19 response (MoH, 2021). The

national task force commanded the circulation health information and distribution of masks and food relief to the people during covid-19. Local sensitization sub-committees translate the information into local language for the people. The emergency response framework was circulated by task force which coordinated activities like evaluation of victims from community with ambulance, licensing of the sectors as per president directives to remain operation for public health emergencies.

The enforcement by Uganda Police Force (UPF), Uganda People Defense Forces (UPDF) and Local Defense Unit (LDU) soldiers supported the sensitization of health campaigns to implement coronavirus lockdown regulations (MoH, 2022). The enforcement was full of canning (due to failure to observe movement time as provide by the presents, monitoring of the vehicles and motor cycles), firing of live bullets to civilians and giving other harsh punishment were non-complaint to the preventive measures of Covid-19. The quarantine was per district and itself was a covid-19 health communication campaign by action. The actions dominated the covid-19 health communication campaigns in Uganda.

Wearing of masks, use of sanitizes and reporting of suspected person with the covid-19 educate people on what they are supposed to do during the covid-19. The wearing of masks was demonstrated by the president and official from MoH to people. The masks were distributed although they were not enough for people. This opened up a market for marking them locally and wear whenever intend to move and mixed up with the other public members.

Vaccination was initially offered at static sites but to increase uptake, the Ministry of Health (MoH) shifted its strategy to Accelerated Mass Vaccination

Campaigns (AMVC). In AMVC, the Ugandan, Ministry of Health increased the number of vaccination points and expanded vaccination access through the establishment of outreaches in communities and at churches, taxi parks, markets among other places. The vaccination campaign which as accompanied with vaccination card, strong warning to block un vaccinated people from travelling abroad and accessibility to public services including transport means like tax and buses in Uganda.

4.3 Communication campaigns regarding covid-19 exposure

The research question one was about extent to which *people were exposed to COVID-19 communication messages?* The communication campaign undertakes the effectiveness of the messages within a campaign, which was reflected through engagement of people to evaluate the health messages circulated during the Covid-19. People reactions on communication campaigns during covid-19 exposure were uniform but the reaction varies among the people. The results are presented in sub-headings below.

4.3.1 Familiarity with COVID-19 preventive behaviors

This was answered by the question about how familiar are you with COVID-19 preventive behaviors such as wearing a facemask, washing hands, sanitizing, and distancing social distancing? The familiarity with COVID-19 prevention behaviour guides on individual reaction, compliance to requirements provided in the health communication, results are set out in figure below.

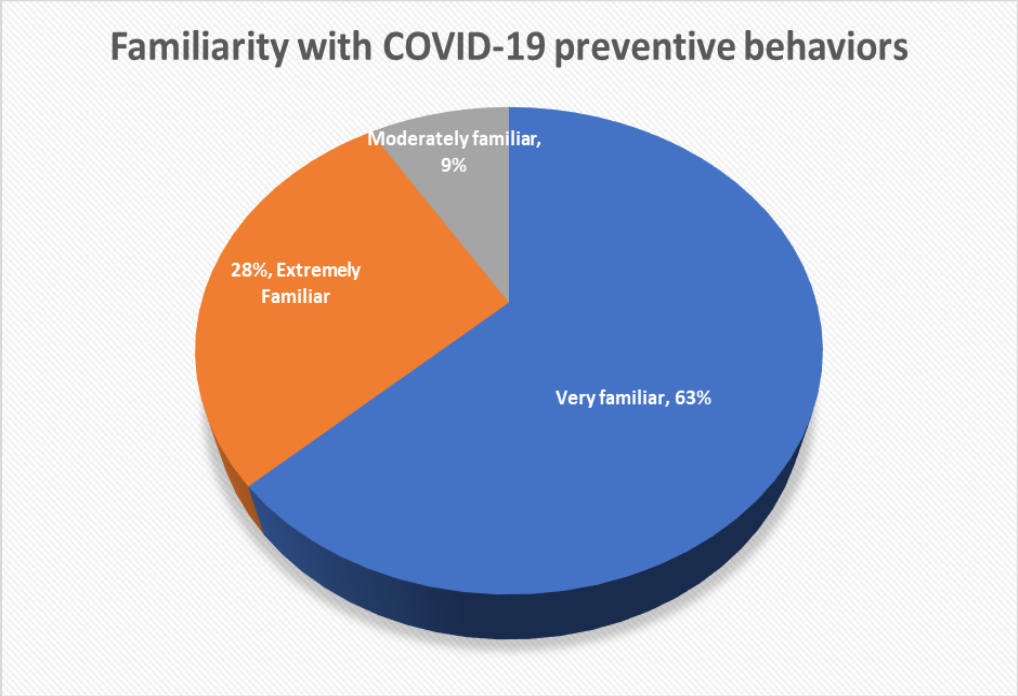


Figure 4.5: Familiarity with COVID-19 preventive behaviour

The results show that most of the survey participants were knowledgeable about the preventive actions for COVID-19. In detail, 63% of the respondents said they were very familiar with these measures, and 28% of the respondents were extremely familiar, indicating a strong awareness among the majority of respondents. A small 8% of the respondents were only moderately familiar, which suggests that a small portion of the group had limited knowledge. In general, the high level of familiarity among respondents highlights the success of informational campaigns, with only a small number lacking a deep understanding. The measures wash hands and social distance were simple to understand and related to hygiene known by people. The familiarity with measures made the content useful to the recipient in the community fostering the positive attitude towards the compliance to their implementation. The enforcement was key measure to force people implement the prevent measures of covid-19 without understanding them in Uganda. The symptomatic messages were drafted based on what Ministry of Health

(MoH) has discovered and suggest for implementation to prevent the spread of deadly virus.

4.3.2 Awareness of campaigns

The question about peoples' responses on whether they know of any campaign that rallied people to practice COVID-19 preventive behavior? The Covid-19 was a unique pandemic with awareness campaign where respondents attached their selection as indicated below.

Figure 4.6: Awareness of Campaigns

The results indicate that all survey participants (100%) were familiar with the COVID-19 prevention campaigns, demonstrating widespread awareness. None of the participants reported being unaware of the campaigns, indicating that the messages effectively reached everyone in the sample. This extensive recognition highlights the vast reach and visibility of the campaign messages. The massive health campaign initiatives over the radio, television, village, Covid-task force and president intervention to address the country on the status of lockdown foster awareness to people. The written and verbal tools, and, the creation of communication campaigns with comprehensible and relevant messages informed the people on the Covid-19. The Social media like Facebook, twitter, YouTube, Instagram, snapchat and WhatsApp are major source for spreading information to

people although creates more panic and spreading misinformation or fake news which constrain the conceptualization of the content.

4.3.3 Trust in Sources

The question was about whether people trust the sources of information about COVID-19 preventive measures? Trust of the source of information support conceptualization of the circulated content for the pandemic. The respondents selected options are set of below.

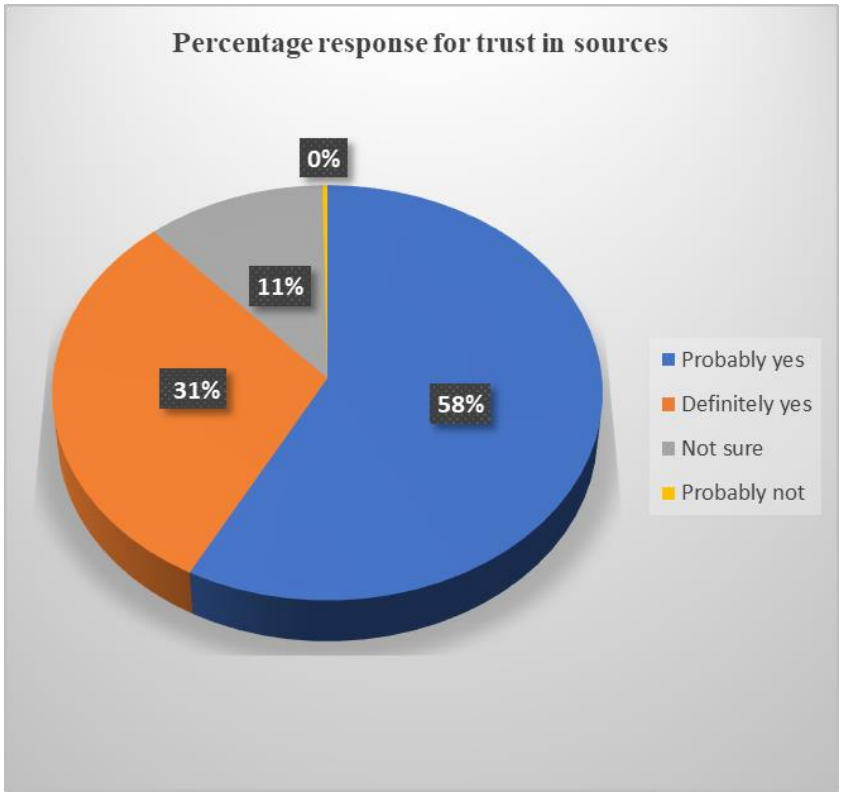


Figure 4.7: Trust on source of information

The findings show that most of the participants had some form of trust in the sources of information about COVID-19. A majority, or 58% of the respondents, said they "probably" trust these sources, though this response suggests some doubt. Another 31% of the respondents expressed clear trust, indicating strong belief in the provided information. In the meantime, 11% of the respondents were

indecisive, showing some skepticism or uncertainty about the sources. Only 0% of the respondents reported a lack of trust, indicating that outright distrust in these sources was rare among the participants. People trusted the source of Covid-19 health messages since they originated from the WHO, MoH and President state of national address in Uganda.

The health campaigns were led by the President of Uganda who gave continuous update on the lock down and status of the Covid-19, the media translated the information into manageable content to meet the need of the audience. The long conversation or speech from head of state was broken down into key points desired to sensitize people on the health prevent measures of covid-19. The communication campaigns posed a substantial impact on health behavior of people in Uganda.

4.3.4 Frequency of Messages

The question was on how frequent did people get the COVID-19 campaign messages? The frequency of COVID-19 messages alert to people on pandemic is indicated below.

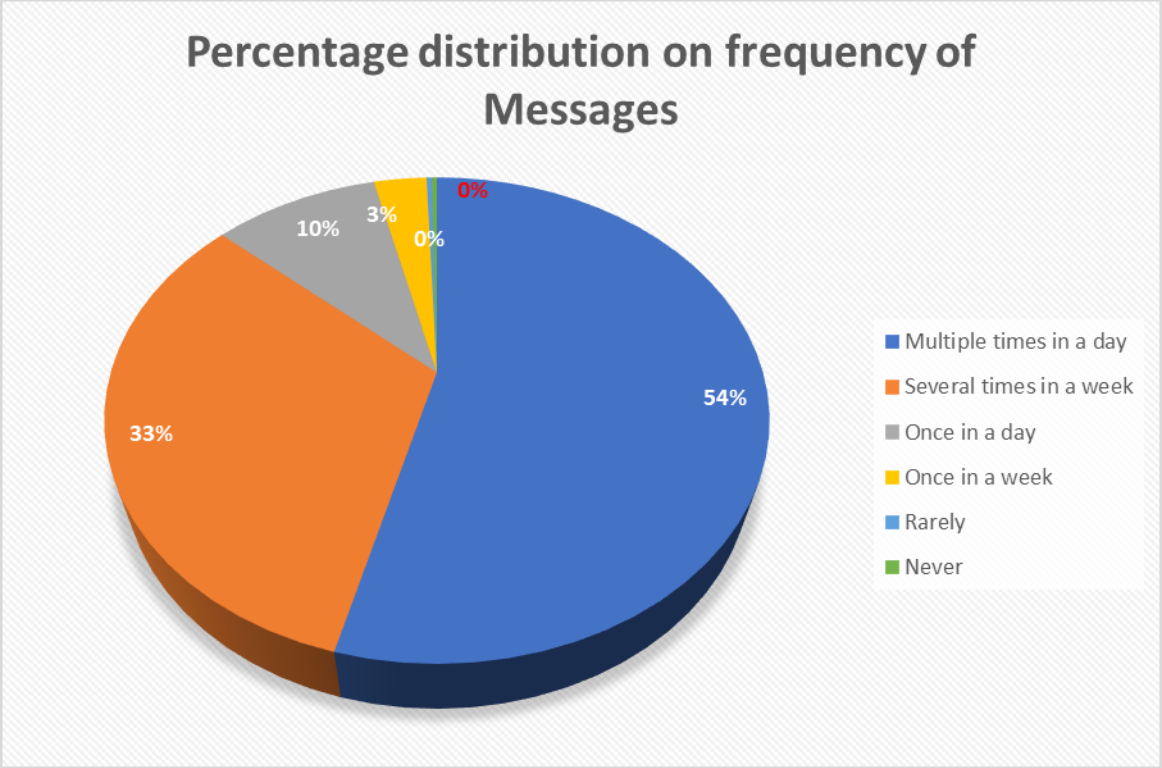


Figure 4.8: Frequency of Messages

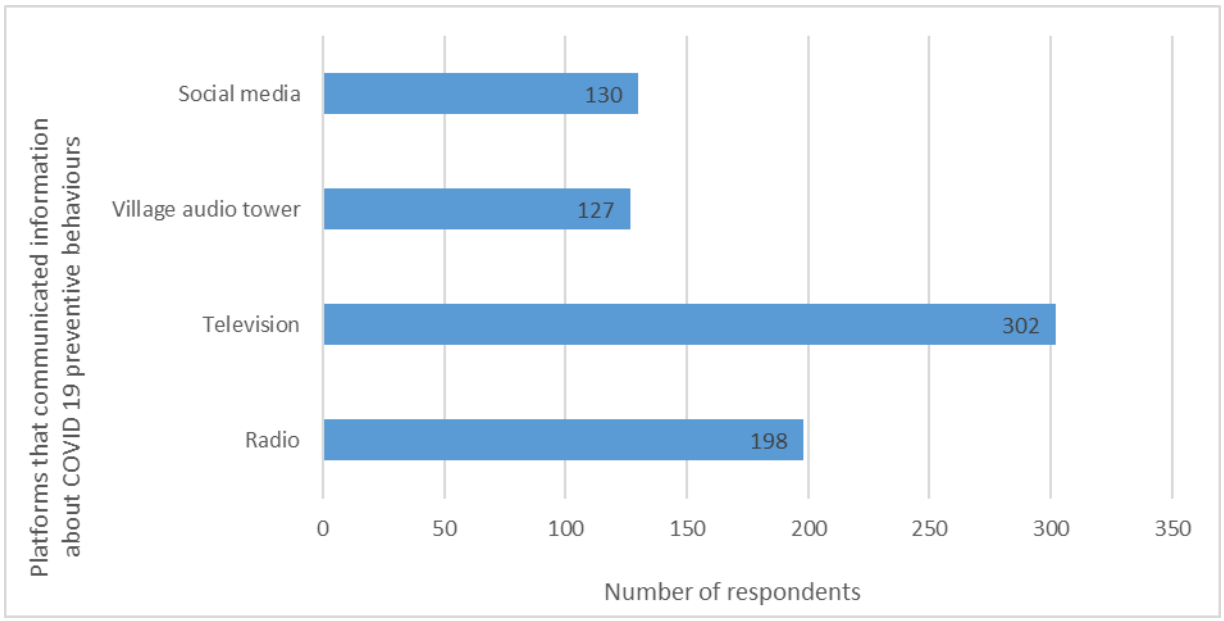
Throughout the day, 54% of the respondents reported receiving COVID-19 messages more than once daily, showing a significant level of exposure to information. Conversely, 33% of the respondents received messages several times a week, demonstrating regular but less frequent exposure. Additionally, 9.7% of the respondents received messages once a day, and 3% of the respondents reported receiving them once a week. Only a small percentage rarely (0.3%) or never (0.3%) received COVID-19 messages. People received health communication from different sources and platforms; WhatsApp, radio, television, friends, village leaders and family members which enrich them with what is required to prevent the spread of covid-19. In what communication, enforcement was vital to spread the message to the people about pandemic. The frequency access to message helped to combat the spread of the coronavirus was to get the message out to the

intended audience, the message to be marketed, and communicated through the use of the mass media to promote health behavior.

4.3.5 Platforms that communicated info about COVID 19 preventive behaviors

The question was about which platforms communicated information about COVID-19 preventive behavior? The results presented below shed light on how COVID-19 preventive measures were communicated to participants using different platforms. This analysis sought to determine the effectiveness and visibility of various communication channels in spreading important health information during the COVID-19 crisis.

Figure 1: Shows the level of reach that each platform has among the survey respondents



Source: Primary data

Figure 4.9: Number of people on communication media

According to the results, television was the most commonly utilized platform, chosen by 302 respondents as a source of information. This indicates

that television played a crucial role in COVID-19 health communication, likely due to its widespread availability and ability to reach various demographics. Radio also had a significant reach, with 198 respondents selecting it as a source, emphasizing its importance in areas where digital media may not be as accessible. Social media was identified by 130 respondents, demonstrating its effectiveness in reaching a digitally engaged audience, potentially younger or more urban. The village audio tower also emerged as a significant channel, with 127 respondents indicating it as a source, emphasizing the effectiveness of community-based communication in rural or remote areas, where local dissemination methods may be more impactful.

The television and social media become a platform to circulate the health content to educate people as well as correcting and refrain the people from posting anything on social media about COVID-19 that makes fun of, ridicules, or minimizes the situation. Public health personnel, teachers, religious and political leaders played key role to educate people on status of Covid-19 as pronounced by the president in directives on television and radio.

4.4 Comprehension and interpretations of covid-19 communication messages

The second research question was on *how did people understand the COVID-19 campaign message?* The way people understand Covid-19 information campaign informed people conceptualization of messages to foster implementation in the community.

The engaged respondents rated their responses on how they perceived and understand the content of the Covid-19 communication messages. The Covid-19 communication messages changed the nature of social interaction and information sharing among people in the society. The social distancing policies, lockdown

measures, and mandatory quarantines accelerated level of understanding and interpretation of communication messages with support of enforcement. The subsequent presentation on the how people understand the Covid-19 campaign messages is illustrated in sub-heading and figure below.

4.4.1 Clarity of communication messages

The question was; Were the messages about COVID-19 preventive behavior clear, and understandable in a language that you understand? The clarity of the information foster understandability of the content to support implementation.

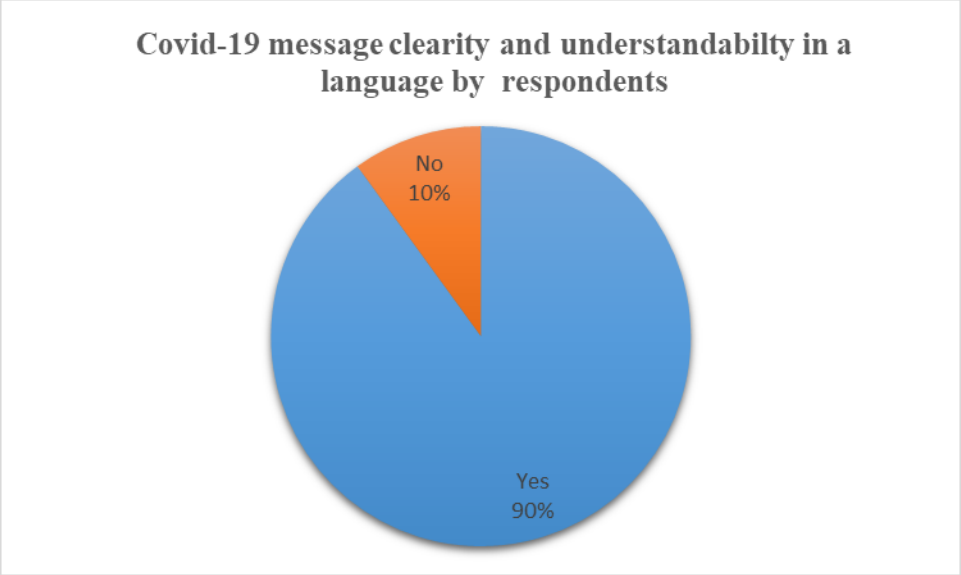


Figure 4.10: Covid-19 message clarity and understandability

The results from the survey showed that 90% of the respondents were able to understand the COVID-19 messages in a language that they felt comfortable with, indicating that the communication was effective for most people. However, 10% of the respondents had difficulty understanding the messages, pointing to an area that could be improved. The clarity of messages indicating some room for improvement in communication to ensure broader understanding among all

respondents. The health messages were translated into dominant local language in the area which made it clearly and perceivable to people.

The content embedded the key elements included, understanding the problem, the target audience, and the effectiveness of messages with support of enforcement to fostered clarity for compliance in the community. Local languages were used to accompany English to draw emphasis on the Covid-19 health messages to people. The media centers at regional level; Western, Northern, Eastern and Central embedded circulation of translated content messages to local content that educated people to implement the Standard Operating procedures. The effects of the pandemic were very disastrous beyond the death of millions, but also affected the social lives of people across the globe.

4.4.2 Preferred language in which the messages could have been received

The question was; which language do respondents have preferred to receive the message? The relevance of information content depends of dominant preferred languages by people which is a vital consideration desired for health promotes to support effective circulation of messages to target audience.

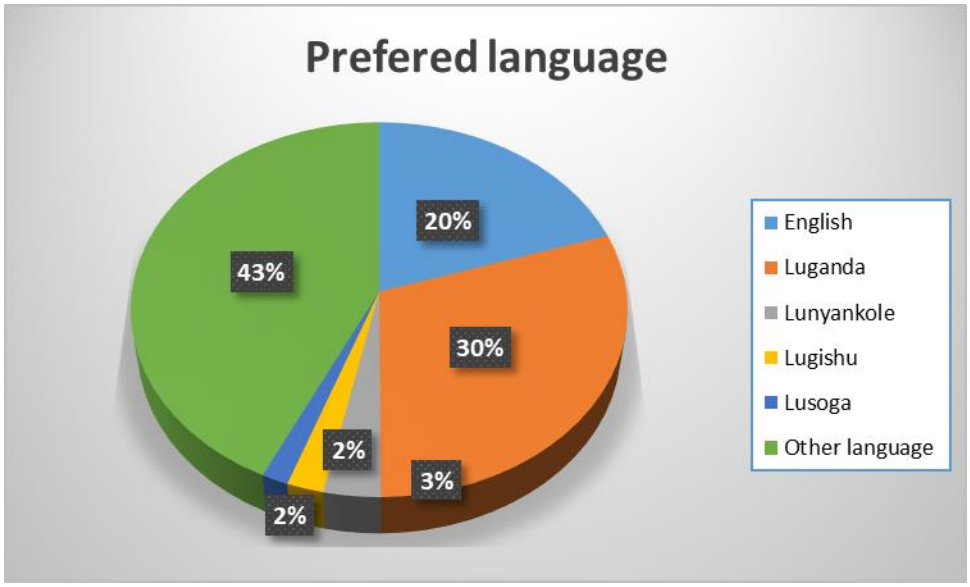


Figure 4.11: Preferred language for content messages

The results showed that people have different language preferences when it comes to receiving COVID-19 messages. Interestingly, 20% of respondents preferred to receive messages in English, while 30% favor Luganda and 43% preferred others. There are also smaller percentages of people who indicated a preference for regional languages such as Lunyankole (3%), Lugisu (2%), and Lusoga (2%). The respondents preferred other language which indicates lack of official language in Uganda. The oral communication in media include those from President were emphasized in Luganda and English which expressed the capacity of people to contextualize the content in mentioned language. The content health campaign messages were printed and published in English also communication was more in Luganda as the dominant language spoken by local people in Mukono district. However, it might be different is the question is asked to people with another dominant language. The language chosen add value on the relevance of content in the health communication campaign.

4.4.3 The kind of measures that were received from the communication campaigns

The question was; What kind of messages did you receive from the communication campaign? The kind of information content received determined the concentration and priority of which aspect did the MoH gave emphasis to educate people on prevention and implementation practices.

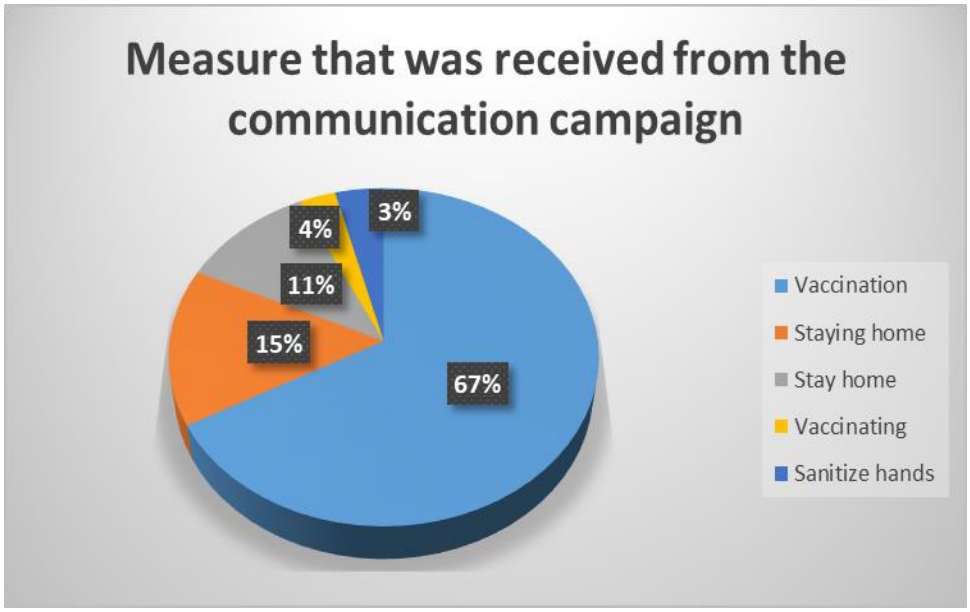


Figure 4.12: Measures that was received from the communication campaign

According to the data, the COVID-19 communication campaign primarily focused on vaccination, with 66.7% of respondents receiving information about it. Messages about staying home were also prominent, reaching a combined 25.9% of respondents. In contrast, only 3.7% of respondents reported receiving messages about hand sanitizing and other preventive behaviors, indicating that these topics were not given as much emphasis. Sanitation through sanitize, washing hands with soap and masking dominated the practice instead of vaccination. The vaccination become the center of health campaign during Covid-19. The promotion of anti-

vaccination discourse was an association between vaccine hesitancy and the promotion of misinformation and conspiracy to prevent the dangers of virus in case it is acquired by the person. The vaccination medicine/ Jabs includes Moderna. Spikevax, Pfizer/BioNTech. Comirnaty, Janssen (Johnson & Johnson) Jcovden, Oxford/AstraZeneca. Vaxzevria. Sinovac. CoronaVac among other were administered and receipient of the jabs received certificates. Women at 65% dominated the vaccination than men based on the statistics by MoH (2021).

4.4.4 The tone in which the COVID-19 preventive messages were received

The respondents were asked about the tone of the COVID-19 preventive messages received? The tone to which people received the COVID-19 content foster conceptualization and implementation of provided guidelines in health information campaign.

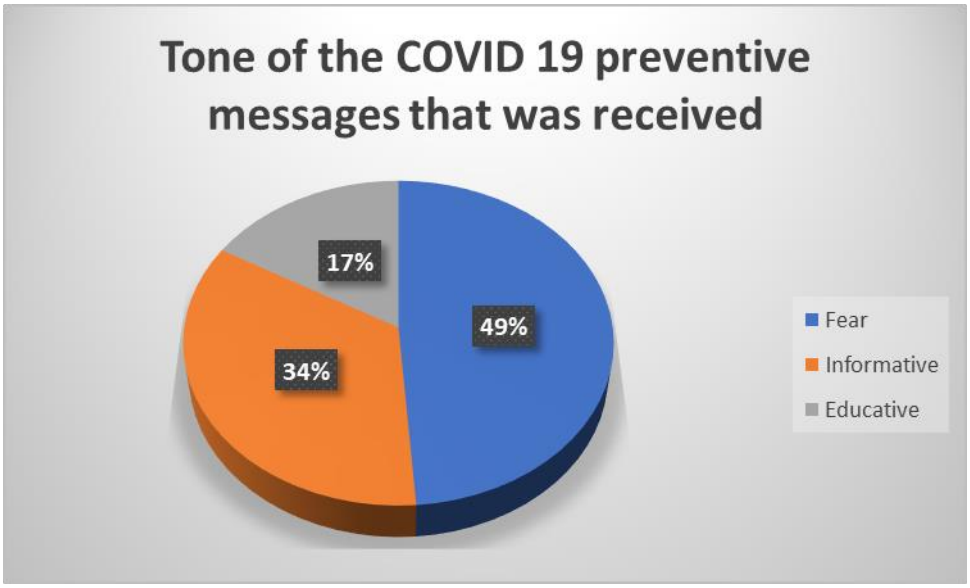


Figure 4.123: Tone of Covid-19 preventive messages

The results indicated that, nearly half of the survey participants (49%) felt that the COVID-19 prevention messages were meant to invoke fear, while 34% considered them to be informative and 16% saw them as educational. The content

of covid-19 health communication campaign was dominated with fear supplemented with the enforcement. The content was full of death cases that increased rates of fear and pressures on national hospital capacity, lockdowns in the mandated citizens to remain within their homes except to collect essential goods, receive clinical care, or travel to an essential workplace with permit. The increases in death rate and number of infections created fear which educated people on the danger of the pandemic in Uganda.

In addition, tone on COVID-19, people where asked about the kind of message receive from the health information campaign. The kind of messages received to support the tone of Covid-19 is set out in Table

Table 4.1: Kind of messages receive from the communication campaign

Message received	No.	(%)
Mask Wearing (MW)	5	1.6
Washing hands with soap (WS)	20	6.3
Social Distancing (SD)	10	3.1
Testing (T)	15	4.7
MW/WS	15	4.7
MW/WS/SD	205	64.1
MW/WS/SD/T	50	15.6
Total	320	100.0

The results indicated that 64.1% represented by 205 respondents received receive health message on Mask wearing (MW), washing hands with soap (WS) and Social distancing (SD) followed by 15.6% received information about mask wearing (MW), Washing hands with soap (WS), Social distancing (SD), Testing (T) and the

least ably received mask wearing only. The covid-19 health message circulated covered the concerned preventive measures which were implemented by people with support if enforcement. The emphasis on Covid-19 health messages was seriously campaigned by canning, lockdown and shooting people to death in Uganda. The content was spread among people with fear of punishment. The moralizing messages, which have traditionally been aimed at individual behaviours such as smoking, were also adapted for the COVID-19 context to promote the consequences of specific health risks. This messaging approach uses moralized persuasion, appealing to social values to influence social health norms perceived by the people during the health campaign initiative for Covid-19 pandemic.

4.5 Effectiveness of covid-19 communication campaigns in influencing attitudes

The third research question was; *How effective were the COVID-19 messages in changing people's attitudes*? The people attitude whether positive or negative depended on the COVID-19 messages circulated to inform them on health matters. The effectiveness of the Covid-19 communication campaigns depends on the nature of the people in terms of their perception and attitudes. The influence was either positive or negative based on the sources, prior awareness and how it has effected the family, known faced negative effect like death, enforcement force the effectiveness of the health campaigns during Covid-19.

The communication campaign successfully impacted the way people interpreted the message and viewed the seriousness of COVID-19. The public health messaging used during the pandemic drew on established health communication strategies, such as encouraging the public to engage in self-limiting

behaviour to manage the impact of the virus to prevent the spread. The responses are demonstrated in sub-headings and figures below.

4.5.1 Perception whether target audience feel that Covid-19 was serious

The question was about whether listening to communication campaign made target audience feel that the disease was more serious than they initially thought? The target audience responded different on how serious was the Covid-19 communication campaign and the responses are demonstrated below;

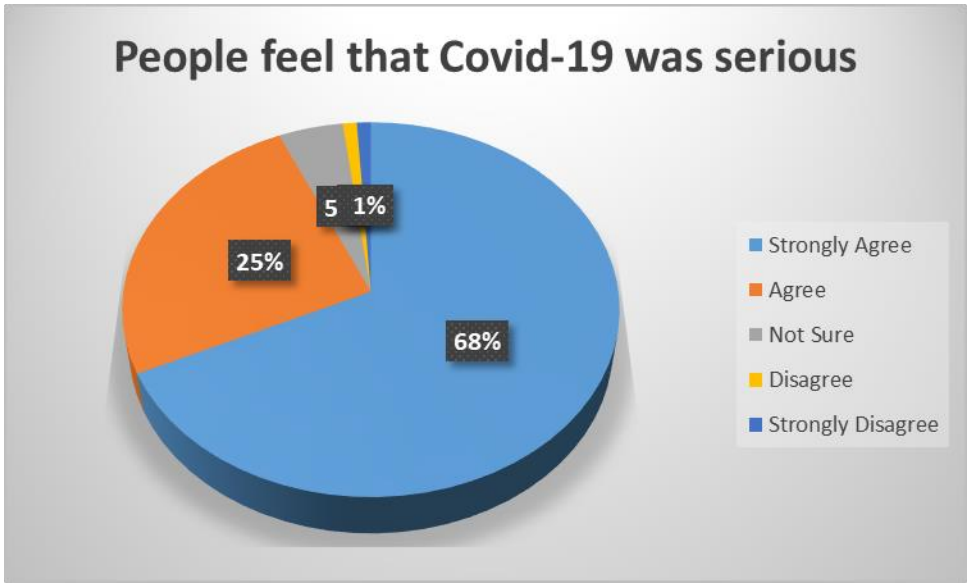


Figure 4.14: Perception on how serious was Covid-19 message

A majority of respondents, 68.1%, indicated that their perception of the disease changed from the campaign, while an additional 25.4% strongly agreed, making a total of 93.5% who perceived a higher level of seriousness. A small number, 5.6%, were unsure, and less than 1% disagreed (0.6% disagreed, and 0.3% strongly disagreed). The people became more alert about the effect of the pandemic which influence the compliance to the preventive measures in the community. The death statistics embedded in published Covid-19 content communication campaign messages made clearity on how dangerous is the

pandemic. This makes people to became aggressive to Covid-19 messages and took it seriously than how it was perceived before the communication campaign.

4.5.2 Does communication campaign made people feel like to catch COVID 19

The question was; Does communication campaign made people feel that they were more likely to catch COVID 19 than they initially thought? The response on how communication campaign messages changed people attitude to feel like to catch Covid-19 is set out below;

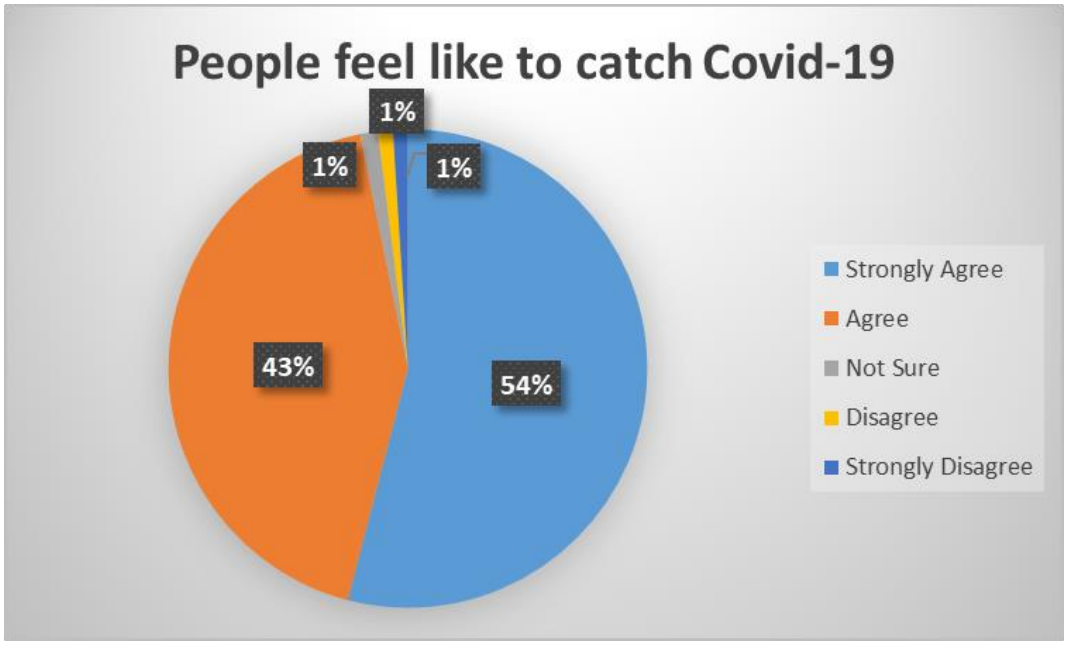


Figure 4.15: Perception of people to feel like to catch Covid-19

The figure indicates a significant 54% of the participants agreed that these conversations made them feel more at risk of contracting the virus than they originally thought, while an additional 44% strongly agreed. The health campaign was educative which make respondent feel more likely to catch COVID 19 than initially thought. The self-efficacy messaging' provides specific harm-reducing instructions for people affected by underlying health conditions, for people interacting with those who are 'at risk' or, in those cases of a global threatening

situation, for the general public. Furthermore, talking about the campaign content noticeably raised the survey participants' presentiment of personal risk related to COVID-19, thus fostered effectiveness of the messages.

4.5.3 Covid-19 preventive measures were more likely to work

The question was; Does what people heard about COVID 19 campaign made them feel that the preventive measures were more likely to work than they initially thought?

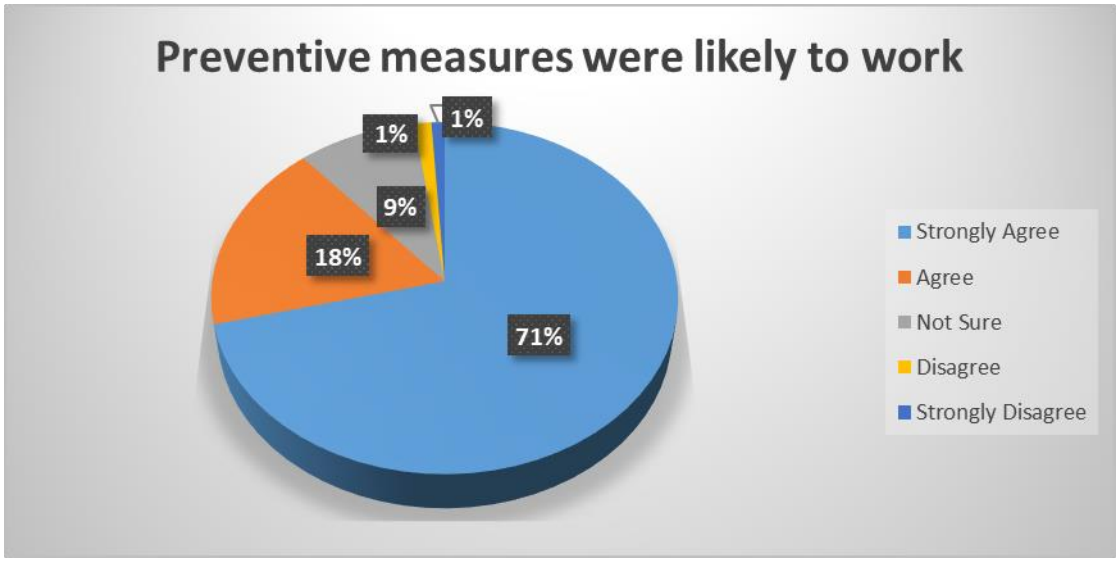


Figure 4.16: Preventive measures were likely to work

The results showed that conversations about the COVID-19 campaign had a positive impact on the confidence of respondents in the effectiveness of preventive measures. The respondents at 71% agreed that these conversations made them believe that preventive measures were more likely to work than they previously thought, with an additional 18% of the respondents who strongly agreed on preventive measures. The reduction in death rates communicated in the Covid-19 health campaign messages that indicated how the pandemic was managed within the community forced people to accept preventive measures.

4.5.4 Increased trust in government ability to deal with pandemic

The question was; Does discussion about COVID 19 increased people's trust in the government ability to deal with the pandemic? The trust in government ability to deal with Covid-19 was perceived within the health communication campaign as demonstrated below;

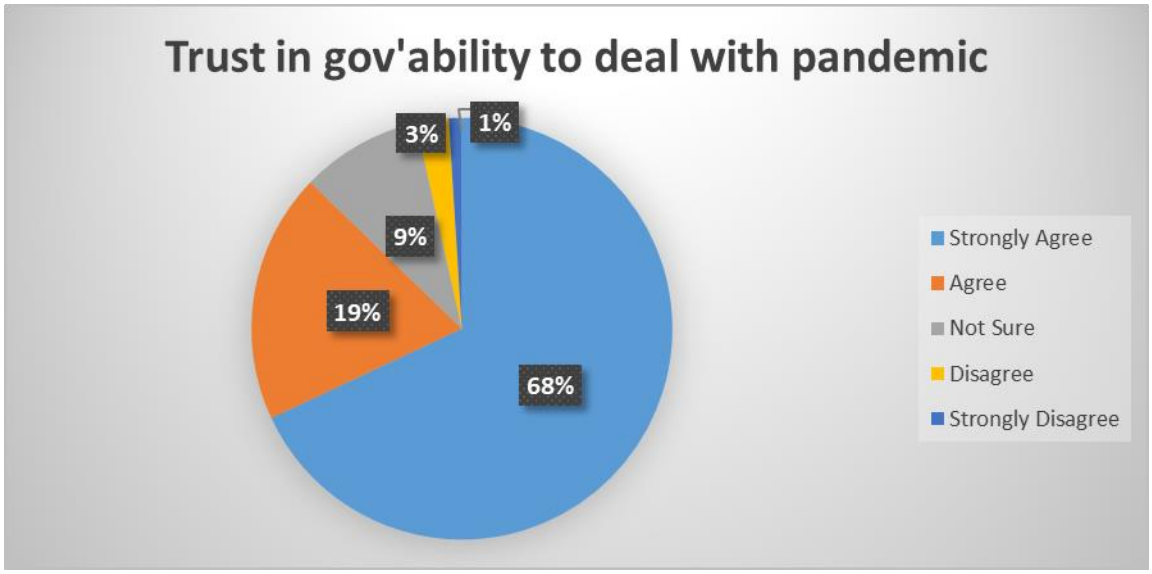


Figure 4.17: Trust in gov't ability to deal with Covid-19

The trust on government ability to deal with Covid-19 was agreed by 87% of participants (68% + 19%), the 9% were not sure, 3% disagreed and 1% strongly disagreed. The enforcement and free medication provided to patients who were discharged after recovery instill higher susceptibility level of trust of government to deal with COVID-19. This indicates that the campaign successfully increased awareness of individual vulnerability to COVID-19. The higher the susceptibility to the pandemic the high the reaction to implement the preventive measures. The health campaigns over media and peer were full of threats which conceive compliance to practice them. The negative health outcome of contacted people with covid-19 forced adherence to the guidance they health messages contained.

4.5.5 Ability to perform the COVID 19 preventive measures

The question was; What people heard about COVID 19 with others made them feel more confident about their ability to perform the COVID 19 preventive measures? The response on whether people developed more confidence about their ability to perform the preventive measures on Covid-19 is set out below;

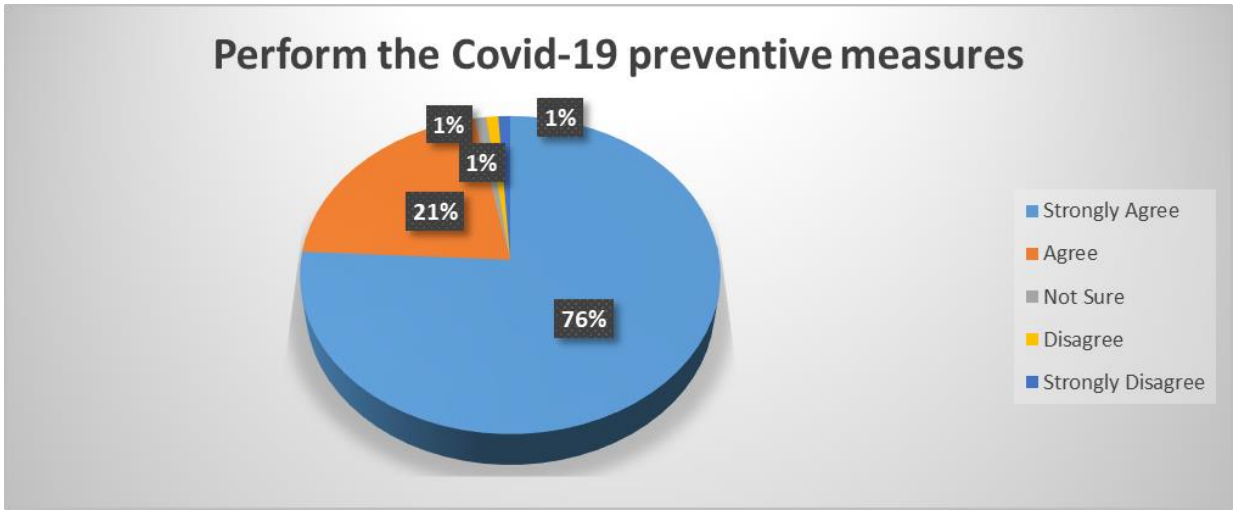


Figure 4.18: Perform Covid-19 preventive measures

The results indicated that 76% agreed to perform the Covid-19 preventive measures and 21% agreed but a small percentage of 1% disagreed and some at 1% were not sure. The communication campaign messaged encouraged people to practice the Covid-19 preventive measures. The exclusivity within the health content facilitate personal responsibility to ably perform the preventive measures to eliminate the associated higher risk of non-compliance.

The effective fear appeals emphasis of the severity of the threat; they include evidence to demonstrate audience vulnerability and provide simple actions to counter the threat by compliance to the preventive measures for covid-19. The enforcement following the guidance of President directives foster acceptance to

the content within health communication to perform the preventive measures for the pandemic.

4.5.1 Frequency use of Covid-19 preventive measures

The respondents were asked to respond on this question; Did you perform COVID-19 preventive behaviors such as wearing a facemask, washing hands, sanitizing, and maintaining social distancing before March 2022 when the mandatory wearing of facemasks was lifted? The frequency determines the effectiveness of Covid-19 health communication to prevent the pandemic in Uganda.

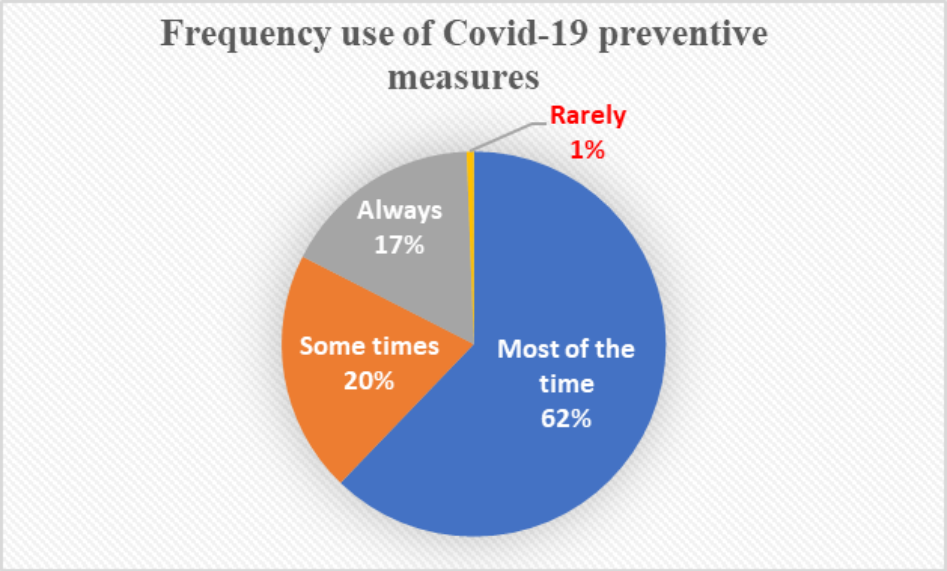


Figure 4.19: Frequency use of preventive measures

Most of the participants, about 62%, said they followed COVID-19 preventive measures "most of the time," showing a generally high level of adherence but not enough to be considered "always." A smaller group, 20%, reported following these measures "sometimes," indicating moderate adherence with some inconsistency. Meanwhile, 17% of the participants said they "always" followed COVID-19 preventive measures, showing a relatively high level of commitment and

consistency. Only 1% of the participants mentioned that they performed preventive measures "rarely," reflecting a very low rate of adherence among this small group. In general, most participants regularly followed COVID-19 preventive measures, with only a minority maintaining the highest level of consistency. The health and risk communication provide valuable insights into the factors that support more effective public health messaging that is, messaging that encourages audience compliance during the Covid-19.

4.5.3 Effects on the adoption of COVID 19 preventive actions

The question was; Were you influenced by the messages to practice COVID-19 preventive behavior in terms of following recommended health guidelines? The adoption to Covid-19 preventive actions depends on the circulated health information campaign.

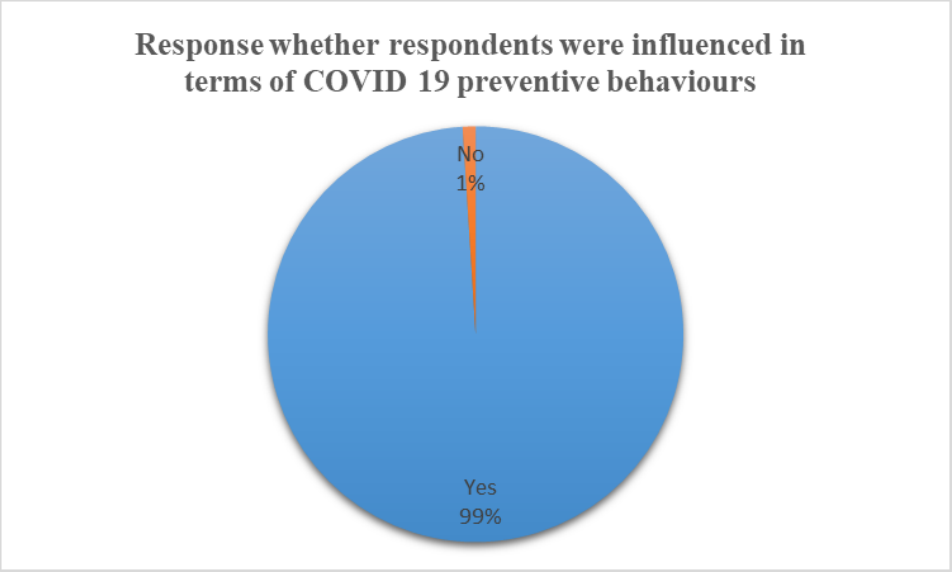


Figure 4.20: Covid-19 preventive behaviors

The findings revealed that almost all of the participants (99%) responded that they were impacted in terms of adhering to COVID-19 preventive measures. Only 1% of the respondents reported that they were not impacted. The health

content circulated during Covid-19 influenced the behaviour of people to prevent the spread of the virus. The testing message of the campaign emphasized the importance of self-isolation if one thought they had come into contact with COVID-19, this influenced the decision undertaken by the victims and peer in the community. The consistency in messaging often proved challenging during the COVID-19 pandemic as message writers needed to reflect new and emerging evidence about the virus on a continuous basis influence the behaviour of people in the community.

4.5.4 Other factors prompted respondents to begin adhering to COVID-19 preventive protocols other than communication efforts.

The question was; Are there other factors that influenced you to practice COVID-19 preventive behavior other than the communication campaigns? The other factors to support adherence to covid-19 preventive measures dominated by respondents are illustrated below.

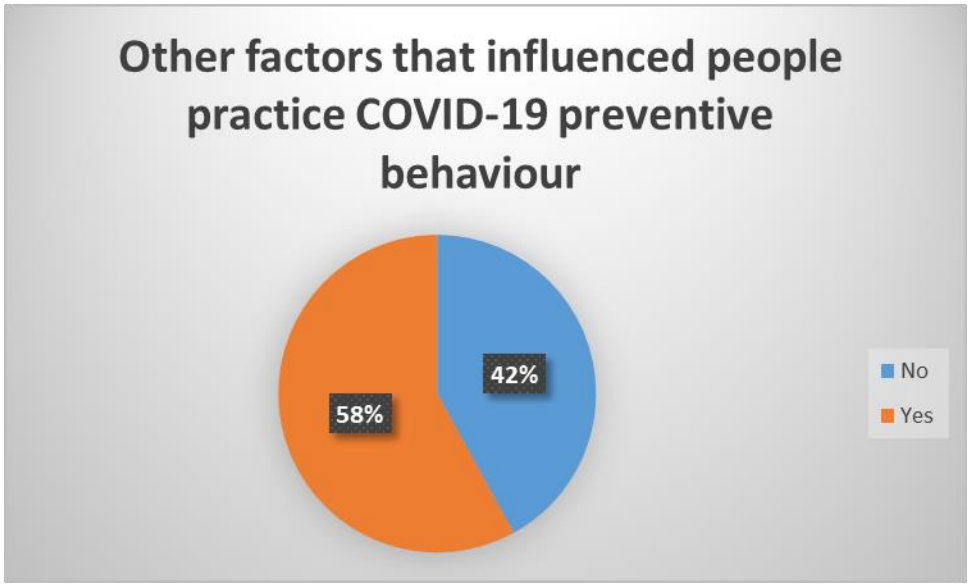


Figure 4. 21: Other factors that foster compliance of Covid-19 measures

The findings show that 58% of the participants recognized that fear of death and coercive measures by enforcement team were other factors than communication campaigns which played a role in motivating them to adopt COVID-19 preventive measures. In contrast, 42% of the participants stated that communication campaigns were the only influence on their behavior. The various factors to engage in COVID-19 preventive behaviors were further mentioned by the participants. The acute respiratory distress syndrome, when the body's organs do not get enough oxygen, shock caused by the infection or heart problems, overreaction of the immune system, called the inflammatory response, blood clots and kidney injury forced people to comply on the Covid- 19 preventive measures circulated in the media content. The other reasons mentioned by the participants encompassed the shutting down of schools and businesses, the anxiety of mortality, and being exposed to COVID-19 news from other nations. Additionally, they mentioned the impact of economic shutdowns, restrictions on gatherings, and the fear of costly medical care.

The unique burial arrangement and cost involved were majority of relatives and family were denied opportunity to attend the burial created threat which educated people to forcefully practice comply with the health campaign content of social distance and wearing mask and sanitizers which was enforced. The propaganda on role of safe distance equated decreasing risks of contracting the coronavirus.

Table 4.2: Reaction of people on Covid-19 Health Messages

Effectiveness of Covid-19 Health messages	No	(%)
Started washing hands regularly with soap (A)	6	1.9
I started wearing masks whenever I was out of home (B)	5	1.6
I took social distancing serious whenever I was out of home (C)	20	6.3
I went for COVID-19 testing (D)	15	4.7
AB	54	16.9
ABC	30	9.4
All (ABCD)	190	59.4
Total	320	100

Source: Primary data

The majority at 59.4% started; washing hands regularly with soap, wearing masks whenever I was out of home and social distancing serious whenever they were out of home after receiving the Covid-19 Health Messages. The Covid-19 health message was full of threaten content to death which accelerate people conceptualization to practice the Standard Operating Procedures to prevent the spread of virus. The transmission of viruses from one person to another can be significantly decreased by interventions of frequently washing hands during a pandemic. Thus, the message implied that hand washing was a preventive measure, but was effective attention to mask-wearing and social distance. The Covid Testing was least practiced due to the cost involved and fear to forced admission to hospital and treatment areas who were almost death units for the victims of virus. The few number represented by less than 15% of successful stories of survives scared people and make positive perception to health communication campaign. Covid-19 did not spare the rich or poor, it was only God, thus makes it a

unique health campaign compare to the known for other pandemics like HIV and cholera among other. The overcrowding reduced person-to-person infection of virus in community and statistics provided by the MoH guide the lifting of the lock down which was dangerous compared to Covid-19.

In addition, people were asked to state whether listening to the Covid-19 preventive behavior communication campaign made me feel the disease was more serious than I initially thought? The outcome of covid-19 communication campaign towards education people on the perception about the pandemic is set out below.

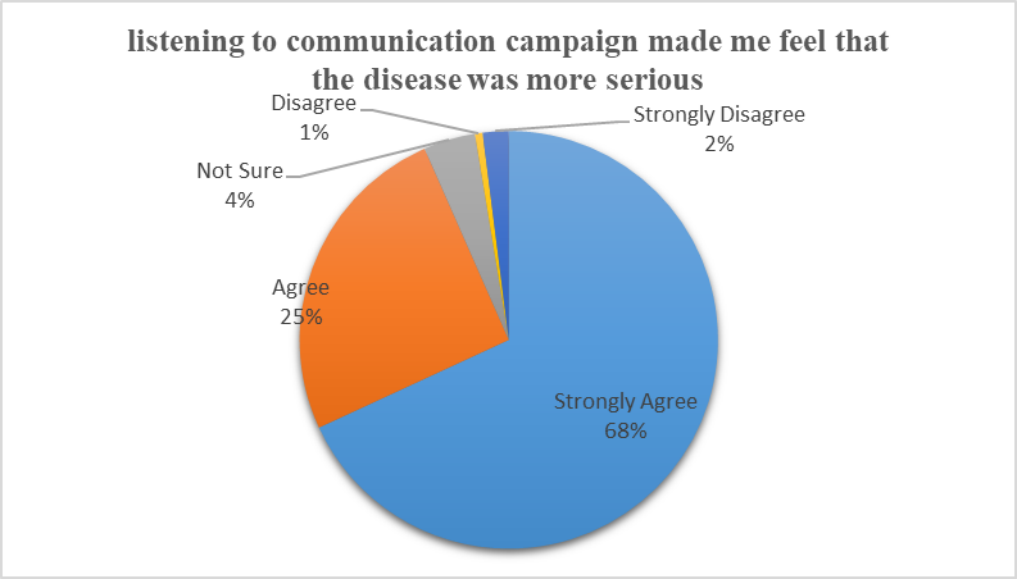


Figure 4.22: Communication change my perception of Covid-19

The results show that the majority of participants (93%) felt that the communication campaigns had a significant impact on their perception of the seriousness of COVID-19. Specifically, 68% agreed and 25% strongly agreed that the campaigns made them realize that the disease was more serious than they had originally thought. Only a very small percentage (0.6% disagreed and 0.4% strongly

disagreed), while 5.6% were unsure. The death of people where 85% of those admitted during the first lock down in 2020 and threatening messages circulated on radio, WhatsApp and television as well as lock down of the economy and enforcement forced people to understanding and implement the guidelines provided in the health message communication. The success of the pandemic health communication depends on the fear of death and prolonged lockdown of people at home. The songs and advised shared among people in the community made them to understand and react positive to the guidelines.

The little success realizes among admitted patients forced people to resort to home self-medication with use of local medication. Several treatment dosages were discovered to respond to outcry on prevention and medication of Covid-19 victims although no vaccine was innovated in Uganda.

4.6 Exposure to campaign messages by gender, age, employment and education level

The health communication was taken joking by the youth below 30 years although perceived as dangerous to adults above 30 years of age. The efforts to embrace health communication supported with enforcement during Covid-19 especially wearing mask and suppression of meetings/ other form of gathering including burial were control adopted control measures. The health communications were majorly at 80% over the radio, television and peer to peer conversation in the community. The reaction on gender composition about health campaign depends on the bread winner at home since the one who looked for the food at home simply sacrificed him or her-self to work with high exposure following the Standard Operation Procedures of Ministry of Health.

The wash the hands and use of sanitizer include waragi and other local spirits dominated the perceived control gadgets although the choice of what to use depends on the level of income but not the level of education. The high income earners and middle income earners were worried about the threats possessed by the Covid-19 messages and complied compared to the poor who lived on the hands out for survival. However, high educate people preferred manufactured sanitizers compare the local sanitizers which was Waragi. The Chief sensitizer of public during pandemic was the president directives and orders that guided the implementation of national and local preventive measures to circulate the health communication. Many people took Covid-19 health campaign serious after local down and death of people in the world. The fear and threat to loose life become the key content to circulate the message to the public using any form of media.

4.7 Strategies to improve future health communication campaigns related to public health issues

The respondents were asked to give any suggestion for improving future health communication campaigns related to COVID-19 or any other public health issues? The respondents stated that health task force need support from local leaders and religious leaders to disseminate messages effectively and increase trust to people. The voices for the messages has to cater for categories of ages and gender with emphasis on the health effects enhance the conceptualization and implementation. Experts have to create messages because many people died because of fear and threats which distract their confidence and belief to stay. The use of non-coercive measures like community engagement of prominent people and leaders instead of enforcement especially police and army to terrorize people is better approach to foster health campaign communication. The Uganda

Communication Commission have to control the content circulated on social media to delete the false or misguiding information towards the public.

The health content clarity is vital with exclusion of phases that develop fear to people on the victim with the pandemic. The messages have to create more hope than fear among the victim, through local public forums like radio, by village crier and different media platforms. Initial information from governments and health authorities about the unfolding Covid-19 crisis, personal risk and mandated protective measures was generally clear and consistent across the country to consensus-based policy and public health messaging foster developing trust and confidence in the content.

Enforcement especially flogging civilians with cans and circulating threatening message need to be excluded in the health campaign. The health communication campaigns, with the major objective of health communication aiming at improving health outcomes through the sharing of health-related information that is clear with local content foster circulation of meaningful communication.

4.8 Chapter summary

The health campaign during Covid-19 was the primary strategy to educate people on the preventive measures. The Covid - 19 prompted governments and health authorities worldwide to employ various health communication campaigns to circulate information, promote public understanding, and foster compliance with preventive measures. The non-violent means of communicating health campaigns with local content and simple words fostered compliance to preventive

measures. Shared information on health campaign is vital to educate people on prevention mechanism which enhance the life expectancy.

Chapter Five

Discussions of the Findings

5.1 Introduction

The chapter presents discussion, conclusions and recommendation on the Covid-19 health campaign interventions. Communication on COVID-19 preventive measures through diverse channels and methods help people understand the pandemic to follow up the standard operating procedures.

5.2 Discussions

The health communication campaign interventions on message content, preposition and acceptance by target audience are as set out.

5.2.1 Expose to health campaign messages

The people were ***familiar with Covid-19 preventive measures*** circulated on media which fostered conceptualization of the health campaign messages and implementation. The pandemic was new but the preventive measures specifically washing hands and social distance were known sanitation practices unlike wearing of mask, use of sanitizers and vaccination. The health campaign message was popular it aligns well with peoples' capacity to adopt and practices them. Much as people knew the relevance of washing hands and social distances, they were not practiced in the community. This was a second campaign message in Uganda which involved hand hygiene focusing on the significance of washing hands (Ajari et al., 2020). This is This finding agreed with the what was suggested earlier by Skjesol and Tritter (2020) in their study about Norwegian way: COVID-19 vaccination, sanitation policy and practice and established that vaccination of people is

effective whenever supplemented with high level of hygiene through washing hands and wearing masks to control the spread of Covid-19 pandemic. Besides, social distance as advocated by ministry of health, safe distance was also pronounced in the health messages as supported by CDC (2020), and Qureshi (2020) who stated that safe distance equated decreasing risks of contracting the coronavirus. This health information campaign reach out well to public "target audience" since some application were known and easily practiced with no added cost. High level of familiarity to content embedded in health campaign facilitate the conceptualization and acceptance of the prevent measures by target audience in the community as informed in the information processing theory.

The familiarity with pandemic preventive measures such as **s*ocial distance and wash the hands*** were common emphasized practices in health campaign of covid-19. This made the communication relevant and constructive to the public since social distance and wash the hands content were comprehended by target audience in Uganda and World at large. The Covid-19 health message comprehension by the target audience was positive reinforcement to its acceptance which is foundation of information processing theory. Covid-19 did not spare the younger and old but the negative effect was common to elder group of people above 70 years and those with chronic diseases such as cancer, heart disease, diabetes, sickle cell, alzheimer's disease, HIV among others. The high level of familiarity to Covid-19 prevent measures makes is trusted and adopted to the public. This is supported by Helsingen et al. (2020) in the study on COVID-19 pandemic in Norway and Sweden threats, trust, and impact on daily life: a comparative survey and discovered that wash hands and sanitizer make the covid-19 health message trusted which fostered change of peoples' attitudes to accept

the implementation of preventive measures, and perceived impact of the pandemic and implemented control measures on life in Norway and Sweden. The familiarity with messages was applauded as a key formative communication campaign to educate the public but treats of death and enforcement mechanism were vital opening remarks to attack people attention to perceive the Covid-19 preventive measures circulated in the media in Uganda.

The health information content related to ***isolation of victims*** led to mixed reaction among the partners at households. This was because of the fear to surrender their spouses to government isolated centers for quarantine to those who tested positive and self-medication with local herbals plus manufactured medicines or solely local medicine since majority at 90% of victim admitted in the health center died in the first Covid-19 lockdown. The fear was another educative practical message that was testified and circulated with evidence of people declared died in Uganda and across the world. The fear attached to isolation of victims attracted target audience attention and acceptance to the health campaign message which is a key phase in information processing theory. The health campaign on isolation was properly perceive and practiced by people based on those with signs; fever or chills, cough, shortness of breath or difficulty breathing, sore throat, congestion or runny nose, new loss of taste or smell, fatigue and muscle or body aches isolated themselves 'self-isolation' without testing at government gazetted testing centers or hospital. The testing message campaign emphasized the importance of self-isolation if one thought they had come into contact with COVID-19 (Ajari et al., 2020). The panic was a peak of the conceptualization of Covid-19 health messages as health virologists stated that one may have the virus, but be asymptomatic, or pre-symptomatic. The isolation

practices was prioritized among Covid-19 health campaign in China as indicated (Ding & Zhang, 2022), they stated that isolation prevent the spread of the global pandemic.

The *trust of information source* on health campaign about COVID-19 accelerated the conceptualization and implementation in the public. In Uganda, health communication was spearheaded by head of state "Present of Republic of Uganda". This forced people to attach full '100%' trust of the covid-19 health messages circulated on media. During Covid-19 period all form of the health campaign were connected to the president speech and circulated content by World Health Organisation. The trust embedded to health message depends on communication sources and communicator trustworthiness which supported comprehension and acceptance of the Covid-19 messages which is underpinned by the information processing theory. Health massages become accepted by target audience whenever originates from trusted communicator and source as informed in the phases of information processing theory. The finding concur with Neelam et al. (2020) in their study about United States' Response to COVID-19: A Case of the First Year and stated that President full involvement with advise from United States Department of Health and Human Services (HHS) to present reports on Covid-19 accelerated the trust in the health campaign messages. It was presented that "U.S. reports more than 28 million cases and 500,000 deaths, accounting for 25% of global cases and 20% of global deaths despite comprising only 4% of the world's population. Life expectancy in the U.S. shrank by a full year in 2020". The presentation of the report by the present and evidence based facts by the health units foster conceptualization and validation of the information provided in the health messages circulated in the media. The trust of health message was

enshrined to the United States Department of Health and Human Services (HHS) unlike in Uganda where the president dominated the health communication. However, President only read the report compiled by the MoH and media players simply broken it down to manageable simple content for the public to conceptualize for implementation to prevent the spread of Covid-19.

The COVID-19 messages were received more than once daily showing a significant level of exposure to information which foster the adoption to preventive measures embedded in the content. It was also revealed that a third of people received messages several times a week, demonstrating regular but less frequent exposure. Regular access and exposure to health campaign information attract the attention and acceptance of the target audience which justified an ideal element of persuasive communication informed with information process theory. The magnitude to which people received the pandemic messages depended on the access to digital platforms; social media (WhatsApp and TikTok) provide instant chain of messages that were saved on Smartphone for retrieval than radio and television. The ability to store and retrieve health communication messages on target audience smartphones grab their attention to make acceptance decision as informed by information processing theory. People accessed information on daily basis via social media, television and radio station since it was the focus of the media industry during Covid-19. People on average had access to pandemic information daily whether from family members, peers in village, social media and fear of matching queue of soldiers patrolling the community. The relevance of frequency access to health campaign messages during covid-19 is emphasized by Cucinotta and Vanelli (2020) who established that instant spread of health

information on daily basis to the public enhance their conceptualization and implementation.

People understand the information once communicated using various sources and channels persuade the target audience behaviors to comprehensively accept and comply to the content in health campaign message. This is supported by Dengand Grépin (2024) in the study about Achilles' heel: elderly COVID-19 vaccination policy in China and stated that instant communication of importance of vaccinating elders with covid-19 vaccines enhanced its implementation in the community in China. It is earlier stated by Wang and Fleßa (2021) who pointed out that health campaign messages create value to people with instant circulation of the content. Communication using various sources and channels capture wider audience as many people are reached out via the available affordances in this fifth generation which is aligned with the information processing theory. The clarity of health message content written in simplified language and tone ease understanding and conceptualization for implementation of health practices in Uganda.

The COVID 19 preventive behaviour information was mainly communicated on television. The television news was provided in English and Luganda as well as other local language known by people where it is broadcasted. The television dominated as people were at home during lockdown and not supposed to travel past 7.00PM. This implies that video and audio channel was the based for people to receive the health campaign initiatives to prevent Covid-19. Radio and WhatsApp were used to access the health messages for Covid-19 but entertained and broader pictures on television became attractive and best option to watch programs on the

health campaign initiatives. The cost implication on data bundle to access WhatsApp made it expensive compared to television which required electricity only. The radio was feasible since it required electricity and at times battery. Comparing the media sources, television was visible source used to communicate the covid-19 health communication initiatives to citizens in Uganda. Citizens followed the preventive measures circulated in health communication messages as part of new behavior which is prioritized in the information processing theory. The finding agreed with Ibrahim and Sanda (2024) who stated that television provide visual presentation with audio which make point clear to the viewers to enhance the conceptualization of the health campaign initiatives. Visual presentation educates people on what to practice once verbal or audio message become unclear to viewer. Liang (2020) who stated that circulation of the World Health Organisation covid-19 health campaign initiatives was feasible on television where people fellow up the pictures to understand the content than radio which is purely for educated. Uganda Broad Casting television is a free channel, thus makes it feasible to communicate and foster access to covid-19 health information to the public in Uganda.

5.2.2 Target audience's understanding of the campaign messages

The target audience for Covid-19 pandemic was the general public regardless of the age since the pandemic did not spare young or older. The understanding of the health campaign message depends on the source, media, language used and individual perception. The foundation of understanding the health information is informed with individual, technical and social metrics that determine the behaviour and attitude of people.

The covid-19 health communication messages were clear to the people due to the provided content which combined threats, fear, education and enforcement for no-compliance. Clarity of the health information campaign support comprehension and acceptance of message content by the target audience as underpinned in information processing theory. The health communication message was initiated by the president and accompanied with the visual content which enhance the clarity. The health communication was supported with the threats of death from neighboring countries; available data as of December 3 2022, Kenya reported 9,136 deaths, Tanzania reported 392 include the President John Magufuli who died on March 17,2021, Uganda reported 3,596 with total of 164,118 confirmed cases (WHO, 2024). The covid messages were simple and clarity on media in Uganda and across the global which is supported by Dyer, (2020) who stated that information for covid-19 health campaign was edited to suit the public in Brazil. The health messages were covered threaten content with evidence from death numbers from the hospital and across the world which made communication clearly to the public.

The clear health messages help people to follow preventive and treatment advice to enhance safety live. Clearly written health information exposes messages that authors in ministry of health attend to it, take enough interest to process it further, comprehend the message, involve practical taught skills and make decisions based on the retrieved information as part of new behavior for prevention of the pandemic is doctrine of information processing theory. The finding concurred with de-Anda-Jáuregui et al. (2023) who stated that clearly written health messages provide understandable content to support the conceptualization of the practices in Maxico. Information clarity attract the public

attention to enhance the conceptualization which is valuable to the media industry. It is further emphasized by Guan et al. (2024) in the study on Rally Effect of the COVID-19 Pandemic and the White Paper Movement in China who established that that clarity of covid-19 health campaign was prioritized in all forms of communication to support the information conceptualization to pandemic preventive measures. However, health communication campaigns will fail if it is unable to succeed with the clarity practice to enhance audience.

The preferred language were Luganda and English to communicate the Covid-19 health campaign to the public. However, some people preferred communication using other language due to mixed of people in Mukono district. The use of English as known official language accommodate majority of elite while natives of the place as well as those who have learnt Luganda within the community preferred it with mixture of Luganda. The language selection was vital to foster inclusion of people in the communication of the health messages during Covid-19. The President of Republic of Uganda as chief sensitizer used to communicate in English with emphasis of any matter in Luganda and little Lunyankole supported comprehension of health message content which is ascribed to information processing theory. The choice of language for pandemic health campaign is supported by Lubinga and Sitto-Kaunda, (2023) who stated that use of local and international language by government officials supported with tailored and mixed multi-phased communication strategy mirroring fear and pro-social appeal messages to the intensity understandability of the COVID-19 waves. This is earlier supported in second wave by Mweri (2021) established that use of language known by majority of people communicated to social media, daily newspapers and

other writings support conceptualization around the issue of COVID-19 preventive measures.

The dominant nature of covid-19 communication campaign was vaccination, staying home accompanied by lockdown and enforcement practices like movement time for people (6:00 AM in morning to 7:00PM in evening). Wearing mask and use of sanitizers were communicated but vaccination dominated the covid-19 health campaign since vaccines jibs were donations and solution to lift the lockdown. Fear of lockdown left target audience voices and vulnerable to accept any health messages aligned to prevention measures of Covid-19. The circulation of health campaign messages with content that led to fear accelerate acceptance by target audience as provided in the information processing theory. Unlike other preventive measure vaccination card as indicated in *appendix 5* was accepted as international safe measures to prevent the spread of covid-19. Getting a COVID-19 vaccine is a safer and more reliable way to build protection than getting sick with COVID-19. The COVID-19 vaccination helps protect people by creating an immune response without the potentially severe illness or post-COVID conditions associated with COVID-19 infection. This finding is supported by Kelly et al. (2023) in his study in Canada, who stated that vaccination of people is vital measure to prevent spread of Covid-19. The careful consideration in the development of publicly available for vaccination is necessary in supporting COVID-19 uptake, while reducing the prevalence of misinformation against vaccination. The President was vaccinated together with prominent people in Uganda to create trust on the vaccination practice against Covid-19.

The COVID-19 preventive messages were dominated with a tone of fear to coercive people to internally accept the practices. Fear educated people in the hardware as Covid-19 became a hard talk with diversion understanding and interpretation. The threat caption within the covid-19 health campaign was praised by the President of Uganda and MoH as key mechanism that led to victory in fight against the spread of the pandemic. Given the relevance of educative health messages, Covid-19 messages were characterized with fear and informative information to ensure compliance than understanding of the president directives. The media followed up the communication as provide by the president and MoH which they broken down to suite what natives need to hear and ably comprehend to understand the content. The vaccination campaign in health campaign for covid-19 is supported by Woodard And Mann (2023) who stated that vaccination campaign dominated the health measures to prevent the spread of vaccine and death of victims of Covid-19. It is earlier supported with health promotion branch for vaccination is supported by Karo (2020) who noted that inclusion of fear in the health promotion with focus on the innovation of vaccine and use of persuasive communication to develop positive public health behaviors to monitor and observe Standard Operating Procedures.

The kind of messages receive from the communication campaign was mainly on mask Wearing (MW), washing hands with soap (WS) and social distancing (SD) which at 95% practiced during Covid-19 in Uganda. Canning of people accompanied them especially walking without masking the mouth was prohibited and punishable militaristically. Testing was least received communication message because it was at cost and optional to natives except those to travel abroad/ outside Uganda. Enforcement team dominated by police used to disperse the congregation include

burial, wedding, church/ mosque and any form of gathering were prohibited. Business places were forced to provide water and soap for washing hands together with sanitizers and adhered to social distance at workplace. These practices prepared people for lifting the lockdown of the economy in the safe mode with new normal dominated with masking, sanitizer, time extension, opening few businesses unlike those in agriculture which remained operation to ensure food security in the country. Circulation of familiar health message contents supported storage and comprehension as informed with information processing theory. Media centered the health campaign within the scope of broad conation to educate people on safe Covid-19 preventive measures. This finding agreed with Mweri (2021) who pointed out that mask wearing (MW), washing hands with soap (WS) and social distancing (SD) were the cheap affordable measures to prevent the spread of the Covid-19 pandemic. The finding concurred with Kshatri et al., (2022) who provided that washing hands with soap and masking mouth with any clothe became ease practice within the means of public.

5.2.3 Effectiveness of the COVID-19 messages in changing people's attitudes

The people's perception to disease changed from the campaign, whereby they accepted that the pandemic has higher level of seriousness to cause illness which is expensive to medicate especially cost of oxygen and low survival chances except death. The people attitudes changed positively with fear and ultimately implemented the content on the coviud-19 health campaign to prevent the spread of pandemic. The death rates evidenced with low at 5% survival rate cultivate knowledge within people which changed their attitude to comply on the standard operating procedures to prevent spread of the pandemic. The distributed health messages with positive living with Covid-19 foster acceptance to communication

content as profiled with information processing theory. Medication of covid-19 was free as government declared in public hospital but low survival rate makes to become mere a mortuary unit than hospital. This educated people to observe the Covid-19 preventive measures to stay health in community. This finding concurred with Salahshoori et al. (2023) who stated that health campaign on Covid-19 educated the public effectively on health issues, decision-makers should employ experts in message design to provide reliable content which change their attitudes. The people's attitude change whereby they started practicing preventive measures of Covid-19 as well as discovering how to medicate the symptoms of pandemic. In addition, hospital started treating people to recovery but not death as it was in the first covid-19 wave in 2020.

The conversations about covid -19 made people feel more at risk of contracting the virus than they originally thought which changed the attitude to practice the preventive measures as provide in the health communication campaign. People watched news dominated with content of dead victims of Covid with low survival rate whether poor or rich. The trust attached to conversations text about covid -19 was positive reinforcement which justified integration of information processing theory. This served as an example that force people to declare that acquiring covid-19 is total death with no proper medicine. The COVIDEX herbal was brought on the market and used to treat covid-19 as communicated in media but current seem not on market. This finding concur with Lubinga and Sitto-Kaunda, (2023) who stated that health campaign conceived people to accept the dangers and risk associated with covid-19 which created fear, threat and high level of compliance. Covid-19 was a dangerous disease which

scared people from relaxing with preventive measures to become infected with non-curable virus.

People perceived a higher susceptibility to COVID-19 which accord a drive to compliance on the preventive practices as disseminated in the health information. The higher expression, polymorphisms, mutations and deletions of several genes are linked with the susceptibility, severity and clinical outcomes of COVID-19. As, early treatment and vaccination of individuals with genetic predisposition could help minimize the severity and mortality associated with COVID-19. The finding concurred with Velavan et al., (2021) who stated that COVID-19 host genetics and compile genetic variants associated with susceptibility to COVID-19 and disease severity. The associations and provide insights relevant to pathogenesis, risk classification, therapy response, precision medicine, and drug repurposing which forced target audience acceptance to Covid-19 preventive measures is driven with information processing theory.

The people agreed that these conversations made them believe that preventive measures were more likely to work than they previously thought which enhance compliance. The Covid-19 preventive measures were cheap compared to the expensive treatment and death of victims. The confidence in preventive measures were boosted as people realized that prevention is not only better than cure but a way to stay alive. The preventive practices worked for people in the safe mode than the painful and expensive treatment with limited survival rate validated the importance of content in the health campaign for Covid-19. The findings agreed with Guan et al. (2024) who stated that conversations on Covid-19 educated people to accept and believe in preventive measures to stay negative.

Further, Porter et al., (2021), also pointed out that the adoption of the communication approach to combat COVID-19 was based on the fact that research has shown that communication campaigns have a substantial impact on health behavior.

The majority at 62.2% followed COVID-19 preventive measures "most of the time," showing a generally high level of adherence but not enough to be considered "always to prevent the spread of pandemic. This concurred with motivation by Yasa (2020) stated that communication involve disease prevention, health promotion, health care policy, and improved quality of individual lives, and health in the community. People were impacted in terms of adhering to COVID-19 preventive measures. Only 1% of the respondents reported that they were not impacted. The other factors were death and corcesion of people to comply with practicing the Covid-19 preventive measures to stay negative and safe. This funding is supported by the health campaign that COVID-19 pandemic became one of the deadliest health challenges to be witnessed in the 21st century (CDC, 2020). It was further established by Institute of Medicine (2020), developing an effective health communications campaign to combat the spread of the deadly COVID-19 necessitated putting in place some key elements. The phases; attention to the message, comprehension of the message preposition and acceptance of the heath message content were embedded in health communication practice during Covid-19 which applaud the integration of information processing theory.

5.3 Summary of findings

The preventive practices worked for people in the safe mode than the painful and expensive treatment with limited survival rate validated the

importance of content in the health campaign for Covid-19 as supported by Yasa (2020). The communication involves disease prevention, health promotion, health care policy, and improved quality of individual lives, and health in the community which concurred with Guan et al. (2024) and Porter et al., (2021) among others. The threats, violence by the enforcement officials, poverty that led to lack of necessities of life, job retrenchment and hunger at households were unobservable pandemics which terrorized people and claimed life for some of them as emphasized by Lubinga and Sitto-Kaunda (2023). The coercive measures complemented the communication campaigns during the Covid-19. The president offered directives of status of covid-19 and preventive measures which were wrongly interpreted by the enforcement team and tasks forces in Uganda. However, health campaign provided persuasive messages to attract comprehension and acceptance by target audience which is aligned with the information processing theory.

Chapter Six

Conclusions and Recommendation

6.1 Introduction

This chapter presents the conclusion, recommendations and area for further research for this study. Communication health campaign attracted attention of the heads of state include Uganda during Covid-19.

6.2 Conclusion

Based on first objective, the study concluded that people were exposed to covid-19 health campaign messages about vaccination, wearing masks, washing hands, social and safe distance, use of sanitizer and staying home during the lockdown on television radio, WhatsApp and TikTok. People were familiar with washing hands, social as well as safe distancing and wearing of masks as hygienic measures circulated with demonstrations on visual channels assisted prevention of covid-19. The health information content related to *isolation of victims* created fear which educated people on the danger of the pandemic such as fever, cough, shortness of breath or difficulty breathing, sore throat, congestion or runny nose and fatigue forced them to comply on the preventive measures. The President of Uganda was primary source of the Covid-19 health campaign content that was circulated by players in media industry on daily basis builds the trust of the information. Health communication campaign had messages that accelerated target audience attention, comprehension and acceptance which is aligned with information processing theory.

The findings on second objective concluded that the target audience gradually understood the campaign messages due to threat of death involved in the

content and fear of being canned. The health campaigns were clear and given inform of directives to people. The health campaign messages were circulated in English and other local known language such as Luganda which eased the understanding on the communicated content on media and peer. The enforcement through canning, shooting people dead and terrible warning were practical mechanism that forced people to understand the health information content. The information clarity was accompanied with the statistics of infected people and death in Uganda and across the global created clarity through threats and fear accelerated by President speech on extension of lock down. Vaccination was known and clearly based on previous general vaccination campaign of polio, staying home accompanied by limitation on movement time for people (6:00 AM in morning to 7:00PM in evening) supplemented with fear coercive people to implement the Covid-19 preventive measures. Unlike other health campaigns communication, Covid-19 content was close to terrorism due to threats, fear and violence on various levels; social, financial and political that wiped out hope to live among people.

Lastly on third objective, communicated Covid-19 health campaign changed the people perceptions to acknowledge the high level of risk associated with pandemic that became known to kill in shorted time with no cure across the global. People felt more at risk to contact the Covid-19 which is associated with high treatment charges dominated with cos of oxygen and low survival chances except death that was expensive between ushs 5,000,000 to ushs 10,000,000 changed people's mind set to practice the preventive measures of social distance, wearing the masks and washing hands. The higher expression, polymorphisms, mutations and deletions of several genes are linked with the susceptibility,

severity and clinical outcomes of COVID-19. The Covid-19 health campaigns were fronted by threats and conceive measures provided in the President directives which accord victory regarding fight against the spread of pandemic in Uganda.

6.3 Recommendations

The study provides the following recommendation as set out below;

Government should emphasis composing of educative content that combined video and audios within health information campaign. The picture that domestic what happen within the community build trust and develop clarity on the content in the pandemic health information campaign in Uganda.

The media sector among other players should communicate simplified content in the local language within the health information campaign circulated to the people. English language need to be used supplemented by the local language known by majority of the people in the target audience. Breaking down the long speech by the President in state of national address about the Covid-19 into action points like lifting of lockdown, dangers of pandemic, preventive measures create clarity on the message with health campaign.

Government should partner with religious leaders, cultural leaders and local administrators to support joint sensitization of the public about the dangers of pandemic and preventive measures. The implementation of enforcement with police and other security forces as mediation factor to enhance compliance to health campaign need effective monitoring and control with proper clear guidance and implementation procedures by the President and designated head of security in district local government.

The Uganda Communication Commission should regulate the health information content circulate on media to prohibit and delete the contractor information from reaching out the public. The musician and other artist have to be involved to craft songs that communicate the dangers and preventive measures of the pandemic to the public. The songs attract and motivate people to understand the content at eases fostering conceptualization and dissemination.

The WHO should always provide filtered accurate information content on the health campaign for acceptance and benchmarking in the community is affiliate with information processing theory. The media should blend the international sources and local sources within content for health campaigns in Uganda. The information processing theory provided foundation to which the health campaign messages became comprehensive, educative, stored, retrieved by individuals and community to reinforce change behavior.

The clarity of messages with use of pictures (video) and simple words known by local people is supported by the information processing theory that requires use of computer model of intelligence to perform tasks in advanced simplified manner that a human brain performs (Smith, Langston, & Nisbett, 1992). The artificial intelligence is vital to circulate the messages in health communication campaigns.

The government, private partners and media sector should rely more to evidence based information provided by technical team at MoH to provide the information content to be communicated on WhatsApp as well as TikTok as instant preferred socialization platform and Television to educate the public. This provides chain of health messages that support acceptance by target audience as informed with information processing theory.

6.4 Area for further research

i. Evaluate the role of technology in Covid-19 Pandemic Health information campaign in Uganda.

ii. The same study can be repeated in other region of Uganda which is not central for bench marking and comparing the results on the Covid-19 health communication campaigns. It can also be repeated with adoption of another theory other than information processing theory.

iii. Evaluating Health Communication Campaigns in post Covid-19 Pandemic in Uganda. The post-covid-19 health communication campaign could inform the practices require to validate those adopted during pandemic.

References

Agha, S. (2000). *The determinants of infant mortality in Pakistan. Social science & medicine*, *51*(2), 199-208. doi: 10.1016/s0277-9536(99)00460-8.

Aiello, A. E., Perez, V., Coulborn, R. M., Davis, B. M., Uddin, M., & Monto, A. S. (2012). *Facemasks, hand hygiene, and influenza among young adults: a randomized intervention trial*. *PloS one*, *7*(1), e29744. https//dx.doi.org/10.1371/journal.pone.0029744

Anderson, J. (1985). Cognitive psychology and its application *Yorknd Ed.) New York: W.H. Freeman and Company*. DOI: 10.4236/psych.2011.28128

Anfinrud, P., Bax, C. E., Stadnytskyi, V., & Bax, A. (2020). Could SARS-CoV be transmitted via speech droplets? Communication Resources. Doi: 10.1101/2020.04.02.20051177

Atkinson, R. C., & Shiffrin, R. M. (1968). Human memory: A proposed system and its control processes. In *Psychology of learning and motivation* (Vol. 2, pp. 89-195). Academic press. Doi.org/10.1016/S0079-7421(08)60422-3

Bala, M. M., Strzeszynski, L., & Topor-Madry, R. (2017). Mass media interventions for smoking cessation in adults. *Cochrane Database of Systematic Reviews*, (11).https://doi.org/10.1002/14651858.CD004704.pub4

Bemodeling, K. (2020). modeling team. *Coronavirus modelling at the NIPH*. fromhttps://www.cdc.gov/coronavirus/2019-ncov/index.html

Biehler, R., & Snowman, J. (1986). Psychology applied to teaching—(5th Ed.) BMifflin Houghton Mifflin Company. doi.org/11.1502/146518.frt45

Craik, F. I., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of verbal learning and verbal behavior*, *11*(6), 671-684. https://doi.org/10.1016/S0022-5371(72)80001-X

Crosby, R. A., Kegler, M. C., & DiClemente, R. J. (2002). Understanding and applying theory in health promotion practice and research. Emerging theories in health promotion practice and research, 15, 1-5. https://doi.org/10.1007/s43076-021-00123-w

Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. Acta Biomedica, 91(1), 157–160. https://doi.org/10.23750/abm.v91i1.9397

de Anda-Jáuregui, G., Gómez-Romero, L., Cañas, S., Campos-Romero, A., Alcántar-Fernández, J., & Cedro-Tanda, A. (2023). COVID-19 reinfections in Mexico City: implications for public health. *Frontiers in Public Health*, 11(February). https://doi.org/10.3389/fpubh.2023.1321283

Deng, Z., & Grépin, K. A. (2024). Achilles' heel: elderly COVID-19 vaccination policy in China. Health Research Policy and Systems, 22(1), 1–14. https://doi.org/10.1186/s12961-024-01155-1

Ding, D., & Zhang, R. (2022). China's COVID-19 Control Strategy and Its Impact on the Global Pandemic. Frontiers in Public Health, 10(March), 1–10. https://doi.org/10.3389/fpubh.2022.857003

Douglas, D.F., Westley, B.H., & Chaffee, S.H. (1970). An information campaign that changed community attitudes. Journalism Quarterly. https://doi.org/10.1177/107769907004700306

Dyer, O. (2020). Covid-19: Bolsonaro under fire as Brazil hides figures. BMJ (Clinical Research Ed.), 369, m2296. https://doi.org/10.1136/bmj.m2296

Evans, W. D., Davis, K. C., & Zhang, Y. (2008). Health communication and marketing research with new media. *Cases Public Health Commun Marketing*, *11*, 140-158. www.casesjournal.org/volume2.

Fischer, E. P., Fischer, M. C., Grass, D., Henrion, I., Warren, W. S., & Westman, E. (2020). *Low-cost measurement of face mask efficacy for filtering expelled droplets during speech. Science Advances*, *6*(36), eabd3083. https://www.science.org/doi/pdf/10.1126/sciadv.abd3083

Fong, M. W., Gao, H., Wong, J. Y., Xiao, J., Shiu, E. Y., Ryu, S., & Cowling, B. J. (2020). Nonpharmaceutical measures for pandemic influenza in nonhealthcare settings—social distancing measures. *Emerging infectious diseases*, *26*(5), 976. https//dx.doi.org/ 10.3201/eid2605.190995

Fox, S. (2020, May 30). E-patients With a Disability or Chronic Disease. achieved July 2020, from https://www.pewresearch.org/internet/2007/10/08/e-patients-with-a-disabilityor-chronic-disease

Frieden, T. R. (2014). Si components are necessary for effective public health program implementation. *American journal of public health*, *104*(1), 17-22.

Gagne, E. (1985). The cognitive psychology of school learning. Boston: Little, Brown and Company. https://doi.org/10.1009/r45098-031-00345-w

Getachew-Smith, H., King, A. J., Marshall, C., & Scherr, C. L. (2022). Process evaluation in health communication media campaigns: A systematic review. *American Journal of Health Promotion*, *36*(2), 367-378. https://doi.org/10.1177/08901171211052279

Glanz, K. (1997). *Theory at a glance: A guide for health promotion practice* (No. 97). *US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute*. https://doi.org/10.1090/1098678.1997.135647452

Guan, Y., Guang, L., Li, L., & Liu, Y. (2024). The Rally Effect of the COVID-19 Pandemic and the White Paper Movement in China. *Journal of Contemporary China, 00(00), 1–12*. https://doi.org/10.1080/10670564.2024.2356863

Haider, M., & Kreps, G. L. (2004). Forty years of diffusion of innovations: utility and value in public health Communication *9*(S1), 3-11. https://doi.org/10.1080/10810730490271430

Helsingen, L. M., Refsum, E., Gjøstein, D. K., Løberg, M., Bretthauer, M., Kalager, M., & Emilsson, L. (2020). The COVID-19 pandemic in Norway and Sweden – threats, trust, and impact on daily life: a comparative survey. BMC Public Health, 20(1), 1–11. https://doi.org/10.1186/s12889-020-09615-3

Howard, J., Huang, A., Li, Z., Tufekci, Z., Zdimal, V., van der Westhuizen, H. M., ... & Rimoin, A. W. (2020). Face masks against COVID-19: an evidence review. https://doi.org/10.1073/pnas.2014564118.

Ibrahim, A. M., & Sanda, H. U. (2024). The Use of Social Television in Interactive *Health Communication with Implications for Media Literacy*. September. https://doi.org/10.13187/me.2024.3.398

Iloanusi, S., Mgbere, O., Iloanusi, N. J. R., Yunusa, I., & Essien, E. J. (2021). COVID-19 related information sources and prevention practices in Nigeria: A cross-sectional study. *Journal of Health and Social Sciences, 6*(4), 566-579. https://doi.org/10.1070/1034443.2021.34328765

Jato, M. N., Simbakalia, C., Tarasevich, J. M., Awasum, D. N., Kihinga, C. N., & Ngirwamungu, E. (1999). The impact of multimedia family planning promotion on the contraceptive behavior of women in Tanzania. *International Family Planning Perspectives*,60-67. https://doi.org/10.1050/1086754.1999.4546783

Joo, T. M., & Teng, C. E. (2024). Behaviors and Patterns of TV News Viewing in Malaysia During and After Covid-19 Pandemic. *In Lecture Notes in Networks and Systems:* Vol. 1011 LNNS. Springer Nature Singapore. https://doi.org/10.1007/978-981-97-4581-4_3

Kelly, K. J., Campbell, A., Salijevic, A., Doak, S., Michael, L., & Montelpare, W. (2023). Evaluation of the readability, understandability, and actionability of COVID-19 public health messaging in Atlantic Canada. Frontiers in Communication, 8. https://doi.org/10.3389/fcomm.2023.1006784

Kinder, D. R. (2003). *Communication and politics in the age of health information*. https://doi.org/10.1009/871-78-78234-6

Kiwanuka-Tondo, J., Hamilton, M., & Jameson, J. K. (2009). *AIDS Communication Campaigns in London*. https://doi.org/10.1075/10765423.2009.17898

Kreps, G. L. (2006). *Communication and racial inequities in health care*. *American Behavioral Scientist*, *49*(6), 760-774. https://doi.org/10.1080/1087654.2006.45632

Kshatri, J. S., Satpathy, P., Sharma, S., Bhoi, T., Mishra, S. P., & Sahoo, S. S. (2022). *Health research in the state of Odisha, India: A decadal bibliometric analysis (2011–2020). Journal of Family Medicine and Primary* Care, 6(2), 169–170. https://doi.org/10.4103/jfmpc.jfmpc

Leung, N. H., Chu, D. K., Shiu, E. Y., Chan, K. H., McDevitt, J. J., Hau, B. J., ... & Cowling, B. J. (2020). Respiratory virus shedding in exhaled breath and

efficacy of faceMedicine*Nature medicine*, *26*(5), 676-680. https://doi.org/10.21203/rs.3.rs-16836/v1

Lim, Y. X., Ng, Y. L., Tam, J. P., & Liu, D. X. (2016). Human coronavirus virus-host of virus-host interactions. *Diseases*, *4*(3), 26. https://doir.org/10.3390/diseases4030026

Lubinga, E., & Sitto-Kaunda, K. (2023). Public Responses To Multi-Phased Fear and Pro-Social Emotional Appeals From the South African Government'S Covid-19 Health Communication Strategies. Communitas, 28(August), 86–102. https://doi.org/10.38140/com.v28i.7054

Mody, B., & Singh, M. R. (1991). Designing messages for development communication: *An audience participation-based approach*.

https://doi.org/10.1177/1090198117728548

Mweri, J. (2021). Corona Virus Disease (COVID-19) Effects on Language Use: An Analysis of Neologisms. Linguistics and Literature Studies, 9(1), 36–47. https://doi.org/10.13189/lls.2021.090105

Namkoong, K., Nah, S., Record, R. A., & Van Stee, S. K. (2017). Communication, reasoning, and planned behaviors: unveiling the effect of interactive communication in an anti-smoking social media campaign. *Health communication*,*32*(1),41-50.

https://doi.org/10.1080/10410236.2015.1099501

Ndyanabangi et al. (2020). Traditional media as a means of communication in health education. Proceeding of the 3rd annual scientific conference. International Conference Centre, Uganda.

https://doi.org/10.1177/1067840514541855

Neelam, S. F., Sanders, K., & Barker, F. (2020). The United States' Response to COVID-19: A Case Study of the First Year. 1–15. https://doi.org/10.1177/1090198227728549

Ocheni, S., & Nwankwo, B. C. (2012). The role of mass media in rural information system in Nigeria. *Studies in sociology of science*, *3*(3), 10-14. http://dx.doi.org/10.3968/j.sss.1923018420120303.1935

Robandi, D. (2020). An analysis of educationCOVID-19 pandemic COVID-19. *E-Tech*, *8*(1), 393209. http://ejournal.unp.ac.id/index.php/etech/issue/view/1320

Salahshoori, A., Araban, M., Babaei Heydarabadi, A., Hatamzadeh, N., Jasemzadeh, M., & Mohamadian, H. (2023). Assessing the quality of COVID-19 messages on Ahvaz Jundishapur University of Medical Sciences' website: A content analysis (Preprint). JMIR Formative Research, 1–13. https://doi.org/10.2196/54031

Smith, M. L., Menn, M., & McKyer, E. L. J. (2011). Effectiveness of the Radio as a Health Information Source. Journal of Radio and Audio Media, 18(2), 196–211. https://doi.org/10.1080/19376529.2011.615776

Snyder, L. B., & Hamilton, M. A. (2002). A meta-analysis of US health campaign effects on behavior: Emphasize enforcement, exposure, and new information, and beware the secular trend. Public health communication, 373-400. https://www.ncbi.nlm.nih.gov

Sood, S., Shefner-Rogers, C., & Skinner, J. (2014). Health communication campaigns in developing countries. Journal of Creative Communications, 9(1), 67-84. https://dx.doi.org/ 10.19204/2021/cvdr9

Skjesol, I., & Tritter, J. Q. (2020). Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is

hosted on Elsevier Connect , the company ' s public news and information . January. https://doi.org/10.1179/1090198119928587

Thorogood, M., & Coombes, Y. (Eds.). (2010). *Evaluating health promotion: practice and methods*. OUP Oxford.

https://doi.org/10.1017/j.ebiom.2020.104564

Uganda: Organizational factors and campaign planning as predictors of successful campaign execution. *International Journal of Strategic Communication, 3(3),* 165-182. https://doi.org/10.1080/15531180902984190

Velavan, T. P., Pallerla, S. R., Rüter, J., Augustin, Y., Kremsner, P. G., Krishna, S., & Meyer, C. G. (2021). Host genetic factors determining COVID-19 susceptibility and severity. EBioMedicine, 72. https://doi.org/10.1016/j.ebiom.2021.103629

Wong, L. P. (2008). Data analysis in qualitative research: A brief guide to using NFamily Physician*family physician: the official journal of the Academy of Family Physicians of Malaysia*, *3*(1), 14.

Doi:14-20. PMID: 25606106; PMCID: PMC4267019.

WOODARD, V., & MANN, B. A. (2023). a Case of Covid Vaccine-Associated Anti-Mda5 Antibody Dermatomyositis. Chest, 164(4), A3327–A3328. https://doi.org/10.1016/j.chest.2023.07.2173

APPENDICES

Appendix 1: questionnaire

Data Collection Tool: Questionnaire

Dear Respondents,

My name is Nalugya Dorothy, a Master's student at the Uganda Christian University pursuing a Master's degree in Strategic Communication. I am conducting a study on the influence of COVID-19 health communication campaigns on adopting COVID-19 preventive health behaviors in Uganda. The information you give will only be used in this study for academic purposes.

Section A: General Information (tick one answer)

1. **State your gender**

a) Male……..
b) Female……

2. **How old are you? (Tick one)**

a) 18-25……..
b) 26-30…….
c) 31-35…….
d) 36-40 …….
e) 41-45…….
f) 46-50……..
g) 51-55……
h) 56-60 ……
i) 61-65……

3. **What is your employment status? (Tick one)**

a) Unemployed……..
b) Self-employed……
c) Employed……..

4. **What is the highest level of Education you have attained? (Tick one)**

a) Did not complete Primary seven……
b) Completed Primary Seven……..
c) Did not complete Senor Four……..
d) Completed Senior Four…….
e) Did not complete Senior Six……
f) Completed senior six……

g) Have a Certificate……
h) Have a diploma ……..
i) Have a Bachelor's Degree…….
j) Have a Master's Degree…….
k) Have a PhD……
l) Others (Specify)…….

Section B: Factors that influenced the adoption of COVID-19 preventive Behavior

1. **How familiar are you with COVID-19 preventive behaviors such as wearing a facemask, washing hands, sanitizing, and distancing social distancing? (Tick one)**

(a) Not familiar……
(b) Slightly familiar…….
(c) Somewhat familiar…….
(d) Moderately familiar…….
(e) Extremely familiar……

2. **Do you know of any campaign that rallied to people to practice COVID-19 preventive behavior? (Tick one)**

a) Yes……
b) No…….

3. **If yes, which platform did they use to deliver information about COVID-19 preventive behavior? (Tick one)**

a) Radio……
b) Television……..
c) Village audio tower…….
d) Social Media……

4. How frequent did you get the COVID-19 campaign messages?
   (a) Multiple times in a day
   (b) Once a day
   (c) Several times in a week
   (d) Once a in a week
   (e) Rarely
   (f) Never

5. **Were you exposed to COVID-19 preventive messages?**
   Yes……. No…….

6. **If yes were the messages about COVID-19 preventive behavior clear, and understandable (Tick one)?**

a) Yes…….
b) No……..

7. **If yes what kind of messages did you receive from the communication campaign (Tick one or more)**
   Mask wearing ( ) Washing hands with soap ( ) Social Distancing ( ) Testing ( ) Others (Specify) …….

8. **Were you influenced by the messages to practice COVID-19 preventive behavior in terms of following recommended health guidelines (Tick one)?**

a) Yes…….

b) No……..

9. Did you perform COVID-19 preventive behaviors such as wearing a facemask, washing hands, sanitizing, and maintaining social distancing before March 2022 when the mandatory wearing of facemasks was lifted? (Tick one)

a) Never…….
b) Rarely…….
c) Sometimes……..
d) Often……
e) Always……

10. How would you rate the overall performance of the COVID-19 health communication campaigns in raising awareness and promoting positive health behavior?

(a) Very effective
(b) Effective
(c) Ineffective
(d) Very ineffective
(e) Not sure

11. Are there other factors that influenced you to practice COVID-19 preventive behavior other than the communication campaigns? (Tick one)

a) Yes……..
b) No…….

12. **If yes, explain** ……..
……
……
……
……
……

13. Can you give any suggestion for improving future health communication campaigns related to COVID-19 or any other public health issues?

.....
.....
.....
.....
.....
.....
.....
.....

14. Choose your level of agreement with the following statements which pertain to listening to COVID-19 preventive behavior campaigns (Tick one level of agreement for each of the six categories below)

a.	Listening to the Covid-19 preventive behavior	**Strongly agree**	**Agree**	**Undecided**	**Disagree**	**Strongly disagree**	**I don't know**

	communication campaign made me feel the disease was more serious than I initially thought						
b.	Discussing what I heard from the campaign made me feel that I was more likely to catch Covid-19 than I initially thought						
c.	Discussing what I heard about COVID-19 campaign made me feel that the preventive measures were more likely to work than I initially thought						
d.	Discussing what about Covid-19 increased my trust in the government's ability to deal with the pandemic						
e.	what I heard about COVID-19 with others made me feel like other people with immunity were taking COVID-19 preventive behaviors seriously						
f.	What I heard about Covid-19 with others made me feel more confident about my						

	ability to perform the COVID-19 preventive measures e.g. wearing a facemask, sanitizing etc.						

Thank you for finding time to respond to this questionnaire.
Nalugya Dorothy ……
Date ……..

Appendix 2: Proposed Budget for the Research

S/NO	ITEM	traveling
1.	General transport (traveling in data collection,)	200,000
2.	Meals, airtime, and transport for data collection	200,000
3.	Incentives for the respondents	200,000
4.	Stationery	100,000
5.	Data for internet	150,000
6.	Binding and printing final copies	150,000
	TOTAL	**1,000,000**

Appendix 3: Time Schedule for the Research

S/NO	Research Activity	Time
1.	Selection and approval	November 2023
2.	Presentation of concept note	November 2023
3.	Proposal writing and submission to UCU REC	December 2023 - May 2024
4.	Data collection	July - September 2024
5.	Data analysis	October 2024
6.	Report writing	November – mid December 2024
7.	Submission of research report	December 2024

Appendix 4: Informed Consent Form for Study Respondents

Uganda Christian University

School of Journalism, Media and Communication

Informed Consent Form for Study Respondents

Dear respondent,

My name is Nalugya Dorothy, I am the Principal investigator of a study titled: Evaluating Health Communication Campaigns of the COVID-19 Pandemic in Uganda: the Case of Central Division, Mukono Municipality. The study leads to a Master's Degree in Strategic Communication from Uganda Christian University in the Republic of Uganda. I kindly request you to participate in my research by providing information.

Principal Investigator (PI) Contact information

If you have any questions or concerns about this study or if any problems arise, please contact Nalugya Dorothy who is the primary researcher by email at dorakukundakwe@gmail.com or telephone at 0782601104/0704918474

Description of your participation

Your participation as a respondent will involve providing information to the researcher by participating in the reviews. Respondents include individuals aged 18 to 65 years who lived in Kauga during the whole COVID-19 period.

The purpose of this study

The purpose of this study is to evaluate the Impact of the health communication campaigns of the COVID-19 pandemic in Central Division, Mukono Municipality

Risks and discomforts

There are no known dangers associated with this research. This research is purely for academic purposes, and there are no discomforts linked since participation is voluntary. The researcher will ensure no physical or psychological harm is caused to respondents; this will be realized through avoidance of embarrassing questions or expressing shock or disgust while collecting data from the respondents.

Potential benefits

There are no recognized financial benefits to you that would result from your participation in this research. The researcher will only write a thank you letter to the respondents for having aided the study through the spirit of voluntarism.

Protection of confidentiality

The primary researcher will do everything possible to protect your privacy. There will be protection of secrets/private information disclosed during data collection and ensure anonymity during report writing. This is because confidentiality is a basic right of the client. All documents shall be locked in a cupboard and keys will kept by the primary researcher because confidentiality is an ethical obligation of the researcher.

Voluntary participation

Your involvement in this research is voluntary. You may choose not to participate and or withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to pull out of this study.

Ethical Concerns

This study was reviewed and approved by the UCU Research Ethics Committee (UCUREC) and registered by the Uganda National Council for Science and Technology (UNCST). If you have concerns about ethics or your rights, please contact UCUREC Chairperson Prof. Peter Waiswa at 0772405357, pwaiswa@musph.ac.ug or UCU-REC Secretariat Mr. Osborn Ahimbisibwe 0775737627 or oahimbisibwe@ucu.ac.ug, UNCST 0414705500, or info@uncst.go.ug

Consent

I have read this consent form and have been allowed to ask questions. I give my consent to participate in this study.

Participant's Name

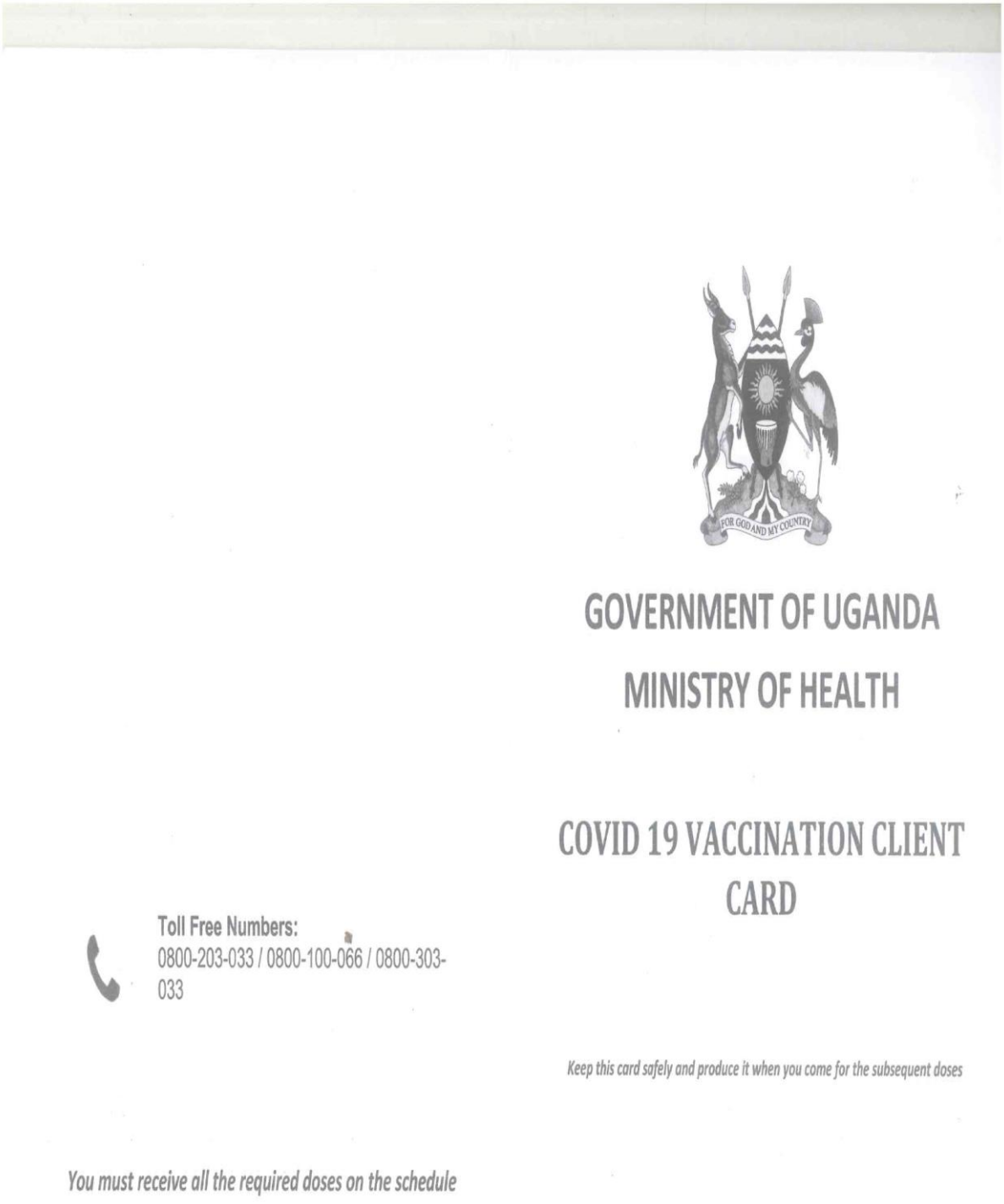
Participant's signature_____ date: _____

Contact _____

Researcher's Name_____ Signature: _____

Date: _____

Appendix 5: COVID-19 Vaccination Client card



Vaccination Card Prototype

HMIS EPI 020: COVID 19 VACCINATION CLIENT CARD

SN:

00767420

GOVERNMENT OF UGANDA

Ministry of Health

HMIS EPI 020: COVID 19 VACCINATION CLIENT CARD

NIN:

Alternative ID for Non-nationals(specify): .....

Name of Client:

Age: Sex:

Occupation:

Nationality:

District: Sub County:

Parish: Village:

Telephone:

Keep this card safely and produce it when you come for the subsequent doses

COVID 19 VACCINATION CARD

Dose	Vaccine name / Date dose given / Next appt date	Batch No	Vaccination Centre	Vaccinator's Initials and Stamp
1st Dose	Astrazeneca / 31/3/2021 / 26/5/2021		MUKONO GENERAL HOSPITAL	
2nd Dose	Astrazeneca / 2/6/2021 /		MUKONO GENERAL HOSPITAL	
	/ /			
	/ /			

You must receive all the required doses on the schedule

UGANDA CHRISTIAN UNIVERSITY

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SCHOOL OF RESEARCH & POSTGRADUATE STUDIES

DISSERTATION CORRECTION COMPLIANCE REPORT BY THE CANDIDATE (POST VIVA FORM)

Date: 22ND APRIL, 2025

Name of Candidate: NALUGYA DOROTHY.. Reg. No: RS21M54/008

Title of Dissertation: Evaluating Health Communication Campaigns of the Covid-19 Pandemic in Uganda

SN	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Other than the speeches by the president of Uganda to the public during the COVID-19 pandemic period, no specific campaigns are singled or mentioned.	The keep distance "Tonsemberera" and vaccination health campaign dominated during covid-19.	Pag x: Abstract
2	Elaborately discuss the context of the COVID-19 pandemic in Uganda.	Health campaign called keep a distance "Tosemberera" , and rapid test health campaign among others are integrated in background	Page 2-3, Background is corrected with inclusion of health campaign in Uganda

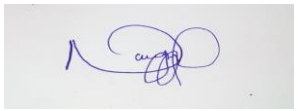
3	Problem statement, the idea is there but the researcher' s intentions need to be articulated with clarity.	The study evaluated whether the covid-19 health campaign' s goals and objectives were clearly stated (WHO, 2021). In addition, evaluation was conducted to establish whether covid-19 campaign had a clear scope and health issue, and whether the target audience was well identified during Covid-19 (MoH, 2021). The way in which Covid-19 health campaigns and target audience were attended during circulation of information necessitated evaluation.	Page 6_ Problem statement clarified
4	Literature review: The candidate may need to add a section on this where this theory is discussed and linked to the objectives of the current study	The section on information processing theory was added in literature review. It concentrates on captions related to how other scholars used in the study. This is because the theory was already captured 1.7.	Page 11. The literature review has also accommodated the theory
5	Methodology: The choice of the study area, which in this case is the Central Division of Mukono does not indicate how the results would be generalized across a larger population of interest	Mukono district was among the districts dominated with victims charged with non-compliance to the health communication during Covid-19 which make the findings transferable and reflection in other areas in Uganda. This supported generalization of the findings in the study.	Page 34. The justification for generalization is included
6	The section on forms of active health campaigns during the COVID-19 pandemic in Uganda was needed.	Sec. 4.2 Forms of communication campaigns during the COVID-19 pandemic was added.	Page 49-50. The forms of covid-19 health campaign like keep a distance is included.
7	It is only in the conclusion that it is now revealed that the health campaigns under investigation were those by the media in Uganda	The term media was deleted and statement re-phased that people were exposed to covid-19 health campaign messages that included preventive measures;	Page 95. It was collected to speak to the general health campaigns during covid-19.
8	Conclusions that are arrived at, align, directly with the findings.	The conclusions are further aligned to the findings	Page 95. The conclusion are aligned based to findings per

			objective
9	The recommendations arrived at, should ideally address future pandemics and the kind of health campaign initiatives that may work better given the lessons learned (if any) with the COVID-19 pandemic.	The recommendations gave feasible future health campaign initiatives like use of simple and local language known by the natives, adding of video to demonstrate the information. The overreliance on evidence based information provided by technical team at MoH	Page 97- Corrected

SN	COMMENTS BY INTERNAL EXAMINER	ACTION TAKEN	INDICATOR
2	Problem statement need to be sharpened like the first sentence is incomplete "Although there is a generally agreed narrative that some health communication campaigns have failed to achieve the intended goals"	The first sentence was corrected as among others. Although there is a generally agreed narrative that some health communication campaigns have failed to achieve the intended goals which deter its effectiveness (Getachew-Smith, King, Marshall, & Scherr, (2022).	Page 4, Problem statement was edited and corrected
3	Conclusions (and Recommendations) Since the first objective was interested in the extent, your first conclusion should tell us the extent of exposure instead of just saying that the extent.	The study on objective one concluded that people were exposed to covid-19 health campaign messages about vaccination, wearing masks, washing hands, social and safe distance, use of sanitizer and staying home during the lockdown on television radio, WhatsApp and TikTok.	Page 95. It was corrected.
4	The second research question was also interested in the extent but again your conclusion still deviates from that	Objective two concluded that the target audience gradually understood the campaign messages due to threat of death involved in the content and fear of being canned. The health campaigns were clear and given inform of directives to people.	Page 95. It was aligned

SN	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
1	Do not combine the pie chart with other discussions or unrelated content. Keep data visualizations focused and clean, and ensure that interpretations are presented separately to avoid confusion.	The pie charts were adjusted to remain with on desired content.	Page 65-70
2	What is the main takeaway your research reveals? This should be a concise and	The non-violent means of communicating health campaigns with local content and simple words fostered compliance	Page 78

	impactful summary grounded in your findings.	to preventive measures.	
3	Explain how you addressed recall in your methodology. How did participants remember past experiences or interactions with the campaign? What strategies or question formats did you use to support accurate recall, and how did you minimize recall bias?	The close ended questions with familiar options regarding Covid-19 health campaigns were used to gather data and the close ended question for percipients to mention their options which were not listed in the question. The questions were set using known terms that were adopted during Covid-19 health communication campaigns. This made respondents to easily recall what happened during covid-19 health communication campaigns.	Page 38
4	Provide concrete evidence of how the theoretical framework was applied. Specify the level at which the theory was used (individual, community, societal, etc.) and explain how the campaign influenced behavioural change through this theoretical lens. Make the connection between theory and practical outcomes explicit.	The theory supported the way individual, community and society attend to the health campaign message. The comprehension of the message preposition and acceptance of the Covid-19 health campaign message content.	page 9
		The information processing theory provided foundation to which the health campaign messages became comprehensive, educative, stored, retrieved by individuals and community to reinforce change behavior.	Page 65
5	If your study had changed from Mukono to a rural area would your findings be different?	Yes the findings may be different because of the area setting.	

Nalugya Dorothy 

Professor James Kiwanuka-Tondo 

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Candidate's Name	Signature	Supervisor's Name	Signature