THE ROLE OF COMMUNICATION IN PROMOTING BEHAVIOR CHANGE: A CASE OF THE 'HELP A CHILD REACH 5' HANDWASHING CAMPAIGN IN KURIA WEST, MIGORI COUNTY

\mathbf{BY}

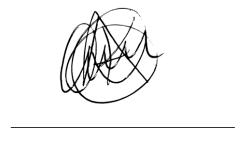
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DECLARATION

This thesis paper is my original work and has not been presented for the award of a degree at any other university.



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DEDICATION

I dedicate my dissertation work to my family and friends. I have a special feeling of gratitude for my loving mother, Jane Mwihaki Kinuthia, for her words of encouragement and push for the tenacity to complete the project.

ABSTRACT

Behavior Change Communication may take different forms to appeal to individuals or groups to change their behavior toward a specific health problem. Access to good hygiene, including handwashing with soap, is an important indicator of the United Nations Sustainable Development Goals (SDGs). Getting a child to reach five years has been associated with overall improved child survival rates, and this is why Lifebuoy moved to inspire the simple life-saving habit of handwashing with soap. This study examined the role of communication in promoting behavior change. The study focused on the 'Help a Child Reach 5' handwashing campaign in Migori County. The specific objectives include determining the communication strategies used in the behavior change campaign, determining the impact of the behavior change campaign and examining the challenges encountered during the behavior change campaign. This study used a descriptive research design using a mixed method of both qualitative and quantitative research methodology. The study was conducted in Migori County because it has several community health groups with many social workers who deal with children and women in handwashing programs. The target population was 357 mothers who had children between 0 and 5 years old for the period 2016–2021. The population was sampled using purposive sampling to ensure that it has a target population of individuals who have benefitted from or have been involved with the handwashing program. Data was collected using semi-structured questionnaires and key informant interviews with the program staff will be done. The data was analyzed through both descriptive and inferential statistics. The study has concluded that using mass media communication channels has effectively influenced behavioral change strategies. Secondly, the study has concluded that the main messages used in 'Help A Child Reach 5' are guilt appeal, social exchange, social norms, and gain frames. The main challenges are religion and strong religious beliefs, lack of information, financial inadequacy, and community resistance. Thus, the study has shown that the proper use of mass media by developing messages that satisfy a wider target increases the positive outcomes of behavioral change. Concerning the impact of handwashing campaigns, the results showed that a majority have not suffered from poor handwashing practices, but there is a huge risk that if handwashing practices are not properly implemented, they can increase the risk of diseases spreading. From the respondents' perspective, the handwashing campaign needs to ensure all target groups have been satisfied through the provision of convenient information to influence behavior change

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CHAPTER ONE

INTRODUCTION

1.1 Background Information

Alder and Rodamn (2003) consider communication to be the response of people to other people's behavior from a symbolic perspective. It helps an individual get knowledge and fain fulfillment of ritualistic responsibilities, where people belong to a given societal setup (WHO, 2009). Communication regarding health helps different groups t get engaged in respective behaviour through having information access. For the intervention measures regarding specific groups to be actualized, there must be support from NGOs and the government. Behavior Change Communication (DCC) from a critical development component. Various factors determine the success of any communication. They include the level to which a given target audience access information and whether it possesses the needed skills and knowledge to present behavioral change (Scutchfield and Keck, 2003).

BCC depends on the contribution from communities, families and participating groups from the phase of plan development to implementation. An attitude of learning and openness is key in realizing behavioral change by regularly consulting all groups participating in it, communities and families during the stages of researching, developing a plan and implementing instead of assuming societal happenings (Michie et al., 2011). The creation of messages is dependent on having the best understanding of the barriers, motivations, assets, culture, behavior and lifestyle of the target audience. Furthermore, it is critical for communities to actively participate in material development.

BCC refers to a process of interacting with communities regarding the development of specific approaches and messages with the use of different channels of communication that aim at

reinforcing or maintaining positive behavior and promoting and sustaining a community or individual behavior. Communication is used strategically through the involvement of societies, communities and individuals when developing strategies of communication that have an appropriate context in the promotion of positive health results using specific models and theories that are concerned with behavioral change (Dolan et al., 2010).

Effective BCC has various components. The situation analysis component is concerned with carrying out systematic reviews regarding the political, cultural and social behavior data to identify external and internal situation determinants including underlying effects and causes of a situation (Michie et al., 2011). Another component is establishing communication strategies that help an organization or program to undergo audience segmentation, which results in effective program tailoring and achievement of the objectives of an organization. Another aspect is intervention creation and change of materials which entails developing messages of a given program with the use of basics of effective message and materials design. Such aspects can undergo adoption by the given organization as long as they fall within the desired context and are designed for a given target audience. The design if the messages has to meet BCC aims and necessitate discussions and actions (Michie et al., 2011).

The major barrier encountered during communication campaign planning that aims at changing health behaviors is the identification and application of suitable persuasion, communication and change of behavior theories to overcome the change hurdles (Ryan et al.m, 2008). Frameworks for the integration of theories concerning the effects of media are given by a model of stage-of-change. It includes multistep flow and setting agenda; persuasion theories like the protection motivation theory and the model of elaboration likelihood; behavior change theories like attitude accessibility, theory of social cognizance and reasoned action, for campaign communication

(Nutbeam et al., 2010). Key aspects for the design of efficient messages and materials include incorporation of feedback, pretesting an audience, review of information accuracy, stakeholder engagement, presentation of drafts from audience consultation, creative briefs and updating the inventory of materials that exist. Another aspect is the implementation and monitoring of the process of change. The aspect includes assessment often data collection that helps in the assessment of the progress of a program and its implementation quality (C-Change, 2013).

According to Bertrand et al. (2006), BCC forms the heart of many community-based programming approaches. Organizations that are community-based use BCC in information dissemination through the integration of aspects like drama shows, music shows, radio talk shows, communication materials, education information, open-air discussions, and outreaches (AMREF, 2011). Furthermore, they utilize advocacy to secure the commitment of leaders to programs and policies to ensure there is support for the change of health and special conditions of communities. They also use BCC in strengthening community and social mobilization about fueling civil society's engagement. Furthermore, it helps them in the promotion of social norms which results in supporting health desires while changing practices that hinder health progression. BCC also helps them in monitoring activities of given projects including the use of mass media in awareness creation. It helps the target audience seek assistance while encouraging healthy habits through the promotion of social values (Mugisa and Muzoora, 2012).

1.2 Overview of the Help a Child Reach 5 HandWashing Campaign

This campaign aimed to communicate the need to wash hands with soap to expectant mothers in Migori County. The objective behind it was to try and reduce the increase in the child mortality rate in this county. On the Unilever website in 2016, CEO Paul Polman said in his speech during the launch of the Help a Child Reach 5 Campaign that in Kenya, for instance, only 15 out of 47

counties account for 98.7% of all maternal deaths. The first 28 days of a child's life are the most critical, as infants and their mothers are prone to infection. Handwashing with soap is an inexpensive method that can significantly lower the risk of neonatal mortality. "The easy act of handwashing with soap is one of the most cost-effective yet often ignored methods to save a child's life, and by leveraging the knowledge and scale of our company together with our partners, we can bring about real change".

Lifebuoy sought to alter the handwashing practices of pregnant females, fresh mothers, and school kids in Migori County. This county is recorded as one of the worst-hit in recording the largest levels of baby and infant mortality rates in Kenya. Paul Polman, the former CEO of Unilever, was a strong advocate of the "Help a Child Reach 5" campaign, which was launched by Lifebuoy, a Unilever brand. In a speech at the Cannes Lions International Festival of Creativity in 2013, Polman highlighted the success of the campaign, which had reached more than 48 million people in India and reduced diarrhea-related deaths by 36%. He praised the campaign for its creativity and effectiveness in using advertising to drive social change and emphasized the importance of businesses taking a leadership role in addressing social and environmental issues. According to Justin Apse, CEO of Unilever East Africa, in his speech, the campaign was intended to operate for six months, during which Unilever Company would use volunteers from a program they developed called Heroes for Change. The heroes were chosen from five major universities in Kenya. The volunteers, in conjunction with the health workers, were expected to train the 160 expectant mothers who were identified for the pilot phase and more from all the villages in Migori County. The mothers were trained on handwashing with soap, neonatal programs, and nutrition.

They were expected to teach and help them understand the need to touch babies after having washed their hands with soap and water. The campaign's main goal of targeting about 1 million Kenyans was meant to effect positive change in the communities through handwashing by the year 2020. The Kenya National Bureau of Statistics sites, that the neonatal mortality rate (deaths of children under one year of age) in Migori County was 45 per 1,000 live births as of 2021. This means that out of 1,000 live births in Migori County, an estimated 45 infants die before reaching the age of one. This necessitated the need to have the information relayed to the people through the volunteers and health workers who were expected to have face-to-face sessions and online tutorials with the people. The idea behind it was to generally increase health outcomes with regards to the children's number attaining 5 years.

The campaign strategy involved taking this international campaign to Migori County Lifebuoy's handwashing initiative mobile ad campaign, as 99% of internet users were mobile operators. The campaign further aimed to raise money to support the young kids. The thinking outside the box entailed an onscreen banner displaying a dirty hand. In order ti remove dirt from the hand, users simply swipe it. The child's age is indicated by 5 fingers. A need for everyday handwashing is displayed by the palm. An informative visual campaign then followed the spotless hands. Users were urged to give and distribute the video on their social media profiles. With every click-through rate on the video, Lifebuoy donated 1 Kenyan Shilling towards the cause.

1.2.1 Role of Communication in a Handwashing Campaign

Communication plays a crucial role in a handwashing campaign as it is the primary means of conveying information and influencing behaviors related to hand hygiene (Siegel et al., 2015). Effective communication can help bring to attention the need for handwashing with soap and water, particularly in settings where access to clean water and proper sanitation facilities is

limited (Cairncross et al., 2010). Communication strategies can also help dispel common misconceptions about handwashing and promote the adoption of correct hand hygiene practices (Pires et al., 2017). A handwashing campaign may use various communication channels, such as mass media (TV, radio, print), interpersonal communication (community meetings, home visits), and digital media (social media, mobile apps). The choice of communication channels should take into account the target audience and their preferred modes of communication (Pires et al., 2017). For example, younger audiences may be more receptive to messages delivered through social media, while older adults may prefer interpersonal communication methods. Communication also plays a critical role in monitoring and evaluating the impact of a handwashing campaign. By tracking changes in knowledge, attitudes, and behaviors related to hand hygiene, campaign organizers can determine the effectiveness of their communication strategies and adjust them as needed to achieve their desired outcomes (Lundgren and McMullan, 2014).

1.3 Statement of the problem

According to Peal et al. (2010), the effectiveness of handwashing interventions is based on the design and proper selection of approaches to enhance behavior change. Cairncross et al. (2010) and Waddington et al. (2009) agree that using the media to promote community-based approaches to promoting behavioral change has been linked with long-term sustainable success in prompting handwashing. The important approaches that can be used to improve the effectiveness and success of handwashing behavior change include implementing community-based participatory, social marketing, sanitation and hygiene messaging, inventory, and advocacy (Peal et al., 2010). For example, Participatory Rural Appraisal (PRA) and Urban Led

Total Sanitation (ULTS) are examples of successful community-based participatory approaches used in promoting behavioral change.

Social marketing involves the use of techniques that will enhance the adoption of behaviors that will improve the health and well-being of a society (Peal, 2010). In a social marketing approach, the program must be developed to market a specific intervention and sanitation goods and services. Is not clearly understood the most effective approach to promote handwashing behavior change. The 'Help a Child Reach 5' campaign was launched by Unilever in 2013 to improve handwashing behavior in communities and reduce the incidence of diarrheal diseases, which are the principal cause of mortality for children below the age of five in developing countries. The campaign was implemented in Migori County, Kenya, to reach 5 million people and reduce the number of deaths caused by diarrhea in children under the age of five. However, according to a report by the Ministry of Health in Kenya, the campaign failed to achieve its objectives. The report revealed that only a small fraction of the target population was reached. I have corrected any spelling, grammar, and punctuation errors, had been reached, and there was no significant change in hand-washing behavior or reduction in the incidence of diarrheal diseases in the county.

One possible reason for the failure of the campaign could be inadequate communication strategies. The campaign relied heavily on mass media, including TV and radio ads, as well as community-based events and education programs, to disseminate its message. However, these strategies may not have been effective in reaching the target audience, especially those in remote areas who may not have access to these channels. Furthermore, the campaign did not take into account the cultural and social norms of the target population, which may have influenced their handwashing behavior. For example, in some communities, handwashing is not considered a

priority or may be perceived as unnecessary, especially in situations where water is scarce. To carry out an investigation regarding the campaign's failure and develop effective strategies for future interventions, a comprehensive evaluation is necessary. This evaluation should include an assessment of the effectiveness of the communication strategies used as well as a comprehension of the behavioral patterns of the target population. Additionally, a participatory approach that involves community members in the planning and realization of interventions may be more operative in promoting behavior change and achieving campaign objectives.

Therefore, this research will be crucial in examining the role of communication in promoting behavior change despite the campaign running for 5 years, not reducing infant mortality cases, and encouraging the adoption of regular handwashing with soap and water, hence the need to conduct my research.

1.4 Research Objectives

The main objective was to examine the impact of communication in promoting behavior change focusing on the case of the 'Help a Child Reach 5' hand-washing campaign in Migori County.

1.4.1 Specific Objectives

- 1. To establish the communicative media and channels used in the behavior change campaign.
- 2. To assess the messages that were conveyed in the behavior change campaign.
- 3. To examine the challenges encountered during the behavior change campaign.

1.5 Research Questions

- 1. What were the communicative media and channels used in the behavior change campaign?
- 2. What messages were conveyed in the behavior change campaign?

3. What were the challenges encountered during the behavior change campaign?

1.6 Rationale and Justification

This is academic research whose main objective is to analyze the effectiveness of the Help a Child Reach 5 Campaign that was launched to help reduce the infant mortality rate in Kenya. In addition, it aims to promote handwashing with soap and running water for mothers before handling newborns.

1.7 Significance of the Study

This research will aid in backing policies such as the Kenya National Health Reproductive Health (MOPH, 2009) strategy, which proposes supportive self-care options at the level of communities and the creation of awareness on reproductive health amongst women by incorporating applicable BCC and IEC resources and actions. This study aims to contribute to the current understanding of the significance of BCC in Kenyan organizations that are community-based. Furthermore, it shall play a key role in bridging an information deficit gap besides providing valuable insights that can help strengthen the existing behavior modification activities of various organizations or create new ones, especially for those who have not yet implemented such programs. Finally, this research makes available details that result from an empirical analysis meant to support encouraging resourceful and real communications.

1.8 Scope and Limitation

According to the Migori County website, in terms of geographical analysis, Migori County is a county in the former Nyanza province. Migori County borders Homabay, Kisii, and Narok Counties, respectively, on the western side of Kenya. In 2019, its population was slightly over 1 million. The county has an estimated 40 wards with about 8 sub-counties. According to an

Afidep Fact Sheet 2017 report on Child, Neonatal and Reproductive Health, the county of Migori has approximately 916,00 people. People between 10-19, <5 and <15 years make up 25, 19 and 49% of the population, respectively. The total fertility rate of the county is said to be 5 children for every woman, which accounts for 5.3 values exceeding the 3.9 national value. Therefore, the county has a high birth rate. Furthermore, it is worth noting that the county is classified amongst the 15 countries having maternal deaths greater than 60% in Kenya.

Subsequently, this research uses a case study-based approach, the limitations of this research include those that are common when using the approach of the study because it is believed that findings may have low validity levels. There is a focus on behavior modification actions within Migori and specifically on the case of the 'Help a Child Reach 5' handwashing campaign for one year, 2022. The target population will be new mothers, pregnant mothers, and school children who have participated in the 'Help a Child Reach 5' program within the whole sub-county. A total of 100 new and pregnant mothers will be sampled from the population to provide information for this study. Therefore, study outcomes can encounter various challenges some include it being moderately limited with no generalization of other areas and a restricted timeframe for carrying out the research presents another limitation. Change of behavior forms a new study area and there is the possibility of having limited scholarly literature to review.

Evaluating the 'Help a Child Reach 5' campaign in 2021 is ideal for several reasons. Firstly, evaluating the campaign will help determine if it achieved its intended objectives and if it had any impact on the target audience. This will help stakeholders understand the effectiveness of the campaign and identify areas that need improvement. Secondly, the campaign was launched in 2016, and over the years, there may have been changes in the target population, the environment, or the behavior of the target audience. Therefore, evaluating the campaign in 2021 will help

stakeholders understand the current situation and identify any changes that may have occurred over the years. Thirdly, evaluating the campaign in 2021 will help stakeholders identify any challenges or barriers that may have hindered the campaign's success. This information will help inform future campaigns and ensure that similar challenges are not encountered in the future. Lastly, evaluating the campaign in 2021 will help stakeholders make evidence-based decisions regarding the allocation of resources towards future campaigns. The evaluation will help stakeholders determine the return on investment of the campaign and make informed decisions regarding funding for future campaigns.

1.9 Operational Definitions

Behavior Change Communication: The interaction and involvement of communities in the creation of paradigm shifts. It helps in the promotion of positive habits which help in the improvement of the levels of health of people in the long-term nature. Different interventions like community mobilization, interpersonal networking, and the use of mass media present outcomes measured by people's conduct, intentions, attitudes and knowledge (Michie et al., 2011).

Social and Behavior Change Communication: A research process characterized by a consultation that aims at the facilitation and promotion of behavioral change while supporting positive health outcomes and social change (Fox, 2012).

Interpersonal Communication: A scenario for exchanging information, feelings and meanings by people using both verbal and non-verbal cues (Montano and Kasprzyk, 2015).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter gives an analysis of the literature on behavior change campaigns and the usage of media in information dissemination to the desired audiences, where in this case it is marginalized people living in remote places. First and foremost, the study seeks to look at the various factors that influence behavior change amongst different individuals, as argued by different scholars. It then proceeds to look at behavior change communication, the media, and the use of social networking to communicate to our target audience the need to improve their health and well-being. The chapter concludes by looking at the key theoretical framework guiding the study alongside the different arguments that have been advanced by different scholars around the main study.

2.1 Behaviour Change

Newson et al. (2013) indicate that a huge percentage of our health challenges are preventable with the solution lying in behavior change. Public health's central aim within health services and interventions for promoting health is an aspect attributed to behavior change. A person's adaptation concerning reducing ill behaviors about health is considered behavior change (Newson et al., 2013). Different theories and models can be used to explain behavior change. An effective response to health demands is represented by the change in behavior and strategies for communication which promote positive results regarding health changes (Nutbeam et al., 2014; Corcoran, 2013).

According to the National Institute for Health and Care Excellence (2007), individuals, households, communities, or population levels rely fully on the implementation of behavior

change through a range of means or techniques. Outcomes and Interventions at the same level may or may not occur interchangeably. Community- and family-level interventions can individually be affected by population-level interventions and whole populations can be affected, as shown in this case. Newson et al. (2013) state upstream determinants influence behavior change for health transition: Better health, on the other hand, is required at every level: planet, country, community and family. Nice (2007) proceeds to say that the effects of an intervention are rarely restricted to one level, whether an intervention or program is delivered to individuals, in community or family settings, or at a population level.

For example, primary care interventions aimed at reducing child mortality among expectant mothers could have an impact on the individual's behavior (for example, the number of times they engage in handwashing with soap, individual health outcomes, or incidence of deaths of children below the age of 5, cases of childhood diarrhea), on the local community (for example, local sales and availability of soap, poor hygiene-related practices), and at the population level (for example, lower chances of other children contracting intestinal infections, eye infections such as trachoma, conjunctivitis, or pink eye, as well as developing acute respiratory infections).

Nice (2007) says that attempts to promote behavior change can be addressed in several ways. Local interventions ranging from one-to-one interactions with individuals and national campaigns to scheduled radio programs are some of the activities underlying this intervention and can be delivered at many levels. Unilever has broadly focused on education or communication, including one-to-one advice, group teaching, or media campaigns. Lifebuoy Soap, through the Unilever Company, has taken part in crafting a handwashing campaign for expectant mothers within Migori County. Currently, they are engaged in a nationwide campaign

to inform school-going children about the need to wash their hands with soap to avoid contracting bacterial infections that come because of a lack of hand hygiene.

2.2 Communicative Media and Channels Used for Behavior Change Campaigns

When people exchange feelings and communicate, the scenario is called communication (Corcoran, 2011, The Communication Network, 2008). A good communication model is made of feedback, understanding, a receiver, a message and a sender. A top-down communication model that has been driven by various experts sis slowly changing to horizontal and non-hierarchical communication, especially in the health information area (Corcoran, 2013). The different communication channels may take the form of communical, organizational, or interpersonal. Interpersonal or intrapersonal communication enables the sharing of information between people like a peer-to-peer or daughter-to-father.

Organizational communication m]entails information exchange within organization networks like workplaces or schools. On the other hand, community communication takes place within a communal setup and entails the use of mass media (Corcoran, 2011). Various approaches may be used to change behavior. BCC entails theoretical models coupled with other methods of communication. Strategic communication requires evidence where a certain message is designed to address a given context locally. Advocacy helps in the preparation of a given audience to accept a given program, idea, or behavior at a political or social level. The mobilization of a social group involves mobilizing people from different areas in a community to present behavioral change.

At least under certain conditions, new behaviors are adopted by institutions, communities and individuals. However, there is a possibility of them going back to old behaviors. To accomplish

the change, WHO (2009) suggests that the adoption of a communication view transmission requires careful consideration of the channels used to disseminate messages, the people that the messages are intended for, the response of the audience and message features with a high impact.

After a message of intervention derived from the communication based on various factors at both individual and macro-social levels it is shared and processed, it goes to decide what people encounter the interpretation. BCC depends on behavior change theories, and these beliefs form the basis for developing inclusive communication techniques and programs. According to Edberg (2015), communication theories are used to investigate the processes of decoding, receiving and sending messages among other things.

There exists an array of strategies that are popular for the promotion of healthy actions among target audiences. Downstream and upstream approaches are usually utilized. The upstream strategy is aimed at reaching out to various stakeholders. These people hold significant power to make a difference in relationships they enjoy with the target audience and to affect health initiatives. They are better equipped to make changes in the conservational factors that can influence behavior or legislation and in community-based or groups. (NCCMT 2007). The downstream approach is concerned with special campaign activities and social marketing.

Health communication campaigns take several shapes, serve various goals, and employ different media. Their intention involves impacting the actions and beliefs of people with regard to health for a respective group or audience and not the whole population, observing a time frame in implementation, and integrating different communication efforts and media in educating people about subjects related to health. Because it connects the how and why components, effective methods are important in dictating the failure or successes of any program related to health

communication. It gives a guide and direction in developing key communications, as well as a justification for the different tasks proposed (NCCMT 2007).

Different researchers view radio as the major source of mass media (Babalola et al., 2006; Papas-DeLuca et al., 2008; Kajubi et al., 2008; Keating et al., 2006; Muli and Lawoko, 2014; McClain and Ambasa, 2014; Asp et al., 2014, Koenker et al., 2015). According to Babalola et al. (2006), radio messages played a key role in reducing female genital cutting and false beliefs in Nigeri's Enugu area. Asp et al. (2014) showed no relationship between the preparedness of women for birth with radio exposure in Uganda. A reduction in contraceptive consumption rate was realized through a campaign done via radio messages (McClain and Ambasa, 2014).

Many males compared to females are reached through television, a reason attributed to a bigger population of educated men than women (Keating et al., 2006). In Uganda, people who read newspapers have better preparation for childbirth compared to those who listen to the radio (Asp et al., 2014). The same researchers discovered that people exposed to television and printed media were less than those exposed to radios. There are reasons to explain the situation despite the low prevalence of newspapers depending on area access (Keating et al., 2006). Residents of rural areas may not be well reached with campaigns done via newspapers, TV and mass media. A lack of consideration of language variation also contributes to the failure of such campaigns. There are low literacy levels in rural areas. Furthermore, newspapers' cost is high and may not be afforded by low-income earners in such areas (Asp et al., 2014).

Other small media including songs, drama, posters and picture cards give information alone and fall under the interpersonal communication category based on the mode of message distribution (Briscoe and Aboud, 2012). Socio-cultural norms need to be respected by community messages (Atkinson et al., 2011). However, the messages need to make people rethink traditional beliefs.

There is effectiveness in using posters whose design is intended for a specific audience based on their principles and values (Mushi et al., 2008, Ntshebe et al.m 2006, Kirby et al., 2007).

A campaign on HIV/AIDS in Botswana considered the inclusion of cultural aspects. It aimed at seeking feedback from people and considering their suggestions. Their values and culture were considered in poster designs to reach more people (Ntshee et al., 2006). Considering Uganda, posters existing at different health centers were critical for bisexual and gay men. However, the posters did not have information regarding HIV/AIDS (Kajubi et al., 2008). There is a possibility of misunderstanding and misinterpreting posters. An example of such a scenario took place in Tanzania where people did not understand the information in malaria vaccination and treatment based on the symbols used. There is a lack of names in the local language for branding preventive measures and treatment for malaria in infants. However, feedback was sought from the community before designing other posters to correct the mess. New brand names that were informative were adopted to help the community understand new interventions on the subject (Mushi et al., 2008). MacClain and Ambasa (2014) established no significant change regarding family planning posters and the reduction of contraceptive intake in Kenya.

2.2.1 Messaging and Media for Behavior Change Campaigns

Wakefield et al. (2010) stated that traditional campaigns tend to spread their message through media channels that scope a vast audience, such as newspapers, magazines, posters, billboards, radio and television. However, people are usually exposed to these messages passively, as they have become accustomed to them. Although some campaigns use modern technology, the receivers still need to actively seek the information, like clicking on a weblink.

Choudhury (2011), in his paper on Media in Development Communication, when media is utilized for development, a developing communicator should know that users are prevalent. Mass media structure should be planned in such a manner the efforts made should be able to reach out to large audiences every time. Hence the reason why Help a Child Reach 5 has proposed to use media that reaches a large audience, which includes but is not limited to television, radio, and newspapers.

Messages on health campaigns can backfire or fall short. Furthermore, they may not meet the audience's expectations. Other challenges are lack of funding, poor research formats and cultural associations and fractured surroundings. A combination of these factors is also possible. Homogenous messages may not address heterogeneous people. Finally, there is a possibility that campaigns address some behaviors that require people's change and yet they lack enough resources to embrace the change (Hornik et al., 2010).

Ajzen & Fishbein (2010) insist that most campaigns have an objective of either causing emotional responses or invoking cognitive actions thereby having a direct effect on people. Therefore, an individual's decision-making is influenced. The results include helping individuals in adopting healthy practices, reducing change obstacles, and making people's emotions change their behaviors. Therefore, new behaviours are achieved through strengthening people's intentions.

Lifebuoy's handwashing campaign has been taken to educate school-going children and expectant mothers on the effects of poor hand hygiene. An advert has been developed on TV showing how infection-causing bacteria work in children's bodies, and as a result, a child falls ill and hence is not able to attend school. Mothers, on the other hand, get to understand the importance of ensuring their hygiene standards are okay through the genres used to package the

messages intended to inform the target audience of top-notch illnesses like diarrhea, which is one of the leading diseases resulting in an increase in child mortality under the age of 5 years.

2.2.2 Developing Behavior Change Messages

The C-Modules approach to effective change of behavior requires an understanding of the context and developing a communication strategy while establishing change interventions (C-Change, 2012). This implies that an effective communication strategy can only be developed through a sound understanding of the situation, objectives to be achieved, target group, and a combination of approaches. Once a message is developed, it needs to be implemented and monitored properly so that an evaluation can reveal the suitability of the communication strategy (Michie et al. 2011).

The foundation for developing an effective communication strategy includes various factors that assist behavior change. This should be done incrementally so that intended outcomes can be attained gradually (McKenzie-Mohr, 2011). This implies that an optimum communication plan should not address all objectives at the same time. A poster and a radio clip, for example, should only include one purpose, whereas brochures can include up to two. A drama, according to Gibson (2010), can support three purposes, and an appropriate approach should be used to guarantee that infection, prevention, or control measures do not carry more than two objectives.

The tone of a communication strategy should be consistent with the target group that the change communication targets (Gibson, 2010). It is not proper to be judgmental, disrespectful, or threaten the audience while disseminating the communication. While developing communication, it is important to focus on a clear message that will achieve particular behaviors. The positive approach and benefits of a communication strategy should be determined by the

target group. Also, the target group should be able to understand and interpret the content properly without losing the intended meaning. According to Short et al. (2015), an effective communication strategy should focus on creating high-level attention, sharing the benefits, having a clear message, being trustworthy, and being consistent.

Developing behavior-change communication necessitates a focus on the context in which the communication will occur. It should be communicated through an interactive approach to enable the development of messages to tailor positive behavior through various channels to sustain a community behavior change (FHI, 2002). According to Manoncourt (2013), when producing behavior-change communication, it is critical to create a message that is cognizant of the environment's socio-ecological limits. Lai and Kreuter (2012) define ecology as how people in a specific ecosystem relate to themselves, their families, their communities, and their surroundings. Therefore, the communication strategy should focus on the spheres of the change behavior campaign so that it can influence the programming of the context (McKee et al., 2000).

strategies that can be used to compound the issue. According to the C-Change (2013), a communication strategy should focus on behaviors that exacerbate the situation and people who can partner with the strategy to achieve desired objectives (Gurman et al., 2012). A behavioral change communication strategy for promoting handwashing can achieve success by integrating behavior change as part of the program alongside other supportive services (Brennan & Resnick, 2012). People need to be taught about the need for change in handwashing before they can adopt the intervention strategies so that they can support transformation, skills, and services (FHI, 2002).

2.3 The Impact of Behaviour Change Campaigns

Communication methods that are utilized in a given behavior change campaign determine its success (Keating et al., 2006; Bowen, 2013). The designs need to consider social routines and cultural experience of communities and even the capacity to manage interventions (Atkinson et al., 2011). However, HIV campaigns are also similar on the global stage and may be implemented normally (Kirby et al., 2007). Linguistic and cultural differences are the main reasons most HIV/programs do not succeed in Botswana. There was discomfort caused by programs that interrupted people's traditional values (Ntshebe et al., 2006).

The success of a modification program depends on its focus on given behaviors (Kirby bet al., 2007). The advantage is paid to the inclusion of some strategies like social support, resources, media and performance (Kirby et al., 2007; Briscoe and Aboud, 2012). A big population can be reached through mass media (Keating et al., 2006). Community activities have a big impact on people's change intention. However, there is a strong impact when the audience gets exposed to a variety of information sources (Babalola et al., 2006; Atkinson et al., 2011, Muchini et al., 2011 and Ricotta et al., 2015). It is also important to target the attention of an audience more frequently (Atkinson et al., 2011).

The knowledge of communities is improved through open discussion and mass media (Keating et al., 2006; Bowen, 2012). Coupling of mass media (printed material, discussion programs, Tv and radio), agents of change in communities (public meetings, school events, cultural shows, group talks and house visits) and community messaging (video units, mobile and road shows), had a positive influence on the beliefs and perceptions of people regarding nets that were treated using insecticides, and ensured that lots of people adopted the use of the nets (Ricotta et al., 2015). Knowledge about HIV/AIDS increased through media exposure. This knowledge was lower in rural areas compared to urban ones (Muli and Lawoko, 2014).

There is lack a of clarification on the level at which different channels influence the behavior of people (Ricotta et al., 2015). Information has been channeled through community agents, village criers and announcements in mosques and churches. However, there are cases of inadequate explanation and infrequent sessions on health education during the use of different communication channels (Mushi et al., 2008).

Community Media is a locally independently oriented media entity to community projects founded on a strong discontent with leading media format and content, dedicated to the values of free expression, community ties, and encouraging community cohesion. Howley, 2005. To address or communicate diverse health behaviors to large audiences, media campaigns have been utilized (Kotler et al., 2008). The campaign duration varies and may thus be short or sustained over long periods. The campaigns are distinctive because they can either get a link to other components of a program like institutional and clinal outreach or may stand alone. They can also support change in policy and influence access to services and products.

The author continues to outline the different information dissemination methods from the big programs of social marketing and health campaigns. Mass media has the advantage of disseminating messages that are focused on behavior and are well-defined to big populations with a low cost and a lengthy time (Kotler et al., 2008). Through this, Lifebuoy has identified 160 expectant mothers in Migori County whom they will use in the piloting phase of this project. Mass media campaigns encompass the use of newspapers, radio, television and existing media while targeting large populations (Wakefield et al., 2010). There si a passive exposure of these messages.

Widespread product marketing and significant societal cultural standards motivated by dependence or practice are all factors that influence the success and failure of impactful media campaigns. Ajzen and Fishbein (2010), indirect strategies for behavior change can be adopted. First, interpersonal conversation via mass media can raise frequent concerns within a social network, making it easy to promote change in behaviors. Large populations are reached by social media meaning that an individual can still get influenced by other people close to him changing their behaviour regardless of him getting exposed to the campaign. An example is where people decide to form groups to practice handwashing after washing or listening to handwashing campaigns. Community Health Workers may be aided to aid in the communication of this behavior change on handwashing within the women groups.

2.4 The Challenges Encountered During Behavior Change Campaigns

Communication interventions have been used to modify behavior; yet, changing people's behavior is difficult. An inclusion is: that not everyone who gets to hear about the messages understands them and, as a result, alters their behavior. Indeed, just a small proportion of the initial population that came across the message will be involved in behavioral change (Sullivan 2011). Behavioral change is a priority in health communication, and it is gradual, therefore there is a need to focus on the affected community. A persuasion approach is critical in the enhancement of new behaviors and beliefs by the use of rational arguments (Edgar, 2012). Mutual understanding, shared experience, group discussion, agreements and enhancement of social networks emanate from dialogue. Furthermore, there is an importance aspect paid to entertainment because it promotes excitement, emotional stimulation and enjoyment through the exposure of the audience to drama, comedy, dance and music. Compliance is supported through incentives, threats, and negative or positive sanctions (Laverack, 2017).

Poor research activities, limited information access and low levels of health literacy, especially in developing countries, communication barriers amongst health workers and provision of information of low quality regarding healthcare form some of the slid barriers faced by health communication. Strong beliefs and religion have the possibility of preventing risky behavior. For example, individuals in Tanzania who were Christians and Muslims did not want to get punished because of sexual activities and other undesired consequences (Wight et al., 2012). In terms of teenage pregnancies, Muslims had the lowest number compared to Catholics (Leerloojier et al., 2013). Punishment threats and religious rules also contribute to the prevention of risky behavior that is not often talked about (Wight et al., 2012). This is also following a systematic review conducted by Mtenga et al. (2015) regarding the improvement of the health of newborns in Tanzania.

Behavior change may be prevented by misinformation or even the lack of it. Atkinson et al. (2011) conducted an orderly review of the literature that aimed to promote hand hygiene in healthcare settings. The review aimed to assess the effectiveness of various interventions and identify key factors that influence their success. Atkinson et al. reviewed studies that used various approaches, such as education, reminders, feedback, and hand hygiene products, among others, to promote hand hygiene among healthcare workers. The review found that interventions that combined multiple approaches were more effective than those that used a single approach. The review also identified several factors that influenced the success of interventions, including the need for sustained support, the importance of leadership and organizational culture, and the need for tailored interventions that address contextual factors such as workload and staffing levels.

There is sex between females and males in Uganda, as evidenced online. However, the country considers homosexuality immoral and illegal, which is the reason why there lack of HIV/AIDS campaigns target heterosexuals indicating a high probability of bisexual and gay men contracting it (Kajubi et al., 2008). Bad public infrastructure, program resistance from the community and financial constraints contribute to the program's failure. Furthermore, unclear responsibilities and roles, and insufficient systems of reporting affected the program's success (Atkinson et al., 2011).

Persistent health literacy programs can help address the literacy challenges with a keen focus on the campaign targeting people affected by having marginalized skills of literacy through establishing centers meant to give effective skills of communication to professionals. Laverack (2017) conducted a scoping review of the literature on community-based interventions that aim to promote hand hygiene. The review aimed to identify key components of successful hand hygiene interventions in community settings and provide guidance for the design and implementation of future interventions. Laverack reviewed studies that used various approaches, such as behavior change communication, social marketing, and community participation, among others, to promote hand hygiene. The review identified several key components of successful interventions, including the need for participatory approaches that involve communities, the importance of addressing contextual factors such as cultural norms and beliefs, and the need for sustained support for behavior change. Different approaches need to be adopted with a document on health promotion and BCC including people's empowerment, the creation of a supportive environment through string policy frameworks, adopting approaches that enhance change of behavior and engaging people to make healthy decisions.

2.5 Theoretical Framework

This study will be grounded in two theories, namely, social learning theory and Lewin's threestep change theory.

2.5.1 Social Learning Theory

Learning theory presents both the theory of social ecology and structural models. Learning theory emphasizes vicarious and direct learning by considering how consequences and behavior interact (Scutchfield and Keck, 2003). Furthermore, models that are theory-based and health communication give different aspects in the implementation and planning of interventions related to public health. It is critical to disseminate messages regardless of the impact it shall have on the recipient. Achievement of this perspective is possible through considering major elements like channel analysis. The analysis determines communications methods, channels and settings that have a high probability of influencing the target audience (Bensley and Brookins-Fisher, 2018). It entails the easiest channels of reaching the target audience, their information perception and preferences.

Bandura (2001), points out that social cognitive theory gives an argentine conceptual framework (Bandura, 1986, 2001b), that helps in the analysis of psychosocial mechanism and determinants by which human action, effect and thought is symbolically influenced.

According to McQuail (2010), Bandura's theory assumes four essential social learning processes, which take place in the sequence of attain, retain, produce and motivate. Consideration is drawn to what the media contains that can be relevant to our interests, personal needs and lives. The study aims to explain the role that communication has played in promoting handwashing with soap as an intervention to build focus and convey the need to take up this initiative of behavioral

change as we try to minimize infant mortality. Understanding the importance of handwashing with soap is important in that our hands bear germs that can lead to contracting diseases that result in death if passed to a child under the age of 5 years. A third production stage entails the application actualization of behavior with regards to learned lessons, where they get a reward of punishment, causing more or less motivation.

Bandura (2001) goes on to claim that human conduct has always been interpreted as unidirectional causation, where actions are influenced and regulated either by environmental factors or by inner characters. The study aims to examine the knowledge rates of the expectant women of Migori County on the effects of handwashing with soap and water. Accessibility to water is a challenge in some and most of our rural areas, so mothers have to travel far to get water or buy from a local vendor, which can be costly, particularly in these tough economic times. The need to hand wash with soap and water might therefore not be very fundamental to them.

The objective of the scholars relates to my research in that the setting in which low-income families flourish affects their ability to hand-wash regularly with soap and water before handling an infant. My research, therefore, seeks to understand the challenges that mothers can face when it comes to adopting this initiative for behavioral change. The role it plays is allowing a study to examine the realization of the soap and water effect in handwashing on facilities of children.

Most mothers have a preconceived mentality that modern approaches are not as common as conventional methods, and new methods of child upbringing and handling have posed a challenge. This then presents a challenge in understanding the message of the study. Using social workers and volunteers to reach out to mothers in rural areas serves as an excellent way to help build understanding and awareness of the need to wash hands before handling an infant.

Bandura (1999a, 2000c): There is no consideration of individual autonomy in people leading their lives. They need to consider working together to achieve outcomes that they cannot achieve on their own. The importance of social cognitive theory applies to the collective agency of human nature.

A shift in actions in various human beings is a gradual process. Collaboration with influencers is critical to help empower mothers to use soap and water to wash their hands when handling babies. In this case, there is a need for the campaign to help create awareness of the need to adopt this initiative among community-based staff, Chama leaders, and volunteers. The scholars support this study by arguing that changing behavior takes time for a person, and as a result, the outcome may not be immediate. Mass media use in this research aims to understand the messages employed in the Help a Child Reach 5 Campaign. Using this, it also aims to examine how this program led to a reduction in infant mortality under the age of 5 as a result of taking up the program to improve behavior.

2.5.2 Lewin's Three-Step Change Theory

Several models explain the change management process, like the force field analysis proposed by Kurt Lewin. It is important to understand the main motivation that prompts a need for or resistance to a change (Armenakis & Harris, 2009). This model is critical in understanding the motivation for change resistance or adoption so that handwashing programs can formulate strategies for minimizing resistance and promoting the success of handwashing programs (Cameron & Green, 2003). The three main stages of the Lewin change model are unfreezing, changing, and freezing. Using force field analysis, this study will be able to identify the driving forces of resistance to adopting a change management program. This involves identifying the forces that would support the change process and those that would resist the change process.

According to Lewin's model, identification of the conflicting forces will provide a basis for developing an approach that will ensure the success of the handwashing program (Cameron & Green, 2003).

Unfreezing

Based on the Lewin model, the unfreezing stage requires a need to create awareness about the importance of the handwashing program. This is achieved by unfreezing the current system based on a team approach as opposed to focusing on an individual. The people targeted by the handwashing program will resist change, but this can play a major role in improving their lives (Armenakis & Harris, 2009). To unfreeze the existing culture, the current situation of neonatal deaths creates a need for change. At this stage, the respondents will be provided with the reasons for change and the benefits that will accrue by adopting the new change process (Robbins, 2003).

Changing

The second stage involves change, which involves a cognitive redefinition of how the objectives of the handwashing program can be achieved (Mintzberg, 1989). In this stage, people will be reeducated so that they can understand the positive aspects of change. At this stage, the program will organize and mobilize resources that are required to support the transformation process (Armenakis & Harris, 2009).

Freezing

Its intention is to ensure that changes that are implemented never fail because of old existing changes. This stage occurs because of existing evidence that handwashing is a stable approach to addressing the problem of neonatal mortality among children under five years old in Migori County. At this point, a detailed analysis of available resources to support the handwashing

program will be evaluated so that a meaningful change can be implemented to execute the behavior change (Johnson et al., 2005). At this point, the main interest of the change program is to prepare communicative messages and use media channels to emphasize the importance of the handwashing program. It is important to consider the human aspect in the change program by focusing on the psychological bond that exists among healthcare workers and new and pregnant mothers (Walton, 1999). According to Johnson et al. (2005), the communicative messages through the channels should be clear by providing sufficient knowledge on handwashing.

2.5.3 Health Belief Model

One communication theory that can be used to promote behavior change is the Health Belief Model (HBM). Behavior change is most likely to occur when individuals perceive personal vulnerability to a health problem and that the problem is serious enough to warrant action when they believe action will reduce the extent of the problem, and when they have a perception that advantages tied to taking a given action are more than any intended costs and barriers.

The HBM has been widely applied in health communication campaigns, including those aimed at promoting vaccination, HIV prevention, and cancer screening (Champion & Skinner, 2008; Janz & Becker, 1984). By tailoring messages to individuals' beliefs and perceptions about health problems and addressing potential barriers to behavior change, health communicators can use the HBM to design effective behavior change interventions.

2.6 Conceptual Framework

It indicates the association between variables. The study's independent variables were communication strategies used in BCC, the role of media in BCC, and the challenges encountered during BCC. The dependent variable is handwashing with soap and access to good

hygiene to ensure a reduced infant mortality rate as well as an increased number of children reaching age 5. The framework is summarized in Figure 2.1.

INDEPENDENT VARIABLES DEPENDENT VARIABLE **Communicative media** channels Radio Television Short Video Films Social Media Outdoor media Posters and Brochures Word of mouth Resultant behavior change campaign Increased handwashing practices **Communicative media** messages approaches Gain framing Social norm Guilt appeal Fifth control message

Figure 2.1: Conceptual Framewor

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

The chapter describes the methodology used in conducting the research. Therefore, there is a description of the research design, study area, targeted population, the study sample, and sample size from the intended audience. The chapter also describes procedures for data collection and sampling as well as instruments of data collection, instruments validity and reliability, and finally data analysis tools and methods. This order is how the chapter is organized.

3.2 Research Approach

A mixed-methods research approach was adopted. Babbie (2010), argues that choosing a research approach will significantly impact the research design and methods selected. Qualitative research approaches are often used when gaining an exhaustive understanding of human behavior and experiences. Quantitative research uses a deductive research approach that focuses on polls and surveys extracted from data gathered around a specific group of people.

When evaluating behavioral change, a qualitative research approach can be useful for exploring the reasons behind the change and gathering more detailed information about the process of change. This approach would involve collecting rich, descriptive data through interviews, observations, and document analysis to identify the factors that contributed to the successful behavior change, including the individual's motivation, social support, and any barriers they encountered along the way.

3.3 Research Design

A descriptive research design was instrumental in defining handwashing impacts on the target population. Both quantitative and qualitative methodologies of research were used. The design helped collect habits, opinions and attitudes from the target population. A descriptive design helps in setting out a large outline of critical aspects regarding work that needs to be done, entailing data collection methods and analysis used and the research strategy adopted in addressing specific objectives (Gordon, 1998). A descriptive design was critical in giving an accurate picture and explaining characteristics regarding the knowledge, beliefs, practices and behaviors of community members. The design was appropriate as the study seeks to explore the case of the 'Help a Child Reach 5' hand-washing campaign in Migori County, Kenya. The study also made use of quantitative and qualitative research approaches. To understand the breadth and depth of the issues under investigation, using quantitative and qualitative viewpoints, inference techniques from data analysis after collection were incorporated. It offers a broad understanding of the subject, and it is suitable for corroboration.

3.4 Study Site

The study site was Kuria West, Migori County. Kuria West covers three divisions, namely Kehancha, Mabera, and Masaba. To carry out the handwashing campaign to create awareness and encourage habit formation among community health workers equipped with skills in counseling. The study area is suitable for this study because Kuria West in Migori County has a high child mortality rate due to preventable diseases such as diarrhea and pneumonia. The "Help a Child Reach 5" program aims to reduce child mortality rates through education on proper hygiene and sanitation practices. Secondly, the program is relevant to the community in Kuria West as it focuses on addressing the specific health challenges that the community faces. By

studying the program, one can demystify the community's health needs and how they can be addressed. Thirdly, "Help a Child Reach 5" is a collaborative effort involving the government, NGOs, and local communities. Studying the program can provide insights into how these different stakeholders can work together to address health challenges in a community. Also, the program has been successful in reducing child mortality rates in Kuria West and can serve as a model for other communities facing similar health challenges. By studying the program, one can gain insights into the strategies that have worked and can be replicated in other settings.

3.5 Units of Analysis

Mothers who were either pregnant or had children between 1 and 5 years (the period between 2016 and 2021) based in Migori County were used.

3.6 Target Population

Mothers who had children between 1 and 5 years old for the period 2016–2021 made up the target population. This is the period when the campaign was carried out within Kuria West. According to the 2019 Census, the females population in Kuria West Sub-County in Migori County was 107,417, and this will be considered the target people. According to Kothari (2004), a fraction percentage of the population as 10% is ideal for a study. Therefore, the total sample target population for this study will be 100.

3.7 Sample Size and Sampling Techniques

3.7.1 Sample Size

Sampling involves carrying out a systematic compilation based on large instances that represent the population. Its objective is the collection of empirical data that is precise at a lower cost (Baskarada, 2014). Both purposive and random sampling techniques were used. In calculating an actual sample size, Fisher's formula was adopted (Rutterford et al., 2015).

To identify the appropriate ratio size for assessing the success of "Help a Child Reach 5" in Kuria West, Migori County, using Fisher's formula, we would need to consider the following factors: Confidence Level: The level of confidence we desire in our estimate of the program's success rate. Secondly, the degree of error is the acceptable amount of error or uncertainty we can tolerate in our estimate. Lastly, the population size is the total population of the area being studied.

Therefore, a sample size of approximately 384 individuals was used to assess the success of "Help a Child Reach 5" in Kuria West, Migori County, with a 95% accuracy level with a margin of error of 5%. However, it is important to note that this is only an estimate, and other factors such as the sampling method, survey design, and response rate could also affect the accuracy of the results.

3.7.2 Sampling Technique

Both random and purposive sampling were used. The target was local leaders, community health workers, nurses and doctors, who were critical in spearheading awareness on handwashing with soap. Purposive sampling requires the researcher to sample the subjects based on how he understands their characteristics. In this study, subjects involved in handwashing activities were sampled. The main advantage of using purposive sampling in this study is that it was easier to generalize about handwashing practices (Dodge, 2008). A purposive sampling to identify community health workers, new and pregnant mothers, and doctors. The sample was proportionately distributed to the Migori sub-counties based on their populations.

3.8 Data Collection Techniques

Data collection involves gathering essential data linked to both the objectives and research questions. This study used semi-structured questionnaires, and key informant interviews with the program staff were conducted. The procedure for data collection was done by 4 research assistants and the researcher. It involved a researcher administering questionnaires to the desired respondents and conducting key informant interviews.

3.9 Validity and Reliability

Reliability refers to a level to which a given test or estimation scale is stable, consistent, steady and reliable (Deb et al., 2019). An instrument is considered more solid if it has a great constituency. A pilot test was necessary to ensure reliability and validity. According to Di Mascio et al. (2015), a pretest using reasonable instruments helps in the evaluation of whether an instrument is likely to become problematic. 10% of the sample size was used in the pretest. The content of questions for the interview was examined by the researcher to enable the exclusion of questions that would yield unnecessary information. Cronbach's alpha (α) helped determine reliability. Bos (2020) states that instruments used in any research should have a reliability level equal to or more than 0.70.

3.10 Data Analysis and Presentation

Analysis of data was done from the outcome of both the respondents and secondary data records. There was a compilation of findings to help in aiding spreadsheets, suing data coding, sorting and editing to ensure consistency and accuracy. The data was quantitatively and qualitatively analyzed. It was imported to SPSS before variables were defined and coded. Descriptive statistics helped in summarizing the demographic characteristics of the respondents while

providing key variables for the research questions. Measures of central tendency and dispersion were used in descriptive statistics. Frequency distribution, standard deviation and mean were used in summarizing the findings.

3.11 Ethical Considerations

Following research ethics is a critical practice in research. This is based on confirming and establishing faith in the findings, as well as appreciating the source of data or information (Bukve, 2019). This study will take stringent efforts to ensure that all ethics are followed when performing a successful research study. This study will protect respondents' identity by not publishing their names, job titles, ranks, or the institutions for which they work during the report's development. The study will maintain the confidentiality of all field data obtained. The study will guarantee that field data is appropriately kept and not accessible to unauthorized individuals (Diaz-Diaz & Semenec, 2020). This is done to protect the privacy of the data and the sources of the information.

A letter for conducting research was obtained from the university. This is important because it enables the researcher to advise all the respondents that the collected data is for academic use only and not for commercial use or any other purpose, and therefore creates trust in them to respond to the research instruments used to collect data. In all instances, all research assistants involved in this study were required to comply with all the research ethics and therefore make the study a success.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The chapter gives the study findings based on the objectives. Key informant guides and questionnaires were useful for primary data collection.

4.2 Response Rate

357 out of the 384 questionnaires issued to the respondents were returned, representing a 93% response rate, which was sufficient for proceeding with data analysis (Mugenda and Mugenda, 2003). The response rate is represented by Table 4.1. The graphs and tables under this chapter have the 357 sample size unless otherwise stated. Some tables have more than 357 sample sizes as they represent multiple responses (in cases where respondents had to give more than one response).

Table 4.1: Response Rate

	Frequency	Percentage %		
Responded	357	93		
I did not respond	27	7		
Total	384	100		

Source: Author (2022)

4.3 Demographic Information

It is represented in terms of their ward of residence, age, education, their children's status during the campaign period, and the duration of their stay in their current home.

4.3.1 Sub-County of Residence

This study was carried out in all the sub-counties in Migori County. At least two wards were randomly selected in each of the sub-counties. The respondents were evenly distributed across the selected wards, as shown below.

Table 4.2: Respondents' sub-county of residence

	Frequency	Percent
Kehancha,	115	32.2
Kenancha,	113	32.2
Mabera	120	33.6
Masaba	122	34.2
Total	357	100.0

Respondents had to tell how long they had lived in their current area. This was used to gauge if the respondents had lived in the area long enough to have heard about the handwashing campaign and observe the behavior change as a result of the campaigns.

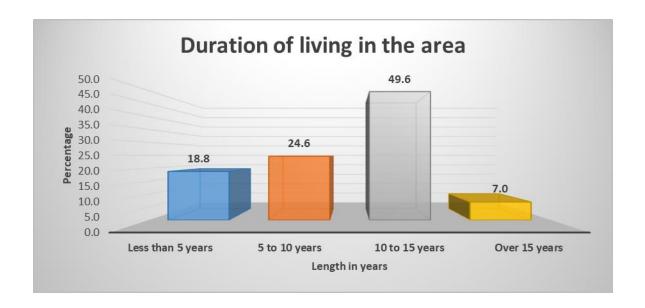


Figure 4.1: Duration of living in the area

Half of the respondents stated that they had lived in the current area for a period between 10 and 15 years. In addition, 24.6% indicated that they had lived in the area for a period between five and ten years; 18.8% had lived in the area for less than five years; whereas 7% of the respondents reported that they had lived in the same area.

4.3.2 Respondents' Gender

All the respondents for this study were mothers who had children between 1 and 5 years old for the period 2016–2021. This was the period that the 'Help A Child Reach 5' handwashing campaign was conducted in Migori County.

4.3.3 Respondents Age

Participants were either equal to or more than 18 years old. Some mothers were below 18 years old, but according to the laws of Kenya, anyone under 18 is regarded as underage, and therefore, assent would need to be sought. The researcher deliberately excluded mothers who were under

18 years old due to this requirement. The age distribution of the respondents is shown in Figure 4.2.

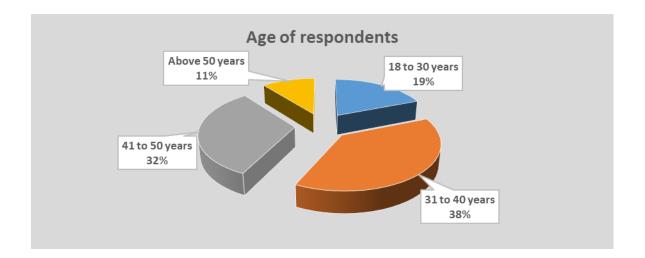


Figure 4.2: Age of respondents

Based on the figure above, respondents between 31-40 years gave the largest proportion (38%). The next one was 41-50 years at 32%. 18 to 30 years accounted for 19% of the respondents, while 11% were above 50 years of age.

4.3.4 Level of education

The research attempted to assess the degree of the respondent's education level. This was critical because it allowed the researcher to assess the study's level of understanding and to understand the issues.

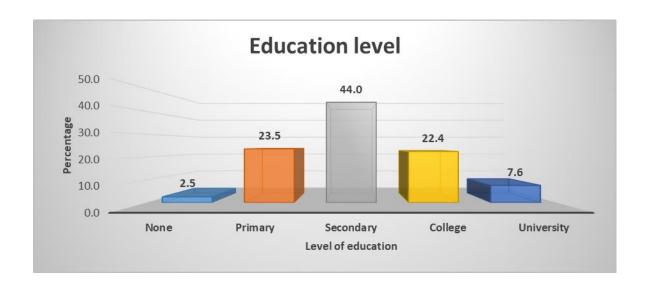


Figure 4.3: Level of education of respondents

Many respondents completed the basic level of schooling, with 44% reporting to have completed secondary school education, 22.4% had a college education, and 7.6% were university graduates, respectively. Moreover, 23.5% of them had a primary school education level, and only 2.5% had no form of basic education. The majority of the respondents had the basic educational background to be able to adequately respond to questions.

4.3.5: Status

Status was important to determine how they could have first heard about the handwashing campaign. 30.8% of the respondents stated that they first heard about handwashing when they were pregnant. 41.2% of the respondents heard about the campaign when they had children between 1 and 5 years old. These two statuses show that the campaign was first heard at a crucial time when handwashing was important as a strategy for reducing infections in pregnant and lactating mothers. Further, the responses showed that 28% of the respondents were pregnant and had been taking care of a child between 0 and 5 years. The status responses showed that hand-

washing campaigns are favored by groups whose status requires the need for increased handwashing approaches.

Table 4.3: Status of respondents when they first heard the campaign message

	Frequency	Percent
I was pregnant during the period between 2016 and 2021	110	30.8
The debildren between 1 and 5 years old during the newled between 2016	1.47	41.2
I had children between 1 and 5 years old during the period between 2016	147	41.2
- 2021		
Both	100	28.0
Total	357	100.0

4.4 Descriptive results

4.4.1 Communicative Media and channels used in the behavior change campaign

The first objective sought to establish the communicative media and channels used in behavior change campaigns. First, the respondents were asked about their frequency of accessing various media channels and the effects the channels have had on their behavior change.

Source of information on handwashing campaign

The respondents were asked how they first heard about the hand-washing campaign to determine how effective the media channel was. 37% of the respondents stated that they heard about the campaign from television, while 32% got the information from social media. These responses

indicate that television and social media are the most common media channels used by the respondents in Migori County. Another 15% stated that they first saw the handwashing campaign through billboards and posters, while 16% got the information from the radio.

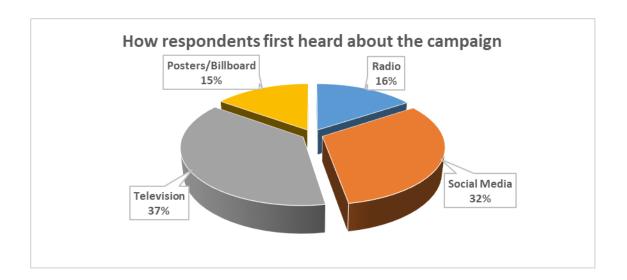


Figure 4.4: How respondents first heard about the campaign

The study needed to establish the frequency of using specific media channels to obtain specific information about the handwashing campaign. From the previous question, the study established that radio, television, posters and billboards, social media, and short films are the common media channels accessible to the target population in Migori County. The majority of respondents (68%) do not use short films as a source of campaign information. Radio (42.6%), television (44.5%), posters and billboards (0.6%), social media (47.1%), and short films (0%) indicated that social media and television are the common methods of communicating handwashing campaigns in Migori County. Similarly, the responses showed that short films and posters are the least effective ways of communicating campaigns for people to get the first information about the handwashing campaign.

		Not at all	Rarely	Sometimes	Frequently
Radio	n	31	88	86	152
	%	8.7	24.6	24.1	42.6
Television	n	48	87	63	159
	%	13.4	24.4	17.6	44.5
Posters/Billboard	n	58	262	35	2
	%	16.2	73.4	9.8	0.6
Social Media	n	64	30	95	168
	%	17.9	8.4	26.6	47.1
Short Film	n	245	97	15	0
	%	68.6	27.2	4.2	0.0

Frequency and Effectiveness of media channels

The study guide made a follow-up to establish the influence extent of the media channel on the target audience in disseminating information about handwashing. The results showed that 18.8% of the respondents are never influenced by posters or billboards, while 14% are influenced by television, 5.6% by social media, and 10.6% by short films. The results show that a majority of respondents first hear hand-washing campaign messages from posters, billboards and television, but they are not influenced. However, campaign messages carried out through radio had the highest rate of influence because 21% of them were influenced every time they came across the hand-washing campaign information. The results further showed that 61.1% of the information carried out through television often influences the audience with the information carried out. This is important to this study because 14% of the respondents argued that they are never

influenced by television media, but 61% are often influenced. This illustrates that a certain approach to communicating the message through television can increase the rate of media (36.4%), radio (39.5%) and posters/billboards, which are the most common media channels that often influence the audience with the information.

Table 4.5: Frequency of media channels in the behavior change campaign

		Never	Seldom/Rarely	Sometimes	Often	Every time
Radio	n	12	40	89	141	75
	%	3.4	11.2	24.9	39.5	21.0
Television	n	50	14	22	218	53
	%	14.0	3.9	6.2	61.1	14.8
Posters/Billboard	n	67	110	7	114	59
	%	18.8	30.8	2.0	31.9	16.5
Social Media	n	20	146	2	130	59
	%	5.6	40.9	0.6	36.4	16.5
Short Film	n	38	50	151	103	15
	%	10.6	14.0	42.3	28.9	4.2

The findings in the previous section have indicated that a certain approach to communicating hand-washing messages can increase the rate of influence. Thus, it was important for this study to focus on whether the use of media to communicate the hand-washing practices played a role in increased engagement in the practices. 48% of respondents responded by agreeing that using media motivated them to engage in hand-washing practices, while another 15% strongly disagreed that media had a role in hand-washing campaign engagement. However, 21% of the respondents disputed that the use of media motivated them to engage in handwashing practices. Additionally, 16% of the respondents neither agreed nor disagreed that media use was critical in

motivating their involvement in hand-washing practices. The results confirm that, when properly used, the media has an important role in motivating target populations during hand-washing practices to be fully engaged.

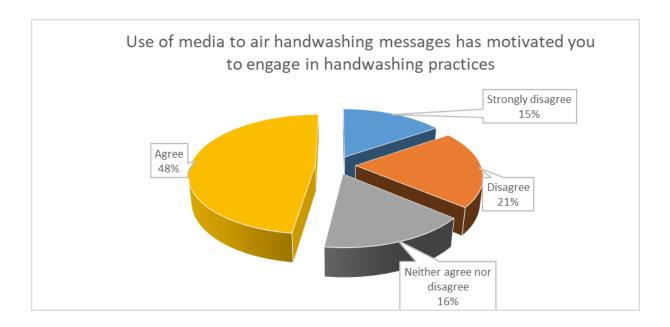


Figure 4.5: Media and motivation to be engaged in handwashing practices

Communicative approaches used

The communication strategy needs to use particular approaches as a basis for ensuring the campaign strategy has effectively reached the audience. The results showed that social norm (97%), gain framing (91%), fifth control (47.1%) and guilt appeal (31.9%) are the common communicative approaches used in disseminating handwashing campaign materials. The results confirm that handwashing practices can better be addressed through social norms and gain framing communicative approaches in Migori County.

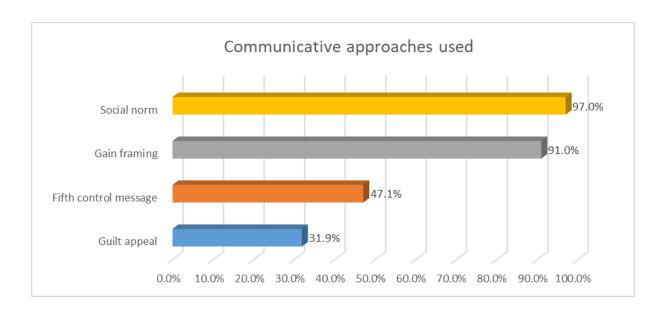


Figure 4.6: Communicative approaches used

The communicative approaches used have a certain level of effectiveness based on the needs of the target population. This study sought to determine how effective the communicative approaches are in ensuring that they disseminate hand-washing messages properly to the target population. 51% of the respondents argued that the communicative approaches are effective, while 37.8% stated that the communicative approaches are somewhat effective. This illustrates that the handwashing campaign has achieved a desirable level of effectiveness because of the communicative approaches used. An additional 10.1% believed that the communicative approaches used in the handwashing campaign were not effective and this points out the need to improve the communication approaches.

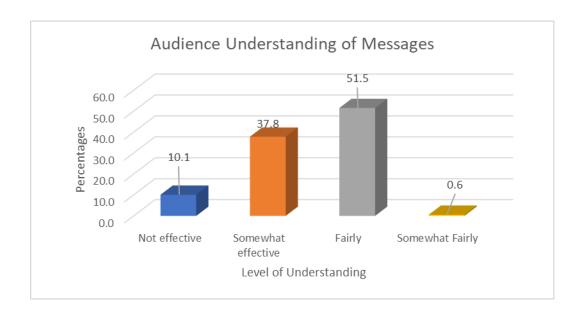


Figure 4.7: Effectiveness of the messages conveyed

Effect of time spent in media platforms on handwashing practices

The extent to which an individual can access a media channel has a direct impact on the possibility of accessing hand-washing messages. The media channels used in these campaign strategies have other programs, and it is clear that the frequency of accessing a media channel influences the respondents in getting access to campaign messages. Respondents were asked if the number of hours spent accessing the media channels was sufficient to expose them to the campaign message effectively. 41% of the respondents claimed that the number of hours was likely to expose them to the campaign messages and influence their hand-washing practices. 25% were extremely unlikely and 16% were unlikely to access the campaign message based on the number of hours they spent on the media channels. An additional 18% remained neutral on whether the number of hours spent on a media channel would contribute to the campaign message. The outcomes show that some of the participants were exposed to media channels without the actual need to access information but for other activities like leisure.

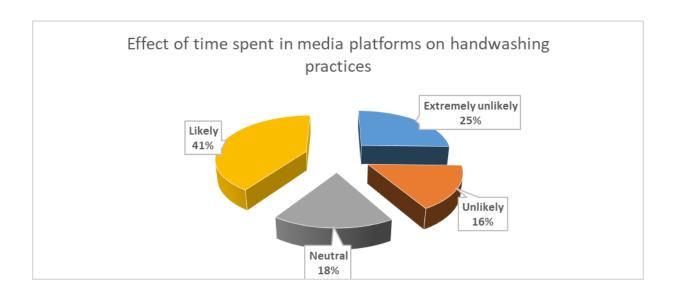


Figure 4.8: Effect of time spent on media platforms

Handwashing campaigns without media channels

The study sought to compare the impact of a hand-washing campaign without using the media to disseminate the message. The respondents were asked about their opinion concerning the impact of the hand-washing campaign without using the media to communicate crucial messages. From the results, 81.8% of the respondents stated that the campaign would not be less effective without the use of media, while 18.2% argued that indeed the handwashing campaign would be less effective without the use of media to disseminate the messages. The results show that handwashing would still achieve its objectives without the use of media channels because the clarity of the information would still be achieved.

Table 4.6: Would a handwashing campaign be effective without media channels?

	Frequency	Percent		
Yes	65	18.2		
N7		01.0		
No	292	81.8		
Total	357	100.0		

4.4.2 Messages that were conveyed in the behavior change campaign

Respondents in the study were asked about the messages that were used in the hand-washing campaign to determine the effectiveness of the strategy used. The respondents were provided with options on the type of messages and the nature of the messages used in the campaign.

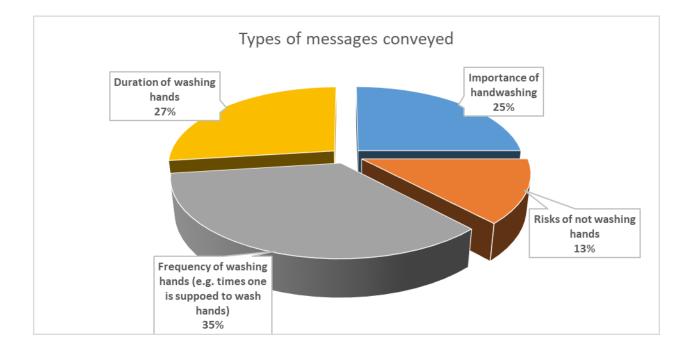


Figure 4.9: Types of messages

The messages comprised four main groups: the importance of handwashing, the risks of not washing hands, the frequency of washing hands (e.g., times one is supposed to wash hands), and the duration of washing hands. From the findings, 27% of the respondents stated that the majority of the messages used in the campaign included how long one should wash their hands. For example, one of the respondents stated that the common messages he observed were:

"Wash your hands for at least 20 seconds using soap and running water to eliminate all germs."

Moreover, 25% of the respondents argued that the messages used in the campaign were mainly positive. The messages were used to illustrate how washing hands plays a role in supporting healthy beings. This showed the importance of washing hands, for example, in promoting healthy living. For instance, a respondent illustrated that some of the messages used in the campaign were:

"Washing your hands for at least 20 seconds helps you stay healthy".

Another message conveyed was,

"Washing your hands helps you avoid illness."

35% of them argued that the messages were purely based on social norms for motivating behavioral change. One of the respondents stated that

"One in every eight people wash their hands regularly."

This social norm message is important in the campaign because it creates a social norm where people within society focus on hand-washing practices to encourage other people to practice hand-washing.

Another section of respondents (13%) revealed that the messages used in the campaign were guilt messages. He stated that the campaign's guilt message was

"Wash your hands to protect your loved ones."

This is an illustration of how the practice of handwashing is used to protect loved ones from infections and diseases caused by dirt.

The responses in this section have confirmed that the "Help a Child Reach Five" campaign has messages that are classified into four main types of framing that are consistent with the social exchange theory. These types of frames include gain, social norms, simple exchange, and guilt appeal.

Frequency of communicating handwashing messages

The study needed to evaluate the frequency of communicating campaign messages to the audience to determine its effectiveness. The respondents were asked about how frequently the communication messages were shared through the media channels. 44.3% of the respondents argued that messages were communicated daily, while 40.3% stated that the messages were shared at least once a week. Only 15.4% of the responses stated that the campaign messages were communicated rarely, at least once every month. The results from the respondents indicate that hand-washing campaigns were communicated frequently, and this shows that the possibility of reaching many people increased.

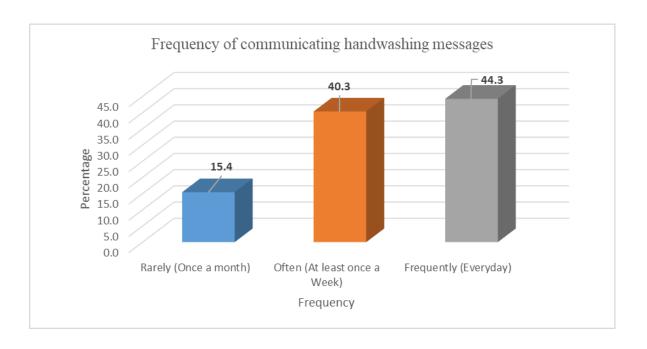


Figure 4.10: Frequency of communicating handwashing messages

4.4.3 Impact of the Handwashing Campaigns

This question dealt with the impact of hand-washing campaigns used in the communication strategy of the program. Respondents were asked whether, in the last year, any member of the family has suffered from diseases that result from poor hand-washing practices. 61% of the respondents argued that none of their members had suffered from dysentery or cholera in the last year. However, 39% of the respondents agreed that some of their household members had suffered from diseases caused by poor hand-washing practices. This is an illustration that a majority have not suffered from poor handwashing practices, but there is a huge risk that if handwashing practices are not properly implemented, they can increase the risk of diseases spreading.

It is imperative to evaluate whether the handwashing campaign has been effective in Migori, where hand-washing practices have not been properly implemented. The respondents were asked whether the "Help a Child Reach Five" campaign has been successful in Migori County. Many

of the respondents (37%) claimed that the campaign has been successful, while 40% stated that the campaign has been less successful. Further, 23% of the population claimed that the campaign had achieved moderate levels of success. The results confirm that, to a greater extent, the campaign has achieved success in reducing and ensuring that people in Migori County can wash their hands.

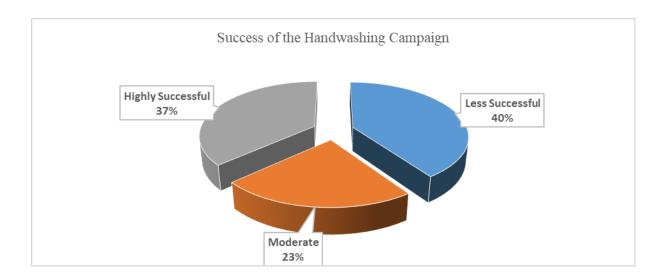


Figure 4.12: Success of handwashing campaigns

The success of the handwashing campaign in Migori was properly evaluated based on its influence on the number of times residents washed their hands before and after visiting the toilet. The respondents were asked whether members of their families hand wash with soap and running water after visiting a toilet. From the results, 33% of the respondents stated that they rarely wash their hands, 26.3% never wash their hands, 21.7% sometimes wash their hands and the remaining 19% often wash their hands after visiting a toilet. The results show that a majority of people in Migori County do not wash their hands with soap after visiting a toilet and this can be a cause for concern.

The second question was to find out whether the respondents washed their hands before eating. 31.5% responded that sometimes they wash their hands with soap before visiting a toilet. Another 30.6% claimed that they often wash their hands with soap before eating, while 27.8% agreed that they rarely wash their hands before eating, and 10.1% never wash their hands before visiting a toilet. The majority of respondents hand wash with soap and running water before eating and after visiting a toilet, which is consistent with the objectives of the 'Help a Child Reach 5' campaign.

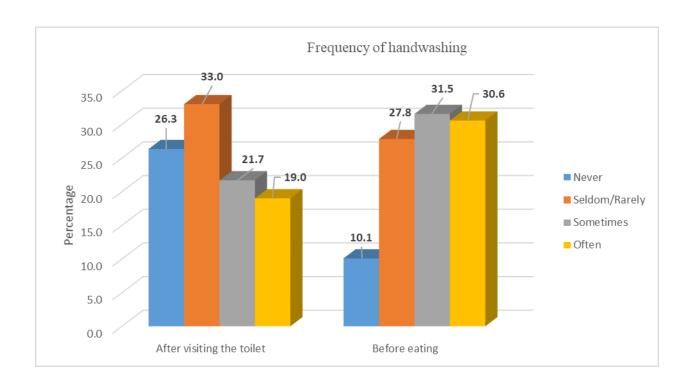


Figure 4.13: Frequency of handwashing

The campaign's main objective was to determine whether it had achieved its desired behavior change objective to promote handwashing strategies. The findings indicated that 26% of the respondents' behavior change had been achieved and many people within the ward are practicing handwashing approaches. However, 74% claimed that the handwashing campaign has not

achieved its objective of promoting handwashing practices within their wards. The results from the responses show that the campaign has not effectively increased the rate of handwashing strategies in Migori County. This implies that some activities or new approaches are required to ensure that behavior change is achieved within the county to support a healthy community that is not affected by challenges and complications from poor handwashing practices.

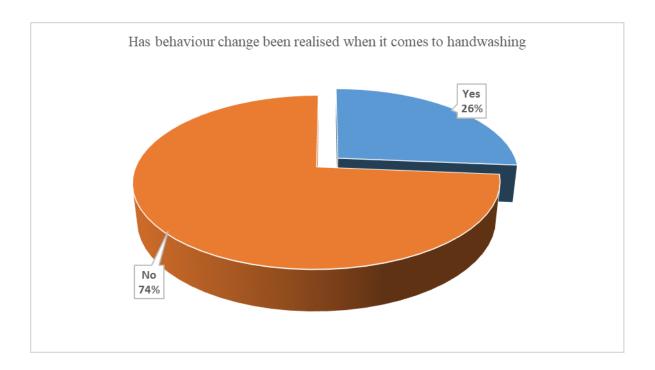


Figure 4.14: Realization of behavior change

There was a need to follow up on the nature of the behavior change that has been achieved through the campaign messages. The respondents who agreed that behavior change had been achieved were asked about the frequency with which members of their family are involved in hand-washing practices. 65% of individuals who believe behavior change has been achieved argue that they rarely wash their hands, while 35% occasionally wash their hands. The results confirm that a majority of people influenced by the campaign messaging have not implemented

regular hand-washing practices. The results call for a need for more efforts to be carried out to increase the nature of hand-washing practices to achieve the desired campaign objectives.

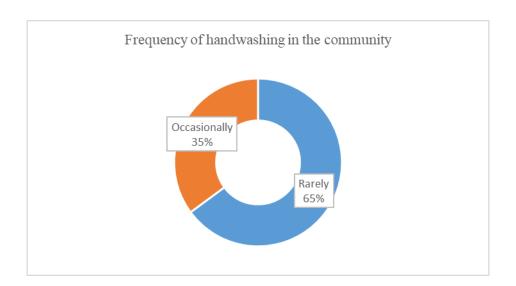


Figure 4.15: Frequency of handwashing

4.4.4 Challenges encountered during the behavior change campaign

The respondents were asked about the challenges that are faced when implementing behavior change campaign strategies to support handwashing. Respondents were provided with five classifications of challenges that affect the effective implementation of behavior change communication campaigns. 44.3% of the respondents disagreed that religion and strong religious beliefs are major challenges to the behavior change campaign. Only 0.6% of the respondents agreed that religion and strong religious beliefs were major challenges. However, 55.2% of the respondents remained neutral about the challenge of religion and strong religious beliefs.

Therefore, the communication strategy needs to consider the religion and religious beliefs of the involved audience before using media channels to communicate.

The second challenge was the lack of information about the campaigns and misinformation about the facts relating to the campaign strategy. 42% of respondents disagreed that inadequate information is a key challenge in the successful application of behavior change communication. Only 11.8% of the respondents argued that lack of information is a challenge in implementing successful behavior change. The results show that people in Migori County have adequate information about hand-washing practices that improve the health and lives of their families.

Another challenge identified in the responses was financial inadequacy in the importance required to facilitate effective implementation of the program. 97% of the respondents disagreed, while only 3.1% agreed that financial constraints are a challenge. The results confirm that adequate finances have been provided to support handwashing practices and this can be a major factor in supporting a healthy community.

To some extent, community resistance has been established as a major concern about the implementation of handwashing practices. A sizeable proportion of respondents (46.8%) stated that community resistance was not a problem, but 53.2% argued that it was a challenge to the program. The results confirm that community resistance in Migori is a major factor that has restricted the realization of hand-washing practices.

Most of the respondents (96.1%) stated that lack of health infrastructure is not a major challenge in supporting behavior change programs, while 3.9% of the respondents claimed that poor infrastructure is a concern in the implementation of handwashing strategies. The results confirm

that Migori County has an elaborate health infrastructure that can support the implementation of handwashing practices.

Table 4.8: Challenges for handwashing

		Strongly disagree	Disagree	Neither agrees nor disagree	Agree
Religion and strong religious beliefs		65	93	197	2
	%	18.2	26.1	55.2	0.6
Lack of information or	n	54	96	42	165
misinformation	%	15.1	26.9	11.8	46.2
Constraints in financial resources		93	253	11	0
		26.1	70.9	3.1	0.0
Community resistance		113	54	182	8
		31.7	15.1	51.0	2.2
Lack of health infrastructure		39	304	14	0
	%	10.9	85.2	3.9	0.0

The results have indicated that people in Migori have sufficient information about the need to implement handwashing strategies to support healthy beings and the lives of members of the community. Thus, the respondents were asked about the challenges that hinder them from implementing handwashing practices while they were aware of the significance of the practices. The respondents were provided with challenges such as lack of feedback, lack of immediate impacts, poor process support, social proof and lack of autonomy.

From the results, 25% of the respondents claimed that a lack of feedback has resulted in poor implantation of handwashing practices. One of the respondents stated that

"I can't see bacteria on my hands for me to wash them frequently."

This is an illustration of how people lack feedback after washing their hands, which guarantees their safety and do not see the need to implement hand-washing practices.

On the other hand, 35% of the respondents claimed that a lack of immediate consequences has often hindered their adoption of handwashing practices. Handwashing practices advocated by the campaign do not result in immediate consequences. Therefore, the respondents were not bothered by implementing the handwashing practices because they were not subjected to immediate consequences if they failed to implement handwashing strategies. One of the respondents argued that

"I work as a catering staff and I do not transmit cold germs to people."

The results confirm that the lack of immediate consequence from the failure to wash hands increases the level of behavioral laxity in implementing handwashing practices.

Another 27% of the respondents argued that a lack of process support reduces the implementation of handwashing practices in Migori County. One of the respondents claimed that a lack of soap for washing hands makes it difficult to implement handwashing practices. The results confirm the Lifebuoy strategy to provide soap can act as a motivation for increasing handwashing practices among the community members. Another problem in the implementation of hand-washing practices is social proof, where members of the community see how others behave in hand-washing strategies. One of the respondents, who is a junior staff member at the sub-

county hospital, claimed that sometimes a lack of resources hinders them from implementing handwashing practices, and this is copied by their patients.

4.5 Discussion

The section gives a discussion of the findings based on the study objectives and comparisons with relevant explanations site

4.5.1 Communicative media and channels used in the behavior change campaign

The results of the study have indicated that an increased enactment of specific behaviors aimed at promoting growth and health is significant in communication.

The results have shown that mass media is the main source, whereas radio is the main media channel for communicating behavior-change messages. This is consistent with the findings of prior studies by Babalola et al. (2006), Pappas-DeLuca et al. (2008), Kajubi et al. (2008), Keating et al. (2006), Muli and Lawoko (2014), McClain Bur Ambasa-Shisanya (2014), Asp et al. (2014) and Koenker et al. (2015). Radio is highly dependable as a media channel because it plays a major role in reducing false beliefs about handwashing. Thus, the results indicate that high levels of exposure to radio are important in ensuring the target audience can influence behavioral change.

The results showed that television is another media channel that is effective in communicating behavior-change messages. However, the level of exposure of people to television was low, and its impact on influencing their behavior change was low. People normally spend a few hours watching television and this affects the level at which it can be used to influence their behavior

and change strategies. It is consistent with the findings of research done in Uganda by Keating et al. (2006) that established low levels of engagement in television compared to radio. Also, people living in the rural areas of Migori have difficulties accessing the campaign messages because of the lack of electricity for televisions to operate.

Another critical media channel that has been identified by the results is posters and billboards. Although a small number of people are influenced by its messages, the messages contained in the billboards are considered interpersonal and reach a small number of people. This justifies earlier findings in the study by Briscoe and Aboud (2012), who found that posters have a limited impact on disseminating information. Probably, posters are not designed in a manner that respects the social norms of people or their traditional cultural aspects, which motivates them to ignore the messages on the posters. This is consistent with earlier studies by Mushi et al. (2008), Ntshebe et al. (2006) and Kirby et al. (2007) confirmed the effectiveness of posters as being based on their extent of respect for the values and principles defined by social-cultural practices.

4.5.2 Messaging and Media for Behavior Change Campaigns

The results of the study have indicated that behavior change campaigns most frequently made messages via radio or TV to reach large audiences. Outdoor media like newspapers, magazines, posters and billboards. Respondents in the study observed passive exposure to hand-washing messages that were triggered by the routine use of media like radio. The handwashing campaign in Migori has focused on complementing traditional media and using social media platforms. This is a major challenge to the effectiveness of the messages because a majority of the

respondents fear clicking on those links to obtain additional information about the behavior change.

The findings have elaborated that behavior change campaign strategies should consider the broad nature of their audience to achieve program objectives. Therefore, the media channels' messages must consider reaching a diverse target audience group. The results have shown that 'Help a Child Reach 5' has used media that reaches a large audience, which includes but is not limited to television, radio, social media, posters and billboards. The campaign messages have achieved a certain degree of success because they focused on a heterogeneous audience group.

The messages used in the campaign show that they are founded on guilt appeal, social norms, social exchange, and gain framing. Specific messages have shown that the messages are intended to stimulate cognitive and emotional responses from the audience. The findings are consistent with Ajzen and Fishbein (2010) research, which says that many campaigns aim to directly invoke intellectual or emotive responses targeting individual recipients. This is important in influencing how people make decisions about hand-washing practices before eating and after visiting a toilet. This way, it reduces obstacles to a successful and effective behavior change strategy (C-Change, 2012). The results have shown that the campaign messages have incorporated various traditional aspects of the people. All the messages under the four frames provided have been effectively evaluated and monitored throughout the campaign. This supports an earlier claim by Michie et al. (2011), who argued that messages developed for a behavior change campaign need to be implemented and monitored properly so that an evaluation can reveal the suitability of the communication strategy.

The results have shown that 'Help a Child Reach 5' has combined several elements and factors of change. The results have shown that members are encouraged to start washing their hands

once a week, or daily, before eating or after visiting a toilet. This is consistent with an earlier finding by McKenzie-Mohr (2011) that behavioral change strategies need to be implemented progressively. Different message frames are consistent with specific messages that have the desired objective. For example, the guilt appeal messages focused on people encouraging their families to adopt hand-washing practices to improve their health and safety. This supported an earlier finding by Gibson (2010), who argued that an effective communication strategy should not consist of more than one objective.

The results have shown that the campaign messages used by Help a Child Reach Five were consistent with the expectations of the target group. It is not proper to be judgmental, disrespectful, or threaten the audience while disseminating the communication. The messages developed in the campaign have a clear objective of encouraging people to wash their hands with soap and running water to improve their health and the lives of their relatives. The results confirmed that the campaign adopted a positive approach that was sufficient to target a specific target group. The messages used in the campaign were simple to read and understand by both school-going children and pregnant mothers. Therefore, the findings of the study have confirmed an earlier assertion by Short et al. (2015) that an effective communication strategy should focus on creating high-level attention, sharing the benefits, having a clear message, being trustworthy, and being consistent.

The results have shown that the campaign message was developed based on the context in which the communication will take place. Using posters, radio and television has offered an interactive process that supports the development of messages to tailor positive behavior using different channels to sustain a community behavior change. This has proved an earlier claim by Manoncourt (2013) that, before developing a communication campaign for behavior change, it is

imperative to develop a message that is mindful of the socio-ecological constraints in the environment. For example, in the handwashing campaign, the results have shown that communication was focused on a community level and not just on individuals. The results agree with Lai and Kreuter (2012), who found out that effective communication should consider an environment that relates to the context of self, family, community, and surrounding environment. The results of the study have reinforced the conclusion that an effective communication campaign should consider the ecological environment where it needs to operate before it is rolled out to the actual population.

The content shared in the communication campaign has been properly analyzed with a vision of promoting hand-washing practices. From the onset, the handwashing campaign was focused on low handwashing practices in Migori County that have resulted in diseases like cholera and dysentery, where school-going children and pregnant women face the highest risk. The radio and television media channels have been used in this campaign because they have an integral role in addressing systematic problems. This has proved an earlier claim provided by the C-Change model that an effective communication strategy should focus on behaviors that exacerbate the situation and people who can partner with the strategy to achieve desired objectives (Gurman et al., 2012). This is the reason why the handwashing campaign has incorporated behavioral change strategies as a basis for improving outcomes (Brennan & Resnick, 2012). People need to be taught about the need for handwashing and provided with adequate information before they are requested to adopt a behavioral change.

4.5.4 The Impact of Behavior Change Campaigns

The success of BCC is dependent on using communication methods to disseminate the behavioral change message. However, the content and diverse nature of the environment should be considered in the campaign strategy. This was supported by Atkinson et al. (2011), who found that BCC material has to consider the social routines, cultural experience and capacity to manage interventions of the community. Some of the school-going children have diverse cultural backgrounds and adopting handwashing strategies can be difficult. However, the majority population in Migori County is homogenous, has a similar cultural background, and can adopt similar handwashing strategies. This shows that the handwashing campaign has been able to achieve its objectives because it does not experience conflicting issues with the values and traditions of its people (Ntshebe et al., 2006).

The handwashing BCC focuses hardly on handwashing with soap and running water. In achieving the desired objective, the handwashing campaign has incorporated several strategies that ensure its success (Briscoe & Aboud 2012; Kirby et al. 2007). The results have shown that sufficient information, social support and performance media or materials by giving lifebuoy soap have been provided to motivate behavioral change. For example, combining the use of radio and television was critical to reaching a large population and influencing a greater level of behavior change. This is consistent with previous studies that indicated that a combination of strategies is critical in supporting behavioral changes in a large population (Babalola et al., 2006, Atkinson et al., 2011, Muchini et al., 2011; Ricotta et al., 2015). Thus, the regular updating of the target population about the need for implementing handwashing has increased the positive response to the project outcomes.

Television and radio media channels are important because they reach a large population of people and provide open discussion forums and knowledge (Keating et al., 2006; Bowen, 2012). Campaign ion handwashing using SMS messages, radio, TV and other audio like music videos

and songs in combination with free soap delivery significantly increased behavioral change in adopting healthy social norms. Before the handwashing campaign, the level of knowledge was considerably low among school-going children and pregnant women about the effectiveness and need for hand hygiene in protecting themselves from germs and infections. There is a clarification on the effect that the different channels have on people's behavior when using community change agents (Ricotta et al. 2015). The results of this study have shown that mass media has positively influenced a large population towards adopting healthy handwashing hygiene.

The results have shown that media campaigns have been used to address or communicate the various handwashing practices to the audience. A unique aspect of the campaigns is that they may stand alone or be linked to other organized program components. In this campaign, multiple approaches have been used to disseminate information about hand-washing practices in society. The findings have shown that the campaign has identified school-going children and expectant mothers in Migori County who face the highest risk of infections from poor handwashing practices. Thus, using the mass media is critical to the success of the program because it has expanded the level of awareness for people who access the media channels frequently.

Religion and strong religious beliefs are the leading social norms and behaviors that have affected the successful implementation of the handwashing campaign. This is consistent with Ajzen and Fishbein (2010), who found systematic challenges as leading factors hindering the achievement of behavioral change. The findings indicate that large audiences are reached by mass media and behavior changes become social norms that would be difficult to achieve in a community. The results indicate that healthcare workers must be aided in ensuring hand-washing practices by providing incentives to motivate them to adopt healthy behaviors.

4.5.5 The Challenges Encountered During Behavior Change Campaigns

The success of handwashing practices in Migori has been affected by several systematic challenges that are found in the environment. The results have shown that the main challenges that affect handwashing practices include: not everyone who gets to see the health messages understands them and, therefore, cannot change their behavior; not everyone who sees the message agrees with it; not everyone who agrees with the message changes his behavior. Some of the audiences have argued that they do not see the immediate impact of hand-washing practices. This is an illustration of a lack of sufficient knowledge about hand-washing practices and infections. This is consistent with an earlier finding in a similar study by Sullivan (2011) that a very small portion of the primary audience that sees a message go ahead in practicing behavioral change. However, in this study, change of behavior is a priority to achieve an effective and healthy community.

The campaign seeks to provide education as a basis for learning promotion, comprehension, and skills equipping which are needed for handwashing using soap and running water. In this study, the results have shown that the persuasion approach was used to motivate and encourage the positive adoption of hand-washing practices. Secondly, the results have indicated that the campaign has intensified the use of dialogue to promote mutual understanding and share their experiences in handwashing through mass media channels.

The results have shown that low levels of knowledge about hand-washing practices have limited the level of access to critical information that increases understanding of hand-washing practices. Social media is an accessible media platform as a source of information, but it contains certain sites that can promote misleading information and content. This is a major challenge that hinders the adoption of behavior-change practices because of misleading information. Secondly, the results have shown strong religious beliefs and religion can prevent risky behavior. For example, the religious beliefs of common sharing prevent some of the target audience from washing their hands with running water and instead prefer sharing from a common source. This is consistent with an earlier assertion that religious beliefs can hinder the adoption of change (Wight et al. 2012).

The results have indicated that a lack of information about handwashing practices hindered the achievement of desired project objectives (Atkinson et al. 2011). However, the results have indicated that financial constraints are not a major challenge in the implementation of handwashing practices. Further, the results have shown that community resistance to the handwashing campaign is a concern for low uptake of handwashing practices. Also, the results have shown that inadequate communication about hand-washing practices hinders behavioral change among the target audience. The consistency with the findings by Atkinson et al. (2011) is that poor communication is a major challenge in achieving project outcomes. The findings imply that challenges and barriers to effective implementation of handwashing programs can be overcome by using mass media to communicate accurate information and improving the communication skills of campaign implementors (Laverack 2017).

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the study findings and conclusions drawn from them. Furthermore, recommendations are given.

5.2 Summary

The study examined the role of communication in promoting behavior change. It looked at the case of the 'Help a Child Reach 5' hand-washing campaign in Migori County. The specific objectives were to determine the communication strategies used in the behavior change campaign, to determine the impact of the behavior change campaign, and to examine the challenges encountered during the behavior change campaign.

A descriptive research design was used in the description of the influence of handwashing on the targeted population. The total target population for this study was 500, but 357 respondents were successfully used in the study. The study has shown that hand-washing practices in Migori have been favored by school-going children and pregnant mothers, whose status requires the need for increased hand-washing approaches. Concerning the communicative media used in the behavior change campaign, the findings of the study have shown that television and social media are the common media channels that are used by the respondents in Migori County.

Concerning the media channel that was used to hear about the handwashing campaign, the results showed that short films and posters are the least effective ways of communicating campaigns for people to get the first information about the handwashing campaign. The results

show that a majority of respondents first hear hand-washing campaign messages from posters, billboards and television, but they are not influenced. However, campaign messages carried out through radio had the highest rate of influence.

The findings have indicated that a certain approach to communicating hand-washing messages can increase the rate of influence. The results confirm that, when properly used, the media has an important role in motivating target populations during hand-washing practices to be fully engaged. The communication strategy needs to use particular approaches as a basis for ensuring the campaign strategy has effectively reached the audience. The results confirm that handwashing practices can better be addressed through social norms and gain framing communicative approaches in Migori County.

The results have shown that the hand-washing campaign has been effective in Migori, where hand-washing practices have not been properly implemented. The results confirmed to a great level, that the campaign has achieved success in ensuring that people in Migori County can wash their hands. In addition, the findings showed that most people in Migori County do not wash their hands with soap after visiting a toilet, and this can be a cause for concern. A majority of the respondents hand wash with soap and running water before eating and after visiting a toilet, which is consistent with the objectives of the 'Help a Child Reach 5' campaign.

5.3 Conclusion

5.3.1 Theoretical Conclusion

The research was grounded in, social learning theory and Lewin's three-step change theory. The learning theory explains the structural models and general social-ecological theory. The study aimed to explain the role that communication has played in promoting handwashing with soap as

an intervention to build focus and convey the need to take up this initiative of behavioral change as we try to minimize infant mortality. Understanding the importance of handwashing with soap is important in that our hands bear germs that can lead to contracting diseases that result in death if passed to a child under the age of 5 years. Further, the study aims to examine the knowledge rates of the expectant women of Migori County on the effects of handwashing with soap and water.

Lewin's Three-Step Change Theory uses three stages unfreezing, changing and freezing to explain the behavioral change. According to the Lewin model, identification of the conflicting forces will provide a basis for developing an approach that will ensure the success of the handwashing program (Cameron & Green, 2003).

5.3.2 Conclusion

The main campaign's objective was to determine whether it had achieved its desired behavior change to promote handwashing strategies. The results from the responses show that the campaign has not effectively increased the rate of hand-washing strategies in Migori County. This implies that some activities or new approaches are required to ensure that behavior change is achieved within the county to support a healthy community that is not affected by challenges and complications from poor hand-washing practices. For example, the results confirm that a majority of people influenced by the campaign messaging have not implemented regular hand-washing practices. The results call for a need for more effort to be carried out to increase the nature of hand-washing practices to achieve the desired campaign objectives.

The study identified the main challenges facing the handwashing campaign as religion and strong religious beliefs, lack of information, financial inadequacy, community resistance, lack of

health infrastructure, lack of feedback, lack of immediate impacts, poor process support, social proof, and lack of autonomy. The results have indicated that people in Migori have sufficient information about the need to implement hand-washing strategies to support healthy beings and the lives of members of the community. Other challenges that affect the implementation of handwashing practices include a lack of feedback, a lack of immediate impacts, poor process support, social proof and a lack of autonomy.

The communicative approaches used have a certain level of effectiveness based on the needs of the target population. The findings have illustrated that the handwashing campaign has achieved a desirable level of effectiveness because of the communicative approaches used. The extent to which an individual can access a media channel has a direct impact on the possibility of accessing hand-washing messages. The media channels used in these campaign strategies have other programs and it is clear that the frequency of accessing the media channel plays a critical role in enabling the respondents to get access to the campaign message. The study shows that some of the respondents were exposed to media channels without the actual need to access information but for other activities like leisure.

5.4 Limitations of the study

For a child to attain 5 years, there is an association with an improvement in survival rates of children, and through this aspect, Lifebuoy has been able to inspire the habit of hand-washing which is simple and can save lives. However, this study was focused on determining mass media's effect on influencing behavior change. The findings of the study have shown that mass media influences behavior change in hand-washing campaigns. The study is limited by its use of a single handwashing campaign because it is not clear how other programs are affected by the

mass media. Secondly, there was a time limit and financial constraints because the impact of a handwashing campaign could not be studied within one year.

5.5 Recommendation

The results show that handwashing would still achieve its objectives without the use of media channels because the clarity of the information would still be achieved.

- 1) The responses in this section have confirmed that the "Help a Child Reach 5" campaign has messages that are classified into four main types of framing that are consistent with the social exchange theory. These types of frames include gain, social norms, simple exchange, and guilt appeal.
- 2) Concerning the impact of hand-washing campaigns, the results showed that a majority have not suffered from poor hand-washing practices, but there is a huge risk that if hand-washing practices are not properly implemented, they can increase the risk of diseases spreading.
- 3) From the respondents' perspective, the handwashing campaign needs to ensure all target groups have been satisfied through the provision of convenient information to influence behavior change. According to social exchange theory, the message should be consistent with the expectations of the target audience.
- 4) As a strategy to improve the campaign, this study recommends the following:

Handwashing campaigns should provide an incentive for the target population to influence their behavior change.

Using mass media is effective in influencing behavior change, but the media channels should contain sufficient information about the target objectives.

The campaign strategy should not only focus more on social media channels but also use radio because it has a wider coverage and can give real-time feedback about the hand-washing campaign.

The campaign needs to adopt the development of messages using the local dialect in Migori County for the mothers to identify with.

Handwashing campaigns need to consider using chief barazas, women's groups, and church meetings as opposed to using mainstream media.

For the campaign to remain effective, there is a need to change the messaging or the campaign period to a shorter period, preferably 1 year and assess the impact vs behavior change.

- 5) Therefore, organizations practicing BCC are important in developing the program following a detailed review of information that exists and lessons that have been learned. It needs to be followed by formative research to gain knowledge of any existing current determinants and practices, barriers and feasible practices (Mushi et al., 2008).
- 6) Behavior change is based on the community and needs to point at actions that have been partially designed and tested by the community. Developed concepts are always tested for feasibility and other alternative behaviors are negotiated and offered with respective individual families. Therefore, activities of behavior change need to be implemented to effect real change (Favin et al., 2004).

5.6 Suggestions for Future Research

Future studies may focus on:

a. The impact of mass media on other handwashing campaigns in Migori to compare the

results

- b. To evaluate the effectiveness of handwashing education in supporting behavior change in other counties to see if the results are similar to Migori County
- c. The role of communication in promoting behavior change: A case of the Jigger

Campaign

REFERENCES

Adler, R. & Rodman, G. (2003). Understanding Human Communication. 8th ED. New York: Oxford University Press.

Alba, S. (2010). Improvements in access to malaria treatment in Tanzania following community, retail sector and health facility interventions -- a user perspective. Malaria Journal 9, 163–178.

AMREF (The African Medical and Research Foundation). (2011). HIV and AIDS behavior change communication strategy 2011 – 2014.

Asp, G. (2014). Associations between mass media exposure and birth preparedness among women in southwest Uganda: a community-based survey. Global Health Action 7, 1–9.

Atkinson, *et al.* (2011). The architecture and effect of participation: a systematic review of community participation for communicable disease control and elimination. Implications for malaria elimination. Malaria Journal 10 (1), 225–257.

Babalola, S. (2006). Impact of a communication programme on female genital cutting in eastern Nigeria.

Bensley, J.R. & Brookins-Fisher, J. (2018). Community and Public Health Education Methods: A Practical Guide 4th ED. Burlington: Jones and Bartlett Learning

Bowen, H. (2012). Impact of a mass media campaign on deb net use in Cameroon. Malaria Journal 12 (1), 1–18.

Briscoe, C. (2012). Behavior change communication targeting four health behaviors in developing countries: a review of change techniques. Social Science & Medicine 75, 612–621.

C-Change (2013) The C-Change Story. (C-Change Report) Washington DC

Corcoran, N. (2013). Communicating health strategies for health promotion. London: SAGE Publication.

Corcoran, N. (2011). Working on health communication. London: SAGE Publication

Cumming, A. H. (2006). Second Language Research: Methodology and Design (review). The Canadian Modern Language Review / La Revue Canadienne des LanguesVivantes, 62(4), 631–633.

Deb, D., Dey, R., & Dey, R., & Practical Insight for Researchers (Vol. 153). Springer Singapore.

Diaz-Diaz, C., & Diaz-Diaz, C., & Materialist Methodologies. Springer Singapore.

Di Mascio, T., Gennari, R., Vittorini, P., & De La Prieta, F. (2015). Methodologies and intelligent systems for technology-enhanced learning. In P. Vittorini, T. Di Mascio, L. Tarantino, M. Temperini, R. Gennari, & De la Prieta (Eds.), Advances in Intelligent Systems and Computing (Vol. 374). Springer International Publishing.

Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). MINDSPACE: influencing behavior for public policy.

Edberg, M. (2015). Essentials of Health Behaviour: Social and Behaviour Theory in Public Health. 2nd ED Washington DC: Jones and Bartlett.

Edgar, T. (2012). Communication and Behaviour Change Challenges to Limiting the Development of Antibiotic Resistance.

Favin, M., ertNaimoli, G., & Sherburne, L. (2004). Improving health through behavior change: A process guide on hygiene promotion. US Agency for International Development.

Fishbein, M., & Ajzen, I. (2011). Predicting and changing behavior: The reasoned action approach. Taylor & Francis.

Kajubi, P. et al (2008). Gay and bisexual men in Kampala, Uganda. AIDS Behaviour 12, 492–504.

Keating, J. *et al* (2006). Assessing effects of media campaigns on HIV/AIDS awareness and prevention in Nigeria: results from the VISION Project. BMC Public Health 6 (123).

Keating, J. *et al* (2006). Assessing effects of media campaigns on HIV/AIDS awareness and prevention in Nigeria: results from the VISION Project. BMC Public Health 6 (123).

Kerrigan, D. *et al.* (2015). A community empowerment approach to the HIV response among sex workers: effectiveness, challenges, and considerations for implementation and scale-up. The Lancet, 385(9963), 172-185.

Kim, S. *et al* (2015). Assessing implementation fidelity of a community-based infant and young child feeding intervention in Ethiopia identifies delivery challenges that limit reach to communities: a mixed-method process evaluation study. BMC Public Health 15 (1), 1–14.

Kirby, D. *et al* (2007). Sex and HIV education programs: their impact on sexual behaviors of young people throughout the world. Journal of Adolescent Health 40, 206–217.

Koenker, H. *et al* (2015). Impact of behavior change intervention on long-lasting insecticidal net care and repair behavior and net condition in Nasarawa State, Nigeria. Malaria Journal 14 (1), 469–499. A

Laverack, G. (2017). The Challenge of Behaviour Change Health Promotion. Esbjerg: University of Southern Denmark Press.

Leerlooijer*et al* (2013). Qualitative evaluation of the Teenage Mothers Project in Uganda: a community-based empowerment intervention for unmarried teenage mothers. BMC Public Health 13 (1), 1–15.

McClain, B. (2014). Evaluation of a Communication Campaign to Improve Continuation Among First-Time Injectable Contraceptive Users in Nyando District, Kenya. International Perspectives on Sexual and Reproductive Health 40 (2), 56–67

Muchini, B. (2011). Local Perceptions of Forms, Timing and Causes of Behaviour Change in Response to the AIDS Epidemic in Zimbabwe. AIDS and Behaviour 15 (2), 487–498.

Muli, I. &Lawoko, S. (2014). The relationship between Access to Mass Media and HIV/AIDS-Related Knowledge, Beliefs and Behaviours in Kenya. Psychology 5, 736–743.

Mushi, A. *et al.* (2008). Development of behavior change communication strategy for a vaccination-linked malaria control tool in southern Tanzania. Malaria Journal 7, 1–9.

Mtenga *et al* (2015). Social cognitive determinants of HIV voluntary counseling and testing uptake among married individuals in Dar es Salaam Tanzania: Theory of Planned Behaviour (TPB). BMC Public Health. 15 (1), 1–8

Mugisa, M., &Muzoora, A. (2012). Behavioral change communication strategy vital in malaria prevention interventions in rural communities: Nakasongola district, Uganda. Pan African Medical Journal, (ARTISSUE).

Mushi, A. K. *et al.* (2008). Development of behavior change communication strategy for a vaccination-linked malaria control tool in southern Tanzania. Malaria journal, 7(1), 191.

Nagi, R.S & Prasad, P. SK (2020). Effective behavior change communication interventions in adults by community health workers: A scoping Review Protocol.

National Collaborating Centre for Methods and Tools (NCCMT 2007), Developing health communication campaigns.

Ntshebe, D. *et al* (2006). The use of culturally the mend HIV messages and their implications for future behavior change communication campaigns: the case of Botswana. Journal of Social Aspects of HIV/AIDS 3 (2), 466–476.

Nutbeam, D., Harris, E., & Wise, W. (2010). Theory in a nutshell: A practical guide to health promotion theories (pp. no-no). McGraw-Hill.

Ricotta, E. *et al.* (2014). The use of mediation analysis to assess the effect of behavior change communication strategy on bed net ideation and household universal coverage in Tanzania. Malaria Journal 14 (1), 332–348.

Ryan, R. M., Patrick, H., Deci, E. L., & Williams, G. C. (2008). Facilitating health behavior change and its maintenance: Interventions based on self-determination theory. European Health Psychologist, 10(1), 2-5.

Scutchfield, D.F. & Keck, W. (2003). Principles of Public Health Practice 2nd ED. New York: Thomson Delmar Learning.

Sullivan, C. (2011). Health Behaviour Change: Understanding Stages of Change. Vol 25. Issue 2.

Wight, *et al* (2012). The need to promote behavior change at the cultural level: one factor explaining the limited impact of The MEMA Kwa Vijana adolescent sexual health intervention in rural Tanzania. A process evaluation. BMC Public Health 12 (1), 788 –799.

World Health Organisation (WHO, 2009). Why Health Communication is Important in Public Health. Vol 87 No 4

APPENDICES

Appendix 1: Letter of Introduction and Informed Consent

My name is Irene Kinyanjui, a student at the University of Nairobi undertaking a Master of Arts in Communication. I'm carrying out a study on "the role of communication in promoting behavior change: A case of the 'Help a Child Reach 5' handwashing campaign in Migori County." Your assistance in honestly responding to all the items in this questionnaire will be appreciated.

Thank you for your cooperation.
Yours Faithfully
Irene Kinyanjui
Interviewer: Signature Date.
Witness: Signature
Date
INFORMED CONSENT FORM
I confirm that I have been informed about the purpose, duration, benefits, and risks of this study and my participation in the process. I acknowledge that I am free to withdraw from the study at any stage if I wish, without giving any explanation and that I will not be compromised in any way since my participation is voluntary. I have been assured of the confidentiality of all the information that I will provide. I am at liberty to ask questions that will be answered to my satisfaction. I have been made aware that the information I provide may be published, but my name will not appear at any stage of the study nor will any information that may identify me be used in the study. I, therefore, accept the willingness without any influence, to participate in the research.
Signature or thumbprint of Interviewee
Date
Signature or thumbprint of Witness
Date

Researcher Statement

procedures to be followed in the study, and the risks and benefits involved.
Name of the Interviewer
Signature
Date
Appendix 2: Questionnaire
Instructions
Tick appropriately in the brackets or fill in the space provided.
Feel free to give further relevant information in the space provided.
PART A: DEMOGRAPHIC INFORMATION (Please tick appropriately)
1. Gender Male [] Female []
2. Level of education?
Primary [] Secondary [] College [] University [] None []
3. Age bracket?
18 to 30 years [] 31 to 40 years [] 41 to 50 years [] Above 50 years []
4. Tick appropriately.
I was pregnant in the period between 2016 - 2021 []
I had children between $0-5$ years in the period between 2016 - 2021 []
5. Which Ward do you come from within Migori County?
6. How long have you been a member of this ward in years?
Less than 5 years [] 5 to 10 years [] 10 to 15 years [] Over 15 years

I, the undersigned. I have explained to the volunteer in a language she/he understands, the

PART B: COMMUNICATIVE MEDIA AND CHANNELS USED FOR BEHAVIOR CHANGE

(Tick	appropr	iately)
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7.	How	did you firs	t hear ab	out the car	mpaig	n?					
Radio	[]	Social Medi	a[]Te	elevision [] Pos	sts/Billboa	ard []			
Short I	Film []Word of I	Mouth (F	From friend	ds, off	icials, etc	:.) [] Others	spec	ify	
	•••••			•••••							
8.	How	frequently d	lo you ac	ecess the fo	ollowi	ng comm	unic	ative me	dia cl	nannels?	?
				Not at	all	Rarely	Son	netimes	Free	quently	Always
Rad	lio										
Tele	evisio	1									
Post	ts/Bill	board									
Soci	ial Me	dia									
Sho	ort Filn	1									
9.	Pleas	e indicate th	e extent	to which o	conten	t in the fo	ollow	ing med	ia pla	tforms l	has
influer	nced y	ou to partici	pate in h	andwashin	ng prac	ctices.					
				Never	Seld	om/Rare	ely	Sometin	nes	Often	Every
											Time
Rad	lio										
Tele	evisio	1									
Post	ts/Bill	board									
Soc	ial Me	dia									

Short Film

10. Do you think the use of media to air handwashing messages has motivated you to engage
in handwashing practices?
Strongly disagree[]
Disagree[]
Neither agree nor disagree[]
Agree[]
Strongly Agree[]
11. What are some of the communicative approaches used in the handwashing campaign?
Gain framing []Social norm[]Guilt appeal []Fifth control message[]
12. How effective were these strategies?
Highly effective [] Moderate [] Effective []
13. What other communication strategies do you think could have enhanced the
Handwashing campaign? And why?
PART C: BEHAVIOR CHANGE MESSAGES
14. In your opinion, what is the likelihood that the number of hours an individual (like you)
in Migori accesses media platform(s) led to access to handwashing messages?
Extremely unlikely[]
Unlikely []
Neutral []
Likely []
Extremely Likely []
15. Do you think handwashing behavior would be less without the use of media to air out the messages? Yes [] No []

Explain your
answer
16. What kind of handwashing message have you received? (List all that apply)
17. How frequently were the messages communicated?
Rarely (Once a month) []
Often (At least once a Week) []
Frequently (Everyday)[]
PART D: THE IMPACT OF BEHAVIOUR CHANGE
18. In the last 12 months, has anyone in your household suffered from dysentery, cholera,
etc.?
Yes [] No []
19. How often do you or members of your household typically wash their hands after visiting
the toilet (with running water and soap)?
Never []
Seldom/Rarely []
Sometimes []
Often []
Every Time []

20. How successful was the Handwashing Campaign in	n Mig	gori (County	<i>i</i> ?		
Highly Successful [] Moderate [] Less Succ	cessfu	ıl []			
21. How often do you or members of your household t	ypica	lly v	ash th	eir ha	nds be	fore eating
(with running water and soap)?						
Never []						
Seldom/Rarely []						
Sometimes []						
Often []						
Every Time []						
22. Has behavior change been realized when it comes to	o har	ıdwa	shing	withir	ı your	ward?
Yes [] No []						
If your answer is No to the question above, please explain	• • • • • •			••••		
	• • • • •		•••••	• • • • • •	• • • • • • •	•••
If Yes, how often do the community members wash their h	nands'	?				
Always [] Occasionally [] Rarely []						
PART D: BEHAVIOUR CHANGE CAMPAIGN CHA	LLE	NGI	ES			
23. Please indicate the extent to which the following for of five:	actors	s affe	ected ti	he car	npaigr	ı on a scale
1 – Strongly Disagree 2 – Disagree 3 – Undecided 4 – Agree 5 – Strongly Agree						
Factor	SA	A	U	D	SD	
Religion and strong religious beliefs						

Lack of information or misinformation			
Constraints in financial resources			
Community resistance			
Lack of health infrastructure			

24. Please explain further how the above factors affected the implementation of the handwashing
campaign
25. What other challenges affected the handwashing
campaign?
26. What are some of the possible mitigation
measures?

THANK YOU VERY MUCH FOR YOUR TIME.

Appendix 3: Interview Schedule for Program Staff and Local Leadership

This instrument is meant to gather data on the role of communication in promoting behavior change by focusing on the case of the 'Help a Child Reach 5'handwashing campaign in Migori County. Kindly fill in your response in the provided spaces or choose among the provided responses by marking the correct choice. Thanks

1.	Gender Male [] Female []
2.	Level of education?Primary [] Secondary [] College [] University [] None []
3.	Age bracket? 18 to 30 years [] 31 to 40 years [] 41 to 50 years [] Above 50 years
[]	
1.	For how long have you taken part in the campaign?
Less th	nan 3 years [] 3 to 5 years [] Over 5 years []
2.	What communication strategies did the campaign use in promoting behavior change in
Migor	County?
3.	To what extent do you think these strategies were effective in aiding the campaign to
achiev	e its intended goals and impact?
•••	
4.	In your opinion, what were the challenges experienced during the behavior change
campa	ign in Migori County?
5.	How could these challenges be mitigated for similar campaigns in the future?

THANK YOU VERY MUCH FOR YOUR TIME.

THE END