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COMMUNICATING ABOUT PANDEMICS: EXPLORING COVID-19 COMMUNICATION RESPONSES IN KIGALI CITY

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February 2025

DECLARATION

I, *MPUNGIREHE Odette*, hereby declare that the work on which this thesis is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

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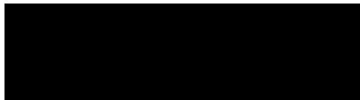
Signature:  Date: 05/02/2025

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DEDICATION

Losing the person who invested everything in my education was not expected. To my Father RUTEBUKA Vincent, rest eternally in peace.

ABSTRACT

Globally, public health communication has taken an ongoing top-down approach. Community engagement is overlooked in emergencies, yet it is pivotal because it helps in recruiting new allies and resources, creating better communication, building trust, and improving overall health outcomes. COVID-19 preventive communication in Rwanda focused on disseminating information to the public, expecting them to adopt preventive behaviours. Development communication researchers have criticised the top-down approach as antagonising participation and engagement, thus advocating for a participatory communication model. The model follows a liberating communication philosophy in which participants cease to be filled but participate in the communication process, with dialogue and conscientisation as key drivers of that process. Unfortunately, how and when to start engaging communities is not clearly described in development communication literature. This study aimed to examine how dialogue and the stages of conscientisation in communities influenced COVID-19 prevention messages in Kigali, Rwanda. It examined how Kiruhura, Karama and Mwendo residents understand local contexts and how these influenced their communication of dominant messages. The study adopted the Participatory Communication Approach from Freire and Dutta's Culture-Centred Approach, selected eighty-one participants through purposive sampling, collected data with nine focus group discussions, and utilised reflexive thematic analysis to illustrate the contextual perceptions, responses, and dialogical scenarios. It found that residents of Kiruhura, Karama and Mwendo communities perceived COVID-19 as illusory. Influenced by their culture, socioeconomic limitations and other pandemic experiences, communities perceived COVID-19 prevention messages as inapplicable, which resulted in mixed and ambivalent responses. Also, COVID-19 instructional communication humped dialogue and conscientisation by neglecting local contexts, which should constitute a practical foundation for the pandemic-related discussions, thus overlooking local communication structures. Therefore, this study suggests analysing communities' culture, experience with other pandemics, changing socioeconomic situation and their intersection with perceptions of emerging pandemics. It also advises introducing dialogue by linking pandemic narratives and community lived experiences, and basing community participation on local communication systems. In addition, this study suggests prioritising interpersonal over media

channels.

Scholarly, this research contributes insights on how to communicate contextually applicable pandemic preventive messages and apply the principles of humility, empathy, love, and hope in dialogically engaging Rwandan communities in pandemic communication. Practically, it discusses local enablers of pandemic dialogue.

Keywords: Health communication, messages, COVID-19, conscientisation, dialogue, community engagement, Rwanda

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LIST OF ABBREVIATIONS

ARDS	Adult Respiratory Distress Syndrome
CCA	Culture-Centred Approach
CCMS	Centre for Communication Media and Society
CDC	Centre for Disease Control and Prevention
COVID-19	Coronavirus Disease of 2019
FGD’s	Focus Group Discussions
HIV/AIDS	Human Immunodeficiency Virus /Acquired Immunodeficiency Syndrome
MERS	Middle East Respiratory Syndrome
MOH	Ministry of Health
NIEO	New International Economic Order
NPI	Non-Pharmaceutical Interventions
NWICO	New World Information and Communication Order
OAU	Organisation of the African Union
RBC	Rwanda Biomedical Centre
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
TV	Television
UDHR	Universal Declaration of Human Rights
UN	United Nations
WHO	World Health Organisation

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Since December 2019, the world has been facing a global pandemic of the SARS-CoV-2 virus, which causes the COVID-19 disease (WHO, 2020). The ongoing spread of this pandemic is creating a high demand for accurate and concise research-informed information related to COVID-19 and a greater dependence on and need for trusted information sources. Medical and scientific evidence concerning the virus is being uncovered and communicated rapidly to inform policymakers and the public about how best to respond and mitigate new infections. At the same time, communities are still grappling with multiple COVID-19 messages, trying to make sense of these health messages from their own lived experiences.

Community engagement during these public health emergencies is often overlooked, but pivotal because it helps in building public trust by acknowledging communities' pandemic-related challenges and developing relevant, responsive solutions. (Dutta et al., 2020; Essel, 2022).

Rwanda has registered 133,194 confirmed cases of COVID-19 with 1,468 deaths, reported to the World Health Organisation (WHO) as of April 26, 2023. As of January 2023, 26,106,436 vaccine doses have been administered (WHO, 2023). To curb the spread of the virus, Rwanda has put in place response mechanisms to deal with COVID-19 and implemented various preventive procedures such as the obligatory quarantine for all incoming travellers, the mandatory wearing of face masks, hand washing, and the practice of social distancing (Bridget et al., 2020). Several risk communication and awareness campaigns were organised. The first was #GumaMuRugo─a call to stay at home and save lives−which brought together Rwanda's Ministry of Health, the Rwanda National Police, and local authorities. The campaign consisted of efforts and innovations in communication and awareness to reach the community and encourage citizens to respect protection measures in the entire country. #Shishoza─crudely translated as 'Think twice', followed these earlier efforts.

These two campaigns (#GumaMuRugo & #Shishoza) originated from the Communication

Cell, a team responsible for awareness, community engagement, media relations, and rumours management in the National COVID-19 Joint Taskforce Coordination, and comprised interventions to explain practically how to practice prevention behaviours (Rwanda, 2020d). Both used mass media platforms, complemented by the Ministry of Health (MOH), Prime Minister's Office, Rwanda Biomedical Centre (RBC), and other government agencies, releasing official information on Twitter (Karim et al., 2021). In addition, local governance institutions and their stakeholders increased community awareness of the pandemic prevention using mobile sound systems as well as public and private media (Karim et al., 2021). The #Sindohoka campaign, roughly translated as 'I Never Relax', quickly followed not only to maintain an individual level of motivation when citizens started relaxing individual prevention efforts, but also to address enforcement-related challenges, emphasising the need for personal protection behaviours against the virus.

Researchers found that in Rwanda, communication for development has been dominated by the diffusion approach, and the system of communication remained top-down, with messages reaching the communities as directives from scientists and experts (Iruhiriye et al., 2022; Musabyimana, 2019; Rwanda, 2018a). This type of communication is characterised by the contradiction between the communicator and the audience, like between the teacher and the learner, applying the banking approach to education (Freire, 2005). In this approach, expert-led information is disseminated to the uninformed public, expecting them to change and adopt expected health behaviours. This approach, however, fails to achieve the expected behavioural and practical outcomes, instead leading to unexpected results like pandemic fatigue and growing misinformation, as noted in Rwanda during the COVID-19 preventive communication (Rwanda, 2020c). On the contrary, to achieve planned health outcomes, health communication should follow a liberating educational framework in which the participant ceases to passively receive (Krenak et al., 2022). Instead, passive reception should be replaced by active participation in the communication process, fostering collective and informal knowledge growth through dialogue and conscientisation as key drivers of this process. Considering the pandemic's impact on the well-being and the expected role of affected communities in Rwanda (Saxena et al., 2021; Rwanda, 2020d). This research explores how urban and peri-urban communities engaged and participated in communication for COVID-19 prevention.

Building on Freire's (2005:12) philosophy that considers the world as a problem to be controlled or addressed consciously by a person called to change it, while at the same time creating the possibilities to live better individually and together with others; as well as the

participatory communication guiding philosophy, which defines communication as dialogue and community engagement fostering cultural identity, commitment, trust, and empowerment (Freire, 1970; Waisbord, 2020). This study explores COVID-19 prevention messages perception and contextual influences in the three categories of crowded settlements of Kiruhura, urban spontaneous or informal; Karama, urban planned or formal; and Mwendo, per-urban grouped settlements. This exploration is built on the Culture-Centred Approach, which prioritises community voices by suggesting that communities are dynamic interpreters and creators of messages and meaning based on cultural and contextual realities (Airhihenbuwa et al., 2014; Dutta, 2008). It further explores how dialogue and the stage of conscientization adapted by Karin and Johansson (2007) from Freire (1970) influenced community perceptions of COVID-19 prevention messages.

1.2. Problem statement

Communication interventions addressing health problems in Rwanda have been dominated by the top-down approach, with messages reaching the communities in the form of instructions (Iruhiriye et al., 2022; Musabyimana, 2019; Rwanda, 2018a). It strongly focused on communicating scientific information with little interest in how communities in different spatial settings deal with communicated information by understanding and communicating messages or relating them to their local contexts. It excluded communities in development efforts by neglecting the elementary communication practice based on dialogue to empower and engage communities in achieving and maintaining anticipated development goals, such as pandemic eradication in Africa and Rwanda (Asingizwe et al., 2018; Ingabire et al., 2015; Allotey et al., 2019; Ndzinisa and Govender, 2024).

The problem occurs in different domains that affect the living conditions of Rwandans, such as agriculture, nutrition, early childhood development, and disease prevention, and has been caused by the programmes' strong dependence on mass media to communicate, with limited interest in contextual factors and community-based communication channels (Iruhiriye et al., 2022, Musabyimana, 2019, Rwanda, 2018a). In the context of COVID-19, "communication as part of the pandemic management has been strengthened and controlled by the communication cell of the COVID-19 Joint Task Force Coordination, responsible for awareness and community engagement, media management and rumours management" (Karim et al., 2021: 5).

The communication cell facilitated the dissemination of information to the public using the media, ensured accuracy in coverage and reporting, and the sharing of information has been done through consulting technical staff, including clinicians, scientists, and epidemiologists (Bridgett et al., 2020). It further provided a combined source of COVID-19-related information to combat misinformation using governmental websites and social media (Karim et al., 2021).

By determining the flow of information from the national to mid-level and the community(Iruhiriye et al., 2022), but not how to hear from the community's pandemic conscientization steps, awareness programmes did not favour dialogue between community members themselves and health experts. This approach deprives the community's opportunity to be heard and express themselves, with communicators assuming that community members agree with the instructions they communicate and assume they will follow them, but the results can be unexpected (Musabyimana, 2019; Rwanda, 2020c).

Awareness programmes have been characterised by planning objectives, messages, and channels to reach the community, also called targets, and tell them what to do with limited interest in how they respond (Iruhiriye et al., 2022; Musabyimana, 2019; Rwanda, 2018a). They are also characterised by monitoring and evaluation targeting only the top-down quantitative outcomes regarding the number of produced and distributed communication materials, supplemented by non-communication related outcomes; and both are planned to reach secondary and tertiary audiences more than primary audiences, which are community members (Iruhiriye et al., 2022; Musabyimana, 2019; Rwanda, 2018a).

Dissemination-related problems affect communities and development partners, outcomes, and sustainability. It not only results in unexpected outcomes but also limited community ownership and behavioural resistance (Ingabire et al., 2015; Asingizwe et al., 2018; Karim et al., 2021). In addition, fatigue and speculation among the public have been noted even during COVID-19, when government institutions and stakeholders were increasing community awareness and prevention using the media as well as mobile sound systems.

1.3. Significance of the study

Considering ending epidemics and communicable diseases as the main target of the health-related development goal (Stafford-Smith et al., 2017), and the principle that puts the

community at the centre of participatory development, it is relevant to study how local communities perceive messages and how they participate in COVID-19 preventive communication. Communication during pandemics aims at reaching different communities and populations to exchange well-being information, engaging, empowering, and supporting them to adopt or sustain a healthy behaviour or practice (Schiavo, 2014). Also, community participation helps to make ordinary people responsible for their well-being and to engage the community and their leaders in tackling a health issue by determining key steps toward behavioural or social change or practising the anticipated behaviour (Freire, 1974; Schiavo, 2014). In this regard, a study evaluated the institutional effectiveness of communicating research results to communities. This research found that communities viewed institutional messages as instructions similar to those from local leaders and felt their views were inferior and not valued (Musabyimana, 2019; Jjuuko, 2021). It then suggested careful community members' implication and empowerment through significant consideration of their context and indigenous knowledge.

Another study evaluated the effect of alerting and involving communities in disaster risk reduction and found that government plans are preferentially implemented, with little consideration of the community's traditional knowledge and the last standing as beneficiaries instead of participants in activities aiming at reducing disaster risk (Nahayo et al., 2017). Other researchers evaluated health communication campaigns and found that they targeted top-down quantitative outcomes, resulting in people not behaving as expected (Ingabire et al., 2015; Asingizwe et al., 2018). They did not propose mechanisms to engage communities in understanding and defining their health problems. Also, strategies to initiate participation and change are not indicated in the development communication scholarship (Kincaid and Figueroa, 2009).

Participatory communication theorists suggested that the course of transformation in any community must include both reflection and action relating communication to dialogue and conscientisation (Freire, 2005), where community members are conscious of their cultural contexts and strive to hold their identity. Therefore, further research is needed to study enablers and encounters of pandemic prevention, starting by analysing message interpretation and variation because any community participatory communication experience is founded on social differences and community members' conscious positions indicated by the four stages of awareness, dialogue, authentic word and transformation (Karin and Johansson, 2007, Alexander et al., 2022; Romero Fresco and Chaume, 2022).

This is qualitative research which follows an interpretive inquiry to discover messages' contextual interpretation and adaptation by exploring two concepts integral to participatory communication. Conscientisation which means "developing consciousness" (Taylor, 1993:53), is related to the independent course of acknowledging that all human beings, including the poor, are able to learn and reach critical engagement with reality (Nyirenda, 1996) or understanding of their ability, strength, or difficulties (Freire, 1974; Kincaid and Figueroa, 2009, White, 2004; Tufte and Mefalopulos, 2009). Dialogue is related to how communities' knowledge and understanding are shared (Campbell and Scott, 2012b; Nyirenda, 1996). Starting from the premise that individuals are knowledgeable, dialogue is the bedrock of all action-oriented learning because it fosters critical mindfulness and develops agency, which is the individual power to make sense of ideas or act relating to them individually or with others (Tufte, 2017).

The two aspects are relevant in analysing how communication enacted community consciousness by analysing how communities balanced social contexts and realities in response to the problem of COVID-19. Therefore, this research uses focus group discussions to examine the interpretation of COVID-19 prevention messages and contextual factors of meaning in Kiruhura, Karama, and Mwendo settlements from 2020 to 2022. It contributes contextual dialogue-related challenges and emerging solutions to better engage communities in future pandemic preventive communication.

1.4. Research objectives

1.4.1. General objective

This study explores how dialogue and the stages of conscientisation in communities influence the perceptions of COVID-19 prevention messages in Kigali, Rwanda.

1.4.2 Specific objectives

1. To examine the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda.
2. To understand how local communities catalyse consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities.
3. To examine the ways in which dialogical principles have been enablers or disablers of COVID-19 prevention messages in Kiruhura, Karama and Mwendo settlements.

4. To explain how dialogue and conscientisation can influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda.

1.5. Research questions

1.5.1. General question

In what ways have dialogue and the stages of conscientisation in communities influenced perceptions of COVID-19 prevention messages in Kigali, Rwanda?

1.5.2. Specific questions

1. What are the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda?
2. In what ways have local communities catalysed consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities?
3. In what ways have the dialogical principles been enablers or disablers of COVID-19 prevention messages in the settlements?
4. How can dialogue and conscientisation influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda?

1.6. Study location

This study was conducted in Nyarugenge, one of the three districts of Kigali, the Capital of Rwanda. Kigali records the highest daily COVID-19 infection rates compared to other provinces of Rwanda and is referred to as one of the epicentres of the pandemic in the country (Minister, 2021a). The Capital was put under total lockdown twice in 2021 due to the increase in COVID-19 cases from January 19 to February 7, 2021 (Minister, 2021c; Minister, 2021b)[1] and from 17-31 July 2021 (Minister, 2021a)[2]. This study investigates three categories of crowded locations whose housing, population, and living characteristics make them susceptible to COVID-19 or may affect how residents of these communities interpret, adapt, and

[1] https://www.primature.gov.rw/index.php?eID=dumpFile&t=f&f=28717&token=add14d658a974cabff3a1effed71b9bbff404f20

[2] https://www.primature.gov.rw/index.php?eID=dumpFile&t=f&f=28728&token=91956d89b1ba55e9e31e0a7b699d74dab9e3024c

reconstruct COVID-19 prevention messages. Mwendo is a peri-urban grouped settlement planned for between 100 and 200 houses by the site (Rwanda, 2012; Ngoga, 2015a; Rwanda, 2021a); Kiruhura is a spontaneous city settlement characterised by several dwelling units enclosed in the same compounds and substandard living conditions such as limited plot accessibility (Hitayezu et al., 2018); and Karama, a modern urban settlement, multifamily house setting of up to 12 dwelling units in 3-4 floors (Rwanda, 2021a).

1.7. Theoretical framework and methodology

Within the communication for development application to health, the participatory communication approach is rooted in the work of Freire (2005:32) on dialogical pedagogy, and the Culture-Centred Approach guides this work's theoretical framework. The work of Freire (2005:32) is epistemologically built on the concept of "praxis, which means conscious action". Also, praxis results from the dialogical learning relationships (Freire, 2005) relating a teacher to the health communicator, and the student to the community or audience, and the two must learn together. They gradually observe their own and the social world's reality and then become conscious of their experience with that reality to confront it appropriately (Freire, 2005). This framework highlights that the communicator creatively engages the community about a concrete situation, discourages passive behaviour, and empowers the community to analyse and exchange knowledge (Nyirenda, 1996).

The stages of conscientisation adapted by (Karin and Johansson, 2007) from Freire (1970) Participatory Communication guide the methodology in studying how communication has been a means through which residents of Kiruhura, Karama, and Mwendo settlements became critically aware of COVID-19, their vulnerability to it, and also their individual and community ability to limit its effects by enacting the preventive messages in their local contexts. This framework is also complemented by the Culture-Centred Approach's concepts of agency, structure and culture, which guide the methodology in discovering how residents of the three settlements perceived COVID-19 and its preventive messages, and the influence of their cultural contexts on their perceptions. This study's theoretical framework is detailed further in Chapter Three.

This study adopted an interpretive paradigm to interpret how communities in highly populated sites of Rwanda interpret and adapt COVID-19 prevention messages, make sense of them and influence their conscientisation related to prevention measures. It followed a qualitative

process and used focus group discussions (FGDs) to engage residents of Kiruhura, Karama and Mwendo settlements about how they made sense of COVID-19 prevention messages and adapted them within their local context.

1.8. Structure of the thesis

This study is subdivided into seven chapters, with each addressing a wide range of thought-provoking issues related to the research aim.

The first chapter presents a general introduction to the study. It gives the background of COVID-19 and related communication in Rwanda, describes the research problem, the research objectives and questions, and the research significance and ends with a short description of the thesis chapters.

The **second chapter** reviews the literature and discusses theoretical concepts that frame the study on communication about COVID-19 and pandemic prevention. It discusses issues at the global, African and Rwandan scales and provides a historical review of theories that influence development communication to address health issues, current criticism and challenges in reaching communication targets. It further discusses factors that influence community participation, the role of communication professionals and community members and how to increase dialogue for pandemic conscientisation.

The **third chapter** describes the theoretical framework, including participatory communication and the Culture-Centred Approach. The participatory one will be used to discuss communication challenges and how to fill the gap between the communication intention and the community perceptions of the pandemic by closing the contradictions between intentions and communities' responses. The Culture-Centred Approach guides discussions about contextual limitations, the influence of cultural factors and the locally existing opportunities to generate dialogue.

The **fourth chapter** presents the adopted methodology. In this chapter, the interpretivism paradigm is discussed, and the related need for a qualitative approach is justified. It also provides details about the study location, population, sample and sampling method, recruitment of participants, data collection, analysis processes, and the details of ethical considerations.

The **fifth chapter** starts with a brief description of the participants and presents data that responds to the first two questions: What are the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda? and In what ways have local communities catalysed consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities?

The **sixth chapter** presents the other two questions: In what ways have the dialogical principles been enablers or disablers of COVID-19 prevention messages in the settlements? And how can dialogue and conscientisation influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda?

The **seventh** chapter discusses this research's findings, relating them to the literature and theoretical framework. It offers practical community-emerged solutions for engaging communities in future pandemic-related communication.

The **eighth chapter** discusses this research's contribution to existing literature, while the **ninth chapter** concludes this research, explains its limitations and provides recommendations for further research.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The current chapter contains information on literature related to development and health communication. It not only defines important terms contained by this study's variables but also describes the historical change in development communication and how this is related to COVID-19 and other pandemic prevention, with regard to the relationship between messages, communicators and community contexts. Published works on development communication, COVID-19 and preventive communication in Rwanda, as well as communication lessons from HIV/AIDS and Ebola prevention, are also reviewed. Centrally, this chapter highlights how affected communities are the main actors in pandemic preventive communication, explaining the relationship between communicators, with the gaps in the existing literature threaded in different sections of the chapter.

2.2. Communication for development

2.2.1. The three paradigms of development

Ideally, communication is concerned with individuals and communities engaging in exchanging meaning, with all participants playing the role of receivers and senders (Figueroa et al., 2002). When communication is associated with development, it is known as communication for development and carries with it different meanings according to the development views. Literature subdivides development communication into three paradigms, which also offer different perspectives and changes in meaning according to the developmental concern, with communicators aiming at persuading, raising consciousness, or building consensus.

Firstly, in the modernisation paradigm of the 1950s-1960s, development was the process of changing the traditional way of living that causes underdevelopment and poverty in poor countries and communities, thus linking development to the adoption of modern and Western styles of living. In this paradigm, the world countries was subdivided into two opposite parts which were the "Core", first world or the west comprising of rich countries locate in Europe

and North America, and the "Periphery", third world or global south comprising of poor countries located in Africa, Asia and South America (Friedmann, 1963). Modernisation communication scholars supposed that introducing the media and different kinds of educational, political and economic news could transform the individual and the society from traditional and poor, to rich and modern (Servaes and Malikhao, 2011; Dutta, 2011). Practically, communities were expected to be lacking information, alienated by their culture and must passively receive messages for changing individual behaviours and social norms in a short time and with numeric outcomes (Rogers, 1995; Tufte, 2017). Therefore, societies had to follow a linear process of development made of five stages: the traditional society characterised by lack of science and technological progress, the preconditions for takeoff or big socio-political and economic transformation, the take-off or quick and automatic economic growth resulting from a high investment rate, the drive to maturity or integration of modern technology in all economic activities, and the age of high mass consumption or modern living enjoying the same comforts and luxuries as the westerns(Rostow, 1960).

Secondly, the dependency or dissociation paradigm resulted from scholarships targeting modernisation, which identified the establishment of capitals, and countries that politically, economically, and militarily depended on, and were controlled by core countries (Frank, 1967). Those third-world centres also served the interests of the entire capitalist system by facilitating the exportation of raw materials (Baran, 1957). Dependency theorists concluded that modernisation-related development and communication theory were not appropriate to developing countries (Lent, 2021) and practically weakened them through inequality in the flow of information between the core and the periphery, which resulted in the exaggeration, distortion and falsification of third world realities and peripheral dependence on information from the core (Teer-Tomaselli et al., 2021). These problems resulted in the use of information tools to only promote the interests of the rich and elite groups (Lent, 2021).

These critics led to the New International Economic Order (NIEO) and the New World Information and Communication Order (NWICO), which aimed to address North-South inequalities by redistributing capital and media resources from core to peripheral countries, thus addressing their dependence on news importation, thus emphasising the development of media through ownership, infrastructure, and content flow(Teer-Tomaselli et al., 2021, MacBride and International Commission for the Study of Communication, 1980). The two orders failed to bring solutions to existing problems because they preserved the same top-down approach and related inequalities. Also, more critics have shown the need for more innovative,

human, responsive and classless models of communication (Huesca, 2008; Lull, 2007) that should inspire development and change. Another influencer of new communication approaches was Dag Hammarskjöld, the United Nations(UN)'s Secretary General from 1953 to 1961, who advocated for a UN that serves as a forum for peace, conflict prevention and resolution related dialogue, with improved communication systems that give global south nations equal opportunities to contribute both ideas and staff (Bildt, 2012).

Thirdly, the participatory paradigm may be innovative communication, which is defined as information exchange using a dialogical and horizontal approach (Morris, 2003). It originated from Freire's (1970) "Dialogical Pedagogy" model, in which he proposed the concept of "liberating education", considering communication as dialogue and participation. This communication should have one objective, conscientisation, which means free conversation prioritising trust, commitment, and cultural identity (Kincaid and Figueroa, 2009; Tufte, 2017). Also, its dialogical approach should be defined by the principles of equitable distribution as well as the active participation of grassroots actors (Tufte, 2017).

This type of communication will increase the participants' ownership by reconstructing and sharing knowledge. In the same way as education, communication would be an innovative dialogical discovery of the world and knowledge, instead of the transmission of information between the influential and the marginalised (Freire, 2005).

For Freire, the development problem in developing societies was not about information, with solutions based on persuasion, behavioural bias, focusing on the sender, and limited to the implementation of Western philosophies. The problem was instead about communication, and he proposed a solution, considering local, cultural, and historical communication factors. That should be human-centred communication, dominantly interpersonal and face-to-face, with media and communication technologies facilitating group interactions (Okunna, 1995), whereas community forms of communication would be occasions for identifying and reflecting on community problems and emerging solutions (Freire, 2005; Saurabh, 1998; Van Blerk and Ansell, 2007).

This strategy not only includes community members who were traditionally considered receivers or audiences but also originated from them. That is what Freire (2005:76) called the right of everyone to express their world separately or jointly with others: "This is not the privilege of some men, but the right of every (wo)man. Consequently, no one can say a true world alone, nor can he say it for another, in a prescriptive act which robs others of their words.

For third-world countries and populations, the participatory paradigm would provide an opportunity to reflect on their own development and participate in solving related problems.

Theoretically, the concept of dialogue stresses the horizontal exchange between communication experts and local residents, while conscientisation is about perceiving and dealing with existing communication inequalities between the two sides (LMcPhail, 2009). Practically, apart from the internet-based opportunities to horizontally exchange information, a lot more opportunities are generated by the understanding of community evidence and local people's experiences (Manyozo, 2012) and can help get rid of difficulties founded on the criticised subjective and non-scientific side of participatory communication. Effective expression helps people share appropriate information about their conditions, thus increasing their understanding of their responsibilities (Servaes and Malikhao, 2020). Participatory communication theoretically relates to this study as it helped the researcher discover local perceptions, limitations and new context-based opportunities to overcome stereotyped ideas and encourage diversity and plurality, thus respecting the dignity and equality of people located in diverse contexts, living in distinct conditions, and acting in different ways (Servaes and Malikhao, 2011).

Dialogue practically enlightened this research's methodology in analysing the ways in which Kiruhura, Karama and Mwendo residents communicated COVID-19 prevention messages, their role and existing rooms to increase community participation in pandemic conscientisation.

2.2.2. Development communication and COVID-19 prevention

This study falls in the broad study area of communication, culture, and media studies, particularly the option of communication for development applied in the health field. At its early stages, development was linked to economic growth, characterised by technological and innovation transfers from the rich countries or the north to poor countries or the south (Melkote and Steeves, 2001). During these periods, communication and the media were considered powerful tools to transfer innovations and models from advanced countries to developing ones and from cities to rural areas, with their powerful, uniform, and direct effects on inhabitants (Melkote and Steeves, 2015).

This concept of development was criticised for ignoring the human aspect, and development started being linked to people in the 1990s increased poverty and diseases forced government and non-government organisations to adopt a people-centred approach to development. It

became human development, defined as "increasing the prospects for living a long and healthy life, being educated, having a decent standard of living, and enjoying political and civil freedoms to participate in the life of one's community" (Kincaid and Figueroa, 2009: 1312).

Therefore, the United Nations set up goals to guide development from the early 2000s onwards. One of these goals that evolved from the eight Millennium Development Goals (Mefalopulos, 2005) to the seventeen Sustainable Development Goals, the third of which is "Good Health and Well-Being" (UN, 2015). This goal also bears health-related targets, one of which remains "By 2030, end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases, and combat hepatitis, water-borne diseases, and other communicable diseases" (Stafford-Smith et al., 2016:4). This would be driven by a shift to prevention through locally-led approaches instead of treatment, amongst others (Buse and Hawkes, 2015). The shift is determined by the principle of participatory development, which puts the community at the centre of its development, stipulating that people can assess and determine their needs, discuss processes to reach them and participate in all practices touching on their lives (Freire, 1970).

One of the characteristics of participatory development is the participation of people susceptible to the effects of a problem (Bessette, 2004). This study focuses on residents of Mwendo, Karama, and Kiruhura who are susceptible to the effects of COVID-19. It suggests that protection against the pandemic can be more effective if residents actively participate by assessing their present situation and future expectations, and by developing plans to address these needs. This can be possible through a participatory approach to communication, which has to be "based on dialogue rather than monologue, horizontal rather than vertical information sharing, social rather than individual change, equitable participation, local ownership, and empowerment" (Kincaid and Figueroa, 2009:1313). This participatory communication process is more important than its end (Govender, 2011) because it is based on dialogue, not an end, but, like in the Freirean (1970) problem-posing approach, a tool to understand the communication object or the development problem. The participatory approach to communicating development issues is founded on "participation as a basic human right" (Melkote and Steeves, 2015:390) and starts by involving people in acquiring more knowledge about their situation and becoming confidently able to change it. Therefore, people can interpret and share messages to influence pandemic preventive attitudes with the communication approach, helping them to satisfy their communication needs, thus enjoying their right to inform and being informed (Somavía, 1981) about a health issue in relation to their historical, cultural and economic environment.

2.2.3. Development Communication and Disease Prevention in Rwanda

Communication in Rwanda is associated with the country's political and media history. The History of Rwanda is subdivided into three main periods: pre-colonial, colonial and post-colonial (Byanafashe and Rutayisire, 2016). Communication in the pre-colonial era was marked by oral narrations. These narrations were heavily loaded with facts based on official and widespread oral tradition that concentrated on the justification of the kingdom's reality and philosophy as a priority, and overlooked individual as well as family reasons. The kingdom's ideology and mission were to make Rwanda a populous, unified, rich, and militarily powerful kingdom (Mulinda and Nkaka, 2017). While these narratives conveyed mythologies, beliefs, and various stereotypes, they also played a significant role in shaping the historical consciousness and collective awareness of the Rwandan identity.

Even though the family was overlooked in official communication, it was the foundation of all knowledge and value transmission. In Rwanda, all children were educated by their mothers and elders on how to behave socially (Dusaidi and Puttanna, 2017). As they grew up, girls learned from their mothers' social dos and don'ts and were further trained about doing domestic and subsistence-supplying work by emulating their elders. Around the age of fifteen, they started learning from their peers about their health, including sex and reproduction, as their mothers were prohibited from communicating this intimate information (Byanafashe and Rutayisire, 2016). After marriage, their access to knowledge and information was influenced by their husbands' families and neighbours (Byanafashe and Rutayisire, 2016).

Boys were trained by their fathers on how to defend family and national interests as well as to represent their fathers. Further, they were recruited by the reigning king for formal intensive sport and military training to defend the country(Byanafashe and Rutayisire, 2016). At the same time, they learnt dancing, speech, poetry, and perseverance together with generosity, tolerance and courage (Byanafashe and Rutayisire, 2016). The authors do not mention how all of this was applied, but mention that boys would have family meetings with their fathers to discuss important social as well as economic issues, while community concerns were communicated to the king through poems by both men and women poets. It is also recorded that community elders would sit together to discuss and address important community issues, restoring social justice and order in the community by uncovering the truth, punishing the offenders, and reconciling conflicting parties in a community setting known as "Gacaca" (Byanafashe and Rutayisire, 2016).

In the colonial period, which stretched from the later part of the 19th Century to 1962, all features of the Rwandan identity were interrupted, manipulated and subscribed to the two main colonial ideologies, "divide and rule" and "rule for exploitation" (Mulinda and Nkaka, 2017:165). These ideologies sought to restructure the country, undermining its internal cohesion and transforming it from a society with strong indigenous organisation and resistance to foreign imposition into one increasingly dependent on external powers.

Colonial ideologies were supported by missionaries who framed Rwandans as naïve and lazy, with crude intelligence, excessively attached to their traditions, superstitious rather than historic and characterised by materialism and spiritualism (Byanafashe and Rutayisire, 2016). Therefore, the two historians added that the objective of replacing all Rwandan principles and practices with their proclaimed divine ideology, these colonial actors recorded direct accounts from traditional narrators, manipulated and transformed these narratives to align with their own myths and philosophies, further distorting Rwandan history and identity to serve colonial interests.

The colonisation era mirrors the dominant paradigm in Rwanda, as it marked the introduction of modern schools and hospitals by missionaries, who also established the first Catholic print media, such as *Kinyamateka* in 1933. This continued until the introduction of two government-owned print outlets (*Invaho Nshya* and *La Nouvelle Relève*) and Radio Rwanda in the early 1960s (Kimonyo et al., 2004; Kamilindi, 2007). These government-owned media were closely tied to the political agenda of the time, which continued the colonial ideology of divisionism. This association prevented them from practising development journalism (Kamilindi, 2007; Dallaire, 2007) and limited their influence on social development. Also, their role in health was limited because little priority was given to pandemic prevention, with the country failing to adopt external strategies to eliminate malaria, which was the leading cause of mortality and morbidity until 1980. Apparently, by focusing on external economic strategies, the local contexts and the environment were disregarded.

The post-colonial era was associated with the dependency paradigm of the 1970s and 1980s, and it focused on the economic relationship between Rwanda and regional countries, as well as economic and technological dependency on the International Monetary Fund and Western countries. In the media and communication domain, this era was not only influenced by economic pressure, where it was estimated that social transformation aspects are determined by the market (Huesca, 2008), but also by information disparity between the two poles (Teer-

Tomaselli et al., 2021). Media redistribution in Rwanda was characterised by the introduction of more media institutions inspired by the New World Information and Communication Order (NWICO). The post-colonial philosophy also adopted the top-down approach and was criticised for perpetuating historical inequalities. Therefore, researchers called for models of communication that should help African countries face the then economic, security, environmental and health crises (Huesca, 2008).

Rwanda continued to face socio-economic, security and health crises, regardless of the introduction of more media between 1991 and 1994. The impact of print media remained unseen due to the oral tradition that dominated communication in the country for a long (Kimonyo et al., 2004). On the other hand, radio, with its influential oral power, has been accused of participating in the 1994 genocide against the Tutsi by disseminating hate messages (Dallaire, 2007). Researchers have particularly emphasised the role of Radio-Télévision Libre des Mille Collines (RTLM), which served as a tool for perpetrators in disseminating hate speech and propaganda before and during the 1994 genocide against the Tutsi. The genocide resulted in approximately 1,000,000 deaths and millions of displacements (Dallaire, 2007; Kamilindi, 2007). This ideological concentration of the radio overlooked both public health and disease prevention. Consequently, the country experienced frequent epidemics of infectious diseases, especially malaria, HIV/AIDS and tuberculosis, resulting in the highest daily mortality rate of 20-30/1000 people, the highest child mortality rate and the lowest global life expectancy at birth (Karema et al., 2020).

Literature shows that communication for development in Rwanda has been dominated by the top-down approach. But after the 1994 Genocide perpetrated against the Tutsi, the country opted for a change built on social justice, participation, equality, learning and cooperation as values (Minaloc, 2013), fueled by the National Decentralisation Policy, which aims at ensuring effective community participation in development. These values helped the country address post-genocide social and economic development challenges by drawing on Rwandan historical, cultural, and community-based approaches. These values, characterised by viewing problems—including illnesses—as communal rather than individual, helped the country achieve several home-grown solutions that enjoyed some success, including Umuganda-Community Public Works; Ubudehe-Internal Community Support; Community Policing; Abunzi-Community Mediators; Imihigo- Performance Contracts; Inteko y'Abutarage-Community Gathering; and the Gacaca courts (Minaloc, 2013).

In the public health domain, those strategies informed Mutual Health Insurance (Mutuelle de Santé), a bottom-up social, economic and health initiative (Hartwig et al., 2012) that helps community members save money and pay for health insurance most of the time through local associations or cooperatives. It is one of the most extensive community-based health insurance schemes operated in Sub-Saharan Africa, covering over 90 per cent of the Rwandan population (Hartwig et al., 2012). The scheme has successfully increased access to healthcare and reduced the burden of catastrophic health spending, particularly for poorer segments of society (Hartwig et al., 2012).

The literature does not clarify how Rwandans reflected on emerging pandemics regarding their contexts and cultural traditions. Therefore, this research is an opportunity to understand how local, cultural, and historical factors influence the health communication of inhabitants of Kiruhura, Karama and Mwendo settlements. It also examines how these factors shaped community reflections on COVID-19-related issues, beginning with their interpretation and adaptation of prevention messages. As Freire (1970) states, it is necessary to analyse the pandemic problem from the view of Kigali city Residents, considering how they communicated during the crisis, the community-level challenges, and evolving solutions.

2.2.4. Major changes in development Communication

With regard to the modernisation, dependency and participatory paradigms, communication for development kept evolving to face global technological change and the increase in human health crises, including emerging health threats. Here follows the main shifts adapted from scholars (Mansell and Wehn, 1998; Servaes and Malikhao, 2011).

From the 1950s and 1960s, communication centred on the sender (Mansell and Wehn, 1998) with guidance from the stimulus-response model of communication, which later became the communication effects theory (Shannon and Weaver,1949). In the public health domain, communication was dominated by the health promotion view of delivering true and neutral information regarding a health risk and concentrated on disseminating news on recent and factual events originating from the authority (Seale, 2002). Following the limitations of information-oriented health and development campaigns, communication paradigms kept changing and evolving.

From the 1970s, communication became more centred on the receiver and the message (Mansell and When, 1998) and communicators started involving scriptwriters and content

producers to stipulate health ideas in admired media inventions such as music videos and soap operas promoting contraception in different countries or the inclusion of anti-smoking sections in Hollywood cinema (Jane and Kim, 2002). Today, the emphasis is on the communication process and the exchange of meaning and its implications. Within this attention shift, the interactive side of communication has been acknowledged, and the exchange of meaning is increasingly becoming two-way and participatory instead of being one-way, linear, from higher authorities to communities, organisations to individuals, or the wealthy to the poor (Servaes and Malikhao, 2011). The receiver-centred approach to communication has focused on culture as a visible, natural, and standardised framework for human interaction, shifting attention from purely material and economic criteria to the acknowledgement of cultural diversity and perceptual differences (Servaes, 2021b). Given the shift towards receiver-centred communication and the emphasis on the implications of meaning exchange, it is important to explore how local and cultural contexts affected COVID-19 perceptions in the Rwandan urban spontaneous, modern and peri-urban communities.

Following the increase in literacy levels, individuals and communities became increasingly able to handle messages, use communication technologies and are no longer denied participation in the communication process due to a lack of practical skills. In Rwanda, with the establishment of the nine and twelve-year basic education and other educational advancements, many community members can read, analyse, and exchange information as the number of people who attended secondary school and university has tripled between 2002 and 2022 (NISR, 2022). Also, the majority ownership of mobile phones and access to the internet help them to participate in online social discussions in written, oral or digital forms (NISR, 2022). This brings in the necessity to evaluate how Rwandan communities contributed or should have contributed to the understanding of COVID-19-related knowledge. This analysis also helped discuss communication models that may suit local community contexts.

The international flow of communication drives not only cultural influences but also cultural hybrids, while internal and external development factors are interdependent. Therefore, communication for development was redefined as a social process based on dialogue using a broader range of methods and tools, aiming to reach an agreement to act, referring to the interests, needs and capacities of concerned parties (Servaes, 2021).To understand and develop a proper communication strategy, one must understand community understanding, dialogical challenges and opportunities based on the sense they give to messages because a development solution starts with the meaning that audiences give to messages (Okigbo, 2021). Also,

information-rooted ICT systems in relation to people's creative potential and knowledge have changed current communities from an information to a knowledge society that can participate in designing and implementing communication programs (Mansell and Wehn, 1998).

Consequently, true knowledge is the meaning that people make of information, something that is delivered to people in the form of information and subsequently is transformed into knowledge by the same people. For knowledge to be effective, people must not only have access to information and interpret it but also contribute to content development and communication processes (Mansell and Wehn, 1998; Servaes and Malikhao, 2011). In this regard, studying the context in which knowledge circulates should help in understanding how societies perceive, generate and act on pandemic prevention knowledge.

Therefore, current networks of traditional media or interpersonal channels of communication are not restricted but are more effective if combined and suitably used in reference to the needs and limitations of the local situation (Servaes and Malikhao, 2011). For the two researchers, governments and leaders are no longer able to control all communication networks in any society. In addition, alternative networks, even when not consistently active, and operating through political, cultural, or religious structures and relying on informal, social, creative, or popular channels, are highly participatory, credible, and strongly embedded in other social institutions. To this end, it is worth studying how mass media, interpersonal and alternative channels of communication have been integrated and are operating through Rwandan socio-cultural structures in the context of COVID-19 communication.

2.2.5. Pandemic preventive communication issues

Globally, communication about pandemics has been dominated by the expert transmission of scientific information to communities. Similarly, COVID-19 communication was reduced to a one-way dissemination of messages, with the adopted approach silencing and marginalising community voices, despite lessons learned from the ineffectiveness of this model during the Ebola and HIV/AIDS crises (Gumede, 2022).

This one-way and top-down approach to communication includes disseminating information through paid advertising in print and broadcasting, media engagement, and the use of government digital and social media platforms. The approach has been mainly criticised for overlooking community participation as well as the integration of local contexts and knowledge. It is monologic and anti-dialogue because it considers health professionals as

experts who possess the most accurate knowledge about health, while at the same time placing the uneducated public on the opposite end of the spectrum.

The approach is contrary to Freire's principle of dialogue based on mutual recognition and two-way or dialogic communication (Blanco, 2022). If people are expressively engaged, they can contribute to new, meaningful and innovative answers. Such dialogic engagement would delve into local communities' experiences in navigating COVID-19 restrictions and safety measures, facilitating a deeper understanding of the factors that support or hinder effective responses.

On the other hand, time limits, dominant during health crises and emergencies, force practitioners and policymakers to target quantifiable outcomes and reduce their willingness to listen to communities and let them make decisions regarding their development and health issues (Dol, 2012). These types of communicators are referred to as "tellers" because they approach communication as telling people what to do or instructing them on how to change their behaviours. In contrast, "listeners" (Dol, 2012) view communication as participatory, focusing on advocacy and searching for common understanding (Berger, 2010; Gao, 2019).

Sometimes, communication for development during crises implicates work in the "grey zone" (Dol, 2012:13), with unknown directions or purposes, and no approach or condition may remain correct, but communicators keep trying all possible solutions. They become champions when they can disregard the "telling" (Dol, 2012) position, respect the views of the people they engage with, and at the same time, help them find their own solutions to pandemic problems.

Lastly, community members' ideas and competencies have always been underestimated by adults or leaders who always try to represent them through their own testimony, while in their full rights, they are considered to be actors and experts of their own social and cultural world (Van Blerk and Ansell, 2007). When community competencies are valued, it is only for implementation (Van Blerk and Ansell, 2007). In addition, participation in group activities is problematic because the most educated members tend to hold the most influential positions in projects through self-nominating themselves or by default in the absence of a group protocol. In addition, When people communicate from a disempowered position, their voices become lost or misrepresented by those who mediate on their behalf" (Harris, 2021: 106) Researchers in development communication in African countries like Kenya, Zimbabwe, Mozambique, Uganda, and Tanzania have noticed the consideration of community participation in program implementation only (Leonard et al., 2013; Johnson et al., 2016; Douglas et al., 2022). Communities' participation in implementation led to conflicts of interest between communities

and program implementers, a minimal sense of ownership of the programs, and behavioural resistance by the communities who were considered as the significant implementing group (Leonard et al., 2013; Johnson et al., 2016; Douglas et al., 2022).

This is a reminder that the role of communication in development is to help address an existing problem, which may stem from the lack of community resources or individual knowledge. (Wilkins, 2007). Here, communication seeks not only to instruct societies about health risks but also to enable broader empowerment practices, enabling people to independently understand their own issues, to consider, discuss and negotiate related ideas, as well as to engage in community and national levels of public debates (Austrian et al., 2020)

In Rwanda, researchers examined the effectiveness of malaria prevention campaigns and pointed out the gap between government communication and people's preventive actions that results in the cycle of malaria in the country (Ingabire, 2015; Domina et al., 2018). Those researchers called out to identify determinants of the use and misuse of prevention resources and factors that should shape the design of effective interventions to close the gap between messages and prevention intentions. More research noted the preferential implementation of government policies with little consideration of the community's knowledge and the communication dependence on mass media, which limited people's participation in the change process that affects their lives (Nahayo et al., 2017; Iruhiriye et al., 2022). Those researchers did not determine how and when communities can start participating.

2.2.6. Community engagement in HIV/ AIDS and Ebola communication

COVID-19 is not the only pandemic to see contradictions and challenges related to its preventive communication. Before, health communication saw challenges and changes in the messaging efforts to eradicate pandemics like Ebola and HIV/AIDS. Firstly, HIV/AIDS-related communication did not succeed sufficiently due to non-integrative tactics such as the pandemic perception as a health problem, the focus and blame of particular cultural groups, the dominant use of mass media as the most significant means of preventive communication, and the exclusion of communities and stakeholders. These tactics may have helped in increasing awareness, but failed in curbing the spread of the pandemic and amplified the condemnation and discrimination of some groups.

These challenges resulted in shifting the communication approaches with people thinking about a move to perceiving HIV/AIDS as a development problem, adopting cultural solutions, and

using community and small-scale media (Lie, 2008). This change was motivated by the fact that mass media has no direct effect on individual behaviour or attitudes but is instead a means of socialisation and that people's choice of a certain media depends on shared media culture which resulted in incorporating HIV/AIDS prevention messages in popular media programs like soap-opera, with edutainment becoming the dominant HIV/AIDS communication strategy. Also, people's focus moved from behavioural to social change, aiming at including community stakeholders in tackling HIV/AIDS as a development problem whose solutions must be rooted in the culture (Lie, 2008).

It was noted that learning fundamental facts about a pandemic remains important, but not enough to change one's behaviour. Instead, communication interventions must also pay attention to information shared within the community. Therefore, it cannot change individual behaviour, but can clear the environment and stand as a basis of discussion with change taking place in collective and shared principles. In this regard, studying cultural principles will serve as the context in which communication is taking place, a source of locally relevant communication content, and a process of dialogue to enable community expression and participation.

After discovering the contextual factors in HIV/AIDS communication and prevention behaviours, many reports advised moving from communication to action by merging research and intervention to change and develop new communication processes founded on existing knowledge. Also, HIV/AIDS communication failed because it was based on representation and civic action, thus failing to craft messages that the audience should engage with, causing them to develop a feeling of disempowerment toward the pandemic-related challenges (Tufte, 2017) and a lack of motivation and capability to limit its social effects. Therefore, scholars advised abandoning the long-standing civic engagement-founded terminology and replacing it with the new terminology, amended and founded on community experience and context (Tufte, 2017), to engage and empower them much more.

On the other hand, facts related to Ebola show that a lack of community engagement and participation strains the relationship between government, communities and civil society, makes progress more difficult and results in misusing resources to achieve desired goals (Allotey et al., 2019). Also, COVID-19's strong focus on science with lower interest in the existing awareness and effect of the virus at the community level is the same as it was with the Ebola outbreak (Toole, 2016; Chandler et al., 2014; Vinck et al., 2019) whereas excluding

communities in pandemic preventive messages concludes with neglecting the elementary communication practice based on dialogue.

During the Ebola outbreak, scientific communication and little engagement of communities drove communities' suspicion of prevention, behavioural and therapeutic measures, distrust and harmful sentiment toward healthcare personnel (Shobowale, 2021). Therefore, a lot more contextual misunderstanding affected Ebola-related communication and prevention efforts. For both HIV/AIDS and Ebola, scholars proposed that to effectively control the spread of pandemics, there is a need for combining global, national and local behavioural efforts to minimise community susceptibility through sustainable prevention strategies (Isbell et al., 2016). The response to both epidemics suggests that the effective approach to contain emerging pandemics in Africa must be a data-driven combination of contextual and dialogical processes involving different affected communities (Isbell et al., 2016). This conclusion informs this study's aim of analysing message interpretation and perception of COVID-19 risk in formal urban, informal urban, and peri-urban grouped settlements during the Shishoza and Sindohoka campaigns.

2.2.7. Barriers to community participation

Researchers have been discussing community participation-related issues for a long but two main barriers have been limiting practitioners from achieving pre-prepared development communication outcomes: "The first problem is related to the main tasks normally assigned to communication specialists. Most of them are expected to produce mainly publicity, public relations, and/or multi-media materials without much involvement in the information needs assessment, communication strategy and planning, message positioning, treatment, and design, and/or multi-media mix selection processes. The second, and more critical, problem is their lack of a holistic, integrated, multi-disciplinary and inter-sectoral approach in analysing communication problems as well as in designing and planning communication strategies in support of the broader development objectives or goals" (Servaes, 2008: 26).

Although adopting the participatory strategy has been hindered by the fact that it menaces the prevailing structures, participation is not about the absence of development and communication specialists, designers, and leaders, but the understanding and consideration of community groups and their suggestions are considered before any allocation and distribution of resources (Servaes, 2008). For instance, while many decisions and policymakers are 'charmed' by participatory and bottom-up approaches, they nonetheless continue to believe

that vertical, top-down planning, mainly based on the use of old and new media, remains a more effective way to 'deliver' social change. "Many development practitioners are avoiding the semantic debates outlined above to harness the benefits of both approaches. For them, what is most important is not what an approach is called, the origins of an idea or how it is communicated. What is critical is that we find the most effective and efficient tools to achieve the noble objectives outlined in the Millennium Declaration" (Rogers, 2005:183-184).

Respectively, besides the dominant adoption of the top-down approach in communicating public health, this study analysed local interpretations of COVID-19 messages to explain the challenges and possibilities of community engagement in communicating about pandemics. Instead of grounding on quantitative data, this study provides a lens to collect community-generated qualitative data, which, combined with existing scholarly reports, will increase knowledge about existing opportunities and challenges to the participatory approach to pandemic communication in a.

2.2.8. Possibilities to enhance community involvement

To effectively engage communities, there is a need for innovative or participatory communication, defined as information exchange in a dialogical and horizontal approach (Morris, 2003), which increases the participants' ownership by reconstructing and sharing knowledge. This approach was introduced by Paulo Freire (2005), for whom the problem in developing societies was not about information, with solutions based on persuasion, behavioural bias, focusing on the sender, and limited to the implementation of external philosophies. The problem was instead about communication, and he proposed as a solution the consideration of local, cultural, and historical communication factors. It should be dominantly interpersonal, with media and communication technologies facilitating group interactions(Okunna, 1995), whereas community forms of communication would be occasions for identifying and reflecting on community problems and emerging solutions(Freire, 2005; Saurabh, 1998; Van Blerk and Ansell, 2007).

This strategy does not include community members as traditional receivers or audiences but originates from them. That is what Freire (2005) called the right of everyone to express their world separately or jointly with others. Expressing oneself effectively helps in sharing knowledge, in building trust and commitment, which involves a new attitude to overcome stereotyped ideas and encourage diversity and plurality, thus respecting the dignity and equality of people located in diverse contexts, living in distinct conditions, and acting in different ways

(Servaes and Malikhao, 2011). Therefore, discourse on community living conditions must not only originate from that community but may also generate interaction within and with other communities.

How participation, dialogue, and community engagement begin is not very clear in most of the literature on development communication. However, since the communication method is rooted in the development method, there is a need to change the development focus of viewing community members as objects or passive beneficiaries and consider them as development agents, which involves mutual collaboration built on listening to local individuals' goals, challenges, and solutions instead of keeping telling them what to do in the policy-based approach (Dol, 2012). In this shift, communicators would not serve as disseminators of information but will facilitate development through consensus-building, guidance, and learning because governments have never been able to control their citizens' development evolution," they can be supportive by providing information, resources and opportunities that individuals alone cannot muster; they can create a favourable climate within which people can unfold their wings"(Quebral, 2021:14). And, this can be possible with the guidance of Freire's dialogical principles of humility, empathy, love and hope (Ailton Krenak, 2022), and by exploring residents' contextual perceptions of pandemics and related messages.

Sometimes, communication for development during crises implicates work in the "grey zone" (Dol, 2012: 31), with unknown direction, and no approach or condition may remain correct, but communicators keep trying all possible solutions. Their success depends on how they are able to disregard the telling perception and respect the views of the people they work with and, at the same time, help them find solutions to their particular problems. The Rwandan strategy also proposed advanced community listening and engagement mechanisms in the continuing COVID-19 waves. This is testified by the change from instruction-based communication (Lab, 2022) in the Shishoza prevention campaign to the individual responsibility and ownership-oriented Sindohoka (Lab, 2022; UNICEF, 2022).

In addition, for better and sustainable outcomes, keeping the community listening is an advantageous option. Therefore, it is better to help communities identify themselves with issues and feel more effectively included by together identifying health problems, assessing how they impact the communities, and enhancing their comprehension, thus evaluating the communication approach and how it serves the community by treating real-life problems without overlooking how communities engage with messages and surrounding limitations

(Saurabh, 1998). In my view, it is much more important to consider the audience's contextual and innovative ideas in responding to their concerns. For example, readers' and listeners' letters, calls, and short messages provide rich and insightful data sources that can be easily interpreted, implemented, or responded to instead of a field survey for regular audiences. Currently, there are more and more ways, including digital forms, of engaging audiences in determining and designing messages regarding their welfare and evaluating how those messages help reach communication goals. In this regard, the Rwandan COVID-19 communication campaigns recognised and utilised the Ministry of Health's hotline, social media and community networks to address community issues (Karim et al., 2021; UNICEF, 2022). Their applicability and effectiveness still need to be analysed

Because of the changing public health and contextual situation, today's communication requires a partnership between practitioners and researchers. Researchers may facilitate community collaboration with local communities to monitor and evaluate the local relevance and impact of the messages and improve the program following collected information (Saurabh, 1998). In my view, practitioners cannot objectively evaluate their own work; if this is the case, they may fall into the success story trap. Therefore, the two sides need permanent interaction, consultation, and partnership.

Also, it is ethically imperative to ensure timely feedback in communication, but researchers, policymakers, and practitioners must go beyond the passive feedback to disseminators and accommodate feedback as an exercise of considering findings and outcomes in changing processes (Van Blerk and Ansell, 2007). Active feedback, I suggest, must not carry only questions or appreciation but open expressions and suggestions to relieve or overcome emerging challenges. Even though feedback is traditionally part of dissemination programs, communicators can do better by appropriately giving communities a voice or allowing them to easily and comfortably present and discuss important issues as they feel them (Van Blerk and Ansell, 2007). In this regard, topics must deal with problems that community members experience daily by not only responding to all questions but also suggesting solutions for different groups and stimulating interpersonal communication among the audience.

2.2.9. Communicative relationship

Development in its economic aspect is associated with wealth and profit accumulation, while participation, which means the impartial sharing of power, is said to decrease the interest of privileged groups. Participatory communication can take place after disrupting structures that

can alienate or privilege some groups or community members, as stated by (Mowlana and Wilson (1987: 143), "Communications policies are basically derivatives of the political, cultural, and economic conditions and institutions under which they operate. They tend to legitimise the existing power relations in society, and therefore, they cannot be substantially changed unless there are fundamental structural changes in society that can alter these power relationships themselves." Communication experts elaborated on the criteria for establishing a participatory communication model.

Foremost, informing, being informed, and communicating are basic individual and social human rights because in any society, people are concerned with satisfying their communication needs (Juan Somavia, 1977; 1981). Secondly, each society has the right and responsibility to independently define the concrete form of organising its social communication process based on its history, social-cultural and economic environment. Regardless of the cultural and structural environment, the communication approach must prioritise the principle of participation and accessibility (Juan Somavia, 1977; 1981). Thirdly, communication is the front side of social conscientisation and liberation, while the media play a central role in the process of social change, having the capacity to inform, disinform, expose or conceal important facts, and interpret events. (Juan Somavia, 1981). Finally, the right goes with responsibility and communicators, including the media, must convey social and legal responsibility, thus reflecting community or public consensus (Juan Somavia, 1981).

To make this concrete, there is a need for channel multiplicity to enable dialogue and debate, a transparent and accountable communication ecosystem that encourages public inputs and discussions, easy and cheaper public access to a variety of communication channels as well as the promotion of community-based channels, and a dynamic society in which all categories of people can actively participate in their development related discussions and decision procedures (Servaes, 2021a). All of the mentioned criteria and advice motivate this study's objectives to analyse and discuss communities' experience in interpreting and communicating COVID-19 prevention messages.

2.3. Health communication

2.3.1. Health communication as conversation

There are two main methods of communicating health messages. Mass communication is the communication of the same messages indirectly and widely to a large audience without direct

interactions, and interpersonal communication is a spontaneous, non-mediated interaction that involves the exchange of verbal and non-verbal information, feelings, and meanings between two or many persons (Dickson, 2004). The two methods may be affected by intrapersonal communication when a receiver, through internal reflection, analysis and self-talk, makes sense of incoming messages based on background, personal beliefs, attitudes and values. The process of communication takes place and depends on the environment, context and social structures. Therefore, being critically reflective and self-aware is important in health communication because it helps to learn from or contextually adapt messages for practice (Cross et al., 2017). Critical reflection makes the communication method important in influencing the receiver's decision.

Also, knowledge is at the centre of communication and critical reflection because by experience, people are consciously or unconsciously experts in their own lives. By ignoring this, communicators feel that they are experts to advise, inform and perpetuate the agenda. They may have health knowledge, but cannot be experts in other people's lived experiences, environment and socioeconomic lives (Servaes, 2008; Tufte, 2017). Ignoring these factors may hinder the delivery of effective health messages, which must be evidence-based or mirror the social-cultural situation of the receivers. Such ineffective messages result in unintended outcomes.

For effectiveness, communicators must remove those inequalities and bridge the knowledge gaps by supporting communities to enjoy their communicative rights instead of passively receiving their professional information (Cross et al., 2017). Participatory communication pioneers assume that communication is about dialogue and community participation, which generates a sense of ownership among all participants through interpreting and sharing knowledge.

Maximum research on health communication is concentrated on the message and the receiver, while the sender is thought to be an expert, objectively looking to strategically bring change. An actively engaged audience seeks, attends, and develops messages. Therefore, two-way communication helps refine messages because of the feedback obtained through its interactive features. This highlights the similarities between communication and education because they both aim at building the citizen’s ability to construct his/her own reality, which is a basis for empowerment (Freire, 1972), and only learning can generate change (Green et al., 2015). Therefore, instead of being passive receivers, people interpret and understand the world as they

see it. This leads to knowledge co-creation, a two-way course of communication where senders and receivers interact and construct the meaning of each other's feedback. They generate new knowledge by deeply learning together. It is a transformative understanding or dialogical communication where people learn through communication, critical reflection, and experience. By means of dialogue and critical consciousness, people learn the collective intentions that change the communication content so that it comes from their experiences or from concrete contextual realities, as well as effective problematic codification (Ailton Krenak, 2022; Nyirenda, 1996; Freire, 1974).

In this communication, participants accept that their social reality is susceptible to interrogation and change (Taylor, 1993). Therefore, they must be assisted to resist their passive understanding and increasingly develop a critical understanding of their reality. In the communication activity, experts discuss with the communities in regard current conditions and empower them to gain more knowledge. Such learning is free from any top-down or side-walking activities, thus accommodates common enquiry or the examination of a problematic situation as well as their shared growth because, " …. humans are able to engage with one another in acts of shared intentionality - everything from a joint walk to joint participation in transforming people into institutional officials- their social interactions take on new qualities" (Tomasello, 2008:103). Most communication activities centre on unselfish investigation and the participants' innovation to discourage their passive conduct (Chasi, 2022). In health communication, engaging in shared intentionality is compared to perceiving others as agents of collaboration and is subdivided into two main activities: cognitive skills known as the creation of the common ground or the shared contextually perceived issue; and social motivation known as sharing with others or facilitating interaction that helps to get the message across and develop the same social intention (Tomasello, 2008). In this regard, communicators try to help receivers reason based on evidence and get more clarification whenever necessary.

2.3.2. Health communication players and their functions

Effective communication, like education, is characterised by dialogic relationships between an expert and a community learning together (Freire, 1974; Nyirenda, 1996). This communication is transformative, and the dialoguing parties equally contribute to identifying and naming problems and elaborating plans to confront them (Campbell and Scott, 2012b). The two parties are linked by the social context and play different but importantly complementary roles. Those roles are determined by the communication method, which is also based on the development

method. The modernisation focus aims to influence the individuals perceived as beneficiaries lacking information to change their way of living style and adopt the new one injected by experts through mass media (Teer-Tomaselli et al., 2021). On the other hand, participatory development focuses and concentrates on grassroots communication and participation by listening to local individuals' goals, challenges, and solutions instead of telling them what to do (Teer-Tomaselli et al., 2021; Dol, 2012).

In the participatory approach, health communication professionals are expected to provide significant procedures and medical knowledge (Campbell and Scott, 2012a). They do this effectively by permanently identifying or establishing the common ground between them and the communities and ensuring their participation. They ensure community participation and build voice equity and equality at all levels by examining the voices that are missing in pandemic-related discussions (Dutta, 2021). On their side, affected communities provide insights into the relationship between scientific knowledge, and their own interpretation, needs, and interests; and how they shall alter or make use of acquired knowledge because they have information on how formal health knowledge and services may interfere with the community's home-grown reaction to well-being related problems and medical advancement (Campbell and Scott, 2012a). More importantly, they can discover, discuss, and address obstacles to the application of acquired knowledge and services.

In their respective roles, professionals and communities are connected by the social context, which embodies the common ground. Therefore, scholarship advises for context knowledge and applying it to shape interventions and make them relevant: "It is critical to use research to understand the social context … including social and cultural norms and behavioural drivers … and to use this analysis to inform the design of the strategy. If this step is skipped, you risk wasting precious resources and time on ineffective interventions" (Waisbord, 2005: 81). Therefore, the communicator and community roles are only facilitated by local context, which cannot be overlooked if effective health communication is to happen.

2.4. Covid-19 preventive communication

2.4.1 COVID-19 in Rwanda

COVID-19 is a worldwide communicable infection that first occurred in Wuhan in China's province of Hubei, in December 2019. The novel coronavirus was identified on January 7, 2020, and its genomic structure was universally shared. The WHO named the infection

'COVID-19' and the causal virus 'SARS-CoV-2' on February 11, 2020, because of its genetic resemblance to the coronavirus that caused the SARS epidemic in 2003. Other members of the same family include SARS coronavirus (SAR-CoV) and MERS coronavirus (MERS-CoV) (WHO, 2020a). Declared a pandemic by the WHO on January 30, 2020 (Shobowale, 2021; Gauckler and Kronbichler, 2021), the Coronavirus Disease of 2019 (COVID-19) has spread throughout the world as of 6:21 pm CET, December 14, 2022. It has affected 646,266,987 people and killed 6,636,278 people, and a total of 13,008,560,983 vaccine doses have been administered (WHO, 2023).

The disease's unpredictable sickness progression characteristics vary from a range of asymptomatic to severe and life-threatening infections (Shobowale, 2021; Gauckler and Kronbichler, 2021). It mainly affects the respiratory system, and the most common signs range from fever, cough, and minor shortness of breath to acute desaturation, triggering respiratory failure. Despite the lung impairment in the form of "Adult Respiratory Distress Syndrome" (ARDS), there are reports of the novel coronavirus creating a thrombo-embolic condition in the body, causing myocardial infarction and pulmonary embolism as well. For several patients, it can lead to kidney failure (CDC, 2020). Its spread modes vary from droplets, airborne, or feco-oral to physical contact (CDC, 2020).

This variety of mixed disease concerns is one of the reasons for the increasing fatality (WHO, 2020). This makes COVID-19 currently the world disorder with the highest social impact due to various reasons, such as disease-associated deaths and geographical expansion, the worldwide fall of the stock exchange, cancellation of sports and entertainment events, and the shortage of goods in markets. In the beginning, leaders have been dealing with the COVID-19 crisis on a largely national basis, but the virus's outbreak and effects do not recognise borders. Addressing its health, social and economic effects requires a global collaborative vision and no country, including the USA, can succeed in overcoming them in an entirely national effort (Gauckler and Kronbichler, 2021).

Initially, Africa, especially Sub-Saharan Africa, recorded the lowest infection and death rates, which increased progressively as of 6:21 pm CET, December 14, 2022; the continent has recorded 9,427,566 confirmed COVID-19 cases. In April 2020, the WHO noticed community transmission in various African countries (Austrian et al., 2020). This has been added to pre-existing worries, such as the spreading of COVID-19-related misinformation like unverified treatments and the promotion of hopeless protective behaviours. In addition, an estimated one

billion people globally who reside in crowded areas are at a suspiciously high risk of contracting COVID-19 and are less equipped to deal with epidemics, because it is challenging or impossible for them to practice personal hygiene and public health behaviours required to control the spread of COVID-19 (Austrian et al., 2020).

Even if Rwanda is commended for its effort in combating COVID-19, it has also been hit. As of 6:21 pm CET, April 26, 2023, the country had registered 133,194 confirmed cases of COVID-19 with 1,468 deaths. As of January 1, 2023, 26,106,436 vaccine doses have been administered (WHO, 2023). In its hard work to curb the spread of COVID-19, Rwanda was the first of sub-Saharan African countries to go under full lockdown on March 21, having documented the country's first case of COVID-19 on March 14, 2020. On the other hand, the country adopted the Extended Parallel Process Model, also known as the Fear Versus Threat theory, which is mainly anchored in public relations and argues that a threat, in its varied forms of severity and susceptibility, can be checked (Nasaba and Sembatya, 2021). The authors stressed that this model led the Rwandan fear appeal-founded risk communication and awareness campaigns such as Guma Mu Rugo (loosely translated as 'Stay at home and save lives'), Shishoza (loosely translated as 'Think twice'), and Sindohoka (loosely translated as "I never relax').

Public health researchers found that Rwanda recorded a low infection and mortality rate compared to other countries (Musanabaganwa et al., 2021), but attributed the result to non-communicable or non-behavioural related factors such as the tough strategies to test and trace the virus, strict infection control strategies and a population which is young in the majority (Musanabaganwa et al., 2021). These researchers did not consider the effect of either communication or community participation.

With regard to the pandemic, means of transmission and nonexistent medication, it is not easy to overlook affected communities since they are at the centre of any development and health effort (Somavía, 1981; Quebral, 2021). This forced the researcher to analyse COVID-19-related communication and the role played by Karama, Kiruhura and Mwendo residents.

2.4.2. Policy suggestions on communication and community participation

Communication, like other sciences which affect the lives of people, is connected to geographical locations and involves socio-political and economic situations of the concerned individuals, communities, countries and regions. This section discusses how community

participation is linked with global, regional and national development policies. It introduces the reader to current universal, regional and national laws and policies by contemplating how they connect people to larger societies and how they are expected to participate in the world and local development programs.

Historically, communication has been linked with development which is also linked to people whom different health organisations and policy documents call for participation which is related to the consideration of their social and cultural contexts which influence the awareness of who they are, their critical thinking, their discussion with others and how they react in situations challenging their communities; thus guiding the initiation of conversation to balance health expectation, prevention procedures and appropriate local actions (Chitnis, 2012). Basically and legally, community involvement in communication started with the Universal Declaration of Human Rights (UDHR), which stipulates that each individual has the right to express ideas freely, search, receive, and convey news and opinions through any medium, irrespective of borders (UN, 1948). It further stipulates that learning should focus on human development and the defence of essential human rights and freedoms. It further instructs for free participation in the community's cultural life, the free enjoyment of the arts, the sharing of technical progress, and related paybacks. In addition, it emphasizes that everyone should recognise, secure, and respect the rights and freedom of others in the exercise of those human rights.

Secondly, the African Charter for Human and Peoples' Rights recognises everyone's right to obtain information, voice and distribute one's opinions within the laws, the right to ethically and tangibly enjoy the greatest state of health, and everyone has the right to be educated, and that learning should be equally accessible (OAU, 1986). It further recognises individuals' rights and freedom to participate in their community's cultural life and all people's rights to an environment that favourably satisfies their development. At the same time, the Charter orders member states to ensure and protect those rights and promote and protect the community's ethical and traditional values (OAU, 1986).

More importantly, rights necessitate responsibilities. Therefore, the charter stipulates that "every individual shall have the duty to respect and consider his fellow beings without discrimination, and to maintain relations aimed at promoting, safeguarding and reinforcing mutual respect and tolerance"(OAU, 1986:9). Consequently, the individual has the duties of preserving harmony driven development, respecting the family; investing one's physical and

intellectual abilities to serve one's community and country; preserving and strengthening social and national commonality, and African cultural values in one's relationship with other community members and promoting the society's moral well-being through dialogue, acceptance, and discussion (OAU, 1986).

Thirdly, the Rwandan constitution recognises the Rwandan culture as a source of home-grown solutions stipulating that " … Rwandans, based on their values, initiate home-grown mechanisms to deal with matters that concern them" (Rwanda, 2015:35). In its chapter IV dedicated to human privileges, the constitution guarantees Rwandans rights to education and good health, rights and duties to promote culture. It guarantees the freedom of the press, expression and access to information. More importantly, the chief law orders everyone to ensure, recognise and respect other people's rights and freedoms, public morals and social welfare.

Therefore, international health organisations such as the WHO and the Centre for Disease Control and Prevention (CDC) have been emphasising the role of community participation in communicating public health issues and that communities should contribute to defining their needs, suggesting available means to reach them and contributing possible human and financial means (Rifkin and WHO, 1990). Firstly, the CDC defines a community from the systems, social, virtual and individual perspectives (CDC, 2011). From the system perspective, a community is an active being made of different human elements representing certain interests or performing specific and restricted activities toward the group's needs (CDC, 2011). Socially, a community is a network that associates individuals and groups of people who can be mapped in geographical areas (CDC, 2011). Virtually, it is a social group of people sharing interests and communicating systematically using the internet (CDC, 2011). Individuals, in their own sense, can belong to one or many communities, and the terms can vary depending on the existing networking procedures (Minkler et al., 2004). Even though some networks are traditionally deep-rooted in affinity or clan, most of the social community is raised from geographical closeness, occupation or recreational interests. Those networks may have a negative impact on public health, but when they are combined with cultural, economic and other factors that interest individuals and communities, they play a considerable role in minimising the spread of contagious disease (Zilberberg, 2011). To limit the negative effects and promote the positive ones, the CDC advises analysing the existing community network, their communication, and regularly monitoring how they grow or can potentially help in

interpreting and sharing knowledge, as well as in the development of applicable strategies (CDC, 2011).

The same organisation advises that the analysis must be conducted regularly to adapt the communication and community participation efforts in all phases of the pandemic prevention. All communicators are advised to properly collect information, store, analyse and share it appropriately because sometimes information is only stored and lost due to time and capacity-related challenges, thus limiting the community's chance to be heard and destroying trust (Vries et al., 2020).

Some researchers interchangeably use community participation and community engagement defined as the " understanding of concerns, attitudes and beliefs of key audiences, identification of target audiences and gathering of information about their knowledge and behaviours, engagement through social media, radio, and other appropriate means, identification of community influencers special information needs for people who are disabled or illiterate, and establishment of hotlines to respond to concerns" (Tambo et al., 2021:46)

To communicate about COVID-19, the WHO encouraged abundant community participation (WHO, 2020a). The overall health organisation reminded prevalent risk communication challenges learned from previous pandemics, including contextual uncertainties, pandemic fatigue, misinformation and distrust, thus recommending communicators to physically and virtually engage communities to enable community-led responses that centre on community needs, knowledge, issues, and vulnerabilities, as well as to avoid duplication and reduce knowledge gaps (WHO, 2020b). In my understanding, both the CDC and the WHO recognise the importance of community context-driven participation.

In Rwanda, government planning and strategic documents acknowledge the capacity of the local population to intervene actively in implementing public health programs. Among these, the Vision 2050 development strategy and the National Decentralisation Policy recognised and emphasised the importance of the country's cultural values in facing and addressing development problems based on Rwandan historical, cultural and community-based approaches to dealing with issues, thus encouraging the support and promotion of homegrown solutions (Rwanda, 2020a; Rwanda, 2021b). Also, the Fourth Health Sector Strategic Plan stipulates that the Rwanda health sector should account for the population's needs and utilise essential services, but, more importantly, strengthen community engagement in preventing, detecting, and responding to health threats (Rwanda, 2018b). When it comes to

implementation, results show much more top-down dissemination activities, and when the communities are engaged, reports show different community influencers trained and participating in implementing top-down activities with much attention on quantitative outcomes in terms of people who are reached, disseminated materials, and media access statistics, among others (Rwanda, 2022).

In relation to this research, the Rwandan COVID-19 Standard Operating Procedures recognised the importance of methods of understanding audiences' concerns, attitudes, and beliefs and proposed that community engagement activities should centre on proactively engaging and collecting information from audiences, engaging social communities on social media and responding to questions and comments (Rwanda, 2020d). The same document proposed that communities or audiences should be engaged on radio and television to call in and ask questions. Also, the Rwanda COVID-19 Preparedness Plan of March-August 2020 aimed at disseminating communication materials using print, electronic media and social media with regard to COVID-19 cases and symptoms, as well as the established prevention and control measures (Rwanda, 2020b). Toward the communities, the plan aimed mainly at assessing audience behaviours or requesting audiences to report suspected cases of COVID-19 to their leaders. Instead, communities should have been encouraged to express their opinions, fears, concerns, and aspirations, as well as local communicative innovation and opportunities. This research was an analysis of community members' sense of messages, challenges and opportunities to improve local dialogue for pandemic conscientisation.

2.4.3. Communication medium in Rwanda

Communication aims at sharing knowledge and building understanding. In communicating, Rwandan communities make use of traditional and modern channels of communication. Sometimes people prefer to integrate traditional media in communication about pandemics because they are based on and owned by community members (Abaneme et al., 2021). Those means of communication are trusted sources of information that can be utilised in a pandemic crisis or for communicating about COVID-19 in this study's case. If used effectively, they can facilitate comprehension and agreement because when included in communication approaches, they may be adaptable, acceptable and recognisable because they are mostly common among community members (Hu and Qiu, 2020). Historically, socialising with family and friends, storytelling, poetry and traditional music are the dominant means of sharing information.

Firstly, socialising is a way in which community members connect in usual and unusual ceremonies, attempting to build commitment, a sense of belonging and sustain the union of members of a certain community (Lunenburg & Ornstein, 2008). Rwandan residents can also socialise around social, religious and economic activities. Secondly, storytelling is the most common way of discussing, learning, sharing experiences, empowering, healing or answering specific problems presented in each story (Garretson, 2015) without harm or embarrassment. For Rwandans, it is a free, interesting and daily community media that dominantly holds people together exchanging stories. It is the source of a popular saying, "ukuri gushirira mu biganiro", loosely translated as "all the truth is said in stories". More importantly, an interesting story can be repeated and exchanged from one group to another, and it is said that the more it is repeated, the more interesting it becomes, "amagambo aryoha asubiwemo". Stories may be told in different formats that vary from texts, arts, and drama and using different traditional and digital media.

Thirdly, Rwandan poetry is a rhythmic way of providing knowledge in interesting and humorous rhymes to a mass and an opportunity for the individual to listen, understand, process information and respond to others (Apol, 2017). Even though not everyone is good at poem creation, many people are able to change a simple message into rhymes and other innovative formats, and it is popular to find people who have quickly memorised and are repeating a poetic message communicated in a single gathering. Further, poems are also entertaining and can be transformed into traditional songs and dances.

In the contemporary environment, there are so many ways that Rwandans use to socialise, communicate or entertain. Among these are mass media as well as digital and internet-based social media. This research will investigate how Rwandans perceived COVID-19 and their appropriation of messages to their local contexts and local means of communication.

2.4.4. Community participation and COVID-19 communication in research

Several researchers studied COVID-19-related communication with an emphasis on community participation. One researcher analysed the promotion of risk communication and community engagement to promote the Coronavirus Outbreak in China (Hu and Qiu, 2020). It analysed government prevention documents that were dominantly scientific, relating them to the WHO COVID-19 prevention guidelines. The study, which adopted clinical research methodologies, suggested that by engaging communities, governments can easily improve how residents interpret their messages and become more conscious of the crisis, thus increasing the

government's ability to effectively provide necessary knowledge (Hu and Qiu, 2020) and reducing the gap, which might be a source of misinterpretation. It explained that local prevention teams made up of members from primary health care facilities and rural and urban government grass-roots bodies were engaged in screening and epidemiologically investigating the outbreak in their respective communities. It further found that local teams were able to help in the virus containment by timely educating the public. This research did not explain how to engage communities in communication activities, as well as related challenges. This may be related to the researcher's belonging and self-identification with the WHO Collaborating Centre for Health and Biomedical Information, thus lacking data and interests in communication-related matters.

Another researcher studied ways of promoting citizen engagement through government social media pages during the COVID-19 pandemic (Chen et al., 2020). This study used web-scraping to analyse COVID-19-related posts from January 14th to March 5th 2020, capturing posted content and the numbers of likes, posts, and comments for each of the studied messages. It analysed the effect of media richness, dialogic loop and content types on people’s participation. It found that there is no relationship between high media richness and people’s participation. On the contrary, the dialogical principles originating from the Dialogic Communication Theory (DTC), as well as types of content, increase the number of likes, shares and comments. The study provided a quantitative account while not valuing the qualitative reasons that might help promote citizen engagement. Focusing on government and organisational communications, this research also prioritised the scientific benefits and tools of dialogue instead of the contextual and community factors of dialogue and participation. Therefore, the two studies analysed community participation from the organisation or national focus and not on the communities, and both leave readers unclear about why and how local communities might be engaged.

Before the COVID-19 outbreak, a study evaluated the cultural and linguistic adaptation of a healthy diet text message intervention for Hispanic adults living in the United States (Cameron et al., 2017). That study employed qualitative methods as part of the mixed method and found that messages should be culturally and linguistically adapted to make them appropriate to local communities. Also, qualitative answers showed features of the messages that could reduce the message's relevancy and power to generate constructive interactions. While the adult population found it respectful and suitable, the younger generation said it would be better to adopt an informal and friendly language. Also, the focus group discussions exposed the cultural

inappropriateness of some vocabulary that participants perceived to be diminutive and silencing. The researchers advised that adopting a socially appropriate and friendly tone not only promotes independence and control but also increases the message's ability to attract and hold people's attention (Cameron et al., 2017). The study was oriented toward the community's meaning-making as proposed by the active audience and not how it can be influenced by the context per the Culture-Centred Approach. That's why the current one is interested in studying how community contexts influence residents' interpretation, discussion and response to messages.

Other research in Europe and North America studied communities 'participation in COVID-19 preventive communication through social media, but with little interest in commonalities and contextual factors (Chen, 2024; Bruns et al., 2021; Lovari et al., 2021). Those studies' findings framed people's social media participation as having contributed to fake news and conspiracy theories.

With regard to the African social and collective cultures, A study in Nigeria applied in-depth interviews to visualise how to effectively communicate COVID-19 to Rural Dwellers (Abaneme et al., 2021). It suggested that African and Nigerian rural communities strongly depend on traditional means of communication, like criers[3], to access information. It also posited that in crisis and pandemic communication, rural dwellers need to be engaged in communication planning and highlighted the necessity of considering and integrating traditional means in future crisis communication planning (Abaneme et al., 2021). The 2021 study inspired the current research to analyse the communication structures that might influence communities' consciousness of COVID-19 and the sharing of related knowledge with regard to the social-cultural contexts.

Another study conducted in Malawi adopted qualitative methodologies to explore the COVID-19 infodemic in Chintheche, a small Malawian town (Manda, 2021). The study was conducted in two instalments, May and August 2020. It was an interview-dominated study but also used focus group discussions in the second instalment to probe participants' opinions on COVID-19

[3] Famous messengers in the precolonial and colonial period of Igboland, currently located in Nigeria, who served as the major means of information dissemination in their respective communities. Braught from AITO, O. O. 2014. The Poet as Town-crier in a Nation in Conflict: Okigbo's and Ojaide's Poetry. *Brno Studies in English,* 40**,** 5-26.

preventive practices in general and the adherence to social distancing in particular, because the interview had revealed that the measure was disregarded despite the awareness and knowledge from the government and international health organisations. It found that participants could recall the pandemic symptoms and how to protect themselves. The discussions also exposed that participants were convinced that the pandemic is real and dangerous after the government's extensive awareness campaign and witnessing known people being hospitalised or suffering from it. In addition, they revealed that some participants were still not convinced and questioned the pandemic and protection measures, while participants gave a number of reasons behind hand washing and social distancing. The study was interested in knowledge retention but showed little concern for how participants acquired and shared knowledge in their respective contexts and under the restrictions of a pandemic. Therefore, this research is interested in analysing why some participants can take too long to be conscious of a pandemic, why they can memorise prevention measures and never intend to practice them, and when and how they can share COVID-19-related knowledge and thinking regarding their local context.

Another study analysed COVID-19 preparedness in seven Sub-Saharan African countries, including Rwanda (Umviligihozo et al., 2020). This study documented public health interventions from the analysis of official reports, scientific publications and announcements from governments and health organisations in the earlier phases of the pandemic. The study advised that governments and health organisations should educate and involve communities on possible health threat prevention, prioritise scientific and health education to expose false beliefs, respond to inquiries, and address communities' worries. In addition, they should bridge the gap between communities and health structures. This research did not clearly explain how to implement such pieces of advice, as it focused much on medical and scientific arguments and disregarded the social and communication aspects. This research comes in to explore communication-related qualitative methodological and theoretical opportunities to involve communities in pandemic-related education.

Another was conducted in Kenya, Rwanda and Uganda to analyse cross-cultural responses to COVID-19 (Nasaba and Sembatya, 2021). This multimethod research analysed Twitter posts by government institutions. The study revealed that governments in the three countries adopted the long-standing artistic tradition of behaviour change communication, supposing that persuasion is key in influencing people's reactions to a message. Also, even if prevention messages were endorsed in Rwanda and Uganda at the beginning, many in Kenya were questioning and resisting them. As time passed, people started facing the growth of false

conspiracies, developing fatigue with the measures and becoming conspicuous as their socioeconomic situation was devastating. The research did not find whether persuasion helped the countries influence people’s prevention behaviours against COVID-19, nor how it should be used effectively to maintain people’s engagement in communicating to influence the pandemic-related prevention character. As proposed by the Participatory Communication Approach, people not only need to be informed, but also to participate actively in their knowledge acquisition as conscious individuals or remain indifferent if they do not discuss surprising knowledge, emerging challenges, and possible solutions (Freire, 2005; Kincaid and Figueroa, 2009; Durakoğlu, 2013). Therefore, this study is interested in discovering how the adopted method was used to engage people in determining their information needs, expressing their ideas and locally generated solutions to substantially communicate and improve preventive attitudes regarding message codification in reference to both the Culture-Centred Approach and Freire's (2005) originating Participatory Communication Approach.

In the same region, a study conducted in Kenya analysed COVID-19 fear-arousing persuasive communication and behaviour change (Emojong, 2021). This research, which applied focus group discussions and in-depth interviews, noted the public knowledge of the pandemic and its preventive approaches, but a low perception of participants' vulnerability to the disease. For the research, people recognised what to do but lacked the motivation to act. Therefore, it advised communicators to focus on educating about the pandemic risk. Even if his research was conducted in an urban community, it targeted participants who had developed professional careers, which motivated our research to analyse community-based communication issues in different residential settings.

In Rwanda, one researcher adopted a quantitative method to describe COVID-19-related knowledge, attitudes, and preventive practices among healthcare workers (Ndishimye et al., 2020). This research, which targeted medical doctors, noted high levels of understanding and informed beliefs about the pandemic. The findings’ reliability and significance in terms of information and communication remain questionable with regard to the relationship between researchers, who are mainly leaders in the Rwanda Biomedical Centre and important government hospitals and participants who are single staff in the hospitals, and according to that research, were expected to have interests in continuously learning about the disease and the study confirms a number of learning resources available mostly in urban areas. The study was limited by the quantitative survey orientation and professional environment of participants, which limited the collection of actual communication-related data that might be gathered from

simple citizens like local community health workers, and researchers highlighted that a qualitative technique should have helped better describe behavioural and knowledge matters.

Another study assessed the reason behind the low level of COVID-19 contamination and mortality in Rwanda through data analysis and found that Rwanda recorded a low infection and mortality rate compared to other countries (Musanabaganwa et al., 2021), but attributed the result to non-communication or non-behavioural factors such as the tough strategies to test and trace the virus, strict infection control strategies and a population which is young in the majority (Musanabaganwa et al., 2021). These researchers did not consider the effect of either communication or community participation. This might be influenced by their scientific gaze that orchestrated their limited interest in contextually analysing the social and knowledge-related factors.

The abovementioned researchers mostly adopted quantitative approaches that apply techniques that are popular for studying real science. In quantitative inquiry, scholars invest in the acquisition of knowledge objectively via investigation (Efron and Ravid, 2019). In this type of research, collected data are neutral, collective and generalizable based on visible facts that may have been tested and measured but not modified (Efron and Ravid, 2019). Here, researchers suppose that there exists a complete social world which remains coherent in a defined setting and period, at the same time assuming that the community reality is made of neutrally described facts that can be scientifically explored and verified (Efron and Ravid, 2019).

Quantitative studies, which look for simplified assessments of social issues, discover reasons behind changes as well as their consequences and claim the capacity to predict the next or advanced consequences based on the present findings (Servaes, 2020). In health communication, researchers admitted that communication techniques have never been neutral because the same approaches and channels work differently in different contexts, and cannot be generalised due to the varying effects of the same techniques in different modes and the interaction of channels that generate multiple interpretations and applications of communicated content (Servaes, 2020). For these reasons, communication evaluators and researchers should base on contextual factors instead of generalising the effects of a particular channel or campaign, as " these lessons warn against making generalisation about the effectiveness of a given approach or channel, and call for the attention of communication specialists and researchers to contextual efforts" (Inagaki, 2007:35). Also, most of the quantitative data are

collected during the campaign evaluation phase, and research indicates that they provide very little evidence of their independent collection processes (Servaes, 2020). Therefore, they cannot be helpful in analysing the reason behind the success or failure of a communication campaign to influence people's behaviours.

Differently, qualitative approaches advocate for the social construction of reality by its meaning as subjectively perceived by individuals (Efron and Ravid, 2019). From this perspective, people experience reality differently with regard to their communities, social-cultural and historical contexts (Zoller and Dutta, 2009; Schwandt and Gates, 2018). Therefore, the perception of reality is not only subjective but is also uncertain, numerous, situation-based, and worthy (Efron and Ravid, 2019). For this reason, qualitative research does not seek to explain a social issue but instead seeks to understand it from its participants' points of view (Schwartz-Shea and Yanow, 2013; Denzin and Lincoln, 2018).

2.5. Conclusion

This chapter discussed development and health communication, their historical background in general and in Rwanda specifically, and their application to COVID-19 preventive communication. It also discusses major changes in development communication and related challenges with special regard to the role played by communicators in pandemic-evolving situations. It further discusses health and pandemic communication, linking it to existing laws and policies in Rwanda, Africa and the world. In addition, it discussed research work on community participation in COVID-19 communication. The next chapter presents theoretical constructs that guided this study.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1. Introduction

The theoretical framework is a structural development of summarised ideas and theories from tested and published information, synthesised by a researcher to have a theoretical base to guide their data collection, analysis and interpretation of meaning (Kivunja, 2018). For this study, the theoretical framework is made of experts' stated models in the field of communication for development to address health crises, especially emerging diseases and pandemics.

Following the plan to study COVID-19 communication in Kigali City's settlements, the participatory communication approach rooted in the work of Freire on dialogical pedagogy (Freire, 1970) and the Culture-Centred Approach (Dutta, 2008) guided this work's theoretical framework. Particularly, this chapter deconstructs the two aspects of dialogue and conscientisation, founding the participatory communication embedded in the Freirean liberating pedagogy work to demonstrate the process of engaging COVID-19-affected communities in creating and sharing knowledge to influence preventive behaviours in Kiruhura, Karama and Mwendo communities.

This chapter outlines the key perspectives of Participatory Communication and Culture-Centred Approach (CCA) theorists and researchers on how contextual factors influence communities' pandemic communication and their responses to health messages. It also builds the study's context, discussed in the previous literature chapter, explaining how the researcher applies the two theories in collecting, interpreting, and analysing data. Consequently, this chapter describes the aspects explored in relation to the applicability of the theories.

3.2. Participatory Communication Approach

This sub-section is divided into two parts. The first comprises the historical development of participatory communication and its relevance to this research. The second focuses on participatory communication and its concepts, followed by carrying out the current research.

3.2.1 History and relevance of the participatory communication approach

3.2.1.1 A part of communication for development

For many of the researchers, the participatory communication approach is part of the history of communication for development that started in the 1950s and 1960s. This approach emerged as a means to examine and enhance communication efforts aimed at addressing poverty-related issues in developing countries and marginalised communities (Kincaid, 2002). Many of them emphasise the 1949 inaugural speech of the US President Truman as the beginning of Communication for Development. In this speech, President Truman first introduced the ideas of ′third world �because and ′ development ‵ as leading markers of the diffusion paradigm (Tufte, 2017).

It resulted from the evolution of communication for development from the modernisation or dominant paradigm, which favoured a top-down flow of information. This paradigm also formed the foundation of the diffusion of innovation theory, emphasising the transfer of innovations from experts to passive recipients rather than fostering active community engagement (Rogers and Svenning, 1969). In that era, communication was considered a means to change the individual into a modern citizen by persuading them to discard their traditional way of living and adopt a Western lifestyle (Rogers and Williams, 1983; Servaes, 2008). Pandemic and health communication in the modernisation paradigm suggest that contamination results from how individuals behave and what they do or refuse to do (Airhihenbuwa et al., 2014; Betsch et al., 2016). Regarding the communicators' role, the diffusion models of health communication suggest that governments, non-government institutions, and health and communication experts have credible information and know the right behaviour to recommend to passively ignorant patients and communities who lack critical thinking and discourse (Schiavo, 2014; Melkote and Steeves, 2015; Obregon and Waisbord, 2012; Obregon and Mosquera, 2005). Regarding COVID-19 preventive communication, the banking approach to communication associated with diffusion/ top-down communication or awareness is discussed. The banking approach is the contradictory communicative relationship between experts and communities, where knowledge is treated as a gift that is given by leaders and experts who consider themselves knowledgeable to communities whom the hierarchy thinks of as ignorant (Freire, 1970). Additionally, communities depreciate themselves and their knowledge, and do not participate in communication through dialogue but instead receive, memorise and repeat content (Freire, 1970). This communication, which was supposed to support developing communities, failed to engage them by considering them as targets and

thereby reductively focusing on individual behaviours, while neglecting social and contextual aspects (Essel, 2022).

This criticism resulted in the dependency paradigm, which argues that the periphery (third world) depends on the core's (Western) technologies, resources, and financial assistance to develop (Kabonga, 2016). This also generates communication and news dependency that leads to the distortion and exaggeration of third-world realities (Servaes, 2008; UNESCO, 2004). The dependency paradigm was the first paradigm to acknowledge that successful and relevant development in the core cannot be applied in peripheral countries (Emeh, 2013), acknowledging the power of the state to encourage a free market economy with a free flow of information to assist the population in the process of change (Emeh, 2013).

Criticism of earlier research and theories led to the emergence of Participatory Communication, aligned with the Development of the Multiplicity Paradigm (Servaes, 1999, cited in Servaes, 2012). This paradigm emphasises a shift from the traditional top-down communication flow—from elites to communities—toward a more collaborative approach that fosters dialogue. It recognises that individuals and communities have the capacity to engage in conversation, negotiate, and make informed decisions about issues affecting their lives (Freire, 2005).

Even if for some researchers, communication for development started with the post-war aid projects and dissemination model, other scholars do not hesitate to mention that it did not even start with diffusion, but rather the participatory approach to open dialogue run by European societal movements in the 19th century (Reich, 2002, cited in Tufte, 2017). Others suppose that it started in 1927 with Bertolt Brecht's conception of the potentiality of radio in a dialogic and participatory setting; where he stated that "The radio would be the finest possible communication apparatus in public life … if it knew how to receive as well as to transmit, how to let the listener speak as well as hear, how to bring him into the relationship instead of isolating him. On this principle, the radio should step out of the supply business and organise its listeners as suppliers" (Brecht, 2006:2 quoted in Tufte, 2017). If it were the case, development communication would have required participation and dialogue for success from the earliest beginning or may have been participatory before the diffusion paradigm itself. Irrespective of the contradiction around its introduction, the participatory approach is central to the framework adopted in this research.

3.2.1.2. Two methods to participate in communication

Participatory communication comprises two approaches. The first is UNESCO's definition of self-management, access and participation from the 1977 meeting in Belgrade, the former Yugoslavia: Access is related to the equitable use of mass media to serve the public (Tufte and Mefalopulos, 2009). It is constructed as existing opportunities for the public to choose varied and relevant programs and to have the means of transmitting reactions and demands to production organisations.

Participation implies a higher level of public involvement in communication systems. It includes the involvement of the public in the production process and also in the management and planning of communication systems (Tufte and Mefalopulos, 2009; Mefalopulos, 2005). Participation may not only be representation but also consultation of the public in decision-making. Self-management is the most advanced form of participation. In this case, the public is fully involved in the formulation of communication policies and plans, and individuals exercise the power of decision-making within communication projects (Fox, 2019).

UNESCO's discourse puts the focus on the institution, as in the case of participatory or community radio, which means a radio station that is self-managed by those participating in it (Servaes and Malikhao, 2011).

The second approach, which also emphasises the importance of cultural context, is connected with Brazilian teacher Paulo Freire's (1970) work, in which he emphasised that community members must be considered entirely as subjective human beings and suggested dialogical communication. On the one hand, it is inspired by Sartre's existentialist theory, which advocates for the respect of the other as an independent human being (Webber, 2009). On the other hand, it represents a human projection of utopian hope, aiming at achieving more collective solutions to shared poverty-related problems rather than pursuing individual opportunities to satisfy material needs (Kaufmann, 1879; Berneri, 2019). This study adopts Freire's (1970) approach to analyse how community members independently link their social contexts with their understanding of perceiving and discussing COVID-19 prevention messages to slow down the spread of the virus.

In contrast with Freire's (1970) discourse, UNESCO's notion comprises ideas of gradual evolution. Some amount of access may be allowed, but self-management may be postponed until sometime in the future (Servaes and Malikhao, 2011). For Freire (1970), there must be no

compromise; instead, one must respect the culture and opinion of the other or fall into domination.

As per research, the Participatory Communication Approach is rooted in the work of Freire on dialogical pedagogy and is widely accepted as a normative theory of participatory communication (Waisbord, 2020). The current research applies the work of Freire (2005), which is epistemologically built on his concept of the world as not static but as a reality in the process of change, a problem to be solved by men and women individually or in dialogical encounters with others. The Freirean (2005) work emerges from his ontological call for the world to remove contradictions between teachers and students, health experts and communities for this research. Freire's (2005:32) work further refers to an individual gradually noticing the personal and social reality, being mindful of their own perception of that reality, and critically dealing with it, stating that "[I]n this process, the old, paternalistic teacher-student relationship is overcome". Regarding COVID-19 prevention, contradictions between communities and health communication experts should be removed to help Karama, Kiruhura and Mwendo residents, in Kigali, gradually gain awareness of their situation and discuss its implications on the prevention of the pandemic. Before the current study, a researcher adopted the dialogical pedagogy theory to study unequal relationships in HIV/AIDS prevention projects using Community-Based Participatory Research. The research found that dynamic inequalities in a dialogical/ participatory process can affect community participation and suggested acknowledging and planning beforehand how to account for them in conceiving, implementing and evaluating projects authentically to community beliefs and observations (Mkhonzeni et al., 2023). This research applies the Participatory Communication Approach to study communities' expressions of their experience with COVID-19 preventive communication.

In his writing on critical pedagogy, Freire (2005) distinguished two approaches to education: The banking approach, in which the teacher is considered a source of knowledge and the student is an ignorant and passive receiver in the learning process. This approach considers education as an act of depositing in which the teacher (depositor) sends messages that the students (depositories) patiently receive, memorise, and repeat (Servaes, 2008; Servaes and Malikhao, 2020). Regarding health and pandemic communication, I would suggest that a 'banking model' relates to the notion of community members being 'filled up' with information due to their lack of health knowledge. Practically, the individual is considered the possessor of unconsciousness or a blank "mind", inactive and open to receive reality deposited from the outside world (Freire, 2005).

On the other hand, the problem-posing approach considers that teachers and students jointly create knowledge. Also, students are treated as active participants (Freire, 1974) whose knowledge and experiences are perceived as valuable and important in the learning process (Wallerstein, 1993). This learning model characterises an innovative feature of development and social change by which developing countries and communities can deal with old structures and enter a millennium ecosphere "where men and women deal critically and creatively with reality and discover how to participate in the transformation of their world" (Freire, 2005:34).

In the Freirean (1974) problem-posing approach, students and educators undertake thinking and action simultaneously as one unit of the praxis, playing the same role interchangeably through dialogue. In terms of development communication, engaging in dialogue with communities is a vital concept because understanding a particular community's worldview influences the development initiative. In such engagements, people perceive different knowledge and express it. They do not want to be objects responding to changes that occur around them anymore; they instead get their own ability to take part in changing the society around them. In light of this educational theory, communication is no longer a tool to bring change to a community that must adopt it; rather, it is "the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world" (Freire, 2005).

This approach arose from Freire's (2005) criticism of inequalities that characterised the modernisation and entertainment education approaches developed in the Latin American school of communication for development. It was also applied by researchers and practitioners attempting to reach effective social change by engaging community members as agents of change in Africa and Asia (Tufte and Mefalopulos, 2009). It further illuminated the work of researchers who advocate for effective community engagement in agricultural and environmental sectors, as well as relating to health communication with special regard to the prevention of HIV/AIDS and other emerging diseases (Blanco, 2022; Servaes, 2008; Tufte, 2017).

This research analyses how residents of the three settlements describe their experience in communicating COVID-19 preventive messages. Referring to dialogue and the four stages of conscientization, it discusses residents' perceptions, their authentic expression of concerns and needs, talks and decisions to resist the banking approach, and the community's existing opportunities to improve dialogue and pandemic conscientisation. This analysis further

explains how to engage in community contexts and to increase community participation and the related development of relevant communication strategies.

3.2.1.3. Criticisms of the Participatory Communication Approach

Like others, the Participatory Communication Approach also faces criticism in communication scholarship and practice. On one hand, researchers criticise the Freirean-originated participatory communication model for focusing too much on interpersonal communication with little attention to mediated communication (Servaes and Malikhao, 2011; Servaes, 2008). In response, research work focused on developing participatory models that could link interpersonal and mediated communication, specifically emphasising the role of active sense-making and individuals' action (Tufte, 2017). On the other hand, practitioners criticise participatory and development communication approaches to be "impractical as they do not offer specific, practical guidelines for the different contexts or communities where they can be applied" (Waisbord, 2001:22). By not providing operational guidelines, participatory and development communication does not clearly explain how the community needs to be involved, and the effectiveness of participation for short time and urgent issues such as pandemics and health emergency crises (Waisbord, 2020).

The approach has also been criticised for being conflictual and idealistic, encouraging detachment, interruption, and confusion by researchers who advocate promoting education and decision-making instead of idealising participation (Waisbord, 2020). Further to this, the participatory development and communication paradigm is usually referenced and applied superficially and carelessly in campaigns for social change, often referenced and applied superficially and inconsistently in social change campaigns. As a result, determining how to effectively communicate for participatory social change remains an ongoing challenge. Consequently, this research employs the participatory communication approach to investigate community perceptions of COVID-19 and related dialogue as a solution to the lack of guidance on the approach's application in real-life contexts.

Additionally, experts recommend that "great communicators for social change in Africa must be seen to be committed, passionate, fully invested, and genuinely participatory in the full range of communication planning and implementation that are associated with their programs" (Okigbo, 2021: 199). However, the research did not explain how communicators can actively participate in planning and become ready to implement evolving strategies.

Moreover, participatory processes are incorporated into impactful communication campaigns to preserve the existing inequalities, thus serving the dominant group by silencing community voices (Dutta, 2021). Therefore, an effective move from impactful to participatory health communication remains a scholarly challenge.

3.2.1.4. Tenets of the Participatory Communication Approach

This chapter approaches participatory communication, known as communication for social change or community engagement theory, from its ontological educational background. It starts by analysing the teacher-student contradictory relationships implemented through the banking approach to education, differentiating it with the problem-posing approach and linking the main ideas to the practice of health communication, specifically in dealing with pandemics referring to ideas from the field leading scholars, which helps the research apply the theory in analysing trends, community roles, challenges and locally emerging solutions and opportunities as they communicate to influence COVID-19 prevention behaviours.

Expert and community inequalities

From the beginning of his thought, Freire (2005) discusses the prescriptive relationship between a teacher and a student. This prescription represents one person imposing his choice on another who must be his opposite (a teacher on a student, an expert on a peasant) to be or to behave like him or her. In education, one is supposed to have knowledge, while the other is ignorant. To be fully human, the ignorant must be like the knowledge owner by acquiring that knowledge. For example, the student depends on the teacher's knowledge to become like him, while the latter has all the knowledge and does not need any knowledge from the student. The same applies to communicators and experts who possess information to give and tell communities that do not have any information but must keep silent and only listen.

On their side, communities are unconscious and empty-minded and have only to acquire external knowledge to fill their memory. In development, those communities are underdeveloped, lacking information, alienated, and poor. They need the information to be developed by behaving like or fully embracing the expert's choice. Participatory and development communication researchers described this phenomenon in different but complementary ways by also explaining the passive receivers' problem, solution, and role.

Passive receivers need and must get content, knowledge, and information to be informed and educated about important issues (Manyozo, 2012). In this case, they lack information and do not have anything to communicate. Also, due to their lack of knowledge, they are marginalised, and their voices are erased or silenced through strategic and managerial communication approaches embedded in corporate social responsibilities, public relations and crisis communication (Dutta, 2011; Dutta, 2008). Moreover, their local knowledge and culture are considered to be their obstacles to development, and they must passively receive the message to change their belief and behaviours (Tufte, 2017). More importantly, the local, marginalised people call themselves ignorant while calling the other professor, teacher, and expert, who possess the knowledge and to whom they have to listen and get necessary explanations; and by distrusting themselves, they never realise that they also have knowledge acquired through their experience in the world or through their relation with other people(Freire, 2005). Freire (2022a) calls it "self-depreciation", which means that they finally feel inferior, ignorant, and lazy because of being described as such for a long time. To silence them and discredit their voices, they are misnamed the peasants, marginalised, prostitutes and other names that limit the power of their voice. This leads those who impose knowledge to distrust communities and their reasoning ability, and leads them to communicate in a one-way or banking approach with the aim of making communities memorise, remember the shared information and implement it only as predicted.

In relation to my topic, whoever communicates about health must deal critically with the communicator-community contradiction, consider that communities may have the knowledge to share from their experience, never silence communities' voices, encourage them to express themselves and avoid depreciating terms. This research rejects contradictions as the analysis of community message interpretation helps discover from communities' lived experiences the perceived contradictions and possibilities to voice up and share their understanding. It helps to overcome marginalising conditions by exploring and discussing the contextual interpretation and communication of COVID-19 prevention messages in Kiruhura, Karama and Mwendo communities.

The banking approach to communication

Resulting from the teacher-student contradiction is the banking approach to education in which knowledge is a gift from those who consider themselves knowledgeable to those they think are ignorant (Freire, 1970). Through their full depreciation and the expert's distrust, the ignorant,

poor, and marginalised do not participate in communication and are treated as masses to be manipulated (Freire, 1970).

In this approach, the communication process is compared to the act of deposing, where the communicator is the subject, or the narrator who issues a communique that the empty audience receives, memorises, and repeats. Even though the communities are supposed to receive transformative content, they receive empty and alienating wordiness. This communication process is difficult in reaching development goals because, by focusing on words' sonority, the message loses its transformative power. It suffers from the narration sickness as by separating the content from the communities' environment, the communicator's "task is to fill them with the content of his narration - contents which are detached from reality, disconnected from the totality that engendered them and could give them significance." (Freire, 2005:71).

In development and health communication, this approach is similar to the dominant and diffusion assumption that communication is about disseminating news, publicity, and advertising(Gumede, 2022; Servaes, 2008). When information and education materials are produced, they duplicate the same content released for the press, highly dominated by speeches and photos of higher officials with the need to speak to an entire country in one document, which ends up being broad, generalised or concentrated, to the production proximity like exclusively urban or rural film orientation (Servaes, 2008). This communication focuses on the sender-to-receiver verbosity, lacks the exchange of ideas in public life and hinders critical consciousness development by failing to differentiate communication from information(Waisbord and Obregon, 2012). The approach only targets short-term outcomes, and the experts, also called tellers, are not willing to listen to communities(Dol, 2012). By depending more on quicker technological dissemination of one message to larger audiences, the approach increases the technologically dependent consciousness, thus limiting critical consciousness and dialogue more(Manyozo, 2012; Kim, 2022).

In this approach, the health communicators, with unawareness or lack of information from communities, present themselves as absolutely opposed to them and remain busy justifying their existence (Freire, 1974; Nyirenda, 1996), thus closing communities' option to pursue and discover knowledge in the world itself, and with both experts and fellow. Also, the community and the expert play contradictory roles that aim at minimising or cancelling the community's power of imagination, and who, by remaining much busier storing deposits, is less likely to develop critical awareness, which results from human interventions that aim at changing their

social reality (Freire, 2005). Therefore, they perceive the world as passive entities and use information to familiarise themselves and fit with it. It is also associated with diffusion, advertising and social marketing that aims to transmit knowledge, attitude and practice for individuals to change their behaviour(Morris, 2003; Obregon and Mosquera, 2005). Other researchers call it a first generation of communication for development, where the problem is about information deficiency with culture and social norms as the leading block (Tufte, 2017). Also, the information referred to as the message must come from external experts to reach the target and passive communities, expecting them to change specific manners together with societal customs in a short period (Tufte, 2017). To evaluate such efforts, implementers look at numeric evidence in regard to messages and materials produced and disseminated.

It has been difficult for this approach to achieve the expected outcomes for various reasons. Firstly, changing specific conduct is not possible without changing their basic societal factors (Obregon and Mosquera, 2005). By ignoring the concept of participation, for many years, communication served as a means to conform or adjust the individuals' behaviour following the expectation of the market or ideological will and to deform or misrepresent people's accounts, context and culture to impose another culture on them (Servaes, 2008). This has been difficult because many societies are not ready to change passively and prefer to hold on to their social and cultural principles and practices. This approach is also alienating because it considers communities as the object of assistance, denying their existence as historical being and their human vocation of transforming the world by considering the world as fixed (Freire, 2005). By denying their history, the communities lose the opportunity to have their past as a foundation to move forward, thus remaining unconscious of the world around them and their individual and social role (Freire, 2005).

Also, by depending on outcome-oriented advertising, the dissemination approach campaigns created confusion between the projected behaviour and enabling tool, producing very little or no outcome, with many succeeding in increasing knowledge but not being stretched to practice (Morris, 2005). Contrary to advertising, some entertainment education communications projects have been successful in influencing people's knowledge, attitudes and healthy practices (Morris, 2005. In this regard, it is important to further analyse the reasons behind some projects' success and others' failure.

In communicating about emerging pandemic prevention, it is supposed that the community has no knowledge about the disease and is inactive in getting knowledge. In answering the problem

of COVID-19, many countries adopted the information dissemination approach that used paid advertising in print and broadcasting, media engagement, and the use of government digital platforms, including social media platforms, to disseminate preventive information (Gumede, 2022; Vatta et al., 2021).

Even if health and communication professionals are professionally trained and have experience in those fields, respectively, but may approach and use the information differently and are supposed to guide and help the local community by treating them or advising them on how to remain safe. On the other hand, those professionals must not do it radically and undermine the role of affected communities. They must consider communities' social contexts or their understanding coming from a different source rooted in their local culture, the dynamic simulation of historical practice and custom, and their way of contemplating current discovery with regard to their future aspirations. This understanding is accumulated throughout generations and helps them undertake their living conditions by building and defending their character, morals, beliefs, wealth and overall well-being (Manyzo in Obregon and Weisbord, 2012).

It is also important to note that Indigenous knowledge is structured in a multifaceted and mixed scheme but may also present inexpressive and non-verbal attributes(Roscos-Ewoldsen and Roskos-Ewoldsen, 2010). More importantly, indigenous communication structures that carry the social objectives of a certain community should not be overlooked because they are the community's media that disseminate guidelines and procedures, distract, convey news, convince, and announce important actions (Roscos-Ewoldsen and Roskos-Ewoldsen, 2010). Their function is not only about conveying news but also facilitating the process of acquiring and sharing knowledge (Roscos-Ewoldsen and Roskos-Ewoldsen, 2010). The professionals must also consider local community knowledge that is related to the community's local or scientific evolved reactive experience in response to problems that specifically challenge residents of a specific place (Manyozo, 2012). In this regard, Rwandan communities may have more knowledge to share about their social-cultural, historical, and contextual experience, which may strengthen the process of communicating about COVID-19 prevention via their local communication systems. They also have experience in handling specific problems that may inspire how they deal with pandemic problems in their respective communities.

Even though analysing the banking approach to communication was not the primary object of this research, it helped interpret communities' experience with COVID-19 prevention and find

out the contextual enablers of their participation in the process of communicating about the pandemic with reference to their perceptions, intentions, challenges and related. Also, the local contexts will be analysed to discover their role.

The problem-posing approach to communication

Opposed to banking is the problem-posing approach to education. This approach demythologises reality and does not isolate students' consciousness from their environment (Freire, 2005). It is based on creativity, regards dialogue as an indispensable act of understanding and unveiling reality, and grows learners' critical thinking. It acknowledges humans as historical beings that are unfinished, incomplete beings in the process of becoming, with education as an ongoing activity. This approach corresponds to historical human nature, and "it affirms women and men as being who transcend themselves, who move forward and look ahead, for whom immobility represents a fatal threat, for whom looking at the past must be a means of understanding more clearly what and who they are so that they can more wisely build the future" (Freire, 2005:84). Therefore, it is recognised as one of the efforts that engage individuals who are conscious of their incompleteness. Contrary to the banking approach, determined to maintain and submerge consciousness, the dialogical approach strives to raise people's awareness and seriously involve them in their changing reality (Servaes, 2008).

It acknowledges that human beings are attached and related to the world and other human beings (Nyirenda, 1996; Servaes and Malikhao, 2011; Serrvaes, 1996). In this learning process, communities are gradually modelled through their own difficulties in the world and by the world. As they move forward, they face new difficulties to which they must respond. Again and again, the answers to previous problems suggest new problems, tracking new reflections and communities getting committed to their learning (Freire, 2005). In education, this approach is also known as praxis or people's action and reflection regarding their reality for transforming it.

This approach is an act of cognition, learning through experience, in which education responds to the main problem of individual and group consciousness by rejecting directives and embodying communication. Therefore, it embodies the distinctive character of conscious individuals related to being conscious of an issue, not as objects but as subjects reflecting and acting to solve it. Consciousness and the world's reality go hand in hand. This means that conscious individuals name the world through dialogue or words. In this regard, the cognition process is founded on dialogical relationships that handle contradiction through reflective

cooperation around the same learning objective and also as a cognisable object (Nyirenda, 1996). To this end, the teacher no longer looks at the learning object as his own but as a medium of reflection between him/her and the student. In this case, they are both responsible for the learning process in which they grow and learn respectively through dialogue (Freire, 1974). The teacher's activities are about preparing a project, engaging students dialogically and improving their ideas. It is important to highlight that true dialogue is reflections in naming the world, and true reflections go together with actions; thus, naming the world is changing the world, which cannot be possible when the contradiction between experts and communities persists (Freire, 1974). This is because the contradiction isolates communities from the learning process, while they should learn in harmony and co-intentionally with peers, leaders, and experts. Keeping in mind that the learning objective is to strengthen critical thinking and reasoning skills (Durakoğlu, 2013), curiosity remains the leading human tool along the process, and the Brazilian education philosopher summarises: " Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world, and with each other" (Freire, 2005: 72).

The learning process must start from the situation, which is most of the time challenging, in which both communicators are invested and must arise. In terms of development communication, the problem-posing approach is compared to participatory communication, in which communities are not manipulated, filled with knowledge from leaders and experts about how to deal with a health problem, but interact with them (Servaes, 2008). For example, in communicating about a pandemic like COVID-19, communities are present and involved. Therefore, leaders or experts establish a permanent relationship of dialogue with the communities and the poor (Campbell and Scott, 2012a). In this regard, the leadership, experts and communities practice co-intentional education and co-intend to face COVID-19 as an emerging health threat.

While implementing this communication style, health and communication experts must cease to hold information absolutely but instead get ready to listen and interact with communities (Durakoğlu, 2013). At the same time, communities should not accept that experts own all information and listen to them passively, but rather investigate critically (Durakoğlu, 2013) and understand the pandemic situation through interaction with experts. Those interactions aim at conscientisation or building consciousness, which is the intent to face the world (Freire, 1970b), the current health problem regarding our research. Also, such conscientisation should

always care for knowledge and message modifiers that include "new contexts, stakeholders and societal dynamics" (Tufte 2017:24).

The participatory communication approach derived from the problem-posing education was adopted by the researcher in analysing how residents of Karama, Kiruhura and Mwendo settlements build COVID-19 consciousness, local potential to engage in message co-creation, communication, challenges and lessons for better conscious development in Rwanda.

3.2.2. Theoretical concepts of participatory communication

3.2.2.1. Conscientisation in pandemic communication

In a world faced with many development problems, including emerging pandemics, the Freirean problem-posing or critical pedagogy became a communication practice in growing related responses. The dialogical pedagogy, and later participatory communication, is founded on praxis, the act of recognising people's capacity to reflect and act in response to a problem(Freire, 1970). On its own, praxis is established on conscientisation or " a process of advancing critical consciousness" (Cadiz, 2005: 149). In development, communication aims at creating critical consciousness or human intention to face a problem as a reasoning being differentiated from things by the human vocation to change the world and make it better (Freire, 1970b). Critical consciousness focuses on revealing communicative contradictions and acting against their alienating features (Karin and Johansson, 2007). Therefore, it prepares us to question the implications of being who we are in a particular health situation (Kim, 2022).

Most of the time, conscientisation is not identified in people's behaviours or attitudes but instead in processes and arrangements, or mechanisms laid by experts and community members cooperatively to ease or encourage community participation in discussions (Cadiz, 2005). Therefore, conscientisation is not an end but a four-stage process based on word authenticity that must end up creating the intention toward a solution to a problem, the intention to prevent COVID-19 for this study. Table 3.1 presents the four stages of conscientisation, adapted from Karin and Johansson(2007).

Table 3.1: Stages of Conscientisation

	Awareness	Dialogue	Authentic words	Transformation
Freire's Learning Ideas	One notices he/she is in a situation and the implications of being in that situation.	Dialogically and critically engage with others or struggle against the banking approach.	Speaking authentic words emerging from one's critical thinking.	Combine authentic words with reactions or creativity and responsibility to act in the most challenging situation.
Methodological application of the learning ideas applied to COVID-19 prevention.	Collect evidence of residents' perception of being susceptible to COVID-19 (+ the contextual implication of being who they are in that situation)	Collect evidence of their Critical thinking and the authentic expression of their suppressed ideas, feelings, concerns, and needs.	Explore the evidence of the community's liberating talks or decisions to resist the banking approach and the influence of dialogical principles.	Collect and discuss communities' existing opportunities to increase dialogue and pandemic conscientization.

Source: Research contextualising the illustration adapted by Karin and Johansson (2007) from Freire (1970).

The stages of conscientization, discussion

Per the above table, there are four stages of conscientisation. Firstly, communities question their situation/ the problem and relate themselves to it. Secondly, they start getting concerned about how to advance their identity. Thirdly, they critically question how they are silenced and act to solve the problem by resisting the banking method. Fourthly, they combine their authentic words, creativity and responsibility to respond to the most challenging situation.

The stages imply that people have a natural capacity to learn and become well-informed to find solutions to different problems if they can perceive, reveal and act against communicative contradictions featured in scientific and professional elitism, as the biggest feature of interventions that directly silence participants (Freire et al., 1997).

Here, communicators position themselves in the world not replacing someone else but advocating for the "true word", a true message as a way of working or a meaning that equally captivates both communicators with arguments not only describing facts but also projecting an improved community (Santos, 2018; Suzina and Tufte, 2020; Freire, 1970b). In this regard, uncertain times like pandemic periods in some communities are characterised by hope outweighing fear and the presentation of the world as a ground of manageable opportunities. In return, those communities are characterised by upward uncertainty, which mostly leads to desired outcomes (Santos, 2018). In relation to the current research, residents of Karama, Kiruhura and Mwendo communities may only be critically conscious if they are able to question their contextual situation with shared messages and raise hesitation, which aims at reaching their anticipated COVID-19 prevention outcomes by shaping out space for local and culture-founded ideas that helps to unveil power relationships, social norms, and taboos (Suzina and Tufte, 2020).

By incorporating researchers' perspectives on the critical consciousness approach, this research applied these principles to analyse how COVID-19 messages were perceived and how communicative responses were shaped within the socio-cultural and economic contexts of the Kiruhura, Karama, and Mwendo communities. This analysis aimed to identify potential opportunities and challenges for these communities' active contributions in responding to pandemic-related messages. Also, assisting in the analysis of community members' innovative reactions to resist marginalisation in the most challenging waves. More importantly, regarding local contexts, the stages of conscientisation guided this research in analysing participants' predictions on how dialogue and conscientisation can influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda.

3.2.2.2. Dialogue and its underlying principles

In shaping space for different living and understanding methods, Freire gave a blueprint for autonomous communication guided by dialogue. Articulated in the educator's learning and teaching model as permanent exchanges between teachers and students, dialogue is the essential instrument of change (Suzina and Tufte, 2020). For communication for development researchers, change is not about repositioning the underdeveloped in improved condition but redressing the communication relationship between them and the developed, and confronting inequalities in this relationship. In this regard, communication is how we learn to change and to be human (Campbell and Scott, 2012b). It is a praxis or combination of reflection and action

that clashes with any exhibition of populism(Suzina and Tufte, 2020) or an ambiguous character to manipulate and attract people from two conflicting sides for one's interest; verbalism, or ordinary speech-making without action and activism, that means action without critical reflection (Freire, 2005).

In this regard, it is compulsory to differentiate communication from information that aims to persuade, manipulate or influence. Communication that serves to build the same understanding and intention toward a social problem is built on dialogue, the course of meaning-making that requires action and strategic thinking (Freire, 2005). In this course, every party reclaim space to express themselves, but also commits to listening and letting others express themselves (Dol, 2012; Tufte, 2017). Communicators draw from Freire's (2005:88) insights, which emphasise that no human being can exist in silence or be sustained by inauthentic words; every individual has the right to authentic words that hold the power to transform the world. Freire (2005:88) asserts, "… saying that word is not the privilege of some few persons, but the right of everyone. Consequently, no one can say a true word alone nor can she say it for another, in a prescriptive act which robs others of their words". This perspective underscores the importance of participatory communication, where dialogue is co-created, and individuals are empowered to express their realities and contribute to transformation. Therefore, to capture the space for expression around the world, Freire (2005:88) proposes to adopt dialogue as a communication and development cross-cutting issue and its four guiding principles of humility, hope/ faith, love and empathy that serve as protocols for interpersonal communication (Campbell and Scott, 2012b). These principles help societies break the silence by connecting narratives to people's daily active and emotional lives and facilitating conscious discussion (Campbell and Scott, 2012b), which is motivated by trust in people's knowledge.

Firstly, recognising that people are knowledgeable requires humility, which suggests that authentic truth cannot be possessed by one person or group and cannot be imposed on one group by another. For Freire, it results from a stable action-reflection exercise that considers the reality and perspective of all communicating parts (Betto, 2022). With humility, dialogic communication becomes a venue for people to build and rebuild lasting knowledge(Suzina and Tufte, 2020).

For human beings, being humble is recognising one's limits, taking them seriously, and thus fostering realism in one's actions and attitudes in regard to one's personality and others. In terms of communication, it helps anticipate the perception of enabling people to develop as

well as they can (Chasi, 2022). This perception centred on cooperation is uniquely characterised by human altruism (Chasi, 2022), which is the moral practice or concern for other people's welfare. During a pandemic, such communication should enable people to read the implications of their ways of existence and face others by individually and socially breaking down the existence of ignorant masses encountering great advisers, but only people trying cooperatively to study more than they already know (Freire, 2005).

In a pandemic situation like COVID-19, communicators, community members, adults, or youth, men and women must learn humility to not only consider themselves as teachers but also adopt the position of accepting to be learners. This means that they must interchange and play the same roles (Chasi, 2022). In this regard, community members cannot be heard if their voices are dominated by the experts' self-admiration, which makes their voices so loud. Therefore, a researcher analysed humility and education from Ubuntu's perspective and advised experts and communicators to be humble and retain an attitude of silence to hear others' voices (Chasi, 2022). The researcher further noted that communication for social change requires practitioners' humility to systematically admit that they study, learn, teach, and, with their whole bodies, show their feelings, emotions, wishes, fears, doubts, passion, and critical reasoning, and, at the same time, enable others to do so. The current research elaborates on how community members expressed their feelings, fear, and reasons, and also allowed others to do so by interplaying the principle of humility.

Secondly, empathy, which is a method of recognising different starting points that complicate people's efforts to reach their own objectives, allows communicators and researchers to enter unknown communities (Manyozo, 2022; Suzina and Tufte, 2020). In the development and social change view, empathy is not related to generosity or charity, which imagines those in need as disabled or incapable (Gumede, 2022; Suzina and Tufte, 2020), but rather recognises inequalities as shared problems instead of a result of individual work or value. Another research from South Africa elaborated that empathy helps revive the collective nature of most African communities in responding to their problems overlooked by the Western-centric literature, health communication, and behaviour change conceptualised around the individual as separate from society, hence bringing in the spirit of collective commitment to face the problem of COVID-19 co-equally. When mass media is used, empathy leads people to identify and learn from people in identical contexts and environments (Suzina and Tufte, 2020; Storey and Figueroa, 2012).

Also, empathy symbolises an ideal communication with equitable recognition of other people’s existence, the beauty alive in their culture, and, more importantly, seeing oneself in the other’s condition (Servaes, 2008; Kim, 2022; Eriksen, 2005). Mostly, empathy increases exchange and listening as well as opportunities to make stories in which people not only provide or collect information but are also interested in understanding and making informed decisions as the foundation of their commitment (Tufte, 2017). In addition, through empathy, communication accounts for people’s agency, experience and socioeconomic contexts (Demjén et al., 2023) hope Therefore, empathy is expressed earlier through social interaction and connection, and this study adds to the literature information on how empathy emerged in Rwandan communities' interactions to prevent the Coronavirus.

Thirdly, love is a process of acknowledging the other plentifully as far as one may know. Love-guided approach connects the cause with the people’s judgments, thus valuing relationships more than strict discipline (Suzina and Tufte, 2020). Also, love symbolises the process of effective dialogue, which ends up in agreement with no trace of violence(Freire, 2005). In this regard, dialogue is founded on love and simultaneously, love is dialogue, encompasses the pledge to serve others, and is thus proven by people’s solidarity (Kim, 2022). More importantly, love is the foundation of dialogue and the other principles (Brahma, 2022) because the dialogical pedagogy is founded on love as not simply an emotion but also comprises of actions to rescue and enrich others with inspiration from the Bible verse in Matthew 22:37-39 in which Jesus summarised all the commandments saying that the greatest one is to love God and your neighbour as you love yourself (Brahma, 2022). Therefore, it is a pledge to do good work and respect others, articulated in independent interactions such as listening, dialogue and development of critical consciousness to differentiate itself from nowadays alienating false generosity and people commodification. In education, development and health, love involves the action of preventing people from feeling the pain you felt, thus investing in protecting others from facing the same challenges you faced.

In India, another research studied Theatre of the Oppressed movements against illegal liquor production, unemployment in rural areas, poor health and transport infrastructures, and gave tangible examples of how love may be expressed through innovative action and reflection (Brahma, 2022). This research analyses how love emerged in the Rwandan urban community, pandemic preventive communication, community-founded innovation or challenges.

Lastly, hope is the principle with which people believe they can reach a convincing understanding and keep searching for change (Suzina and Tufte, 2020). Also, hope implies that communicators have trust in people's ability to reason and participate in constructive interactions (Nyirenda, 1996), and when lacking such trust, they will not be able to establish dialogical communication, thus tempted to tell, issue communique or use slogans (Freire, 2005). More importantly, hope is courage because it keeps us believing that everything will be good (Servaes and Malikhao, 2011), which brings in the necessity to communicate not only facts but also messages predicting for better future. Even if, in terms of crises, hope keeps regenerating the fight, it is not predetermined by institutions or political figures but rather the promotion of human autonomy, characterised by people's ability to exchange knowledge and views at equal positions and together define their future expectations (Ferron, 2022b).

The principle of hope guides an optimistic enquiry into the community's necessity of giving a voice to the voiceless, thus allowing those who feel less empowered to speak in public (Ferron, 2022b). Hope is not a native sensation but an action by which people change individual and social conditions to produce equitable social relationships through critical engagements (Ferron, 2022b). Such action is central to the comprehension of the living conditions of other persons. Finally, hope inspires our development process because by keeping in mind that the world and humans are in endless procedures of change, we hold on to our aspiration for the best things and the time to come(Karin and Johansson, 2007). In this regard, an Ecuadorian producer described their own audio-visual products from an Indigenous perspective and concluded that no evidence of remorse could generate hope, but instead, those that give strength, help people understand, and concretely explain the issue and why people's vision and contribution are important (Gualinga, 2022). Therefore, this research contributes to the analysis of how hope emerged in the interpretation and adaptation of COVID-19 messages in Rwanda.

In general, I apply the dialogical principles to analyse the process of COVID-19 communication, the possibility and process of dialogue with reference to the four other principles and how they emerged. In answering the third research question, I collected and analysed community experiences, describing which and how the principles emerged. Previously, Mexican researchers and practitioners applied the principles to analyse dialogue and communication from an Indigenous Perspective. They analysed achievements, challenges, outcomes and needs through meetings. They found that communities contribute to society, culture, and economy and that it is necessary to discuss how they interact with their fellows, experts, or leaders (Blanco, 2022). They proposed seven ways of fostering interactions or using

dialogue to decolonise their thinking and free their hearts by discussing their conditions: build strategies for continuous dialogue, be clear, generate networks to discuss important issues, consider all information as equally important in community communication (food, education, health, economy), relate with researchers and alliances that can help evaluate the content, tools processes and organisations to avoid the reproduction of power dynamics that devalorise others (Blanco, 2022). The current research will further discuss the three communities' residents' achievements or challenges, analysing their own expressions free from external influence.

Dialogue and the search for content

Even if the banking approach has been qualified as being ineffective for so long, it has not been clear how and when to start dialogically engaging communities, especially when communicating about pandemics. The fundamental start for this communication is to realise that an epidemic is not exclusively a health problem but also embodies a socio-economic problem that can be addressed by behaviour change communication (Singhal and Rogers, 2003, cited in Tufte, 2005). Solving such an issue requires the combination of scientific and biomedical answers with communication-based interventions. This engendered the idea of participatory communication as a tool to understand pandemics not only as health problems but, importantly, with an emphasis on communication strategies to influence people's behaviour (Tufte, 2005). Such communication comprises a process of research-based information exchange between health professionals, leaders and community members to give enough voice to local inhabitants' needs and inputs in interactions and communication materials production (Tufte, 2005). It then concludes with improved materials and the generation of a sense of ownership and involvement of all concerned parties by granting local people the right to participate in producing and implementing locally relevant media content (Pitout, 2009).

This approach, proclaimed in the Freirean (2005) dialogical model of education, informs the best way to communicate about health and development problems in a participatory style by highlighting five interrelated characteristics of dialogue, underscoring (Cadiz, 2005):

1. Equality between communicators resists the view of one superior communicator who ascribes top-down directives or memos to the other, considered inferior and beneficiary, to support the view of both as partners and fellow-subjects in the process.

2. A problem-posing approach that introduces ordinary people's routines, knowledge, experiences, and insights by raising problem-related indecisive inquiries instead of giving them prescriptive answers to the problem.
3. A praxis or action-reflection rotation where, instead of lecturing and recommending problem solutions irrespective of affected people's needs and understanding of the problem, we make use of lessons learnt from people's experience, practice and reflections.
4. The conscientisation of partners, which is evident in instruments and structures set to facilitate people's participation in discussions or flexibility to adapt people's programs. Finally, authentic dialogue depends on contextual interpersonal communication predominated by Freire's above-mentioned principles of humility, love, faith, and empathy.

Engaging communities to search and create content

During crises, including emergencies or pandemics, leaders, scientists, and healthcare workers are concerned about how to get and share credible information with the community. The sharing of such information involves the necessity for engaging with the latter in all prevention, treatment and recovery procedures. Since this research mainly focuses on COVID-19 preventive communication, it has been quite necessary to engage communities in the process of message development and communication that aims at influencing preventive behaviours in the communities of Karama, Kiruhura and Mwendo. As with any other setting, those communities historically and culturally situated in the Rwandan Capital have been in the process of preventing COVID-19.

The three communities have been entitled to the native capacity to interpret and transform any kind of information susceptible to affecting their way of living and safeguarding their well-being as self-conscious and incomplete beings (Freire, 1970b). In their incompletion, people seek and share knowledge, which is effectively accessed through dialogue as a tool for authentic communication. Freire highlighted that: "Only dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue, there is no communication, and without communication, there can be no true education" (Freire, 2005:93). The current dominating communication challenge is for practitioners to know how to dialogically engage with communities and for community members to know how to engage

with fellows and experts when they are facing a health problem. The challenge is basically found in the development of content and how it is communicated.

In the banking approach, the content is developed by the communicator who imposes or gifts it to the community. On the other hand, the content cannot be gifted or imposed; it is instead about the reorganisation, synthesis and advanced re-representation to people of the things they want to learn more about(Freire, 2005). This cannot be achieved by one side for the other but by both parties mediated by the existing reality, which not only challenges them but also keeps generating new thoughts(Freire, 2005; Huesca, 2008).

On both sides, these thoughts, inundated with fear, doubt, or optimism, suggest meaningful topics that can serve as the basis for the development of the learning or communication content, which, in return, is applied to people's concrete situation or the reality that needs to be transformed by both communicators (Freire, 1970b). In the field of education, the content is known as the learning objective, while in health and development, it is a problem that requires a solution.

In such a learning activity, experts and communicators do not go to communities bringing them a redemption message, but carry the objective of dialogically engaging them about the existing problem (Wallerstein, 1993; Huesca, 2008) and their own perception of their world and in front of that problem, thus reflecting people's aspirations. Therefore, it is not about presenting to communities programs that are not related to their own preoccupation or imposing on them the expert view of the problem, but discussing both their own views and the experts' view of the problem (Tufte, 2017; Colle, 2008). Irrespective of these discussions, experts are running the risk of speaking without being heard, known as preaching in the desert, because their language is detached from the people's actual condition(Berger, 2010). Such language is disconnected from people's thoughts and is non-existent because it is not directly framed in regard to any understandable situation (Roscos-Ewoldsen and Roskos-Ewoldsen, 2010). For effective dialogue, communicators must understand people's perceptions of reality. Finally, reality, together with its perception by the two parties, constitutes the learning object, themes or communication program content.

Searching for the learning objects is known as investigating the thematic universe and involves a dialogic method to arouse people's consciousness of multiple themes (Freire, 2005). For the Brazilian philosopher, diversification of themes can be found in one society or a small cycle known as an epochal sub-unit, as differentiated from the bigger one known as an epoch. Each

epochal unit/sub-unit contains its own additional or particular themes and obstacles (known as limit situations) that also require specific limit acts or solutions.

Let's compare Rwanda as the extended epoch made of Kigali and the other four Provinces as epochal units or thematic universes, respectively. In its turn, Kigali is subdivided into many communities known as epochal sub-units or generative themes. Karama, Kiruhura and Mwendo are among those communities or generative themes which also contain different themes and related obstacles, also known as limit situations. Both Rwanda, Kigali and local communities as epochs are facing COVID-19 prevention as the same obstacle or limit situation, but any of the three communities is also a thematic universe on its own and may have its own or additional themes and related obstacles/ limit situations. Also, each obstacle or limit situation requires limiting acts or actions to relieve it. The thematic investigation does not only end with the identification of themes but also the identification of limiting situations, and limiting acts, also known as untested feasibility.

The process of thematic investigation is compared to dialogical communication and comprises two processes: organisation and interpretation. It is constituted by the analysis of the community's generative themes originating from their own understanding of the problem and its current situation. During thematic investigation, the investigator/communicator reaches the community to observe, note and analyse all necessary information around one theme or topic of interest under modifying situations, paying more attention to their thoughts and relating them to their daily activities (Freire, 2005).

It starts with organisation, which involves presenting a situation which citizens recognise as similar to their own. Researchers identified that people get easily interested in discussion when the situation is directly related to their desires or experiences (Saurabh, 1998; Van Blerk and Ansell, 2007; Schiavo, 2014; Gumucio-Dagron, 2008). Message organisation is the only tool that mediates communicators, and it must be performed carefully following a number of principles, including a representation of a familiar, non-puzzled, and not clearly instructional situation, which offers various interpretation possibilities (Berger, 2010) or directs to other themes.

Message organisation also comprises two steps related to the generation of various interpretation possibilities. The first is a critical organisation that is related to presenting to people a simple and familiar situation. If dialogue is to happen, messages must not only be made of slogans but also challenge communities to engage in direct critical reflections

(Saurabh, 1998; Gumucio-Dagron, 2008). In this codification, people start sensationally viewing their different desires (Falkeimer and Heide, 2018). It is a representation of a fundamentally thoughtful situation (basic nucleus) that gives way to the emergence of different themes, leading to the second process known as secondary organisation. Secondary organisation is related to people emerging from reality and perceiving the root causes of their desires; after that, they recognise a situation to be closely related to their experience (Falkeimer and Heide, 2018; Freire, 2005).

When the communicator diverges in organising a message or tries to guide the interpretation process, communities become silent and indifferent, or never focus on the discussions, which end up deviating and failing to reach the fusion of both communicators' perceptions (Freire, 2005; Kincaid, 2002; Roscos-Ewoldsen and Roscos-Ewoldsen, 2010). Therefore, they never understand how their desires are related to their respective backgrounds and fail to comprehend the untested feasibility that lies beyond the limit situation behind their desires. In my understanding, regarding the COVID-19 message organisation, if communicators try to instruct or guide the communities in interpreting messages, the latter may behave indifferently and not engage in discussions.

Organisation leads to interpreting, where community members express their themes or clearly convey their "real consciousness" or actual understanding of the situation (Roscos-Ewoldsen and Roskos-Ewoldsen, 2010). This process includes recognising the limitations of their circumstances, as well as the difficulty in perceiving untested feasibilities that exist within these limiting situations (Roscos-Ewoldsen and Roskos-Ewoldsen, 2010). It is in recalling how they have behaved in these circumstances, in relation to their previous perception of the problem, that a new perception, and the development of new knowledge, is achieved (Falkeimer and Heide, 2018). The awakening of new perceptions and knowledge results in the development of a communication plan, which will convert the untested feasibility into testing action (Freire, 2005; Kincaid and Figueroa, 2009). Interpreting also involves dialogue to discuss or decode the presented situation, during which communicators note the contradictory senses between their understanding of the message and the expected perceptions (Kincaid and Figueroa, 2009). The process of reaching such contradictions is also known as conscientisation, a process that stops at not only subjective perceptions of the problem but also actions preparing people to alleviate the limiting situations, discovering untested feasibilities, and testing acts that lead to new, secondary or advanced organisation (Freire, 2005).

Conscientisation also leads to listing and classifying the existing limit situations (new themes) that are not separated from one another but symbolise one totality. Conscientisation leads to true organisation or the choice of the right message and channel to communicate about each theme, then the production of communication materials (Freire, 2005; Freire, 1970b), and later on, the themes that came from communities return to communities as problems to be solved. When there is not enough budget for investigation, as cited above, communicators with little knowledge of the situation can select and introduce basic themes and initiate an advanced thematic investigation (Freire, 2005). One of the most discussed basic themes is the understanding of culture.

3.2.3. Participatory Communication Approach's application to this research

The Freirean (1970; 1976; 2005) derived participatory communication approach is relevant to this study because it is used as a critical model to explore and explain how COVID-19 prevention messages are contextually interpreted in the three settlements. It is then used as a predictive model to explain how the dialogical principles enabled or disabled the development of COVID-19 communication and prevention intention at the individual and community levels.

More importantly, the two aspects of participatory communication guide the methodology to describe how communication has been a means through which residents of Kiruhura, Karama, and Mwendo settlements critically interpreted and responded to COVID-19 preventive messages.

The steps of conscientisation guide this research in examining and explaining a detailed step-by-step process of engaging communities in both planning and implementation of COVID-19 preventive communication in urban settings by analysing participants' contextual understanding, experience, challenges and community emerging solutions. Dialogue also guides this study in exploring and analysing the effects of dialogical principles and the emerging opportunities for enhancing dialogue and conscientisation. This is achieved by considering community members' doubts, hopes, and fears, with the central objective of standing in solidarity with the people and empowering them to actively participate in addressing the challenges they face.

Since this research focuses on analysing how COVID-19 is communicated in Karama, Kiruhura and Mwendo communities, the research complemented the participatory communication with the Culture-Centred Approach This combination facilitated discussions

with participants about community perceptions and responses to COVID-19 messages, the challenges they faced, the solutions they generated, as well as community-based opportunities to increase dialogue and pandemic conscientisation.

3.3. The Culture-Centred Approach

Like the previous sub-section, this sub-section is also subdivided into two parts representing the historical background of the Culture-Centred Approach and its relevance to the current research, as well as its concepts and their methodological application to the research.

3.3.1. Evolution and relevance of the Culture-Centred Approach

The Culture Centred Approach (CCA) emerged as one of the responses to the long-time historical exclusion of local participants in health-related discussions, policy, planning, knowledge distribution and related evaluation. In establishing the CCA (Culture-Centred Approach), Mohan J. Dutta analysed structural inequalities in communication for social change and concluded that focusing on culture helps to create a reasonable avenue for community access to scientific information by dialogically finding contextual solutions and sustaining glocalised practices, while local structures help to acknowledge communities agency and contribution abilities (Dutta, 2021).

The CCA originated from post-colonial theories, where researchers critically examined the political dynamics that defined subaltern populations by describing the continued power domination of Western intellectuals over third-world populations who were often portrayed as backwards and in need of modernisation to emulate their former colonisers. In this process, cultural values were often misrepresented to advance Western culture (Said, 1978). Modernisation equated to globalisation, also known as neoliberal hegemony, increased social inequalities and unequal access and participation in communication, which increases the communication gap between the elite and the marginalised populations (Dutta, 2008). These inequalities increased the marginalisation of the poor members of society and continuously limited their access to economic resources as well as to expression platforms (Dutta-Bergman, 2004). Consequently, communication scholars have grown interested in engaging with the globalisation-founded margins to create space for listening to marginalised people and to create opportunities to transform the process of globalisation (Dutta, 2021).

These listening spaces should help demonstrate how communication and social change at the margin are enacted by disrupting neoliberal oppressive processes (Dutta and Basu, 2018). Essentially, the pursuit of social change must begin by acknowledging the existing social organisation of communities, moving away from a centralised standard, and engaging in processes that challenge the hegemony embedded within that standard. The central standards known as the status quo are criticised for always representing the interests of the powerful members of society. These criticisms are rooted in subaltern studies theories, which revise historical narratives by incorporating the voices of local communities that have traditionally been silenced or marginalised in dominant discourses (Dutta, 2008).

Subaltern studies theorists interrogate dominant structures and deconstruct embodied erasures with the aim of creating alternative discussion opportunities to challenge the status quo; writing stories from the 'bottom' of society and focusing on what is left out of the dominant objectives, programs, and outcomes (Guha, 1981, cited in Dutta, 2011). Based on the principle of transforming social structures, the CCA was proposed as an organisational principle to engage with communication procedures, strategies and tactics that constitute the foundation of current development and communication efforts.

Founded on post-colonial and subaltern study theories, the CCA seeks to transform communication policies and approaches by exposing dominant, marginalising, and hegemonic structures. It aims to open dialogue and opportunities for engaging marginalised voices that resist the inequalities and marginalisation perpetrated by neoliberal strategies (Dutta, 2008).

In the public health domain, the CCA is a culture-based approach inspired by the Marxist understanding of the world, by criticising dominant strategies of health communication and interrogating the qualities of dominant public health communication strategies (Airhihenbuwa, 1995; Dutta-Bergman, 2004). The CCA is the mobilisation of family, local, national and global influence to challenge dominant inequalities by engaging silenced voices to generate meaning with an emphasis on the relevance of material realities in resisting voice control. Therefore, the Culture-Centred Approach to communication focuses on "interrogating the dominant practices of communication for how they create and sustain conditions at the margins, and on creating spaces of transformation by documenting the ways in which these dominant practices are resisted in marginalised communities" (Dutta, 2021). Engaging with local voices creates opportunities for dialogue and entry points for numerous local ideas to eliminate neoliberal-inspired inequalities through innovative communication practices. Such procedures narrate the

community's resistance to dominant oppression structures by applying the CCA's concepts of culture, structure and agency (Dutta, 2011) in methodologically analysing the expression of local ideas in pandemic preventive communication. In this regard, local communication behaviours can be well understood by exploring residents' perception of their current situation, which also applies to this research.

3.3.2. Criticism of the Culture-Centred Approach

Like any other theory, the Culture-Centred Approach has been criticised irrespective of its ability to provide a lens for studying the role of culture in public health, development, and social change efforts. Dominantly, the approach has been criticised for not clarifying how the meaning perceived by audiences is linked to the political economy that shapes the messages conveyed to them (Real, 2012). In my understanding, I doubt this criticism because audiences perceive messages based on their culture, experience and context, irrespective of the producers' intention, political or economic motives. Therefore, the CCA is still relevant to this research as culture offers local communities opportunities to build and exchange meaning about existing health issues, thus challenging the status quo.

3.3.3. Constructs of Culture-Centred Approach and the related methodological application

The Culture-Centred Approach emerged from criticisms of the health promotion or hegemonic approach to health communication (Dutta, 2008; Airhihenbuwa, 1995). The approach was characterised by the dissemination of health information to change cultural behaviours considered as a problem or source of unhealthy conditions. The CCA is preoccupied with community voices to explore how culture, structure and agency interact in resisting silencing conditions (Airhihenbuwa et al., 2014; Dutta, 2011).

Here, culture, which is defined as the common experience that links social groups' lives and ways of communicating, constitutes a site of meaningful co-construction and is at the centre of health communication solutions (Dutta, 2021; Dutta, 2008). In re-theorising health communication, culture helps differentiate its role in hegemonic approaches where it serves to create effective messages and disseminate information such as COVID-19 prevention by hand washing and face masking; and in the Culture-Centred Approach, where it serves to build voice equality at community levels (Dutta, 2021; Dutta et al., 2020).

This research relates to the second perspective since it aims to explore contextual perceptions of COVID-19 and its prevention messages in reference to local community members' lived experiences. Here, culture is not seen as problematic or characterised as a misleading foundation for effective communication strategies (Dutta, 2021), but instead as "the local contexts within which health meanings are constituted and negotiated" (Dutta, 2008: 7). Therefore, it is necessary to explore local factors that define health meaning in Rwanda and the CCA helps facilitate discourse that allows participants to recognise the pandemic problem, related prevention difficulties, their level of involvement, as well as the influence of their culture and local contexts.

Besides culture, "structure refers to the material reality as defined by policies and institutional networks that privileges certain sections of the population and marginalize others by constraining the availability of resources" (Dutta, 2011: 12). In health communication, the CCA emphasises the importance of analysing dominant communication strategies that simultaneously silences the voice of community members, thus limiting their participation. Further, pandemic outbreaks and preventive messages are structured per political, socio-economic and communication resources, and recommendations should also consider local residents' food, accommodation and health daily necessities (Dutta, 2021). With regards to COVID-19 prevention, this research engages participants to discuss how their perception of preventive messages interacts with their socioeconomic contexts. It also engages them to discuss how dominant communication processes silenced related voices; further exploring how participants grappled with their cultural values in discussing and responding to COVID-19 prevention messages.

At the intersection of culture and structure, there is agency, which is related to the ability of local residents to meaningfully discuss or exchange ideas about local structures that can hinder or help them easily access health resources(Dutta, 2008). Agency further refers to "the capacity of the human beings to engage with structures that encompass their lives, make meaning through this engagement, and at the same time, create discursive openings to transform these structures" (Dutta, 2011:15). In the process of communication for social change, people's agency is expressed through their resistance to modernisation policies and processes with locally situated voice infrastructures. These infrastructures not only amplify community voices but also help them address fear and anxieties around pandemics. To this end, this research considers agency by collecting and analysing community experiences in resisting hegemonic policies and the community's existing opportunities for residents to express themselves.

The relationship between culture, structure, agency, and voice

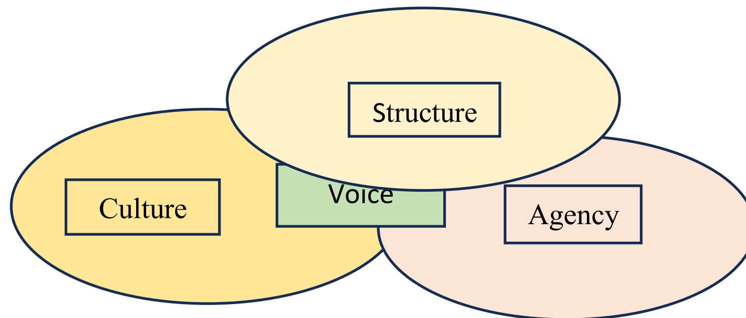


Figure 3.1: Culture-centred approach to voice adapted from(Dutta, 2008)

Practically, this research refers to the CCA in analysing and describing how residents of Kiruhura, Karama and Mwendo settlements engaged with culture, structure and agency to raise their voice and resist the silencing relationships.

Firstly, the research referred to culture in analysing community perceptions of COVID-19, and their responses to its preventive messages as well as related challenges. Secondly, it referred to structures in discussing how social, previous pandemic experiences, and cultural contexts influenced community perceptions and responses to COVID-19. In addition, the research interlinked the aspects in analysing how communities engaged with the culture, structure in discussing prevention measures.

3.3.3.1. Culture-Centred pandemic messaging: Engaging cultural or contextual constructions

In the view of the Culture-Centred Approach, basic health information resources are part of human rights. Centrally conceived communication programs are always top-down and less productive because they intensify existing voice inequalities, slow the achievement of expected health outcomes and complicate the living conditions of less heard members of the community (Dutta et al., 2020). In an improved form, culture should constitute a basis/ foundation of meaningful health information, and the site of developing and negotiating preventive responses (Dutta, 2021).

With regard to the current research, community members should focus on culture to engage with COVID-19 and negotiate its Non-Pharmaceutical Interventions (NPIs) and related responses. Such processes generate locally relevant contextual responses to pandemics, with cultural norms and family ties offering dynamic lessons for effective health communication

and care. In this regard, communities in which "members draw on culturally situated practices to care for each other offer vital resources for social cohesion, creating narratives of care that challenge the neo-liberal ideology of self-help (Dutta, 2021: 93)". Those communities generate new knowledge and opportunities to respond to pandemics including helping each other and generation of innovative health solutions.

The CCA is relevant to this study because it complements the participatory communication approach to guide the researcher in analysing how the community's cultural contexts enabled or disabled the conscientisation of COVID-19 prevention and opportunities for dialogue by studying the role played by the communities based on their perceptions of messages. After all, a development solution starts with the meaning that communities give to messages (Okigbo, 2021). Regarding residents' perceptions of communicated content, the researcher applied qualitative studies to explore how the residents of the three communities perceived and shared meanings from the dominantly communicated COVID-19 prevention messages. With regard to community cultures, understanding a message at the individual level may carry multiple stands that include perceiving the pandemic itself, perceiving participants' involvement and perceiving limitations (Dutta et al., 2020; Dutta, 2021; Dyll and Tomaselli, 2024).

In Ghana, a study applied the Culture-Centred Approach with the Participatory Communication Approach to analyse the use of community radio to communicate COVID-19 among marginalised communities. The study noted that alternative media, such as community radio, which acknowledges and works with marginalised people's complex content consumption habits, played an essential role in Ghana's COVID-19 prevention communication campaigns by providing marginalised community members with a platform to discuss COVID-19 prevention, thus increasing their intention to practice recommended behaviours (Essel et al., 2024). It is recommended that communicators integrate external health communication interventions into local systems using participatory tools such as community media and implement a process of communication sensitive to people's contexts socially and economically (Essel et al., 2024). This research applies the CCA with the Participatory Communication Approach to analyse the perceptions and participation of ordinary Rwandan urban residents in locally communicating about COVID-19 as well as related encounters.

3.4. Complementarity between Participatory Communication Approach and the Culture-Centred Approach

The Participatory Communication Approach that focuses on participation and communicators' relationships has been criticised for not clearly defining when and how to start dialogically engaging residents. It shares much with the CCA, which looks at how cultural and contextual realities affect communities' perceptions and responses to COVID-19 preventive messages to explore avenues for local voices. Instead of delimiting community involvement in the generation of meaning and cultural influence separately, these approaches are complementary in exploring and giving details about the communication process, the role played by local communicators, as well as avenues for improvement. The following table presents how the two theories interactively guide the methodology of this research in answering the research questions.

Table 3.2: Complementarity between Participatory Communication Approach and Culture Centred Approach

Theory	Question 1: What are the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda?	Question 2: In what ways have local communities catalysed consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities?	Question 3: In what ways have the dialogical principles been enablers or disablers of COVID-19 prevention messages in the settlements?	Question 4: How can dialogue and conscientisation influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda?
Participatory Communication	The first stage of conscientisation guides data collection and analysis.	The second stage of conscientisation guides data collection and analysis.	The third stage of conscientisation guides data collection and analysis. Analysis and description of the process of dialogue and conscientisation: the emergence of the dialogical principles in enabling or disenabling COVID-19 prevention messages in the settlements.	The fourth stage of conscientisation guides data collection and analysis.
Culture-Centred Approach	Discover and analyse how community members perceive their situation of COVID-19.	Analyse how contextual and socio-cultural aspects influence people's perceptions.		Discuss participants' understanding of structures that affect their participation and local opportunities to transform these structures.

3.5. Conclusion

This theoretical framework chapter discusses how the researcher mobilised the Freirean-founded participatory communication and the Culture-Centred Approaches to analyse community experiences in communicating COVID-19 prevention messages to influence preventive behaviours. Through the lens of the Participatory Communication Approach, this chapter discusses how communication must apply dialogical principles and the four stages of conscientisation to remove contradictions between communicators and explore area-specific limitations and opportunities to improve dialogue for pandemic consciousness. This chapter also clarifies the researcher's adoption of the Culture-Centred Approach in analysing the community's perceptions of COVID-19 messages and the effect of local contexts on their perceptions. The following chapter explains the methodological steps that have been implemented.

CHAPTER 4

METHODOLOGY

4.1. Introduction

The previous chapter discussed theories and how they guided this research methodology. The following chapter defines the methodological course of data collection and analysis. It describes how data were collected from the overall research paradigm, design, population, and sampling, as well as techniques and tools used. It explains how data collection and analysis methods are linked to this study's aim of discovering how dialogue and the stages of conscientisation in communities influenced perceptions of COVID-19 prevention messages in Kigali, Rwanda.

4.2. Research paradigm

This study adopted an interpretive paradigm based on the understanding that the world and reality are created socially (Zoller and Dutta, 2009; Schwandt and Gates, 2018). This research inquiry reproduces participants' views on their perception of COVID-19 messages based on their ontological and epistemological views of reality or concerns about how things appear naturally and the reasons behind their appearance (Berger and Luckman, 1966). In studying a phenomenon, the interpretivist depends on the views of participants regarding that phenomenon (Schwandt and Gates, 2018; Creswell and Poth, 2016).

Interpretivist scholars discover reality through participants' opinions, individual experiences, and backgrounds (Schwartz-Shea and Yanow, 2013), thus discovering the world in a normal setting by interpreting phenomena in the sense that people give to them (Denzin and Lincoln, 2018). In this regard, the researcher accepts the growth and expression of subjective senses and experiences of people regarding the studied issue, thus accommodating them as research findings (Creswell and Poth, 2016).

In the public health domain, interpretive methodologies are committed to the local context in which health meanings are constituted, healthcare relationships are negotiated, and healthy practices are endorsed(Zoller and Dutta, 2009). The reason why scholars focus on the

communities is to try to understand the social consensus instead of critiquing or transforming it (Deetz and Eger, 2014). Therefore, interpretive data are evaluated through their rich accounts of health communication processes as well as how they help researchers understand participants' experiences (Zoller and Dutta, 2009). Following the investigator's purpose of interpreting how communities in highly populated sites of Rwanda made sense of COVID-19 prevention messages and how they influenced their conscientisation related to prevention measures, this paradigm mainly helped explore participants' thoughts through their interactions related to their experience with COVID-19 messages and their context. The interpretive research is not concerned with the statistical presentation but uses qualitative methodologies to provide a thick description of texts, phenomena and processes in health situations (Zoller and Dutta 2009). Methods include focus group discussions, which help study health communication through group participation. The paradigm defines qualitative steps in which the researcher interprets and presents community members' thoughts and experiences (Schwandt and Gates 2018) in pandemic-related communication. It used focus group discussions to engage various community members about how they made sense of COVID-19 prevention messages and related them to their context.

4.3. Research design

In qualitative, quantitative, and mixed research, a research design consists of strategies of inquiry that provide instructions about the research process Creswell, 2014). Narrative research, phenomenology, grounded theories, case studies and ethnography have been identified as the most dominant strategies.

Phenomenological design, which originates from psychology and philosophy, is an expression of thoughts that focus on people’s experience or a design in which the researcher describes how participants individually describe their experience of a phenomenon. Regardless of its significance in developing qualitative enquiry, phenomenological research equally stands to reveal the fundamentally experienced impression. It is mostly applied to human conversation tools such as interviews and FGDs to explore people’s knowledge of what they do, the reasons and consequences of their actions in society, by contemplating Foucault’s mantra “ People know what they do; but what they don’t know is what they do does (Dreyfus and Rabinow, 2014).

On the other hand, a case study is a design which allows a researcher to deeply analyse and describe recent events such as a program, activity, issue or process and provide a detailed understanding (Chilisa, 2012; Creswell and Poth, 2016). The current study is a phenomenological case study, which combines the two in studying people's experience of a phenomenon (West, 2013). This research used it to understand COVID-19 preventive communication in Kiruhura, Karama and Mwendo settlements in Kigali, Rwanda. It sought to understand contextual motives behind COVID-19 conscientisation and dialogue, and how they influenced message perception by examining individual and community reflections. In contrast with other case studies, the phenomenological one explores participants' individual and subjective self-expressed lived experiences, allowing their deep understanding through a deep interpretation of participants' stories. Seeking to reveal data-generated patterns and themes, such case study also involves qualitative methodologies such as observations, focus group discussions and interviews that allow for rich exploration and describe participants' experiences. Therefore, the current case study allowed this researcher to understand pandemic communication by investigating participants' understanding of COVID-19 in reference to their personal and social reality.

4.4. Research approach

This study followed a qualitative process because it is guided by the nature of the interpretive research paradigm, illuminating the acknowledgement of participants' experience and their influence on the understanding of phenomena (Govender, 2013). Qualitative research represents a positioned exercise that locates the researcher in the world. The researcher aims to present the world through the application of practical and conversational tools that represent the world as it is set naturally (Denzin and Lincoln, 2018). In this regard, each tool or practice has a distinct way of representing the world.

Qualitative research is tough to define because it carries a multiplicity of interpretive methods. Therefore, "qualitative research, as a set of interpretive activities, privileges no single methodological practice over another" (Denzin and Lincoln 2018:49). For the above reason, various theories and paradigms claim to use qualitative methods or strategies that also apply in many disciplines separately. Qualitative research is shaped by multiple political and ethical perspectives, committed to the understanding of human experience, and thus crosscutting in the humanities, social and natural sciences.

The qualitative researcher is an entitled scientist, field worker, naturalist, and artist, among others, due to his/ her methodological application of a mixture of soft and creative sciences to piece together strategic, self-reflexive, and pragmatic different representations of a specific situation. He/ she is said to be a *bricoleur* because of being skilful in performing multiple tasks varying from rigorous self-reflection, interview and introspection (Kincheloe et al., 2018). The *bricoleur* theoretically reads and accumulates a wide knowledge regarding different interpretive paradigms that can be applied to study a specific issue. Qualitative interpretive *bricoleur* understands research as a collaborative procedure fashioned by the gender, history, class, ethnicity, and biography of people in a studied setting, as well as their own profile (Kincheloe et al., 2018). Most essentially, qualitative scholars stress that research is power, as all findings involve a socio-economic or development implication, because scholars tell stories regarding the studied areas and issues (Denzin and Lincoln, 2018).

Qualitative research procedures aim to produce expressive data through people's spoken or transcribed words and evident behaviours (Bogdan and Taylor 1990; Erickson 2018). This design allows people to describe their reality. It further helps researchers to study reality from different views by analysing people's naturally expressed experiences (Erickson, 2018). More importantly, people’s view of themselves and the world is influenced by social and historical contexts (Kincheloe et al., 2018; Freire, 2005). This requires researchers to pay enough attention to individual experiences and social identities, highlighting the needs and specific community’s strengths to legitimise their subjective construction of knowledge and the world(Kincheloe et al., 2018).

In this regard, the focus group discussions made a forum where participants negotiated with each other their interpretation and adaptation experience (Tuominen, 2018). They brought their experience with COVID-19 messages into the situation. Other participants' ideas also influenced them, and the data were enriched by agreements, disagreements and clarifications on how they bridged the gap between message intention and their local perceptions, related challenges and possible solutions.

By considering the limited literature on communication about pandemics in Rwanda, and the influence of the researcher’s professional and training experience on the data treatment, this study was deductive to advance knowledge from the already known information to the unknown (Christians, 2018; Braun and Clarke, 2022; Godden, 2016) because the researcher approached it with knowledge on message interpretation as proposed by the Freirean problem-

posing pedagogy, and the Culture-Centred Approach; but with a mind open to receive information from findings. Mill (1974:186) explains that deduction is contrasting the already known claim and research conclusions to reach a general truth, not as a means of adding to the existing evidence, but instead as merely a means of referring to that evidence. Therefore, "a general truth is not an aggregate of particular truths; but a comprehensive expression, by which an indefinite number of individual facts are affirmed or denied at once" (Mill, 1974:186).

While collecting data, the researcher came across information that she was unaware of. Therefore, the researcher reflected on pre-existing knowledge from the literature and then reflected on new knowledge from collected data in the chapter of discussion and conclusion. She also discussed her professional and personal subjectivity in the reflexivity chapter.

4.5. Study location

This study was conducted in Nyarugenge, one of the three districts of Kigali, the Capital of Rwanda. Kigali records the highest daily COVID-19 infection rates compared to other provinces of Rwanda and is referred to as one of the epicentres of the pandemic in the country as of January 19, 2021. The Capital was put under total lockdown twice in 2021 due to the increase in COVID-19 cases from January 19 to February 7, 2021 (PM Office 2021)[4] and from 17 to 31 July 2021 (PM Office 2021)[5]. The study investigated three crowded settings because crowding and associated characteristics have previously made urban areas susceptible to the spread of infectious diseases (Snyder et al., 2014; Bin et al., 2019), which may affect the communication of COVID-19 prevention messages.

Karama is a modern urban settlement, a multifamily house setting of up to 12 dwelling units in 3-4 floors (Rwanda 2021a) located around eight Kilometres from the Kigali City and Nyarugenge District headquarters. Home to 500 families, most of whom have been relocated from the high-risk informal settlements for a better and more secure shelter. On this site, each dwelling unit has an enclosed kitchen, a water pipe, a modern latrine with a bathroom and

[4] https://www.primature.gov.rw/index.php?eID=dumpFile&t=f&f=28717&token=add14d658a974cabff3a1effed71b9bbff404f20

[5] https://www.primature.gov.rw/index.php?eID=dumpFile&t=f&f=28728&token=91956d89b1ba55e9e31e0a7b699d74dab9e3024c

balcony, nearby roads, and health, education and recreation facilities. Residents own the units but depend on daily work to satisfy other needs.

Kiruhura is a spontaneous settlement of two to eight dwelling units enclosed in the same compound (Hitayezu et al. 2018) situated around four kilometres from the City and Nyarugenge District headquarters. This settlement type is characterised by substandard living conditions such as limited plot accessibility, overcrowding and tenancy in smaller dwelling units, limited access to infrastructure such as health facilities, shared latrines, shared or non-existent water pipes and rental insecurity, with the majority of residents casual and informally employed (Hitayezu et al., 2018).

Mwendo is a rural group settlement located around fourteen kilometres from the Kigali City and Nyarugenge District headquarters. This type of settlement, planned for between 100 and 200 houses per site (Ngoga, 2015b; Rwanda, 2012; Rwanda, 2021a), is characterised by individual home ownership, agriculture as a basic occupation, and access to basic infrastructures including roads, water, electricity, nearby health, and education facilities.

Before this research, a study analysed persuasive communication and COVID-19 behaviour change in Kenya (Emojong, 2021). In addition, the multi-setting/ contextual approach helped me interpret COVID-19 communication phenomena because it is better referring to the local social and economic contexts (Kincheloe et al., 2018). Constantly, contextual factors have been identified as one of the principles underlying effective community engagement approaches(Questa et al., 2020). This reminds us of the need for connecting COVID-19 severity and global impact to the cultural and behavioural responses of different populations to the pandemic.

In a participatory communication vision, this study analysed how preventive consciousness is linked to the understanding of prevention messages and the reconstruction of contextual and localised COVID-19 prevention solutions in different residential settings in Rwanda.

This research takes into consideration a sociocultural solution that recognises cultural determinants by engaging communities in the COVID-19 understanding and knowing how diverse communities in densely populated locations adopt COVID-19 prevention messages in the light of individual and community-level contributing factors. The adopted research angle and design enabled the dynamic promotion of participatory prevention responses to pandemics by triggering successful communication strategies to reduce COVID-19 and pandemic risks in Karama, Kiruhura, and Mwendo settlements.

4.6. Study population

The population of a qualitative study contributes to providing information that answers questions related to the investigated topic through spoken or written accounts of their own experience (Polkinghorne, 2005). Therefore, participants are selected for their experience. In this case, the participants were selected to share their experiences with COVID-19 prevention messages.

It is also imperative for the researchers to separate the general population from the focus population. The general population is made up of an entire group of individuals who share the same characteristics that interest the researcher (Asiamah et al., 2017). In this case, Kigali City residents stood for the general population. On the other hand, the focus population consisted of individuals meeting the criteria that the researcher wanted to investigate and draw conclusions that clarify versions of an experience. In this regard, this research investigated and drew conclusions from different versions of COVID-19 prevention messages as experienced by residents of Karama, Kiruhura, and Mwendo. Therefore, the target population of this study consisted of residents of Kiruhura, Karama, and Mwendo settlements, all located in Nyarugenge, one of the three Districts of Kigali City. Nyarugenge is a multi-sectoral district with a population of 374,319 and the second-highest population density in Rwanda, with 2,830 inhabitants/km2 (Rwanda and Statistics, 2023).

My interest in this District was motivated by its residential setting, representing the three categories of crowded settlements in Rwanda: spontaneous, modern, and grouped (Hitayezu et al., 2018). Analysing the understanding and response to COVID-19 prevention messages and the effects of the contexts in the three settings would trigger how to build dialogical communication to better communicate for a more conscious and motivated community to face a development problem such as a pandemic.

4.7. Sample and sampling technique

Usually, qualitative research adopts a small sample size for more localised data, which has the quality of limiting the research challenges in adjusting meaning and correctness through context and experience-based analysis (Morse, 2018). Such size helps in collecting data with limited compromise because their richness and quality only help validate the research objectives (Akpan, 2021). In this regard, I recruited eighty-one participants (twenty-seven in

each settlement) through purposive sampling, a technique that is not necessarily dictated by a theory or built on a permanent number of participants (Etikan et al., 2016). It is a nonprobability sampling in which "the researcher identifies certain respondents as being potentially able to provide useful data on the research project" (Oliver 2014:150). Here, the researcher forms a subjective view of the wished respondents' characteristics, like being articulate and wishing to participate.

Also, this sampling technique helps investigators to " identify people who, because of their experience or contacts, have special insights into the research question "(Oliver 2014:150). This technique fitted with the current research because it helped choose people who were available and willing to provide the needed information expressively. In this regard, an individual who has been in one of the three sites prior to COVID-19, during and after the lockdowns, and who experienced awareness and prevention activities, was recruited for the study. Therefore, I selected nine women (a teacher, a stay-home mom, two casual workers, an entrepreneur, a religious community leader, a member of the women's council, a village leader, and a community health worker); nine men (a teacher, stay home dad, two casual workers, two entrepreneurs, religious community leader, village leader, community health worker). Also, nine youths (a youth leader, two students, an unemployed, a leader of a religious-based youth community, an entrepreneur, a youth volunteer, and two casual workers) were selected.
My self-reflexivity and positionality also influenced my selection of participants and data collection processes, as discussed in the next specific sections.

4.8. Selection of participants

Over 93% of Rwandan residents speak Kinyarwanda. Eighty-one male and female Kinyarwanda speaker's residents of Karama, Kiruhura and Mwendo sites, aged 18 years and above, were selected by purposive sampling. In this technique, participants are consciously chosen by the researcher based on specified qualities, judging them to be able to provide needed information and, at the same time, excluding those who don't match those qualities (Wimmer and Dominick, 2011). Also, this technique reliably fits with qualitative approaches because it aims to fetch insightful information instead of generalising a large population (Creswell and Poth, 2016; Creswell and Poth, 2017).

In this regard, I met with participants and selected individuals who have a leadership position or are used to openly interacting with many community members because the standard operating procedures (SOPs) supposed that local leaders, influencers and community networks should help in community engagement (Rwanda, 2020d). In the recruitment process, I ensured that participants from different activities or groups were introduced to the research and selected those who were willing to share their experience with COVID-19 preventive communication. Three community leaders and six members were selected among women because they could effectively discuss the women's experience of COVID-19 prevention messages as members of that network. Nine men were also selected to reflect the perceptions of males. Three youth leaders and six young community members were selected to gain insight into the youth's understanding of COVID-19 messages. The choice of the sample was motivated by the need to collect different views from possibly diverse participants and categories (Fusch and Ness, 2015).

Therefore, this study generated data from different residents of Karama, Kiruhura and Mwendo settlements based on their daily responsibilities and activities. I pre-expected that different participants' experiences and contexts could provide different views on how messages should be better communicated to influence COVID-19 preventive consciousness.

In this regard, I collected participants' experiences in interpreting and responding to the pandemic preventive messages in focus group discussion settings. This data collection technique has also been motivated by its virtue of allowing people to exchange in their natural context (Pitout, 2009b).

The following are the criteria for inclusion and exclusion:

Table 4.1: Inclusion and exclusion criteria for FGDs

Inclusion criteria (for men and women)	**Exclusion criteria**
Must be a resident of one of the Mwendo, Karama, or Kiruhura settlements between March 2020 and December 2022	Has not resided in one of the Mwendo, Karama, or Kiruhura settlements between March 2020 and December 2022
Aged 18 years and above	Below 18 years old
Married or is the head of a family	Is not married or is not the head of a family
Speaks and understands Kinyarwanda	Does not speak or understand Kinyarwanda
Is mindful of discussing their COVID-19 lived experience.	Have mental problems
Is willing to participate and accept to sign the consent form	Is not willing to participate or does not agree to sign the consent form
Inclusion criteria (for the youth)	**Exclusion criteria**
Must be a resident of one of the Mwendo, Karama, or Kiruhura settlements between March 2020 and December 2022	Has not resided in one of the Mwendo, Karama, or Kiruhura settlements between March 2020 and December 2022
Aged between 18 and 30 years	Not aged between 18 and 30 years
Single	Married
Speaks and understands Kinyarwanda	Does not speak or understand Kinyarwanda
Is mindful of discussing their COVID-19 lived experience.	Have mental problems
Is willing to participate and accept to sign the consent form	Is not willing to participate or does not agree to sign the consent form

4.9. Data collection methods: Focus group discussions

Focus group discussions (FGDs) were facilitated to analyse how COVID-19 prevention messages were interpreted and reconstructed in various Rwandan crowded areas. FGDs are

"dialogic events within which power relations between researchers and research participants are diminished, and people collectively interrogate the conditions of their lives to promote transformation" (Kamberelis, Dimitriadis et al. 2018:1196). By investigating the conception of community experience and the agreed sense (Kamberelis et al., 2018), they help to gain various perspectives on the phenomenon being studied by stimulating intersubjective threads of evidence from a group of people(Pitout, 2009b; Fusch and Ness, 2015). Therefore, they offered a real way of looking at the contextual interpretation of COVID-19 messages in the three communities. In addition, the FGDs helped me to clearly understand the views of community members on how they engaged in dialogical principles to adapt messages to their context and how the community context influenced individual conscious development and dialogue.

The use of focus group discussions (FGDs) at the community level is motivated by the fact that most reviewed research adopted quantitative frameworks, which do not apply to the FGDs, and look at reality as a result obtained by combining people's experience, correspondence, conversation and analytical differences (Kamberelis et al., 2018). Therefore, my judgment was influenced by participants' constructed ideas on how they engaged with and responded to COVID-19 prevention messages and how local contexts influenced prevention responses in Karama, Kiruhura, and Mwendo settlements.

Unlike many quantitative methods, such as structured questionnaires, focus group interviews allow researchers to collect multifaceted data as they provide opportunities to clarify questions or tease out vague but multilayered responses(Tulloch and Lupton, 1997). They further help researchers probe respondents' interpretation categories, cut off some discussions or interpretation efforts, and recognise indicative silence throughout dialogues. They also allow participants to enlarge their thoughts by enquiring about the interviewer's clarifications(Tulloch and Lupton, 1997).

Even though FGD findings are not subject to generalisation, a study using FGDs has to be strictly designed to ensure that collected data are credible and depict the real contextual situation in the studied locations (Tuominen, 2018). Therefore, for the current research, I ensured that the collected information authentically represents communication challenges, solutions, and opportunities in Kiruhura, Karama and Mwendo settlements to help assume that experienced COVID-19 communication conditions are similar to those in identical settings.

FGDs allow researchers to identify community members' issues concerning certain messages or channels by interviewing six to twelve persons (Pitout, 2009b). To this end, I facilitated three focus group discussions in the identified areas. In each research site, separate focus group discussions between men, women, and youth were conducted with a maximum of nine participants. In each group, 7-9 participants participated in one separate focus group discussion to reduce discomfort, get insight from each category and ensure they were less intimidated compared to a larger group of participants (Kruger 2015). Furthermore, considering that the problem under study crosses diverse living flairs, I combined different categories of occupation but considered the influence of seniority, gender, and age categories (Pitout, 2009b).

The stratification based on gender and age was motivated by the study design and intention to achieve a truthful environment where informants could speak and act normally and offer insight into their everyday communications (Tuominen, 2018). In addition, gender and age influence people’s opinions and how they interpret and react to messages. In the Rwandan culture, women feel intimidated to open up in public spaces and tend to hide some information in front of men (Chantal et al., 2017), while the younger generation interprets and reacts to messages differently due to their wide access and concentration on social media (Karekezi et al., 2021). In total, nine FGDs of 7-9 participants were organised in each of the three communities. There were exclusive discussions between men, women and the youth as per the following table, in which participants are identified by codes in M stands for man, W for woman, and Y for youth. Again, KI stands for Kiruhura, KA for Karama, and M for Mwendo. In addition, each participant is identified by letters varying from A to I.

Table 2.2: Focus group participants by gender stratification

Group	Number of participants	Date	Participant's Pseudonym	Gender	Participant's employment
Kiruhura Men	7	12/10/2023	MKIA		Entrepreneur
			MKIB		Religious community leader
			MKIC		Entrepreneur
			MKID		Community health worker
			MKIE		Casual worker
			MKIF		VillageLeader
			MKIG		Casual worker
Kiruhura Women	7	13/10/2023	WKIA		Entrepreneur
			WKIB		Community Health Worker
			WKIC		Casual worker
			WKID		Casual worker
			WKIE		Stay home mom
			WKIF		Council member
			WKIG		Religious community leader
Kiruhura Youth	8	14/10/2023	YKIA	F	Youth Volunteer
			YKIB	F	Student
			YKIC	F	Casual worker
			YKID	F	Unemployed
			YKIE	M	Casual worker
			YKIF	M	Entrepreneur
			YKIG	M	Youth Leader
			YKIH	M	Student
Karama Women	7	19/10/2023	WKAA		Entrepreneur
			WKAB		Women Leader
			WKAC		Casual worker
			WKAD		Casual worker
			WKAE		Stay home
			WKAF		Community health worker
			WKAG		Council member
Karama Men	8	20/10/2023	MKAA		Village Leader
			MKAB		Entrepreneur
			MKAC		Casual worker

			MKAD		Community health worker
			MKAE		Religious leader
			MKAF		Entrepreneur
			MKAG		Casual worker
			MKAH		Stay home
Karama Youth	8	21/10/2023	YKAA	F	Student
			YKAB	F	Unemployed
			YKAC	F	Youth Leader
			YKAD	F	Religious leader
			YKAE	M	Youth Volunteer
			YKAF	M	Entrepreneur
			YKAG	M	Casual worker
			YKAH	M	Student
Mwendo Women	7	26/10/2023	WMA		Casual worker
			WMB		Casual worker
			WMC		Council member
			WMD		Stay home
			WME		Community Health Worker
			WMF		Religious Community Leader
			WMG		Entrepreneur
Mwendo Men	9	27/10/2023	MMA		Casual worker
			MMB		Entrepreneur
			MMC		Entrepreneur
			MMD		Religious community leader
			MME		Village leader
			MMF		Stay home
			MMG		Stay home
			MMH		Casual Worker
			MMI		Farmer
Mwendo Youth	9	28/10/2023	YMA	F	Student
			YMB	F	Casual Worker
			YMC	F	Casual worker
			YMD	F	Entrepreneur
			YME	F	Religious group leader
			YMF	F	Unemployed

			YMG	M	Youth leader
			YMH	M	Student
			YMI	M	Youth volunteer
Total number	**70**				

4.9.1. Focus group process

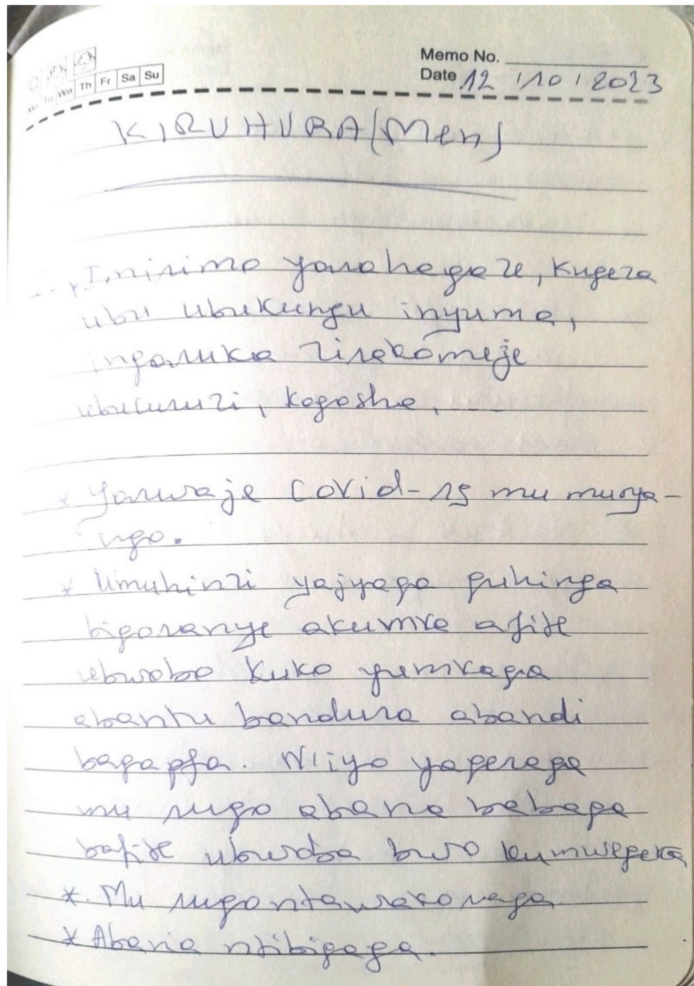
The focus group participants were members of the three communities that experienced the messages communicated to the public by the MOH through RBC, thus mirroring the ordinary message interpretation. Therefore, they offered a real way of looking at the contextual perception of COVID-19 messages in the three communities. In addition, the FGDs helped me to clearly understand the views of community members on how they related them to their culture or were influenced by dialogical principles to adapt them to their context.

To introduce discussion, the moderator must establish a welcoming and truthful environment(Pitout, 2009b). Therefore, as the current investigator, who also played the moderator's role, I assured participants that all views, even if different, were right and welcome and that the discussion was an informal gathering where everyone was free to speak without even requesting an invitation. I also explained that the session was being recorded and requested their permission to record information, and took notes of the conversations between participants.

Firstly, I requested participants to discuss their understanding of messages as awareness or the first step in the process of conscientisation. Secondly, participants discussed how they critically perceived their cultural and contextual situation towards the communicated messages and how they spoke about them, in the dialogue stage. Thirdly, participants discussed the process of communicating internally in the community, and I noted how the dialogical principles evolved as the third stage, known as authentic words. Lastly, they further discussed how dialogue and conscientisation could influence their perceptions and engagement in preventing COVID-19 and future pandemics, similar to the last stage of conscientisation or transformation.

As researchers, moderating such discussions must be self-disciplined (Pitout, 2009b) and control their gaze; I was conscious of my social and behavioural change communication gaze and tried to interpret participants' opinions in regard to their contexts with little influence. I also withheld my opinions and observed respect and attention to not interrupt or criticise participants' opinions.

To keep participants fresh and for an effective flow of ideas, mineral water was served at the beginning of discussions. Also, non-alcoholic beverages and snacks were served at the end when closing up and thanking participants. There were three focus group discussions per site during October 2023, and none of them exceeded ninety minutes. Discussions were recorded, but I also took notes of important information. Below is an extract of my field notes.



Mo Tu We Th Fr Sa Su

Memo No.

Date 12 /10 / 2023

KIRUHURA (Men)

* Imirimo yarahagaze, kugera ubu ubukungu inyuma, ingaruka zirakomeje ubucuruzi, kogosha, ...

* Yarwaje COVID-19 mu muryango.

* Umuhinzi yajyaga guhinga bigoranye akumva afite ubwoba kuko yumvaga abantu bandura abandi bapfa. Niyo yageraga mu rugo abana be babaga bafite ubwoba bwo kumwegera

*. Mu rugo ntawakoraga.

* Abana ntibigaga.

Figure 4.1: Field notes made during FGDs, verbatim in the local language (Kinyarwanda)

Later, the recorded information was transcribed and then translated into English with the help of a translator. Both steps are described further in the data analysis section.

4.10. Data analysis

This study's data were analysed manually by applying reflexive thematic analysis (Braun and Clarke, 2022). Firstly, thematic analysis refers to " a method of identifying, analysing and reporting patterns (themes) within data" (Braun and Clarke 2006:79), and responding to research questions. This process begins by transcribing spoken accounts to facilitate their analysis and involves the generation of initial codes and theme identification by carefully re-reading data (Braun and Clarke, 2006; Clarke and Braun, 2013). Each theme expresses significant ideas in relation to the research questions and embodies approximately similar meanings and responses within a set of data (Braun & Clarke, 2006:10).
Adopting Braun and Clarke's (2022) process of analysing themes, I actively engaged with the data that were produced through focus group discussions.

I also preferred thematic analysis to other qualitative methodologies because it is flexible, easily accessible, and applicable to different types of theories (Clarke and Braun, 2018). Thematic analysis is reflexive when it recognises the researcher's subjective value and awareness of oneself (Braun and Clarke, 2022). It mainly embodies the term reflexivity, which involves "the practice of critical reflection on

In analysing collected data, I followed the six stages of thematic analysis (Braun and Clarke, 2022) as demonstrated by the table below.

Table 4.3: Steps of thematic analysis

	Step	Description
1	Familiarisation with the data set	I familiarised myself with the dataset by re-reading transcribed information from focus group discussions and noting preliminary insights with regard to the research aim and questions.
2	Data Coding	I inscribed codes to all information in my role as a researcher, and my research practice and process" (Braun and Clarke, 2022: 46). Therefore, this type of analysis fully satisfies the values of the qualitative and interpretive paradigm that is informing the current research that aims at analysing people's experience in interpreting and communicating COVID-19 prevention messages. I re-read the data set and then organised and put together the codes and applicable citations.
3	Initial subthemes generation	I examined and grouped codes as the starting point in the development of initial subthemes. I then organised data into the relevant evolving subthemes. Subthemes increase the researcher's ability to work with data and to examine the feasibility of each evolving subtheme.
4	Theme development and review	I reviewed group codes and initial subthemes to develop themes, and at the same time, split, combined, or discarded some of the subthemes that share the meaning to highlight the principal idea. I then classified data into themes that were grouped together to generate responses to the leading research questions.
5	Refining, defining and renaming themes	I thoroughly examined every single theme, found out the background, facts, and centre of interest, and thus defined the story of every theme.

6	Writing up	I spun together the analysed story and extracts of data to further contextualise the analysis with reference to the current literature.

Adapted by the researcher from (Braun and Clarke, 2022).

For the final analysis, the raw data were subject to the six steps of thematic analysis as detailed below.

4.10.1 Familiarisation in reflexive thematic analysis

This is the starting stage in reflexive thematic analysis, which I started by literally writing out and re-reading all the recorded audio data from FGDs. I first transcribed data in Kinyarwanda, the local language of discussion, before translating it into English with the help of a professional translator. During the translation process, which I thought would be much easier with a new intervention, I had to stay closer and consult with the translator to ensure accuracy. Below is an example of my Kinyarwanda and English transcripts extracted from the women's FGD held in Karama on October 19th 2023:

WKAA: "Amakuru menshi nyakura aho nkorera."

WKAF: Nshobora kumara ukwezi ntarabonana cg ngo nganire n'uwo duturanye.

Amakuru ku buzima ahujwe n'iterambere bagezeho cg bifuza yakumvikana kandi agakwira vuba.

WKAC: "Ubutumwa kuri COVID-19, bwavugaga kwirinda ntibuvuge ku hazaza cg ibizakurikiraho."

WKAF: "Mu matsinda tuganira ku bintu byazamura imibereho yacu. Mu mugoroba w'ababyeyi tuganira ku burezi n'imyigire y'abana bacu tugamije ko bakura bakaba abakire, bakabaho neza natwe bakaduteza imbere."

WKAA: " I access more information at work."

WKAF: " It can take me more than a month without meeting or talking with my neighbour."

WKAC: "COVID-19 messages told us to protect ourselves, but never talked about the future or the way forward."

WKAF: "In our association, we mostly discuss our well-being. In the Parents Evening, we mostly discuss our children's education with the aim of ensuring they grow well, become rich, live and help us live better."

During the transcription and translation process, I got initial insight from the data. By involving myself in transcription, contextual understanding of participants' views is enhanced, noting every emotion or intonation in the speech (Morse, 2018). I familiarised myself with the data by reading and re-reading the two versions.

4.10.2. Data coding

After the familiarisation step, I manually assigned preliminary codes to the data based on stages of conscientization and the CCA constructs of culture, agency and structure as important outlines. The coding process allows researchers to identify, tag and focus on specific and important data which inform the research aims (Nowell et al., 2017). Here, I based my research on points of interest emerging from data and produced codes with reference to the research objectives and guiding theories. I systematically read the written data and assigned codes, which were organised in the form of a table, following how they are possibly related to the four stages of conscientisation. This process was a continuous interaction between qualitative data collection and analysis to ensure data clarity and quality.

The following table is an example of the first round of coding or initial codes:

Table 4.4: Initial codes

Awareness	Dialogue	Authentic world	Transformation
Codes Had part-time employment. Became Unemployed Poverty increased Much Hunger Difficult access to authorised jobs	**Codes** Need to be heard/ need of talks No meeting, no exchange	**Codes** Unexpressed feelings (fear, concerns,…) Unfounded knowledge about COVID-19'	Wish discussions among equals. Everyone should be heard. Need for a concrete explanation.
School closure Consequences of other sicknesses price highly increased An ordinary illness that couldn't last longer	Feeling of unshared problems (Lack of empathy) Unnegociated home living/abandonment Losing recovery Hope Needed an explanation of the problems Very late communication Inactive audience Waiting for the leader's instruction	Patients' isolation from others	Wish change in the process Use a megaphone very early morning Hung announcements on compounds and houses Use local what's up groups Talk about it in a community gathering/ inteko

In reflexive analysis, it is advised to have exploratory coding or assign a code to every information the researchers deem important, as they may need them as themes are not in place yet (Braun and Clarke, 2022). Those researchers further advised to do at least two rounds, and when possible, reverse coding style and order (Chasi, 2022). To this end, I coded all participants' ideas that were related to my theoretical constructs of conscientisation, dialogue, culture, agency and structure and kept all the codes for further analysis steps like grouping and

theme building. After the first round of coding, I re-read the data and coded again in reverse order to capture the maximum of information.

Table 4.5: Reversed Coding

wareness	Dialogue	Authentic worlds	Transformation
verfocussing the numbers of cases and	Leaders hunging announcements MY	Codes	Codes
ath MKA, MKI	CHWs reminding households		Should change megaphone and phone
ite and unclear communication MM	LL guarding the youth to not congregate	Passive listening MY / Humility	use YK
ite prevention efforts	Needed advices for some circumstances	Protection resulting from anxiety	Should segment audience per age, sex,
adio alone is not enough WM	Village L, Irondo and CHWs allowed	Residents feeling not responsible/	occupation, etc
sually address people in public space YK	visit MM	Had to listen and behave as instructed	Should explain clearly to a small group
sually Share message in associations	L Leaders repeating instructions	Thinking sharing required permission	Should let people ask whatever
K	Messages were enough WM	Calling & telling others broadcasted	Should request/ encourage people to ask
o source of clear information YKI	COVID every where/ nothing to add	msgs. MM	Should know people's daily life
OVID-19 as business for the wealth	LL and CHWs gave instructions/ urged	Call & ask if they knew	Should base communication on their
sgs displayed business interests	to abide	CHWs, Local and Isibo L visiting/	daily life
xisting Isibo's what's up group and	Same repeated information= not	adressing houeholds WM	Should use social media as alternative to
smart phone in every household	captivating	Community generated resource	meeting
nclear health msg=rumour MKI	Less discussed on understanding	YV reminding WK	Should use existing social media
sed to take health message as they are	COVID-19 YKA	Protected their relatives in home based	Visit house by house/ talk face to face
KI	Most discussed, Contradicting info	care. / Love	
	Parents talk to their children	Oly talked at home YKI	Need to urge residents to give opinions
	YV transmiting info from leaders	No access to outside discussions	MY
oving and caring about by community	YV checking obedience	Youth always blaimed	Need of means of discussion in
aders, CHWs YM	YV reminding to abide	Wished talk with medical staff or	neighbourhood and work force.
obile sound not reaching them	Chose to respect instead of discussing	recovered patients	Need of training/ means to communicate
equently	instructions MKA	Did not now channels for own ideas	digitally. MM
ave no smartphone	YV reminding instructions	Having little knowledge WKI	Need training on sharing knowledge
ere urged to protect by 3 means	LL repeating radio broadcasted msgs	Could not change, ask or talk about	Members must listen to leaders
ifficult to abandon old habits	LL inspecting and advising	instructions	Need leaders to be early informed W M,
nearly their habit= is easy to	Mostly discussed around job related	Had no one to ask	YK
nderstand/apply	change WKA, MKI	Had nothing to share/ needed to learn	Need to use face to face
heap = easy to apply	Rewrote msgs emphisise addressing	Hygiene club gave information MKI	" to use megaphone
revention measures' effects outscoring	Karama residents	Posted the new info on group to help	" to use CHWs
e pandemic	Used local resources to adapt msgs	Collegues	Late training
revention overlooked	Easily applied easier measures	Asked if they heared announcement/	Broadcasted msgs must be well
xisting many opportunity to meet/ talk	Disregard measures for lack of	Empathy	explained
eople used to meet and discuss	knowledge	Wrote &posted msgs to help those not	Wish others to also stop sharing drinks
outh used to meet in sport events	Need of talks/ dialogue YKI	understanding YM	Wish others to also observe social
ultural values prohibited MM	Difficult measures less discussed MKI	Not related to living conditions=less	distancing whenever meeting (i)legally
ormer impolite values encouraged	Complied instead of adapting	discussed MM	Communicating after a clause positive
	All lacked knowledge	L Leaders repeating instructions	case YK

4.10.3. Grouping codes for initial subthemes generation

Thirdly, after the second round of coding, I revised the codes and then grouped those that expressed connected information. At the same time, correcting errors in naming. This was a long process that led to the generation of initial subthemes.

Table 4.6: Grouped code for subthemes

Cultural perceptions	Use of channels	Perceived meaning
Difficult to abandon old habits YM Cultural values prohibited MM Former impolite values encouraged MM Normalised taboo MKA Mourning alone MKA Talk generating values prohibited WM Prohibited physical meeting WKI Missed friends YM Inability to cheer up YM **(About cultural norms: norms prohibited and supported taboos)**	Usually address people in public space YK Used to speak aloud WKA Usually Share message in associations MK People used to meet and discuss YM Youth used to meet in sport events YM Youth more interested by entertainment YKI Social media as the dominant source of info YKI TV and Radio as credible sources YKI **(Pre-COVID used channels)**	Were urged to protect by 3 means YM Overfocussing 3 measures MKA Quick and direct results to follow directly MM Prevented by only distancing, washing and masking WM Urged to stay clean WKA Urged to not touch WKA **(They were asked to…)**
Instructions contradicting with context MM, WKA Housing contradicting with distancing MKI Outside is not clearYKA Unclear measuresYKA Stay-home as double edged WM People suffering quietly MM Families of patients very challenged WM Not prevention, but closing their access to food MM Hunger as the dominant challenge/problem MM Growing anxiety MKA **(Difficult application of msgs/ Subsistence is a concern)**	Existing Isibo's what's up group and YKI Existing many opportunity to meet/ talk YM A smart phone in every household YKI Existing community mobiliser MM Can interact through mobile phoneMM Mobile phone to be used in teaching WM Easy phone calling MM Existing CL and CHWs WM Ownership of mobile phones Community channels of knowledge MKI Existing associations MKI, MKI Existing hygiene clubs MKI Megaphone used to tell/ remind WKI **(Existing, not used channels/ Opportunities)**	COVID-19 is business for the wealth YKI COVID-19 is a lie WKI COVID-19 was for the whites MKI Radio relating it to foreigners MKA COVID-19 could not reach them MKA COVID-19 target The old WM Covid spread through respiration WM Sensitised to prevent unknown disease YKI **(Perception of COVID-19)** Msgs displayed business interests YKI Stars known for advertising YKI Sketch as jokes YKI Promotion of own songs YKI Exageration in content YKI, MKA **(Perception of messenger and format)**

In grouping codes, I further examined codes to generate initial subthemes or outlines of comprehensible thoughts embodying one general idea (Braun and Clarke, 2021). Based on this idea, I critically engaged and interpreted data, linked data with codes and created an initial relevant subtheme; then linking these sub-themes with supporting extracts from the data set.

Table 4.7: Grouped codes and generated sub-themes

Codes	Sub-themes	Extract
Culturally visit a sick relative MKI. Usually meet when they miss MKI Cleanness is their cultural habit MM, MKA Visiting, talking humorously is their social hobby MM Closeness is their cultural habit WM Tradiditionaly Only children stay home MKI Preferred their habit MKA	**Cultural values**	MKIE: «My brother living in Kicukiro tested positive. One day, in the evening, I went there on foot, I visited him, came back kept quiet. I wanted to see how he is doing and also needed support from him." «I did not ask or inform anyone and did it in my own way." MKIF: " It was difficult to stay at home like a child, and we used to go out secretly". MMA:" We could not visit each other and talk humorously, while it is our hobby." MMC:" We usually like visiting and talking. When we meet and talk, we wish not to leave, it helps us much."

4.10.4. Theme development and review

Theme development and review consists of deeply analysing initial subthemes and better identifying and grouping codes and code categories for an initial theme that carries coherent meaning with reference to the collaborating data extracts (Braun and Clarke, 2022; Braun and

Clarke, 2006). I reviewed subthemes to better understand the data by identifying hidden meanings that should help me plan for an initial theme or a coherent presentation of findings. I further read the initial themes, revised and critically developed them into persuasive themes, ensuring proper assigning and categorisation of codes, proper tagging and definition of themes and subthemes. This step helped me initiate, remove a theme, or find the most suitable extracts in the data.

Table 4.8: Theme development and revision

Codes	Subthemes	Theme	Extract
COVID-19 is serious diseases **WKI** A global pandemic WM COVID-19 is business for the wealthy YKI COVID-19 is a lie WKI COVID-19 was for the whites MKI Related to foreigners MKA COVID-19 could not reach them MKA COVID-19 target the old WM Covid spread through respiration WM Unknown last days' disease YKI	**COVID-19 is serious, a lie, a business, global, for the old, for foreigners, …**	**I. Contradictory perceptions of COVID-19, preventive messages, and responses**	WKIC: "Some people considered it as serious pandemic and protected themselves, and for us who thought it was for Chinees, it hardly affected us." YKIF: " Some people said that it is a business of the wealthy and it remains the same till today because we didn't know how it ended." YKIE: "You should glance at soap advertisement" WKIB: " They said that even bringing people in the treatment centre is a lie because they only feed them with fish and ginger-tea, and don't give them any medicine." MKIB: "At the beginning, they used to tell us news from other countries like Italy, Brasil, France, etc. And we thought that it won't arrive in Rwanda as because other news said that it is a whites' disease" MKID: "At the beginning we considered COVID-19 as a rumour or white's disease which can not reach our community." WMD: "They used to tell me, you who is , you will die first because it is mostly killing people aged around 60 years, you are its target because you are old." WME: "We could not find advice because it was a general problem as it was a global, we thought community health workers were also confused as one could teach us how to protect ourselves but test positive the next day, what cleared our hope."
Messages as instruction to abide with/ not to be adapted MKI Were instructed to protect by 3 means YM Overfocussing 3 measures MKA Quick and direct results to follow directly MM Urged to stay clean WKA Urged to not touch WKA Good understanding of hand washing YKI Disgusting earlier messages WKI Over-repetition of some messages YKA Laws requiring fines YM, YKI Contradicting info from media,digital and community sources YKA Msgs displayed business interests/ promotion of songs YKI	**Expert communication, contradictory sources, hidden business agenda, and doubting locals.**		YKAB: " We used to listen and abide with them. If instructed to be home at 19:00, you could not reach your home beyond that time. When instructed to wear a facemask or observe one metre social distancing, you do so." WKAB: "The messages urged us to stay clean and avoid touching on anywhere because the virus stays on objects." YKIB: Staying-home was the most difficult because it was not easy to stay with parents knowing that no one has gone to work and later bring food home. YKIE: It was easier to wash hands because it is their habit. WKIF: Messages were not related to their way of life and were disgusting at the beginning, " Do you know how it feels being obliged to stay at home , being not sick but as a responsible adult living off his work?" YMD: " All medicine is bitter, people's understanding required force and fines. I was once fined for not wearing a mask and called someone to give me the money because I was empty pocket." YKAF: "What I read on the internet was contradicting with what I got from the media." " The internet gave details about the cause of COVID-19 and possible cures." " Radio and TVs gave numbers of new cases and deaths in different countries. On their side, community members basing on their religious beliefs to say that it is the last days, while others said that COVID-19 was made in the laboratory. Even if I was challenged, I used to find articles providing more details." YKIB:" I thought that musicians were promoting their songs because they used to introduce messages with their own hits".

During this stage, I understood the meaning patterns found in the data set and then grouped the themes to generate responses to the leading research questions. In the end, the themes were still vague and needed to be refined again

4.10.5. Refining, defining and renaming themes

Theme refining is about the researchers defining and refining themes based on data aspects that most interest them (Braun and Clarke, 2021). It consisted of a thorough examination of every single theme, finding out the background, facts, and centre of interest, and thus defining the story of every theme. To this end, I defined and renamed the final themes, thus forming the basis for the findings by contextualising the themes based on the research aim, questions and guiding theories. Therefore, the perceptions of community responses to COVID-19 prevention messages through dialogue and conscientization were critically described through a concise and critical analysis of themes, allowing ideas to flow logically. For a detailed and in-depth description of findings on the studied issue, direct quotes were used.

Table 4.9: Theme refining, definition and renaming

Research question	Main theme	Sub-theme/s
1. What are the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda?	1. The community perceives illusory COVID-19	
	2. C-19 prevention messages perceived as impractical	Socio-economic concerns influence prevention efforts.
2. In what ways have local communities catalysed consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities?	3. Cultural norms influence trust.	
	4. Previous pandemic experiences mediate trust in the communication source	
3. In what ways have the dialogical principles been enablers or disablers of COVID-19 prevention messages in the settlements?	5. Community engagement is hindered by transmission issues	Community preference for dialogue.
		Desire to maintain friendship more than desire for self-protection.
		Conflict with desire and opportunity for engagement in COVID-19 communication
4. How can dialogue and conscientisation influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda?	6. Preference for basing on local systems of communication.	
	7. Preference for interpersonal over traditional media channels	

The fifth stage concluded with final themes and encompassed subthemes. The final themes are organised according to the research questions and theoretical aspects, per the table below.

The sixth and final stage was the write-up and consisted of *spinning* together the analysed stories and extracts of data to further contextualise the analysis with reference to the current literature.

In this way, a final report of findings with structured codes and themes was produced. Chapters 5 to 7 present findings, discuss them and provide a general conclusion for this research.

4.11. Research rigour and validity

In the current research, I used rigour and validity to refer to how research can be dependable enough by ensuring integrity in the research process. To maximise the chances of achieving rigour and validity, I referred to the principles of credibility, transferability, dependability, confirmability and authenticity in qualitative research (Lincoln, 2010; Guba, 1989; Jwan and Ong'ondo, 2011).

4.11.1. Credibility

Credibility refers to research findings being trustworthy, reliable and acceptable (Tracy, 2010). For qualitative research, credibility depends on the researcher's clear description of his/ her data analysis processes and the thick description of findings allowing readers to clearly see the research's need and relevance (Nowell et al. 2017:1). In this research, I ensured credibility by clearly describing the processes of data collection, giving necessary details on the flow of FGDS, and providing clear descriptions of each step in the reflexive thematic analysis− including giving illustrative examples to the readers.

4.11.2. Transferability

Transferability is achieved by making readers feel touched by the research story, which is connected to their personal situation; In this way, they tend to automatically assign the research findings to their situation (Tracy, 2010). This depends on how researchers provide complete facts about the study settings and participants. To this end, I gave an in-depth description of the data collection process and the study settings by describing the process of FGDs as well as the context of Kiruhura, Karama and Mwendo.

4.11.3. Dependability

Dependability is the quality of qualitative research whose methods and findings are consistent and enable other researchers to imitate them (O'Donoghue 2007). It can be achieved by the researcher's timely auditing of the entire course of generating data and producing the report (Seale 2000). In this research, I frequently assessed my process of data generation and ensured it was consistent and clearly described in the thesis. To this end, any interested researcher can follow and reproduce the same process.

4.11.4. Confirmability

In qualitative research, confirmability refers to the researcher's effort to manage personal bias by collecting and interpreting data based on grounded facts or events instead of his/her ideas (O'Donghue, 2007). To this end, researchers ensure providing enough evidence of not imposing their own ideas on participants. In this research, I listened to and interpreted participants' stories, abstaining from imposing or distracting them, thus making sure my position did not significantly affect findings.

4.11.5. Authenticity

Similar to sincerity, authenticity refers to the researcher being honest and transparent about personal biases, interests, weakness and their effects on the research process and findings (Tracy, 2010). I achieved authenticity by critically describing my role in the research through self-reflexivity.

4.12. Reflexivity in reflexive analysis

Reflexivity includes a routine reflection of the researcher's own perspectives, activities, and choices throughout the process of his/her study (Braun and Clarke, 2022). Reflection, aiming at considering their own viewpoints, helps investigators be conscious of the philosophical and theoretical assumptions informing their research and strive to ensure alignment between theories and the research exercise (Braun and Clarke, 2022).

During this study exercise, I ensured self-reflexivity, which is "considered to be honesty and authenticity with oneself, one's research and one's audience" (Tracy 2010:843). This is an important process during which a researcher acknowledges his or her own subjectivity, thus

not claiming to be objective (Gergen and Gergen, 1991). Researchers acknowledge their own positionality by critically questioning their choices along the research exercise, carefully examining research objectives and design, and employing data collection methods (Berger, 2015). In this section, I describe my interconnecting social positions and how they influenced how I view the world and others. I further explained how my personal experience and background shaped how I engaged in the research process, and with the collected data.

Therefore, self-reflexivity helped me not only relate my reactions to those of participants but also consider myself as a research instrument (Tracy, 2010), playing the role of moderator in focus group discussions.

4.12.1. Personal background

The personal background of the researcher is important at this stage because qualitative research supposes that a researcher must inform readers about their social positions before talking about experiences and actions in data collection and reports (Braun and Clarke, 2022). Primarily, I am a Rwandan woman studying at the University of KwaZulu-Natal. I was born in a rural area and currently reside in Kigali City. Being a Rwandan informed my choice of topic and location because Rwanda has been among the leading countries in the fight against COVID-19. The national communication interventions played a significant role in this effort, aiming to influence communities' preventive behaviours by disseminating messages through various channels and formats. These multi-format messages reached diverse communities, and I was particularly interested in analysing how these communities engaged with, interpreted, and responded to the messages within the context of their local socio-cultural and economic settings.

I am also a geographic outsider from the study communities, and being a PhD student places me in a privileged position, which requires humility and self-discipline to pay attention and value participants' ideas.

4.12.2. Researcher training and experience

In qualitative research, it is also important to clearly explain how your training and experience, disciplinary assumptions, and philosophy inform and shape the research (Braun and Clarke, 2022). I am trained in media and mass communication and have developed a personal interest and specialisation in communication for development and health communication, having undergone related advanced academic and professional training and undertaken related

responsibilities. As a communication professional, I am interested in how professionally developed messages are interpreted and communicated at the community level and in different settings. I have also learned that affected communities are the primary players in addressing a development and health problem, which inspired my interest to study how communities are involved in communication to influence pandemic prevention intentions. Also, I share the philosophical assumption that communication is like education, which means that acquiring and sharing knowledge involves developing consciousness through dialogue. This motivated my choices of theories and methods to analyse how local communities interpret and contextually engage in communicating dominant messages.

More importantly, from my communication experience, particularly as a former communication officer and member of the communication cell in the National COVID-19 Task Force Coordination, it is an opportunity to ensure clarity and credibility by accepting and dealing with how my personal understanding impacted the research process (Berger 2015), by consulting different authors and, more importantly, giving space to multiple and diverse voices of participants.

4.12.3. Reflexivity about the research process, data collection, and analysis

The research collected data in nine focus group discussions made up of participants selected from residents of Karama, Kiruhura, and Mwendo communities. I am a resident of Kigali city and explained my own position to participants during recruitment. I later noted my subjective emotions during and after focus group discussions and reflected on coding as well as the whole process of writing.

4.12.4. Reflexive Journal

One of the important tools of reflexive thematic analysis is the reflexive journal, which is a documentation and storage of ideas for further reflection, examination, and sense-making (Braun and Clarke, 2022). It was more important to this research as it helped me in situating my standpoint and reflections in the field before starting the study and remaining clearly aware of that knowledge, which applied to the research process reflexivity during data collection and analysis. To this end, I saved and used the journal to remain conscious and consistent in the research process and report to ensure data reliability (Berger, 2015). Equipped with the interpretive belief in the impact between the researcher and the social world (Kincheloe et al., 2018); the un-separation of facts and investigator's values (Kincheloe et al. 2018), noting that

the findings are always influenced by participants' socio-economic perspective (Denzin and Lincoln, 2018); the journal was helpful in collecting, coding and analysing data. It also helped me pursue and note tentative findings that emerged from data, tentative relations, and unexpected lines of enquiry to follow in future research.

4.13. Delimitation of the study

Depending on several reasons, research has multiple limitations. Primarily, this study aimed at exclusively analysing COVID-19 preventive communication and did not look at communication related to its vaccination. Secondly, by focusing on messages, dialogue and conscientisation at community levels, it looked at messages as experienced by participants but could not look at producers' experience. Also, the research could not study all the Rwandan communities and studied COVID-19 preventive communication in only three communities in Kigali, thus not being able to study situations in different African countries. Lastly, being qualitative, this study used a small sample, making it difficult to generalise its findings to bigger populations apart from its participants. Irrespective of the mentioned limitations, this study is still expected to contribute to the existing literature.

4.14. Ethical considerations

The term ethical comes from the word ethics, which means the guidelines and principles for conducting or performing certain activities (Creswell and Poth, 2016). Basically, there are ethical issues which guide researchers before, during, and after the data collection procedure. Therefore, while writing about the methodology used, a researcher must explain the steps undertaken to treat participants with attention, compassion, and recognition of their human being conditions (Oliver, 2014). To ensure ethics, I presented this research proposal for review by staff members at the doctoral colloquium from the Centre for Communication, Media, and Society (CCMS). Then, following comments that arose during the presentation and from reviewers, I amended the proposal until it was appropriate for submission and further presentation to the school-level colloquium before submitting it to the School of Applied Human Sciences Research and Higher Degree Ethical Committee for final approval and ethical clearance. Furthermore, I obtained the gatekeeper letter or permission from Kigali City to enter the communities and reach select participants, as indicated in Appendix 6. Another renowned

ethical value is the participants' informed consent, which obliges the researcher to make sure that participants are fully aware of the nature of the research, as well as their role in it, before voluntarily enrolling in it (Oliver, 2014). In this regard, participants were informed about the objectives of conducting this research via an outlined written statement (see Appendices 1 and 2) that accompanied a face-to-face introduction to the research. Considering that all participants were over 18, each voluntarily gave consent and completed a related form to enrol in the study. See the form in Appendix 2. In the same form, participants gave consent to use an audio recorder to record focus group discussions. To ensure individual anonymity and confidentiality, I used codes to identify participants. Lastly, I assured participants that the collected information will only be used for academic purposes.

4.15. Conclusion

Chapter 4 is related to the methodology followed throughout this research. It discussed the research paradigm approach and justified the use of qualitative methodologies to collect and analyse data. The chapter discussed the process of focus group discussion, the six stages of reflexive thematic analysis and explained the ethical guidelines followed in this research. The next two chapters present findings that emerged from data after concluding the reflexive thematic analysis.

CHAPTER 5

PRESENTATION OF DATA ON PEOPLE'S PERCEPTIONS OF COVID-19 MESSAGES

5.1. Introduction

The previous chapter explained the adopted methodology. The following chapters are related to data collected from focus group discussions. This research mainly focused on participants' stories, and after transcribing Focus Group Discussions, data were generated and analysed following the six steps of reflexive thematic analysis by Braun and Clarke (2022). Chapter five presents data related to the research questions: one, What are the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda? and two, In what ways have local communities catalysed consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities? Chapter six presents data related to research question three: In what ways have the dialogical principles been enablers or disablers of COVID-19 prevention messages in the settlements? And four: How can dialogue and conscientisation influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda? On the other hand, chapter seven discusses the findings and links them with this research theoretical framework and literature. In addition, chapter eight discusses this research contribution to existing literature, while chapter nine is a general conclusion for this research.

In the current chapter, findings are presented according to the following themes and embedded subthemes that emerged from the data:

Table 5.1: Final themes on perceptions of COVID-19 messages

Research question	Main theme	Sub-theme/s
What are the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda?	1. The community perceives illusory COVID-19	
	2. C-19 prevention messages perceived as impractical	Socio-economic concerns influence prevention efforts.
In what ways have local communities catalysed consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities?	3. Cultural norms influence trust.	
	4. Previous pandemic experiences mediate trust in the communication source	

5.2. Community perceives illusory COVID-19

With regard to the research aim, the current research first analysed community perceptions. This theme, "community perceives illusory COVID-19", displays findings related to participants' understanding of COVID-19. Discussing their perceptions of COVID-19, participants testified perceiving COVID-19 as a severe disease that could severely affect them, a lie, a business, a global pandemic, a disease for foreigners and whites, for the elders, fabricated or an unpreventable last-day disease. Firstly, some participants said they thought it was a real and serious disease which could damage their lives. As one participant said, some people thought it was a serious disease, and others ignored it as being for the Chinese. The following was extracted from Kiruhura women's narratives.

Few people considered it a serious pandemic and protected themselves, and we thought it was for the Chinese. (WKIC, October 13, 2023)

On the other hand, there were participants who first thought COVID-19 was a lie and did not care about preventive messages. They also considered it a business and still question its existence, drugless treatment, and end.

Some people said that it was a business of the wealthy, and it remains the same today because we don't know how it ended. You could even glance at soap advertisements in a call to wash your hands. (YKIF and YKIE, October 14, 2023)

They said that even bringing people into the treatment centre is a lie because they only feed them with fish and ginger tea and don't give them any medicine." (WKIB, October 13, 2023)

From much information that talked about other countries, they considered COVID-19 as a rumour, attributed it to foreigners, particularly white people and thought it would not reach their community, as per the following extracts.

In the beginning, we considered COVID-19 to be a rumour. They used to tell us news from other countries like China, Italy, Brazil, and France, and we thought that it wouldn't arrive in Rwanda, as other news said that it is a white people's disease. (MKIB, October 12, 2023)

They might have no prior information about COVID-19 cases in black communities, as they suppose residents of the above-mentioned countries are white. Those who believed it might reach their community thought it only targeted the elders.

They used to tell me: you who are 60 will die first, because it is mostly killing people aged around 60 years old; you are its target because you are old. (WMD, October 26, 2023)

Also, others thought it was a global pandemic, and no one could advise or give them enough information.

We could not find advice because it was a general problem, as it was a global one. We thought community health workers were also confused, as one could teach us how to protect ourselves, but test positive the next day. (WME, October 26, 2023)

In addition, COVID-19 was perceived in religious terms as one of the last days' pandemic, which cannot be prevented, as well as a virus manufactured in laboratories.

Firstly, we thought about what we had been learning from Holly books that in the last days, we will face different pandemics, and we thought that COVID-19 must be the first regarding how its prevention was complicated. We sometimes thought we should not make it to fully protect ourselves. (YKAD, October 21, 2023).

Another added

Others said that COVID-19 was made in the laboratory. (YKAF, October 21, 2023).

Preliminary findings in this section showed that participants had dominant perceptions that COVID-19 was not real, unpreventable, created, or for others, which indicates their ability to contextually make sense of the pandemic.

5.3. COVID-19 prevention messages are perceived as impractical

After the community's perceptions of the pandemic, it was necessary to analyse how they perceived its prevention messages. Data is presented according to the theme named: COVID-19 prevention messages perceived as impractical, and one subtheme: Socioeconomic concerns influence Prevention efforts. When they talked about COVID-19 prevention messages, participants said they had mixed perceptions, with some revealing that messages carried necessary preventive instructions, others finding them ambiguous and, to some extent, contradictory, which made them impractical because they faced socioeconomic limitations to their implementation.

Firstly, residents of the Karama, Kiruhura and Mwendo perceived COVID-19 prevention messages as essential instructions that would guide their protection efforts because they mostly urged them to protect themselves by observing social distancing, curfew, hand washing and face masking, and they obediently applied measures.

The messages urged us to wash our hands and avoid touching on anywhere because the virus stays on objects. (WKAB, October 19, 2023).

We used to listen and abide by them. If instructed to be home at 19:00, you could not reach your home beyond that time. When instructed to wear a facemask or observe one-metre social distancing, you do so. (YKAB, October 21, 2023)

Secondly, messages were first considered to be confusing because they not only carried instructions that were difficult to apply but were also not related to their way of life.

Uuh, imagine being obliged to stay at home when you are used to moving around in search of a job and money; you feel confused because you are not convinced and prefer to keep moving as usual. (WKAB, October 19, 2023)

More importantly, messages were coming from contradicting media, digital and interpersonal sources.

What I read on the internet was contradicting what I got from the media and community interactions. The internet gave details about the cause of COVID-19, and community members discussed possible cures. Radio and TV gave the numbers of new cases and deaths in different countries. I was challenged. (YKAF, October 21, 2023).

In addition, messages appeared debatable as they overlooked geographical delimitation on the one hand.

Here, we live closer to each other, even if everyone is in their own home. One could stand in front of their backyard, assuredly at home without face masks, then wear them if they need to go outside, while they should have been contaminated inside the settlement. (YKAH, October 21, 2023)

On the other hand, the contradiction between message intention and participants' social life was a challenge because participants struggled to satisfy basic needs and were also not convinced enough to stay at home instead of looking for jobs.

It was conflicting. Do you know how it feels to be obliged to stay at home, not being sick, but as a responsible adult living off his work? (WKIF, October 13, 2023)

It was exasperating and more difficult for the families of COVID-19 patients. We had to give him/her a personal cup and plate, which looked like stigmatising a patient (WMC, October 26, 2023)

This section indicates that apart from a contradictory understanding of COVID-19, participants also perceived its preventive messages as unapplicable instructions, while others doubted them because they were not relating to their social life.

After discussing COVID-19 and its prevention messages, participants discussed how residents responded. In their testimonies, some participants declared having behaved as instructed by experts and leaders or by enforcement.

We distanced each other because they said it spread through the respiratory system. When I got visitors, I gave them distanced seats. (WME, October 26, 2023)

Another added:

We listened and considered what leaders told us. (MMB, October 27, 2023)

Other participants had mixed expected and unexpected responses, which were noted in public spaces, where some were reminded to abide by measures.

You could note the difference in understanding when you go to public places and see how some are reminded to wash their hands or respect other preventive measures. (MKIB, October 12, 2023)

There were participants who did not want to comply, were hiding, forced or guided to abide by regulations.

There was no intention to protect oneself. Many people were misbehaving, and when standing near a hand washing station, you should notice people putting little water on their fingers as a sign of washing, while others were forced to wash their hands until COVID-19 restrictions were removed. (WKIE, October13, 2023)

With family and social motives, other participants were aware of the pandemic and its preventive measures but violated them to fulfil other social, cultural and family responsibilities.

My brother, living in Kicukiro, tested positive. One day, in the evening, I went there on foot, I visited him, came back and kept quiet. I wanted to see how he was doing. I did not ask or inform anyone, and I did it in my own way. (MKIE, October 12, 2023)

In their talks, participants recognised circumstances-based decisions to violate measures.

One could illegally go to work so that he could feed his own family and fulfil his parents' responsibilities. Additionally, because many of the residents do occasional jobs, they could find a few, such as hair cutting, dressing, and urgent house renovation after heavy rains. (YKAF, October 21, 2023)

In addition, responses involved calculations as participants had to examine the presence of enforcers, personal interests and the price of personal protection materials. For example, they perceived business and job-related promises to apply prevention measures.

When they said that after protecting ourselves effectively, we would return to work, we respected all the prevention measures. For example, no motorcyclist should wear a facemask ineffectively. (WKIB, October 13, 2023).

Other participants used to only abide by prevention measures when seeing enforcers around.

You could remove and pocket your face mask when enforcers were not around. (MKAG, October 20, 2024)

Some people obeyed the instructions they agreed with and secretly disregarded those that they did not agree with.

I complied with them, and for those I did not agree with, I could do the opposite in hiding. (MKID, October 12, 2023)

Also, participants used to meet illegally and visit at night when missing each other.

You should miss someone and visit him/ her at night. (MKIC, October 12, 2023)

At the same time, others used prevention materials inappropriately depending on current prices.

In the beginning, we used to wear a 1500frw single-use face mask. We used to wash and reuse it, while it was supposed to be used once before the arrival of affordable handmade face masks. (MKAE, October 20, 2023)

Per the presented data, residents perceived COVID-19 messages as impractical because they carried instructions that were difficult to apply, came from contradictory sources and contradicted with their social life. Community perceptions of the unreal pandemic and impractical messages led to variation in community responses, with some participants abiding by instructions, others calculating and responding depending on the expected reward, enforcement, and price of materials.

5.3.1. Socioeconomic concerns influence prevention efforts

Apart from people's perceptions of COVID-19 and responses to its preventive messages, this section displays results related to the influence of contextual limitations on perceptions of COVID-19 preventive messages. Per discussions, people faced socioeconomic constraints which were overlooked in one-size-fits-all messages. On the contrary, socioeconomic constraints influenced people's decisions to respond to the pandemic and its prevention messages by prioritising the satisfaction of their basic and emotional needs. Per participants, many of the residents were self or day by day employed, and COVID-19 prevention measures stopped or interrupted their jobs, and they quickly ran short of food supplies. Consequently, many opted to violate measures and go out.

We went out of stock quickly because we could not go to work. You had no other choice but to go out and find a means of feeding your children. (WKAC and WKAB, October 19, 2023)

Also, prevention messages overlooked people's dependence on daily jobs and their must-work style, which forced many to relocate to rural areas, thus dispersing them.

Many people had daily jobs and rented houses. They left and returned to their rural roots, and we never met again; it dispersed us. (MKIB, October 12, 2023)

Some participants testified to challenges relating to accessing authorised jobs, such as farming for urban residents:

As a farmer, it was difficult to get to my job because they sent us back home. (MKIC, October 12, 2023).

The same happened to Mwendo and Karama participants, who also had to carry farming materials or shopping bags to access related jobs. In addition, they perceived their access to other health services as limited. Those included transport to and from hospitals regardless of their financial ability, as was the case with this young lady from Mwendo:

Going to the hospital was not easy. I was nine months pregnant when the lockdown started; I did not find a moto or taxi to bring me to the hospital quickly; I walked to and from the hospital while I was able to pay for transport. (YMC, October 28, 2023)

Another participant from Kiruhura added that they always prepare for birth by keeping money aside and getting support from families, all of which was difficult during the COVID-19 outbreak.

When you see a sign of birth, you always have side money and directly think about calling a taxi. How could you get it if they were not working? After birth, you cannot get transport back home, and no one should come to award[6] you. (WKID, October 12, 2023)

They further reiterated that people could have the money but not find a car, children's clothes, and other birth items.

Also, participants who expressed that messages focused much on the pandemic and felt as if they were divorced from their future aspirations.

COVID-19 messages told us to protect ourselves, but never talked about the future or the way forward. (WKAC, October 19)

From participants' discussions of COVID-19 prevention experience, they testified that residents experienced growing anxiety. COVID-19 patients experienced emotional complications related to isolation, stigma, and home abandonment. One of the participants described her home-based and hospital experience suffering from COVID-19.

[6] Awarding is a cultural ceremony in which families, neighbours and friends visit new parents to bring them economic support. Particularly, the mother's family must organise one in which they bring drinks, food, milk, clothes and more things that a mother can need to properly feed and care for the baby.

For example, when you were contaminated with COVID-19, it could take like 3 weeks, a month or two without returning to your home. I contracted COVID-19 during the second lockdown and stayed in the Tumba Treatment Centre located in the Northern Province for three weeks after another two weeks in home-based care and isolation without any other contact with people. I made a considerable backwards move at both health, professional and mental levels. (WKIC, October 13, 2023)

Other participants felt much pain, lacked support and felt abandoned in hard times when one of their relatives fell severely sick or died.

Those whose relatives fell sick or died could not be visited or supported, and the situation was more difficult when it was upcountry, where you could not even bury your parent; only those who were around could attend the funeral. Culturally, friends and relatives visit, support, and mourn with the family of the deceased. At that time, no one could mourn with you face-to-face. Imagine mourning the death of your parent alone; the pain was doubled by thinking that no one would visit you. (WKAF, October 19, 2023)

Apart from prevention-related social issues, people were anxious about marriage, which used to be a highly valuable event and postponing it used to be a taboo. In addition, the youth perceived a wedding with a limited number of participants as unpleasant.

Those who had wedding ceremonies could not marry; some were postponed, others married illegally, and others had unpleasant ceremonies due to restrictions based on the number of participants. (YMB, October 28, 2023)

Per the above findings, participants faced economic challenges due to their contextual situation being overlooked through a detached fit-all-all messaging and silently felt related emotional anxieties.

5.4. Cultural norms influence trust

Believing that culture constitutes a foundation for meaningful health information, this research aimed to analyse cultural aspects that influenced the perceptions of COVID-19 messages as well as how they are, at the same time the local foundation of meaning negotiation, communication and behavioural intentions in Kiruhura, Karama and Mwendo communities.

Data presented per the theme named: cultural norms influence trust, are related to the community's prohibited norms and supported taboos.

During discussions, participants confirmed having related COVID-19 preventive procedures to their customs and having thought that the community norms were prohibited. For example, visiting and exchanging humour is a hobby for Mwendo residents who are dependably attached.

We could not visit each other and talk humorously, while it is our cultural *hobby. (MMA, October 27, 2024)*

We usually like visiting and talking. When we meet and talk, we do not want to leave as it helps us much. (MMC, October 27, 2024)

In contrast, COVID-19 preventive messages advised them not to visit and to distance each other.

The messages told us not to get close but to distance ourselves from each other, not greet each other, and frequently wash our hands. (MMB, October 27, 2023)

Other participants emphasised the importance of handshaking and hugging and how the two customs add a savour to their local interactions, expressing how they were not comfortable when not greeting properly, and it was difficult to talk or share a drink.

Handshaking and hugging are our cultural norms. Standing and just saying good morning was so annoying that you were internally forced to extend your hand, and you could sometimes forget to quit. We were not comfortable with messages that were against some of our cultural values. (WME, October 26, 2023)

Another added:

Sharing food and drink is our culture. But how can you drink with a person you did not greet? (WMB, October 26, 2023)

Also, some participants said they were frustrated to find their cultural values prohibited, while taboos and formerly impolite gestures were encouraged.

In the Rwandan culture, people meet and hug. It was prohibited, and we abided. Irrespective of having missed each other, we used elbow greetings like the stars, and it used to be impolite. (MMF, October 27, 2023)

We used to handshake and hug each other, and we were surprised to hear that we should not touch each other. (MKA, October 20, 2023)

You usually go to a neighbour, greet them, sit, and you both enjoy a dialogue. You could also inform each other, and both decide to attend a community meeting. But such talks and meetings were not allowed. (WMC, October 26, 2023)

In addition, visiting a sick relative is a must for Kiruhura men, who usually meet whenever they miss each other and for whom only the sick and young children traditionally stay at home.

Also, we are obliged to visit a sick or mourning neighbour, and no man stays home like children. At least you go out to check what is happening. (MKIC, October 12, 2023)

On their side, the youth from Mwendo found it difficult to prevent COVID-19 and cheer up with colleagues.

We could not cheer up with our colleagues. We usually cheer up through sports and entertainment activities. We could not cheer up and prevent COVID-19 as it required us to stay at home. (YMI, October 28, 2023)

Per the findings, there are cultural principles for greeting, sharing, meeting, visiting, and supporting the sick or mourning families, which affected community trust in messages. On one hand, participants struggled to follow COVID-19 preventive messages, which were against their cultural values and not abiding by values has long been considered a taboo. On the other hand, participants behaved according to messages but missed the opportunities embedded in cultural values.

5.5. Previous pandemic experiences mediate trust in communication sources

Apart from the participants' discussion of their COVID-19 experience, a link between their thoughts and their previous perceptions about pandemics and related messages was noted. Their thoughts are presented through the theme: previous pandemic experiences mediate trust in communication sources. Participants revealed how people used to think about health messages in the past, with their trust resulting from concrete checks and the possible perception of the message as a rumour or impossible, may it had no concrete examples.

Current citizens believe that after concrete checks, if you don't discuss with concrete examples, your ideas are considered forged lies. (YKIH, October 14, 2023)

In the same line of thinking, a participant from Karama added that instructing messages without applicable examples used to be not easily welcomed and required reminders and surveillance, which should lead to people thinking of escaping.

We have been pretty sure that instructions are hardly welcome and require reminders. But surveillance can generate the intention to escape. (MKAG, October 20, 2023)

In their pandemic experience, people revealed having determined credible sources of information both at the community and media levels. Locally, they proved to trust local leaders and community health workers who used to care for them and advise them on how to protect themselves against different illnesses.

We trusted community leaders and health workers who cared for us and urged us to protect ourselves. (YMB, October 28, 2024)

Talking about mediated messages, Kiruhura participants revealed that they only trust information given by leaders and medical staff in the news and also valued testimonies from recovered patients.

I trusted messages that were given by medical staff or leaders in the news. We wished to talk with medical staff or a recovered patient. (YKIE, October 14, 2023)

Other participants' perceptions of messages depended on who they featured and their previous reputation in affected communities. For example, some participants linked messages to film actors who used to act in adverts and thought they were promoting goods, their music or playing films and comedy.

When the messages featured the stars, I thought they were in their daily advertising and promotion of goods, playing films or comedy. YKIH, October 14, 2023)

Other participants declared considering what comedians say as jokes, they talk as if it is comedy and that musicians' introduction of messages with their own beat brought in the perception of the message as promotion of the same song.

In addition, Karama residents' trust was limited by the perceived exaggeration. For example, they questioned the idea of measuring where to stand.

They sometimes exaggerated. For example, one brought a tape measure and measured where he was going to stand, and I wondered how people could always take a length measuring tool with them when going out. (YKAF, October 28, 2023)

Others found measures debatable and decided to implement them only following their own understanding.

Sometimes, there were exaggerations like wearing a face mask and throwing it away after a few hours, while wearing the same outfit for a whole day! We even asked ourselves how we could get a mask at such a high price to wear it once and throw it away. (MKAE, October 20, 2023)

Per the findings, people's experience with previous pandemics silently affected their trust in COVID-19 messages as they critically referred to previous networks of trust.

5.6. Conclusion

This chapter presented data collected during FGDs. Data were presented per four themes and embedded subthemes, which were also formulated according to the participatory communication and culture-centred approaches. It presented initial findings generated by the analysis process that was guided by the methodological approach discussed in Chapter four. In this chapter, I linked data collection and analysis to document participants' ideas related to their perceptions of COVID-19 prevention messages and the influence of their local contexts. According to the initially presented findings, participants shared that they perceived illusory COVID-19, difficult-to-apply measures, and socioeconomic limitations. While their perceptions were influenced by their cultural norms and pandemic experience.

CHAPTER 6

PRESENTATION OF DATA ON DIALOGUE: COMMUNITY ENGAGEMENTS HINDERED BY TRANSMISSION

6.1. Introduction

The previous chapter explained community perceptions of COVID-19 and its preventive messages. The current chapter mainly focuses on how communities were engaged in communicating and preventing the pandemic, and their proposition for better engaging communities in dialogue for pandemic conscientisation. Findings are presented according to the following themes and embedded subthemes that emerged from the data:

Table 6.1: Final themes on dialogue

Research question	Main theme	Sub-theme/s
In what ways have the dialogical principles been enablers or disablers of COVID-19 prevention messages in the settlements?	5. Community engagement is hindered by transmission issues	Community preference for dialogue.
		Desire to maintain friendship more than desire for self-protection.
		Conflict with desire and opportunity for engagement in COVID-19 communication
How can dialogue and conscientisation influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda?	6. Preference for basing on local systems of communication	
	7. Preference for interpersonal over traditional media channels	

6.2. Community engagement is hindered by transmission issues

To analyse how dialogue influences pandemic perceptions in Rwandan communities, this theme: “community engagement hindered by transmission issues”, presents the appearance of

the dialogical principles as enablers and disablers of dialogue and conscientisation in Kiruhura, Karama and Mwendo communities. Per the findings, community engagement in the three communities was dominated by the transmission relationships, even if residents preferred dialogue. In addition, they desired to maintain their friendship more than to protect themselves, and their hope to participate in COVID-19-related dialogue was limited by the lack of dialogical and empowerment opportunities. Data in this section are presented according to the following subthemes: community preference for dialogue, desire to maintain friendship more than desire for self-protection, conflict with desire and opportunity for engagement in COVID-19 communication.

During discussions, participants revealed that communicators engaged in transmitting officially mediated versions of information, assuming others don't know it.

We used to call neighbours. You could ask them, have you heard what was announced on the radio? I used to inform my neighbours about what I saw on the TV, as they might not have seen it or might not own a TV. (MMH, October 27, 2023)

They also circulated announcements or reminded people of the central prevention guidelines, irrespective of the community perspective.

As a leader, I had to circulate printed announcements in the community. We communicated daily by telling people how to behave, how to stay distant, and how to wash hands with proper water and soap,…. (MME, October 27, 2023)

Per their discussion, participants humbly recognised their limits, as they listened to leaders or waited for what leaders had decided; thus realistic about leaders and their own responsibilities.

We did not think about it. We listened to the media and followed what our leaders had planned. There was no need to discuss this; we had heard radio announcements. (WKAD, October 19, 2023)

Additionally, participants expressed having been controlled by community leaders, youth volunteers and community health workers who transmitted, gave, and reminded instructions.

Groups of youth volunteers stood near handwashing stations and requested every passenger to wash their hands before passing, and reminded everyone to wear a face mask before moving out. (YKAA, October 21, 2023)

On the other hand, community members also reproduced and printed messages, assuming to help other members who did not understand them.

We took from our cooperative savings, reproduced, and printed messages that we hung on different blocks where everyone could read them. We thought that some individuals did not understand them well because they were not abiding by the instructions. (WKAA, October 19, 2023)

Following the above-mentioned quotes, during COVID-19, all communicators, including community members and influencers, responded by participating in transmitting messages teaching how to prevent or generate contextual responses to current problems.

6.2.1. Community preference for dialogue

From FGDs, participants expressed their need to learn more about the pandemic and how to better and effectively prevent it. For example, participants said they wanted to talk to medical staff and recovered patients for some details about circulating information that was not clear to them.

We wished to talk with medical staff or a recovered patient. (YKIE, YKIB, October 14, 2023)

In addition, they needed discussions to deal with specific situations, such as accessing water.

It appeared impossible at our water source. We used to stand in the pre-drawn circle for a one-metre social distancing, but sometimes it was impossible. The number of waiting people used to rise in the evening, and everyone started arranging themselves; no one could remember the one-metre distance, and we would sacrifice prevention measures to get water. (YMB and YMI, October 28, 2024)

Other participants testified that they wished to learn from people in identical situations. For example, Kiruhura men wanted to learn how to stay with, take care of and not stigmatise a COVID-19 patient while at the same time protecting themselves.

We wished to learn from others how to cohabitate with a patient who can die at any time, knowing that you can get contaminated and die; take care of and not discriminate against patients. (MKIB, October 12, 2024)

On the other hand, a woman from Karama who was once contaminated with COVID-19 testified that she wished to discuss with others how she had succeeded in protecting her family members by hand washing and masking when in a home-based treatment.

Hand washing and wearing face masks helped me protect my family when I tested COVID-19 positive and was in home-based care. I wish to discuss it with others (WKAB, October 12, 2024)

In addition, COVID-19-related dialogue could generate prevention hope, a source of answers to pressing problems, as was the case with this participant from Mwendo.

After the third jab of the COVID-19 vaccine, my arm got swollen. I was very anxious that it would result in cancer. I discussed it with my husband and neighbours, who advised me to go to the hospital to prevent more complications. I went to the health centre and got drugs that reduced all the pain, and it became normal within a few days. I left the Health Centre Free from all fear. (WMB, October 26, 2023)

The same applied to other Mwendo residents, for whom discussion about survival concerns helped them rethink their work and inspired them to review the objectives of their belonging and meeting in local saving associations, thus building on experience to plan for their future.

Per these findings, communities needed dialogue to face contextual challenges and improve their lives by building their future on their experiences, teaching or learning from other communities' experiences.

6.2.2. Desire to maintain friendships more than desire for self-protection

During discussions, present community members could not hide that they are interrelated and that their relationships guided each of their decisions, including those related to violating prevention measures, which implies that such issues should be discussed for better outcomes. This participant from Mwendo exclusively believed in friendship and visited his contaminated friend.

I once visited a positive friend; he ordered me to stay out; I entered, saying that if he died, we would go together. (MME, October 27, 2023)

Additionally, participants were aware of the pandemic and existing regulations but chose to violate some of them for love and support toward their colleagues. However, they remembered to observe other regulations to protect themselves.

For example, during lockdown, we were not in the same economic situation; sometimes, you could have some food and know that your neighbour did not have anything. Since they told us that with proper hygiene, you cannot contract COVID-19, I could wash my hands and the containers and bring them food. Arriving there, I served the food, observing social distancing. (MKIC, October 12, 2023)

In this regard, people visited and supported their neighbours or informed local leaders for further support, reviving their cultural collective identity overlooked by individual-centred prevention guidelines.

I remember one neighbouring young man who was about to die of hunger, enclosed in his small house, and could not reveal the problem to anybody because they had to stay strong as per our culture. I took the initiative to bring him food and informed local leaders of further support. (WKID, October 13, 2023)

Moreover, love influenced some members to overlook COVID-19 prevention guidelines. Participants from Kiruhura said that when there was love, they made arrangements to meet and talk. A woman from Karama testified having seen some people meet illegally to sell, drink and share alcohol.

Some were selling alcohol at home, while others brought alcohol boxes to sell them in agreed-upon surrounding banana plantations. People who drink alcohol love each other and like sharing. (WKAB, October 19, 2023)

These findings imply that people not only violated some measures to visit and meet, but they also observed a few other measures to protect themselves.

6.2.3. Conflict with desire and opportunity for engagement in COVID-19 communication

During group discussions, participants revealed that they wished to engage in dialogue but were not empowered enough and needed to learn more about the pandemic and its changing situation. For example, a community health worker from Kiruhura testified to having understood the measures but was challenged to explain them to local residents whose understanding differed.

It was understandable for me as a community health worker, but it was difficult to explain to people who said it is difficult to stay at home and prefer to get out and see what is happening. (MKIC, October 12, 2023)

On their side, participants emphasised how the instructional process reduced their hope for participating in dialogue, as they felt they did not have enough knowledge.

The process was about instructions to be only followed, and no one could change anything, ask or talk about them. We all had little knowledge. (WKIF, October 13, 2024)

For Mwendo residents, some instructions were easy to understand but difficult to apply and explain.

We didn't understand some measures because we behaved as instructed by leaders, and some instructions were difficult to apply because they did not bring any help. We could understand the meanings, but not have the means to implement and apply them. (MME, October 27, 2023)

Others discussed at home but had no clear explanation to give to children.

When we talked with our children, we could not explain to them why they were not studying." (MMC, October 27, 2023)

The youth hoped to talk, but thought it was not their responsibility and was not allowed.

We thought that it was the responsibility of leaders and community health workers to ensure that other residents were not allowed to move or talk about it. We had to listen and follow instructions. (YMD, October 28, 2023)

The above discussions imply that people wished to engage in dialogue but had limited capacity to participate in COVID-19-related communication and needed to be empowered.

6.3. Preference for basing on local systems of communication

In response to the research questions and objectives, this research sought to learn the participants' perspectives on improving communication for pandemic-related dialogue and conscientisation in Kiruhura, Karama and Mwendo Communities. Participants are advised to make use of local channels of communication that help them discuss. Their ideas are presented in a theme named: preference for basing on local systems of communication. Firstly, they recognised the existing grassroots leaders known as *Mutwarasibo* as potential enablers of pandemic dialogue.

We have lower grassroots leaders known as Mutwarasibo (1 per 20 households) with whom we like to discuss face-to-face. Discussing COVID-19 should also be easier.

Participants further emphasised their dynamic talks in local association meetings.

We are close, we are together talking and discussing is easier. When it is our association meeting day, we have an occasion to talk and listen to everyone's activities and experiences. (WKAB, October 19, 2023)

While Karama women perceived existing opportunities for dialogue and the ability to teach others how to protect their loved ones when in a home-based treatment, Mwendo youth thought that other communities had succeeded in the dialogical matters and wished to learn from them.

We would learn how local members share ideas. We used to hear that others have WhatsApp groups as one of the necessary dialogical resources. We can learn how to get and use smartphones for effective dialogue. (YMB and YMG, October 28, 2023)

In addition, participants suggested not only consulting with affected communities but also encouraging them to speak.

They could have been a way of encouraging and supporting community members to give their opinions and share messages respecting prevention measures. (YMI, October 28, 2023)

Since people felt not responsible and not empowered, they were advised to encourage them to ask.

I should let people ask whatever they need or ask them about their dominant questions. (YKAH, October 21, 2023)

They further stressed silencing structures and advised on how to deal with them. Those include focusing exclusively on prevention and not talking about the way forward, instructing messages and measures that do not support dialogue.

I would listen to them instead of giving orders. I would introduce a discussion between equals that can lead to a mutual understanding. (YKIB, October14, 2023)

More importantly, participants from Kiruhura and Mwendo proposed other strategies to increase dialogue. Those strategies include segmenting the audience, listening to and valuing residents' ideas, among others.

There might be talks, consider everyone's ideas and provide all necessary explanations instead of having chants and sometimes messages in the comedy form. (YKIH, October 14, 2023)

Another added that talks, sharing of concrete examples, and listening to individual ideas and wishes would be much easier if residents were segmented by age, sex, and occupation.

I should divide people into groups based on age, sex and occupation and talk with them in groups to increase the communication outcomes. (YKAH, October 21, 2023)

Back to their meet-and-talk cultural hobby, Mwendo youth preferred that the curfew time be reduced to let people share new pandemic-related information learned from the workplace with their neighbours.

In addition, participants said that leaders should be trained to talk with residents and facilitate pandemic-related discussions.

As the pandemic was noticed, they should have informed leaders earlier and empowered them to talk with the local communities. (WMD, October28, 2023)

In this regard, participants revealed that local interpersonal channels were overlooked but may facilitate dialogue. For instance, they attend and participate in their associations' meetings and weekly parents' evenings because they have the same interests and goals, which generate opportunities to discuss.

Messages should be shared in existing associations because we mostly discuss our well-being. In the Parents' Evening, [7] *we mostly discuss our children's education to ensure they grow well, become rich, live and help us live better. The same platforms may easily help us discuss our own health. (MKAA, October20, 2023 and WKAF, October19, 2023)*

From the above-presented findings, there is a need for utilising locally existing communication structures to engage residents of Kiruhura, Karama and Mwendo in communicating about pandemics by listening and encouraging people to talk and give their contextual opinions.

6.4. Preference for interpersonal over traditional media channels

Apart from local emerging opportunities for dialogue, participants discussed their dialogical experience before and during COVID-19, and the collected data are presented through the theme: preference for interpersonal over traditional media channels. They revealed that there are local platforms that should facilitate pandemic discussion and conscientisation depending

[7] A specific name for a weekly meeting that brings togetter parents inhabiting the same village in Rwanda to discuss social and development issues, especially in the afternoon.

on circumstances. Adults said that before COVID-19, they used to meet and discuss. Although the youth from Mwendo used to meet and talk at sports events, social media, especially Facebook, remained the main source of information for Kiruhura youth.

During COVID-19, radio and TV were used, and non-mediatic channels were neglected in the urban areas of Kiruhura and Karama. Per-urban/ Mwendo residents had no access to social media and wished non-media tools to be integrated.

There were messages on radios, televisions and mobile speakers explaining how we could protect ourselves. The same content was repeated instead of listening to and engaging residents in dialogues about COVID-19 prevention. (MKID, October 12, 2023; YKAH, October 21, 2023)

Also, media messages were not enough for participants who testified that they did not have access to or time for them, while others said they were not used properly.

Where can I get time to sit and watch TV? But I could chat with friends. (YKIG, October 14, 2023)

Mwendo is a rural area, and mobile sounds could reach here a few times, while people usually meet. (YME, October 28, 2023)

Participants said that there is a need to talk about pandemics in their ordinary gatherings, which can generate dialogue.

If at least one person can join the community meeting or association and tell us about a certain pandemic, it may encourage dialogue. (WKIA, October 13, 2023)

Moreover, messages should be communicated in the workplace because more face-to-face talks happen in the workplace than in their residential areas.

I access more information at work. It can take me more than a month to meet or talk with my neighbour. (WKAF, October 19th, 2023)

They further described existing tools that can help increase information exchange during the pandemic. Youth in Kiruhura said that each small entity/ isibo has a what's up group, and there is at least a smartphone in every household. While Mwendo youth testified to having multiple opportunities to meet.

Men in Mwendo testify that they own mobile phones, which helped them call friends and relatives during COVID-19 and which can help them interact. Mwendo women also recognised many local dialogic tools like associations, clubs, and what's up groups.

These findings imply that community channels of communication are preferred but were overlooked or misused by mostly communicating through broadcasting.

Besides, participants recommended exploring and mediating new media and interpersonal channels to fit some circumstances.

Currently, I can use the existing social media and face-to-face conversations to increase pandemic conscientisation. (YKAE, October 21, 2023)

Another added:

Since there is a phone in every household, I should keep talking with them through phone calls. (KAD, October 21, 2023)

Moreover, channels can be used properly and effectively, as some channels were used to communicate the right message in the wrong process.

Some messages were trustworthy but communicated late. Before any pandemic arrives in the country, related discussions must be facilitated earlier instead of taking measures after registering positive cases. (WKIB, October13, 2023)

Participants advised that channels can be effectively used by linking them to the right approach and fitting residents' dialogic experience and context.

6.5. Conclusion

This chapter presented data related to dialogue. Data were presented per three themes and embedded subthemes, which were also formulated according to the participatory communication and culture-centred approaches. It presented initial findings generated by the analysis process that was guided by the methodological approach discussed in Chapter four. In this chapter, I linked data collection and analysis to document participants' ideas related to their engagement in communicating COVID-19, as well as their proposition of applying dialogue and conscientisation to better engage communities in future pandemic preventive communication. According to the initially presented findings, participants shared that they

engaged in transmitting central messages during COVID-19 preventive communication efforts. They further revealed that people prefer local communication structures and interpersonal channels of communication over traditional media channels.

CHAPTER 7

INTERPRETATION OF FINDINGS

The previous chapters presented initial findings from collected data. The current and next chapters discuss findings with a thick and progressive description of participants' contributions. Findings are described in the context of Rwanda and the three settlements as explained in chapters one and two, and with reference to the Participatory Communication Approach and the Culture-Centred Approach. This chapter constitutes foundational ideas for key lessons emerging from linking this research aim, literature, theoretical and methodological frameworks, and findings.

The study aimed to contribute to contextual challenges in responding to COVID-19 preventive messages, as well as locally founded innovations to engage communities in future pandemic preventive communication. It used qualitative methods that might help understand contextual issues from the community members' or research participants' points of view (Schwartz-Shea and Yanow, 2013; Denzin and Lincoln, 2018). In this chapter, I discuss participants' perceptions, their challenges in communicating COVID-19 and contextual solutions that can inspire dialogue and pandemic conscientisation in the future.

7.1. Pandemic perceptions: People's ability to negotiate health meanings

Widely, communicating and raising pandemic awareness is the most important step in their prevention. At the beginning of this research, I wanted to analyse people's understanding of COVID-19, as people's participation and prevention of diseases depend on the sense they make of received messages (Schiavo, 2014). This section discusses participants' understanding of COVID-19, referring to awareness or the first step of conscientisation. It also refers to the culture-centred approach, aspects of culture and agency to explain participants' recognition of the problem of COVID-19.

As a result, findings revealed that participants had noted an illusional COVID-19 among residents of Kiruhura, Karama and Mwendo settlements.

This indicates that people's senses are characterised by different understandings and uncertainties that can lead to various negotiated prevention outcomes (Santos, 2018). This confirms the CCA suggestion that people in their cultural context are able to constitute and negotiate health meanings (Dutta, 2008). More importantly, conscientisation implies that all human beings, including the poor, are able to learn and reach the level of critically viewing reality (Nyirenda, 1996). This means that participants and other residents had different understandings of COVID-19 before receiving dominant messages. Knowing this information may help the communication recognise different perceptions and people's power to interpret and describe their situation in their own terms (Santos, 2018; Servaes, 2008) as a foundation for effective health communication efforts. Previous research did not focus on the community's understanding of COVID-19 messages in Rwanda. The exploration of community perceptions in this research serves as a base for analysing their interpretation of messages and responses with reference to cultural contexts and socioeconomic experiences to contribute to the literature reasons behind community pandemic perceptions.

7.2. Response to preventive messages: One-way approach generates tensions

After discussing perceptions of COVID-19, it was imperative to explore people's interpretation of its preventive messages, as literature illustrates that health communication during pandemics aims to reach and engage different populations and groups to exchange health-related messages that empower them to adopt preventive behaviours (Schiavo, 2014). This partially applied to COVID-19 messages, which were planned to talk about cases and symptoms, as well as the established prevention and control measures (Rwanda, 2020b). Findings confirmed the two assumptions as participants said that messages urged them to protect themselves against COVID-19 by washing hands, wearing face masks and observing social distancing.

On the contrary, literature illustrates that health communication in Rwanda has been dominantly scientific and top-down, which limits community engagement with messages aiming to influence behaviours instead of creating a common understanding or developing the same preventive intention through interactions that help get the message across (Tomasello, 2008). In this regard, participants confirmed having perceived messages as COVID-19 preventive instructions from health experts. As suggested by criticism of the top-down

approach, residents get busy memorising messages instead of becoming critically aware of the pandemic and developing the intention to change it (Freire, 2005). Other participants perceived them as not only difficult to apply but also coming from contradictory interpersonal, media and digital sources. Also, they kept wondering about messages that overlooked their socioeconomic context on the one hand and were discrepant with their goals for satisfying their primary needs. Since participants have been referring to characters and themselves, they revealed a relationship between their local contexts and residents' interpretation of messages by linking the content to their experience. This confirms suggestions that messages are interpreted through the description of the situation as represented in the message, as well as how it is linked to the community's contextual situation or experience(Berger, 2010). In addition, the CCA suggest that engaging with local voices creates opportunities to discuss how community members negotiate their local context to interpret dominant prevention messages (Dutta, 2008). Understanding people's perceptions is important because it helps understand how they are linked to people's context and current experiences, as conscientisation is not only about accessing messages but instead being able to critically engage with embodied information (Freire, 1974). On the contrary, there is no sign of participants being engaged in talking about their contextual understanding of COVID-19 messages. Therefore, their involvement in COVID-19 prevention attracted the researcher who analysed how residents of Kiruhura, Karama and Mwendo responded.

In preventing COVID-19, many countries adopted the information-disseminating approach and used paid advertising in print and broadcasting, media engagement, and the use of government digital platforms to disseminate COVID-19 preventive information (Gumede, 2022; Vatta et al., 2021). The same happened in Rwanda, and the literature says that mass media was the main source of information, especially in news and advertising formats, and the same information was also shared using mobile sound systems (Karim et al., 2021).

As a result, findings revealed that various participants simply protected themselves as instructed, while pandemic communication should have aimed at empowering and engaging ordinary people to critically develop and sustain the intention to prevent a pandemic (Schiavo, 2014).

Per this research finding, residents interpreted messages differently, such as people's obedience and disobedience that were characterised by overlooking and being reminded of measures such as washing hands in public spaces. Others silently followed measures they agreed with and

disregarded those they did not agree with. Other participants misbehaved, were hiding, forced or guided to abide by regulations, while others used to only abide by prevention measures when enforcers were around.

The requirement for enforcement is caused by communication dependence on outcome-oriented advertising; the dissemination approach can cause confusion between the projected outcomes and their enablers, producing very little or no outcome, with many succeeding in increasing knowledge but not being stretched to practice (Morris, 2005; Servaes, 2021b). Moreover, local members can co-construct or resist messages depending on their negotiated contexts (Dutta, 2008), and such perceptions lead to contradictory and unplanned responses (Servaes, 2008).

Surprisingly, other participants perceived job-related promises and applied measures expecting rewards, while others violated prevention measures to fulfil social, cultural, and family responsibilities, regardless of being aware of the pandemic severity and its preventive measures. Those who responded by fulfilling social responsibilities remind us of Freire's call to recognise that cultural feelings are at the heart of conscientisation for a new communication that never separates people's understanding and feelings (Ailton Krenak, 2022). If people's understanding and feelings are separated, there will be prevalent tensions and the influence of external factors on people's pandemic prevention behaviours, as their contexts may have been overlooked (Dutta, 2011; Campbell and Scott, 2012a).

This research suggests that people's responses to health messages are not exclusive to the public health domain but are also found in their context, which can turn into a limitation.

7.2.1. Pandemic prevention cannot be communicated in a vacuum

This research engaged local participants to analyse how their understanding of local contexts influenced their perception of COVID-19 messages. Again, this interpretation responds to the first question and is enlightened by the first stage of conscientization (awareness), but concentrates on how participants relate themselves to the existing problem of preventing a pandemic. It describes communities' perceptions of their socioeconomic limitations together with related implications and refers to the CCA concept of structure to present participants' perceptions of preventive recommendations in relation to their daily necessities, including food, accommodation and health needs.

Findings revealed that residents were aware of COVID-19 prevention, but they individually employed their agency to adopt diverse preventive solutions like returning to rural roots, informal movement and relocation, among others. This was because, as daily employees, they went short of supplies quickly. They were always wondering how they could all not work and how to survive within and after the extended emergency period. They thought that their employment and economic status were overlooked in preventive communication.

This confirmed the criticism of scientific communication, saying that if communicators try to guide people's interpretation, they grow silent or indifferent, which limits their fusion of message and behavioural intentions by failing to relate prevention desires, their feasibility and personal respective experiences (Freire, 2005; Kincaid, 2002; Roscos-Ewoldsen and Roskos-Ewoldsen, 2010). On the contrary, the CCA suggests that pandemic outbreaks and preventive messages are structured per political, socioeconomic and communication resources, and recommendations should also consider local residents' food, accommodation and daily health necessities (Dutta, 2021). Even if participants recognised government food support, A progressive need for linking messages and economic context to effectively communicate and prevent the pandemic was noted in Kiruhura, Karama and Mwendo settlements.

Apart from poverty and food concerns, they perceived prevention measures as complicating access to authorised jobs like agriculture for urban residents who had to carry farming materials. On the other hand, they struggled to access other health services mainly due to movement restrictions and lack of transport. Therefore, they perceived their current situation and future as being overlooked by messages that exclusively focused on the pandemic and its prevention. Some mothers reiterated that they had the money for important but inaccessible services, including children's clothes and new birth-related services. Other participants sympathised with them, arguing that anyone could face the same problem. They highlighted the importance of prohibited birth-related ceremonies like "guhemba", a cultural ceremony in which families, neighbours and friends visit new parents, bringing them economic support. Particularly, the mother's family have to organise one in which they bring drinks, food, milk, clothes and more things that a mother can need to properly feed and care for the baby. As a mother, I understand what they felt because a new mother needs a lot of items, and transport to and from the hospital is needed, more than ever. One should also not underestimate the need for clothes and other parenting items, which makes the award event and gifts more valuable. Consequently, I noted that participants perceived unspoken challenges related to satisfying basic needs.

In their pandemic prevention efforts, people's economic limitations are also connected with their perceived social limitations. During pandemics, communities also balance their understanding of sociocultural needs with prevention messages to discover, discuss, and possibly address related implementation challenges (Campbell and Scott, 2012a). The current research findings indicate that participants experienced growing anxiety and fear of imminent lockdown. Those who tested COVID-19 positive experienced emotional complications related to isolation, stigma, and home abandonment, while other participants lacked support and felt abandoned in hard times when one of their relatives fell severely sick or died. This reminds the CCA's suggestion of understanding the level of social cohesion (Dutta, 2011) and its influence on addressing emerging tensions resulting from the alignment or contradiction between social norms and preventive intention. Apart from the mentioned social issues, it is culturally constructed that marriage is a very important event that cannot be postponed. For them, limiting the number of participants was about undermining marriage, and they missed forums to talk about it. The issue confirms the existing criticism of behavioural pandemic messages that isolate preventive behaviours from community contexts (Dutta, 2021), which can be solved by the analysis of social cohesion.

These findings mean that preventive communication exclusively focuses on COVID-19's preventive measures, while there are other factors that influenced residents' responses.. These findings confirm that pandemic prevention is derivative of social, economic, and communication means, and related advice should not overlook people's basic needs, primarily including food, shelter and health care (Dutta, 2021). Therefore, the CCA noted world economic inequalities and subsistence based on daily work, and Dutta advocated for considering residents' employment needs and related risks in any pandemic preventive communication efforts (Dutta, 2021). Previous research classed poverty and lack of access to food among community informal structures that challenge prevention behaviours during pandemic crises (Aikins, 2024).

The problem of message inapplicability might be addressed by applying the CCA's proposal of analysing external factors and social structures as well as their influence on participants' responses to messages (Campbell and Scott, 2012a). Therefore, I suggest that socioeconomic limitations should be documented and considered in generating messages that address them and help reach intended outcomes.

7.3. Culture is the site of meaning negotiation

This part departs from the intuition of an improved form of communication in which culture constitutes a foundation for meaningful health information and the site of developing and negotiating preventive responses (Dutta, 2021) and is enlightened by "dialogue", the second stage of conscientisation, to discuss how messages resonated with local cultures. It interprets cultural aspects and their influence on residents' perceptions of COVID-19 as well as the foundation for negotiating its messages. This section responds to the second research question: "In what ways have local communities catalysed the consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities"?

The research's findings indicated that some cultural norms were prohibited, while former taboos were endorsed by COVID-19 prevention procedures. For example, visiting and exchanging humour constitute both a norm and a hobby for interdependent and attached Mwendo residents who, per COVID-19 messages, were called to distance themselves and never visit each other. Referring to culture as the site of meaning-making and structures negotiations, I discovered that while participants had received the messages, they struggled to apply them, as they questioned why preventing a pandemic should primarily challenge their values and encourage actions that are culturally taboo.

For people's pandemic conscientisation, researchers proposed to consider local and culture-founded ideas as they help unveil power relationships, social norms, and taboos (Karin and Johansson, 2007). If this is not the case, there will be tensions between adopting preventive and non-preventive behaviours resulting from conflicting perceptions of messages and cultural norms (Dutta, 2021). This was confirmed by participants who emphasised the importance of handshaking and hugging and how the two customs add a savour to their local interactions. They expressed that they were not comfortable with not greeting properly, and it was difficult to talk or share a drink.

As per the Participatory Communication Approach, emerging tensions and disagreements must be discussed and expressed in a peaceful and careful way. If tensions are not discussed, people can even adopt negative behaviours regardless of being well-informed (Aikins, 2024; Campbell and Scott, 2012a). This was confirmed by Kiruhura residents, who used to go out secretly because they usually met whenever they missed each other. For them, visiting a sick relative is a must, and only the sick and young children traditionally stay at home. The youth also

experienced the same conflicts of preventing COVID-19, which required them to stay at home because they needed to meet and cheer up with colleagues. More importantly, there are several cultural regulations that include visiting and supporting the sick or mourning families and not abiding by them has long been considered a taboo. This research indicated that regardless of the perceived importance of preventing the pandemic, residents of Kiruhura, Karama and Mwendo settlements wished to keep their cultural values and at the same time not engage in taboos. Therefore, I suggest there is a relationship between cultural contexts and participants' perceptions of pandemic messages, and the influence of cultural aspects on people's interpretation has to be carefully analysed for effective communication.

7.4. Previous pandemic experience guides community trust

The participatory communication guiding philosophy considers communication as dialogue in which people create trust, intention, and ownership (Freire, 1970). To this end, this research analysed trust in Kiruhura, Karama, and Mwendo settlements. Findings indicated that participants trusted local leaders and community health workers who used to care for them and advise them on how to protect themselves against different illnesses. For mediated messages, findings revealed participants only trusted the information given by leaders and medical staff in the news and also valued testimonies from recovered patients, as was the case in previous pandemics. Also, residents' trust depends on concrete checks, and without tangible facts, a health message is considered a rumour and the same happened for COVID-19. It means that the provided facts were not contextually tangible to residents of the three settlements. For them, that is why messages were not easily trusted and required observation and reminders.

In addition, other networks of trust were revealed to have been applied to COVID-19 awareness. These networks are mainly founded on traditional, interpersonal, and creative channels but can operate in different social, cultural, and religious structures (Harris, 2021). In this research, findings revealed participants' perceptions of messages depending on who they featured and how they connected to the communities. These are structural factors that are expected to form the connecting social capital by bringing in values that not only connect local participants but also link local participants and other people involved in COVID-19 preventive communication. For example, some participants linked messages to film actors who used to act in adverts and thought they were promoting goods or playing films and comedy, and they did not trust them and considered them as jokes instead. Other participants considered

messages given by musicians to promote their own songs because they started with their own bit. Other participants' trust was limited by the perceived exaggeration in messages, such as wearing a mask for only a few hours. This confirms the literature suggesting that all networks do not contribute to participation because local residents do not always need to bridge with external participants in responding to health and development issues but may instead find alternative means of forging links with other communities that may include requesting support from a trusted leader or expert who can play a valuable role in the participatory communication and process (Uslaner and Conley, 2003) as was the case with community health workers, local leaders, and medical staff. This confirms the CCA suggestion that trust negotiations can enable or disable people's prevention behaviours (Thabethe et al., 2018).

In this research, I analyse community networks of trust and how they contribute to the local community's trust in both pandemic prevention messages and communication channels.

7.5. Epistemologies of dialogue: Principles of humility, empathy, hope, and love connect the narrative to people's lives

The existing literature assumes that communication embodies dialogue to create cultural identity, trust, commitment, and empowerment (Freire, 1970). In such interactions, communicators do not need to disseminate information but facilitate development and healthy behaviours through consensus-building, because governing people's development process has always been difficult (Quebral, 2021). Reaching that ideal communication appeared difficult, and researchers proposed to follow the four principles of dialogue to help societies break the silence by connecting narratives to people's daily active and emotional lives, thus facilitating conscious discussion (Campbell and Scott, 2012b). In this chapter, I refer to the third stage or "authentic world" related to communities resisting the dominant communication and respond to the third question related to the occurrence of these principles in Karama, Kiruhura and Mwendo residents' communication about COVID-19 prevention by discussing how they enabled or disabled. Three subthemes are discussed: Community preference for dialogue, Desire to maintain friendship more than desire for self-protection, and Conflict with desire and opportunity for engagement in COVID-19 communication.

When communication is dialogue, humility suggests that an authentic message cannot be possessed by one person or group and cannot be imposed on another, urging communicators to reflect on communicators' real perspectives (Betto, 2022). Findings from FGDs contradicted

this assumption, with participants revealing that some local communicators transmitted officially mediated versions of information, as if other residents didn't have it. They also transmitted or reminded people of the central prevention guidelines, irrespective of the community perspective. Again, the Participatory Communication Approach calls for individually and socially breaking down the existence of ignorant masses encountering great advisers, but only people trying cooperatively to study more than they already know (Freire, 2005).

On the other hand, ordinary members humbly recognised their limits as they listened to leaders or waited for what leaders had decided, thus being realistic about their own and the leaders' responsibilities. Even though residents recognised their limits, it was contrary to the original sense of humility, which says that being humble is recognising one's limits, taking them seriously, and thus fostering realism in one's actions and attitudes in regard to one's personality and others what communicatively anticipate the perception of enabling people to develop as better as they can (Chasi, 2022). This is because instead of the advantaged group observing humility and helping the disadvantaged grow communicatively, they kept imposing new ideas on them.

In addition, participants expressed a lack of humility on the side of community leaders, youth volunteers and community health workers who transmitted, gave, and reminded instructions, and on the side of community members who reproduced and printed messages, assuming to help other members who did not understand them. Consequently, community members could not be heard, and their voices were dominated by the self-admired local communicators who loudly repeated mediated information instead of facilitating equal and interchangeable communication roles (Chasi, 2022).

Therefore, the above-mentioned findings confirm that during COVID-19, communicators, including some community members and influencers, focused on telling people how to prevent but showed little interest in learning from the opposite side. They confirm the prevalent contradictions and knowledge gaps, which can only be handled by helping ordinary people enjoy their communicative rights instead of passively receiving scientific information (Cross et al., 2017). Therefore, I suggest that engaging in transmission and a lack of humility on the side of the advantaged group limited dialogue that should be a source of contextual information that includes residents' perceptions of pandemic prevention, socioeconomic worries, and cultural influence.

7.5.1. Empathy: Community establishing directions for contextual solutions

Recognising contextual realities that affect people's efforts to reach public health objectives is associated with the principle of empathy, which guides communicators and researchers to recognise contextual inequalities as shared problems instead of a result of individual work or value (Manyozo, 2022; Suzina and Tufte, 2020). In this regard, findings revealed participants' perceptions of different individual realities, shared problems, and locally founded solutions to help those who were suffering. For example, participants recognised protection-related challenges, and some of them took contextually innovative directions that included handmade hand-washing materials. They also recognised the necessity for visiting each other and requested every visitor to wash their hands so that they could meet and socialise. This confirmed the literature, which recognised the importance of Rwandan cultural values in facing and addressing development problems with homegrown solutions (Rwanda, 2020a; Rwanda, 2021b).

More importantly, the Fourth Health Sector Strategic Plan urged the strengthening of community engagement in preventing and responding to health threats (Rwanda, 2018b). Findings confirmed this importance by demonstrating how some participants and residents adapted messages to solve contextual problems, including arrangements to meet, visit, and support others while observing the remaining prevention measures. In this regard, people revived their cultural collective identity by visiting and supporting their neighbours or informing local leaders for further support. This finding also contradicts the individual-founded pandemic prevention that considers communities as ignorant, their knowledge and culture as their obstacles to development and healthy behaviours, which leads to prescriptive messages aiming at changing their belief and behaviours (Tufte, 2017). Instead, it confirmed participants' recognition of the beauty embodied by their culture (Servaes, 2008; Kim, 2022; Eriksen, 2005). Findings also contradicted the communities' attributed self-depreciation that is supposed to result from top-down pandemic communication and instead confirmed the communities' preference for maintaining their cultural values and identity (Freire, 2005; Ferron, 2022a), with their internal collaboration ties enabling community participation in COVID-19 prevention. Consequently, communities' cultural knowledge and values served not as a problem but instead as a base for community-founded solutions. These findings also emphasised the need for empathy embodied by messages that realistically account for community agency, experience and socioeconomic contexts (Demjén et al., 2023) as it motivates preventive behavioural response at both the individual and community levels as people recognise the distress

experienced by others who also feel a sense of support, value and inclusion (Pfattheicher, Nockur, Et al., 2020; Coker, 2024). Also, Findings show that empathy emerged in people's attempts to face the changing pandemic situation through their need to learn more about the pandemic and how to prevent it better and effectively. For example, participants said they wanted to talk to medical staff and recovered patients for some details about doubtable circulating information. This confirmed how empathy leads people to identify and learn from familiar people or to seek support from a trusted health professional when mass media is used in health communication (Suzina and Tufte, 2020; Storey and Figueroa, 2012; Uslaner and Conley, 2003).

In addition, participants' wish to learn from people in identical contexts and situations was noted. According to the findings, some wanted to learn how to deal with specific situations, such as accessing water and staying with, taking care of, and not stigmatising a COVID-19 patient, while at the same time protecting oneself. This confirms how empathy symbolises an ideal communication characterised by the equitable recognition of other people's existence, seeing oneself in the other's condition (Servaes, 2008; Kim, 2022; Eriksen, 2005), as well as opportunities to make stories in which people not only provide or collect information but are also interested in understanding and making informed decisions as the foundation of their commitment (Tufte, 2017).

From the findings, I observed that irrespective of the transmission approach, participants needed dialogue to face contextual concerns, including learning from people in similar pandemic environments. I also observed that participants recognised other people's existence and not only thought about themselves but also about their relatives, friends, and neighbours, and made supportive arrangements with innovative and context-specific prevention directions.

7.5.2. Between relationships and strict discipline: Contextual COVID-19 preventive decisions

Literature, especially the Bible, summarises all the commandments in one, calling to love God and one's neighbour as oneself (Brahma, 2022). Firstly, love is a guided approach that connects the cause with people's judgments, thus valuing relationships more than strict discipline (Suzina and Tufte, 2020). Findings aligned with this thought as participants proved to be interrelated and that their relationships guided each of their decisions, including those related to violating prevention measures, such as visiting contaminated friends.

Secondly, love symbolises the process of effective dialogue, which ends up in agreement with no trace of violence (Freire, 2005). This was confirmed by findings indicating that love influenced some members to overlook COVID-19 prevention guidelines because when there was love, arrangements were made to meet and talk. The same applied to people who met illegally to share and drink alcohol.

In addition, participants were aware of the pandemic and existing regulations, but chose to violate some of them for love and support toward their colleagues, even if they remembered to observe other regulations to protect themselves. This finding confirmed that love is not a simple emotion but instead comprises actions to rescue and enrich others (Krenak et al., 2022). This means that residents of Kiruhura, Karama and Mwendo valued their relationships more than COVID-19 threats.

Moreover, love is not a simple emotion but also comprises actions to rescue and enrich others, thus investing in protecting others (Brahma, 2022). As per findings, love motivated other participants to invest in protecting others, agreeing on directions to face timely challenges like those who used to meet and greet but had agreed to observe social distancing, wash hands and wear face masks, thus responding to the pandemic with local innovative action and reflection. These responses appear not preventive in the lens of dominant messages, but participants testified to having used them and successfully protected themselves against the pandemic. This means that for participatory communication, love is the foundation of dialogue and other principles because it characterises independent interactions such as listening, dialogue and the development of critical consciousness, which differentiates it from alienating false generosity and people commodification.

As a result, I noted that love was behind decisions to violate measures by meeting, visiting, and supporting those in need and peaceful dialogue that led residents to peacefully agree on respecting other measures to protect themselves and their loved ones, even when one was contaminated. Therefore, love guided a suitable local communication approach to prevent COVID-19 in Karama, Kiruhura and Mwendo communities. By disclosing this, I highlight the value of people's relationships and how they can affect pandemic communication and prevention.

7.5.3. Loss of hope: Disempowerment vs no-authorisation to communicate

When people communicate dialogically, hope implies trust in the individual's ability to reason and participate in constructive interactions (Nyirenda, 1996) and people's belief in their ability to reach a convincing understanding (Suzina and Tufte, 2020). In this regard, the current research analysed people's conviction to participate in COVID-19 preventive dialogue. Findings show that local influencers thought that they were not empowered enough and needed to learn more about the pandemic and its changing situation. As per participatory communication, in the absence of confidence, no one is able to establish dialogical communication and is thus tempted to tell, issue a communique, or use slogans (Freire, 2005). This means that due to their inability to facilitate dialogue, local influencers had to only transmit the central message.

On their side, participants emphasised how the instructional process reduced their hope for participating in dialogue, feeling they did not have enough knowledge. This highlights the self-deprecation of ordinary, marginalised residents who view themselves as ignorant, while those regarded as experts fail to recognise the knowledge these individuals have gained through their lived experiences and interactions with others (Freire, 2005). Even in their family discussions, they could not confidently talk with their children about COVID-19 and its preventive measures.

On their side, the youth who hoped to participate in COVID-19 talks did not because they thought it was not their responsibility, and in many cases, were not allowed to. In my understanding, these youth became passive because they were not able to connect their dialogical intention with preventive measures. This reminds us of the perception of preventative measures as acting against cultural dialogical norms.

Other youth had no hope of participating in dialogue because they not only perceived messages as instructions (like adults) but also perceived that the threat of COVID-19 surpassed their prevention abilities. This perception conflicts with the value of hope as a form of courage, which sustains the belief that everything will turn out well (Servaes and Malikhao, 2011). The same happened to women who perceived it as a universal problem without a cure or means of prevention. Both the youth and women had perceived the negative side of the messages instead of the purpose of the messages to regenerate hope by predicting a better future, as dialogical communication connects hope with the future of communities.

Entirely, hope epistemologies in the three communities showed that instructional communication disempowers and reduces people's confidence to participate in pandemic communication, which should revive their prevention efforts and inspire their development process and pessimistic future expectations.

To conclude, the dialogical principles can help societies break the silence by listening and connecting narratives to people's daily active and emotional lives, facilitating conscious discussions (Campbell and Scott, 2012b) motivated by trust in people's knowledge. Therefore, I noted that through conscious discussions, cultural values, taboos, perceptions, intentions, and limitations may be expressed and addressed. Also, contextual preventive directions can be generated, and local residents may confidently engage in dialogue.

7.6. Wisely using Indigenous communication structures for dialogue

In the previous chapter, we discussed local residents' agency as proven by their perceptions of COVID-19 and its preventive messages and limitations to its prevention. The previous section discusses COVID-19-related dialogue in the communities, and the current section links dialogue with participants' wishes for change and discusses how to improve dialogue for future pandemic conscientisation. Here, I respond to the last research question with reference to 'transformation', or the fourth stage of conscientisation, and to the CCA aspects of agency and structure.

According to the literature on previous pandemics like HIV/AIDS, based on representation and civic action, communication failed to craft messages that the audience should engage with and caused them to develop a feeling of disempowerment toward the pandemic-related challenges (Tufte, 2017). The same happened in COVID-19 preventive communication as these research findings revealed a participatory communication centred on the engagement of local leaders, youth volunteers and other influencers who felt not empowered enough, could not engage community members in dialogue, but instead engaged in transmitting information from the central level. This engagement reflects the criticism of top-down behavioural communication, which argues that leaders' involvement tends to silence and undervalue community members' cultural ideas and competencies, representing them instead through the leaders' own perspectives (Van Blerk and Ansell, 2007; Harris, 2021). Instead of considering their own contextual expertise.

Contrarily, findings show that participants recognise existing grassroots leaders known as "Mutwarasibo" as potential enablers of future pandemic dialogue and emphasise that replicating the talks in local association meetings can be helpful in times of crisis.

The findings not only reveal participants' dialogical engagement challenges but also other perceived community avenues for pandemic-related dialogue and awareness. They believe that many young people should receive proper training and participate in dialogical exchanges with other community members. Additionally, while many people own mobile phones, which are used to receive short messages and calls, these resources could be used better to facilitate interaction without the need for physical meetings. This confirmed the literature suggestion that to be participatory, communication should be mainly interpersonal, with media and communication technologies facilitating group interactions (Okunna, 1995). Findings also found that living close to each other can ease dialogue.

For these reasons, I observed a missed opportunity for dialogue due to the misuse or neglect of local communication systems. Therefore, I suggest that local systems of communication should be explored and utilised because they facilitate community discussion.

7.7. Dialogical process: Media or interpersonal?

In participatory communication, channels are also integral, and theorists continuously discuss and compare the effectiveness of media and interpersonal channels. Participants also talked about them when they discussed channels used before and during COVID-19, related challenges and proposed changes to improve dialogue and conscientisation. This section complements the previous section in responding to the fourth research question regarding 'transformation', the fourth stage of conscientisation.

Findings from focus group discussions revealed a predominance of discussions in meetings for adults and youth, as well as prevalent talks in sports events, while social media, especially Facebook, remained the youth's main source of information before COVID-19. During COVID-19, communication was dominated by the dissemination of messages through radio and television, which were complemented by message repetition via mobile speakers and megaphones. These findings confirmed the literature saying that COVID-19 awareness campaigns were characterised by the dissemination of prevention practices through mass media and mobile sounds (Karim et al., 2021). It is also associated with participatory communication

criticism that health information dissemination is characterised by the banking approach, which consists of transferring messages to a passive audience; depending mostly on mass media and the duplication of efforts (Servaes, 2008; Gumede, 2022).

Also, findings revealed participants' dissatisfaction due to content insufficiency and channel access-related limitations, referring to programs broadcast when they were not at home, and geographical locations that were hard to reach with mobile speakers. In development communication, the banking approach is not sufficient to achieve health and development goals because the communities are supposed to receive preventive content, but instead receive empty and alienating wordiness. In this way, messages lose their preventive power by only focusing on the sonority of the words, leading to 'narration sickness', where the content becomes disconnected from the community's environment and reality, which could otherwise provide it with meaning (Freire, 2005; Servaes, 2008; Tufte, 2017). This brings us back to the previous chapters that discuss how such disconnection also leads to contradicting behavioural responses.

In pandemic-related communication, the introduction of dialogical engagement in communities remains a challenge. As a response, this research found that there are complementary interpersonal channels which were overlooked, also suggesting how they could have played a role. For example, the existing associations which bring together people who share the same interests and goals can generate opportunities to discuss a health problem, also serving as both a channel and an occasion to build a pandemic discussion on development goals. This reflects the participatory communication approach, which emphasises incorporating ordinary people's routines, knowledge, experiences, and insights by posing problem-related, open-ended questions rather than offering prescriptive solutions (Cadiz, 2005).

Findings further describe the mobilisation of existing tools within a community that can help increase information exchange during a pandemic. For adults in urban areas, these include WhatsApp groups for each small group known as 'isibo', and the existence of at least a smartphone in every household. For the Mwendo youth, findings highlight multiple opportunities to meet, while peri-urban/rural adults wish to change the use of mobile phones from sharing information to facilitating discussions. This would complement interpersonal channels like associations, clubs, and WhatsApp groups.

As per the CCA, these suggestions reflect the social capital and community networks and the degree of community cohesion and trust that taps into official and non-official networks like local structures, collaboration ties, affiliations, and internal organisation processes that exist

within the community (Dutta, 2011). These are the indigenous communication structures that carry the social objectives of a certain community. They should not be overlooked, as they serve as the community's media, disseminating guidelines and procedures, persuading, entertaining, and announcing important actions. Beyond simply conveying news, they play a crucial role in facilitating dialogue (Roscos-Ewoldsen and Roskos-Ewoldsen, 2010).

In summary, I found that pandemic communication is more effective when introduced in spaces where face-to-face interactions occur, including in the workplace and on digital platforms. Communicating future pandemics in local interpersonal settings can lead to authentic dialogue, which depends on contextual interpersonal communication instead of depending on traditional media.

7.8. Conclusion

In this chapter, I compare the reviewed literature, the theoretical framework, research questions, objectives and findings to draw lessons that help me to satisfy my research interests, respond to the problem statements, and contribute to filling the research gap. Both the findings, literature and theoretical framework confirm that the dissemination approach to communication dominated COVID-19 preventive communication in Rwanda. The approach characterised by experts' instructional messages to communities was not effective enough in generating dialogue and preventive intention, which led to elusive perceptions and responses due to messages and prevention measures that posed a menace to cultural values and silenced affected residents. Findings also indicated available possibilities for improving dialogue and conscientisation for COVID-19 and future pandemics.

CHAPTER 8

THE CONTEXTUAL MODEL OF COMMUNICATING PANDEMICS

8.1. Introduction

Ending and preventing communicable diseases as one of the targets of the "Good Health and Well-Being" Sustainable Development Goal keeps dominating health communication. However, the Literature and findings in this research prove that the pandemic, especially COVID-19 prevention, requires engaging people in communicating messages that make them conscious of the pandemic and later protect themselves and their loved ones. Since health issues in Rwanda have been dominantly communicated in a top-down/ instructional approach, it is necessary to describe contextually and culturally appropriate responses for engaging local community members in pandemic preventive communication.

Previous chapters presented and interpreted data, which provided an early insight into how these research findings addressed the research-dominant queries and objectives. The current chapter presents the researchers' unique contribution to existing knowledge about pandemic preventive communication in Kigali, Rwanda and hopefully a wider Rwandan context. The chapter concludes with a proposed model of how to engage communities in dialogue for pandemic conscientisation.

8.2. A contextual approach to understanding pandemic messages

The Participatory Communication Approach and the Culture Centred Approach (CCA) are theories that guided this research methodology in analysing and discussing the social, economic and cultural factors that affected community perceptions and responses to COVID-19 messages in Kiruhura, Karama and Mwendo communities. Regarding pandemic prevention messages, previous research explored how local communities responded, pointing to the existing gap between expected behaviours and adopted behaviours. They did not give significant consideration to participatory processes and the steps of conscientisation, which suggest that communities are able to learn and critically understand a pandemic (Nyirenda, 1996). Also,

the CCA suggests that people in their contexts are able to constitute and negotiate health meanings (Dutta, 2008).

This research contributed to filling the gap by discussing Kiruhura, Karama and Mwendo residents' understanding of COVID-19 messages embedded in their perceptions of the pandemic. In addition, this research contributed to the literature that to start communicating about a pandemic, health communicators must engage local communities in discussion about their contextual perceptions, which should help later discuss responses as well as limitations.

Also, previous research proposed to contextualise the dominant message but did not provide context-appropriate guidelines for doing so. This research not only discussed COVID-19 perceptions in Kiruhura, Karama and Mwendo settings but also described how they were connected to messages, related responses and community-perceived limitations. This referred to the CCA consideration of culture as the common experience that links social groups' lives and ways of communicating constitutes a site of meaning co-construction and is at the centre of health communication solutions (Dutta, 2021; 2008). This research related to community perceptions, messages and responses and contributed that people's responses to health messages are not exclusive to the public health domain but are also found in their socioeconomic and cultural context, which can also influence people's preventive decisions.

Therefore, it highlighted that socioeconomic limitations should be documented and considered in generating messages that address them, thus helping reach intended outcomes.

In addition, previous research advised closing the gap between expected and community-adopted behaviours by analysing cultural factors that are connected to pandemic prevention messages. This research highlights how cultural values—such as handshaking, visiting and supporting the sick, comforting mourning families, and sharing drinks—and taboos, like isolating the sick and maintaining physical distance, shape people's perceptions and influence participants' responses to pandemic-related messages. Therefore, those aspects together with people's interpretations must be carefully analysed for effective communication.

Again, previous research criticised the dissemination approach for overlooking and disconnecting people's history with the current pandemic issues, but did not explain how the disconnection might be contextually addressed. This research analysed the community's experience with pandemics, networks of trust and how they contributed to the local community's trust in both pandemic prevention messages and communication channels before and during an emergency.

8.3. Dialogical move from top-down to participation

Before starting this research, the literature suggested that effective communication had to be participatory. Many researchers have criticised the top-down approach for conflicting with participation, advocating for dialogically engagement with local communities for effective health communication. They did not indicate when and how to engage local residents in dialogue. As a response, participatory communication theorists advocated for guidance from the principles of humility, empathy, love and hope. This research discussed people's preventive responses as well as connected principles.

Firstly, the dominant scientific and dissemination approach silences community members who engage in transmission relationships. In this research, I have shown that leaders and influencers lacked humility because they thought that local residents had no COVID-19 knowledge; hence, messages were focused on continuous transmission and repetition without understanding their lived experiences and current knowledge banks. On the contrary, the disadvantaged remain humble and observe their limits, which keeps dialogue difficult. Therefore, differently from previous research which suggested that only the central communicator should humbly listen and engage local residents, the current research provided evidence that when the locally advantaged groups engage in the transmission of knowledge and lack humility, it limits dialogue that should be a source of contextual information that includes residents' perceptions of pandemic prevention, socioeconomic worries, and cultural influence.

Irrespective of the transmission approach, I also observed that participants recognised other people's existence and not only thought about themselves but also about their relatives, friends, and neighbours, making supportive arrangements with innovative and context-specific prevention directions. I also provided evidence that participants needed dialogue to face contextual concerns, including learning from people in similar pandemic environments and applying the beauty of their cultural values. I described how people prefer maintaining relationships by obeying central prevention measures.

The study also demonstrated that instructional communication disempowers and reduces people's confidence in participating in pandemic communication, with evidence that their participation can revive their prevention efforts and inspire a pessimistic development process. In sum, this research provided evidence that the dialogical principles guide societies in breaking the silence by listening and connecting narratives to people's daily active and

emotional lives and facilitating conscious discussions. Therefore, I suggested that through conscious discussions, cultural values, taboos, perceptions, intentions, and limitations may be expressed and addressed, and contextual preventive directions can be generated by residents who confidently engage in dialogue.

8.4. A contextual process of pandemic conscientization

From the very beginning, this research aimed to study how residents of Kiruhura, Karama and Mwendo communities engaged in COVID-19 preventive communication by analysing the participatory communication's two concepts of conscientisation and dialogue. For conscientisation, the research is based on the participatory communication theorists' philosophy advocating that a true message is a meaning that equally captivates both communicators, as knowledgeable individuals, projecting for the future with arguments that are not only describing facts and projecting utopia, but instead expecting critically conscious communities (Santos, 2018).

Since conscientisation has never been identified in people's behaviour, but can appear in the process of communication and response to pandemic messages (Quebral, 2021), this research started by analysing how residents of the three communities perceived and responded to COVID-19 messages, at the same time discussing the involved socioeconomic and cultural factors. From this research finding I proposed to make communities conscious of a pandemic in a process of four stages: awareness, dialogue, authentic world and transformation.

The four-stage process serves only one purpose: creating consciousness and avoiding structures that directly silence community members (Freire, 1970b). Per development literature, communication is conscientisation or critical consciousness, which prepares us to question the implications of being who we are in a particular health situation (Kim, 2022). In relation to the pandemics, residents of Karama, Kiruhura and Mwendo and similar communities are able to question their contextual situation with shared messages and raise hesitation, which aims at reaching their anticipated COVID-19 prevention outcomes by shaping out space for different living and understanding contexts (Suzina and Tufte, 2020). Therefore, if engaged, residents can raise their perceptions, the effect of socioeconomic and cultural contexts in dialogue that will lead to transforming the process of engaging them in effectively communicating and preventing pandemics as indicated by the following figure.

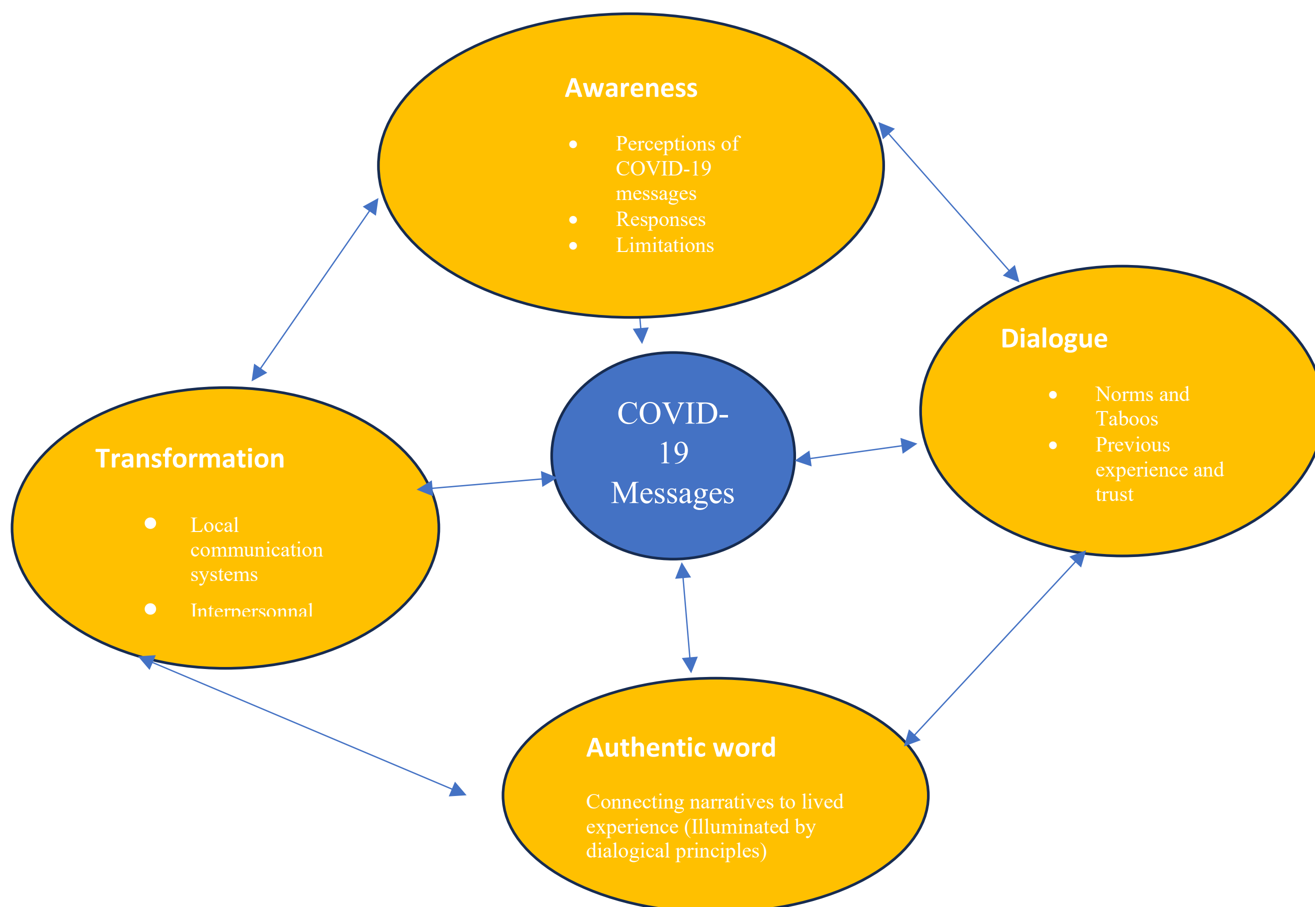


Figure 9.1: Pandemic conscientisation in Kiruhura, Karama and Mwendo

As per the above figure, pandemic conscientisation is not an end but a four-stage process based on creating the intention to prevent COVID-19 and future pandemics in Rwanda's settlements of Kiruhura, Karama and Mwendo. Per this model, the communication process is about engaging communities in all the stages:

The first stage is about engaging in discussing people's perceptions of pandemic messages, their responses, as well as associated socioeconomic limitations. Discussing perceptions and limitations can help engage communities in the earliest stages of communication to build on their existing knowledge and respond to their communication needs, thus communicating the information they need. The second is related to people's discussions of cultural norms, taboos, trust and social cohesion, together with silenced related voices to unveil power relationships and build trust by conflicting perceptions between messages and cultural values

The third stage is about the community's liberating talks, linking narratives and people's contextual experiences in the light of the principles of humility, empathy, love and hope.

These talks help link pandemic narratives and people’s lived experience, identify and deal with silencing structures. The last stage is about changing and replacing the silencing systems with local systems of communication, which facilitate interpersonal communication. At this stage community’s passive behaviours will be discouraged, and their lived experiences will be discussed.

8.5. The contextual model of communicating pandemics

In the existing development communication literature, the beginning of dialogical engagement at the community level has not been clear enough. Some theorists proposed a shift in which communicators are not transmitters but instead engage and collaborate with community members by listening to local individuals' goals, challenges, and solutions instead of telling them what to do (Dol, 2012). Since I could not find practical steps for engaging residents of specific Rwandan communities in communicating pandemic messages in the existing literature, I propose a “contextual model of communicating pandemics”, which should be based on studying the aspects of culture, structure and agency as interactive enablers of community dialogue for pandemic conscientisation. The next figure indicate how it can be processed.

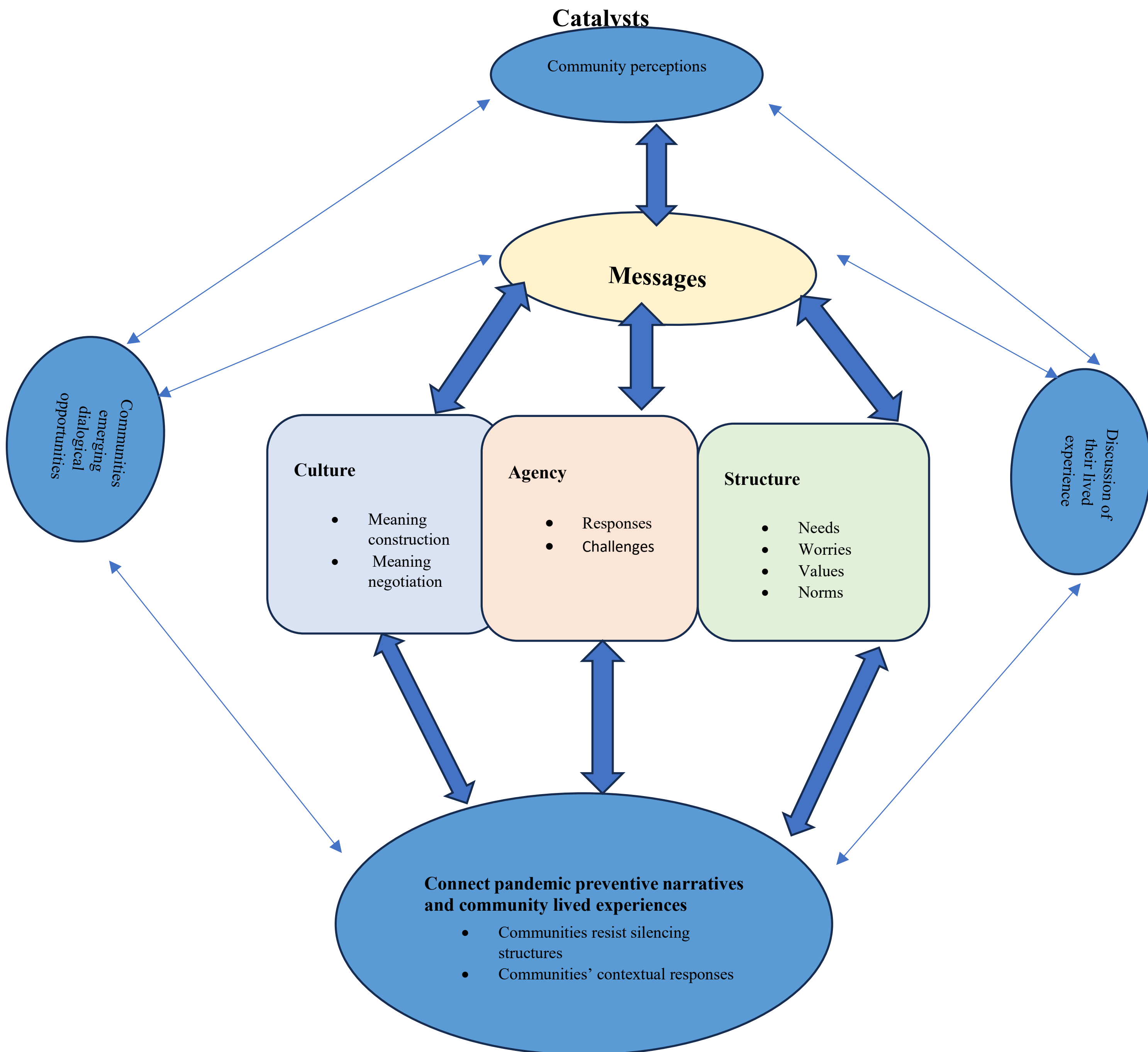


Figure 9.2: Contextual model of communicating pandemics

According to this model, community members are not mindless. Instead, they have negotiated multiple meanings (Dutta, 2008; Dutta et al., 2020) from existing information that they have obtained from different sources. That information must be analysed in the first stage of conscientisation (awareness). Per this research, the community's understanding of COVID-19 should have been analysed to account for their perceived susceptibility and pandemic severity.

In communicating pandemics, culture, which is the local context in which meanings are negotiated (Dutta, 2008; Dutta et al., 2020), will guide the process of community-meaning making. Here, residents' understanding of the pandemic and related messages, the perceived community responses, as well as limitations faced, depend on local and contextual factors, which must be explored. Per this research, residents' perceptions of illusory COVID-19, impractical messages, the influence of culture and previous pandemic experience should have been discussed to contextualise messages and build trust.

Structure refers to factors of meaning or material reality, such as local residents' access to food, accommodation, health services, and daily necessities (Dutta, 2021) as political, socioeconomic and communication resources that should determine the construction of pandemic outbreaks and preventive messages. Similar to the second step of conscientization (dialogue), those determinants also help engage residents in discussing how their perceptions of messages are connected with socio-cultural and economic contexts and how dominant processes silence related voices. In Kiruhura, Karama and Mwendo settlements, those factors should have helped engage residents in discussions to relate their understanding of COVID-19 messages to their satisfaction of economic, social and cultural needs, as well as their future aspirations. In this regard, dialogue is much easier with the application of the dialogical principles of humility, empathy, hope, and love (Ailton Krenak, 2022).

In addition, agency is related to the ability of local residents to meaningfully discuss or exchange ideas about local structures, making meaning through this engagement, and at the same time, creating discursive openings to transform those that silence members (Dutta, 2011), at the same time resisting silencing structures. In communicating pandemics agency will guide residents in discussing pandemic preventive problems in relation to the third stage of conscientization (authentic word), participants respond to COVID-19 messages in their own contextually appropriate ways, thus resisting silencing structures. Lastly, voice is related to community experiences in resisting hegemonic policies and the community's existing opportunities for residents to express themselves. In this model, communicators will liaise with culture, structure and agency in encouraging residents to express themselves and at the same time changing silencing communication structures. Voice is related to the fourth stage of conscientisation (transformation). For this research, it is related to participants' suggestions for improving pandemic dialogue by easing the local population's discussions of contextual information through local systems of communication that facilitate interpersonal communication.

CHAPTER 9

CONCLUSION

9.1. Introduction

The previous chapter dealt with detailing and discussing the contribution of this research and its findings to the existing literature. This chapter presents the summary of findings, conclusions and recommendations obtained from the findings of the study as well as suggestions for future studies. The current chapter finalises the writing steps by illustrating perceptions from previous chapters. It also outlines this research's main findings, discusses their implication on communication theory and practice, and concludes with the study's methodological limitations, its contribution to the literature, and areas for further research. Broadly, this study aimed to explore how dialogue and the stages of conscientisation in communities influenced perceptions of COVID-19 prevention messages in Karama, Kiruhura and Mwendo settlements located in Kigali, Rwanda.

The research applied the participatory communication of Paulo Freire, with dialogue as the first indicator of participatory communication and Berrigan (2017), which also involves the four stages of conscientization. It was also informed by the Culture-Centred Approach with its constructs of culture, structure and agency. The two theories' constructs helped the researcher to investigate how central prevention measures should have been integrated with communities' cultural and contextual experiences. This research anticipated that residents can contextually make sense of accessed messages and should be engaged in the development and communication of prevention messages. Consequently, from the analysed data, the study found that COVID-19 communication in the three settlements might have been participatory by not only instructing residents but instead considering their understanding, challenges and solutions in developing contextually relevant messages for the pandemic conscientization. Ideally, understanding how social, economic and cultural factors influence people's interpretation is a key step in designing meaningful COVID-19 prevention messages.

The study adopted a qualitative approach, which guided the process of utilising focus group discussions to generate data from participants who were purposely selected. Such qualitative engagement enabled the extraction of in-depth narratives which were interpreted with reference

to participants' social, economic and cultural context as discussed in the first, second, third and fourth chapters. The qualitative method was consistent with the study's interpretivism position, which considers the researcher and participants as knowledge co-constructors, as explained in the fourth chapter. Also, qualitative data generation procedures helped in collecting participants' experiences with COVID-19 preventive messages, thus allowing them to express their views on contextual opportunities to improve dialogue and pandemic conscientization while at the same time responding to communities' needs and expectations. Reflexive thematic analysis helped in analysing data and later extracting study findings.

This research was guided by the following research questions:

1. What are the perceptions of community responses to COVID-19 prevention messages in Kigali, Rwanda?
2. In what ways have local communities catalysed consciousness of messages for COVID-19 prevention in Kiruhura, Karama and Mwendo communities?
3. In what ways have the dialogical principles been enablers or disablers of COVID-19 prevention messages in the settlements?
4. How can dialogue and conscientisation influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda?

9.2. Major findings

From this research's findings, several conclusions are drawn. The research concludes that disseminating prevention messages were not enough to prevent the spread of COVID-19 in Kiruhura, Karama, and Mwendo settlements. Instead, there was a need to explore contextual factors, including residents' perceptions and responses to prevention messages, the influence of local contexts and residents' involvement.

The first research question looked at community perceptions of COVID-19 prevention messages. It explored community perceptions of COVID-19 and its prevention messages, their responses and challenges. As per findings, there were different and hesitant perceptions of COVID-19 among residents of Kiruhura, Karama and Mwendo settlements. In this regard, some residents thought that the pandemic was serious and required prevention, while others considered it as a rumour or a business. Others thought they could not prevent it because it

was global, while others thought it could not reach them, considering it was for foreigners and old people.

Also, findings revealed that participants' perceptions of illusory COVID-19 were linked to the participants' consideration of messages as experts' preventive instructions, while others considered them contradictory because they came from contradictory media, digital and community (interpersonal) sources; and were debatable and trustless as participants perceived hidden business interests that increased their doubts. In response, the study found that participants found COVID-19 messages as difficult to apply. Therefore, they responded differently, with some protecting themselves as intended, others abiding by measures they agreed with and disregarding others, while others had no prevention intention or were abiding by enforcement. Others' preventive responses were influenced by perceived emotional anxieties and economic challenges related to satisfying basic needs.

The research concluded that residents are able to interpret messages differently, and their silent views should be considered. It also concluded that communities interpret messages relating the content to their own experience. In addition, varied community responses not only depended on awareness but were also influenced by external factors such as social and economic limitations. Therefore, this research examined the COVID-19 dissemination approach to communication and suggested a participatory communication ecosystem that should be founded on the recognition of different perceptions and people's power to interpret and describe their situation in their own terms. Per findings, the link between communities' interpretation, message intention, people's contextual experience and response should be noted, which will help engage them in contextually communicating and effectively preventing pandemics. Therefore, pandemic prevention and communication responses should not be exclusive to the public health domain but should also be found in the communities' interdependent cultural and socioeconomic contexts.

The second research question analysed the influence of local cultures. This research advances that in an improved form of communication, culture constitutes a foundation for meaningful health information and the site of developing and negotiating pandemic preventive responses. Per findings, there were conflicting intentions and perceptions between social norms and messages because participants had received messages but could not easily apply them as they discouraged their cultural norms like greetings with handshaking, visiting, and sharing, and encouraged taboos like distancing each other, not touching, not meeting, staying home,

isolating the sick, not morning together with families of the deceased among others. Also, this research analysed community networks of trust. Also, the variation in community trust was influenced by local structures and internal organisations, as historically participants trusted local leaders, community health workers and medical staff, as well as patients' testimonies. Also, residents referred to previous pandemics and distrusted messages that were not contextually tangible or featured people whose motives are questionable in the communities. In addition, some messages were debatable as participants perceived them as inapplicable.

In conclusion, this research advances that for people's pandemic conscientisation, considering local and culture-founded ideas in meaning negotiation helps unveil and discuss power relationships, social norms, and taboos. Those cultural ideas also help to build trust and negotiate network structures because not all networks contribute to linking central prevention values and local norms, but instead, there is a necessity for discussing those silenced cultural ideas, thus initiating dialogue.

The third research question looked at the ways in which dialogical principles enabled or disabled COVID-19 prevention messages in the settlements. This research advances that the principles of humility, empathy, and love help societies break the silence by connecting narratives to people's daily active and emotional lives, thus facilitating conscious discussion. From the findings, residents humbly recognised their limits and waited for instructions from local leaders who lacked humility and kept transmitting and imposing new ideas on them, thus silencing their voices. Contrarily, empathy enables dialogue and conscientisation through participants' need for discussion to face contextual concerns, including learning from people in similar pandemic environments. Also, participants resist the transmission relationships by recognising the existence of other people and shared inequalities, which informs contextual responses, with people thinking not only about themselves but also about their relatives, friends, and neighbours. Those directions resulted from a locally relevant communication driven by love, which led them to meet, visit, and support those in need with peaceful dialogue that contextually concluded with agreements to respect other measures to protect themselves and their loved ones. In addition, hope in the three communities showed that instructional communication disempowered and reduced people's confidence to participate in pandemic communication. While the little dialogue revived their prevention efforts and inspired their development process, and pessimistically future expectations.

In summation, this research advocates for facilitating pandemic prevention behaviours through consensus building following the principles of humility, which helps in trusting people's knowledge and avoiding transmission relations, and empathy which guides the recognition of shared inequalities and the establishment of locally relevant preventive directions, love that motivates peacefully conscious discussions and protection of others, and hope which guides people's prevention empowerment. The principles should help connect prevention narratives to people's experiences, thus generating optimism for pandemic eradication and the best things to come.

The fourth research question analysed how dialogue and conscientisation can influence community engagement and perceptions of COVID-19 and future pandemic prevention in Kigali, Rwanda. From people's perceptions, limitations and engagement with dialogical principles in communicating to prevent the spread of COVID-19, health messages should not be mere experts' instructions. Therefore, this research proposes a contextual model for communicating pandemics. Such procedures will facilitate the integration of central prevention measures into local contexts based on the concepts of health communication as dialogue in the four stages of conscientisation. It projects residents' contextual perceptions of COVID-19 prevention messages and contextual limitations as the basis for engaging them in COVID-19 communication. The contextual model of communicating pandemics was informed by the researcher's engagement with literature, the two guiding theories as discussed in the second and third chapters, as well as data collected during this research.

Findings suggested that COVID-19 instructional communication humped dialogue and conscientisation through messages that overlooked local contexts, which should constitute a practical foundation for the pandemic-related dialogue. Also, findings suggested that COVID-19 preventive communication missed a dialogical opportunity by overlooking or misusing community networks and proposed that local leaders, volunteers and community health workers should facilitate dialogue instead of transmitting messages.

Moreover, these research findings revealed that participation is about encouraging and supporting residents to give their opinions, and advised discouraging their passive behaviour by empowering them to discuss contextual situations. In addition, findings suggest that COVID-19 communication highly depended on ineffective media and overlooked local interpersonal channels. They suggested not only basing on local systems of communication but also prioritising interpersonal over traditional media channels of communication.

Therefore, this research concluded that people's agency embodied in their pandemic perceptions, intentions, and challenges informs context-based messaging and suitable preventive directions. Also, facilitating local discussions helps explore and make use of community networks of trust and empowers community members to engage in contextually discussing their pandemic experience. Finally, funding communications in the local structures and prioritising interpersonal channels increases messages' convenience with local circumstances and problems, thus improving community engagement in pandemic communication and prevention.

9.3. Study implications and limitations

This research has different implications for both development and health communication, with reference to pandemic prevention. It was an original attempt to explore the possibilities of introducing dialogical engagement in pandemic preventive communication at the community level.

In the first place, participation depends on the sense residents make from received messages, which are interpreted with regard to the local contexts. This study revealed the possibility of a contradictory understanding of COVID-19 and its messages. In a top-down approach to pandemic communication, those interpretations remain silenced but have to be documented as they serve as the foundation of locally relevant messages that can be easily understood or negotiated for preventive intentions. This underscores the need for every pandemic communication effort to gather and incorporate local community perceptions in order to create contextually relevant messages. Communities' perceptions are influenced by how prevention messages are linked with cultural values, taboos and contextual limitations. When this relationship is not discussed, as in the case of COVID-19, it leads to frequent tensions. On the contrary, discussing them helps unveil the existing norms, power relationships and networks which can help build trust and facilitate pandemic dialogue based on people's contextual experience.

Engaging communities in pandemic dialogue is about linking prevention measures and local narratives, which during COVID-19 dissemination communication was difficult as some communicators lacked humility and kept telling instead of considering local voices that might also carry communities' innovative ideas to respond to the pandemic, as was the case. Communication practitioners and researchers need to keep in mind that communication is

dialogue and consider the existence and role of affected communities, humbly listen to them and consider their ideas, help them share experiences that can increase hope for prevention and generate community-funded innovative responses to pandemic problems. I hope that such dialogue can help every communicator communicate contextually relevant information.

To contain the spread of COVID-19 in Kigali city settlements, health communication played a vital role. The role of health communication in responding to pandemics is to create awareness and mobilise communities for preventive decisions. For effective health communication interventions, there is a need to change the paradigm from the dissemination approach to the contextual agency structure change for the dialogical empowerment approach inspired by the CCA and participatory process of communicating. Therefore, it is necessary to recognise local residents' agencies, encourage them to express themselves, document and utilise local dialogical opportunities, and complement media and interpersonal channels for relevance and improved pandemic dialogue and conscientisation.

Nevertheless, as discussed in the fourth chapter, this research has limitations. It was difficult to discuss all the aspects of COVID-19-related communication globally, and the study was limited to exploring the phenomenon in only three settlements of Kiruhura, Karama and Mwendo and could not analyse COVID-19 preventive communication in the whole country or other African countries. By focusing on message, dialogue and pandemic conscientisation at community levels, it only looked at local residents' experiences, but could not analyse the experience of health and communication experts. By focusing on COVID-19 preventive communication, the study could not discuss communication issues related to vaccination. Lastly, the study followed a qualitative enquiry, which used a small sample, which made it difficult to generalise its findings to larger populations apart from its participants. Its findings only apply to the selected participants and residents of the studied settlements. Irrespective of the above-mentioned limitations, the study has contributed to the current knowledge, and its findings can contribute to future research.

Even if the study findings may not be generalised or transferred to diverse backgrounds, their conclusions would apply to identical socioeconomic and cultural backgrounds. Therefore, the findings cannot only be restricted to application in distinct and narrow cases. Instead, there is a possibility that its methodology can be applied to other locations in conducting similar research. To this end, data collection and analysis processes, as well as Kiruhura, Karama and Mwendo settings, were described in detail.

9.4. Areas for further research

Intellectually, there are many directions for conducting further research on community participation in health communication. Since this research focused on COVID-19 preventive communication in urban communities, it recommends similarly analysing the phenomenon in rural communities to verify for similarity in findings, thus recommending research to see findings on pandemic preventive communication that can emerge from other regions of Rwanda.

Also, the research holistically analysed people's perceptions of COVID-19, local contexts and dialogue in communities. It then proved the need to explore how health stakeholders can engage in dialogue to review the process of communicating pandemics from the global, national and local scale to build trust and engage communities in pandemic preventive dialogue.

Finally, the research employed a qualitative methodology to produce information on communities' perceptions of the pandemic and their engagement with its prevention messages from a small purposively sampled population, and it wished to study the phenomenon from a different methodological perspective. Therefore, it suggested that future research may adopt a design that can help use a more extended population that can also allow for generalizable findings.

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APPENDICES

Appendix 1: Informed Consent Form (English)

Information Sheet and Consent to Participate in Research

Date: 11 September 2023

Dear Participant,

My name is Odette Mpungirehe with student number 221115959. I am a PhD student at the Centre for Culture, Communication, Media and Society (CCMS) in the School of Applied Human Science, College of Humanities, University of KwaZulu-Natal, Howard College.

You are being invited to participate in a study titled **"Communicating about pandemics: Exploring COVID-19 communication in Kigali City's settlements, Rwanda. A case of Shishoza and Sindohoka campaigns. ".** The purpose of this study is to explore how COVID-19 messages were understood, interpreted, and reconstructed to influence the perception of COVID-19 risk, readiness and action to adopt preventive behaviours in formal urban, informal urban and rural grouped settlements.

The study aimed to recruit a total of eighty-one participants (27 community leaders and 54 community members). The eighty-one participants were divided into nine groups of participants to take part in focus group discussions (FGD). Each group consisted of 9 participants.

The study does not involve any risk whatsoever kind on Participant (s). We hope that the study will create the following benefits:

1. To analyse how local community settings catalysed the consciousness of the COVID-19 outbreak in Kiruhura, Karama and Mwendo settlements.
2. To discuss the dialogical principles evolved in re-developing the central prevention messages to apply them to the community contexts and the evident epistemological adaptation or community-founded directions in response to the pandemic messages.
3. To explore how the communication approach adopted by local Rwandan communities promoted and/or hindered dialogue and conscientisation, and what are the community situated opportunities for improvement.

Please note that:

1. The information you provide will be used for scholarly research only.
2. Your participation is voluntary. You have a choice to participate, not to participate or to stop participating in the research.
3. Your views in the focus group discussion will be presented anonymously. Neither your name nor identity will be disclosed in any form during the study.
4. The focus group discussion will take about 60 to 90 minutes.

5. Light refreshments will be provided during the focus group discussion.
6. The record, as well as other items associated with the interview, will be held in a password-protected file accessible only to me and my supervisor. After a period of 5 years, in line with the University rules, it will be disposed of by shredding or burning.
7. If you agree to participate, please sign the declaration attached to this statement.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number………).

In the event of any problems or concerns/questions, you may contact the Researcher at:
Cell: [redacted]
Email: 221115959@stu.ukzn.ac.za or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Thank you in anticipation of your favourable consideration.

Yours sincerely,

Odette Mpungirehe

Consent to Participate in Focus Group Discussions

I …………………………………………………………………………….. (Full names of Participant) have been informed about the study entitled " **Exploring community message adaptation to influence COVID-19 prevention behaviours in Nyarugenge District settlements, Rwanda. A case of Shishoza and Sindohoka campaigns"** conducted by Mpungirehe Odette.
I understand the purpose and procedures of the study, and I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I am entitled to.
I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.
If I have any further questions/concerns or queries related to the study, I understand that I may contact the Researcher on (Cell: +[redacted]; Email: 221115959@stu.ukzn.ac.za).
If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers, then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

I hereby provide consent to:

Audio-record my focus group discussion YES / NO

____________________ ____________________
Signature of Participant **Date**

Appendix 2: Informed Consent Form (Kinyarwanda)

Inyandiko ihamya ubushake bwo kwitabira ubushakashatsi

Ku wa 11 Nzeri 2023

Nshuti Mutumirwa,

Nitwa Mpungirehe Odette, Umunyeshuri ufite Nomero 221115959. Ndimo gukorera Impamyabumenyi y'ikirenga (PhD) mu ishami ry'Itumanaho, Itangazamakuru n'Umuco mu ishuri ry'Ubumenyamuntu rya Kaminuza ya KwaZulu-Natal (*Centre for Culture, Communication, Media and Society in the School of Applied Human Science, College of Humanities, University of KwaZulu-Natal*).

Ngutumiye kugira uruhare mu bushakashatsi bwitwa **" Kuganira ku Ndwara z'Ibyorezo: Kwiga uko abatuye umujyi wa Kigali baganira kuri Koronavirusi . Twifashishije Ubukangurambaga bwiswe Shishoza na Sindohoka".** Ubu bushakashatsi bugamije kwiga uburyo abatuye mu nsisiro, mu midugudu igezweho ndetse no mu nkengero z'umujyi bumvaga, basobanukiwe cg basubiyemo ubutumwa bwerekeye COVID-19 kugirango burusheho kugera kuri benshi , kumvikanisha neza ubukana bw'icyorezo, ndetse no kongera ubushake bwo kugikumira aho batuye.

Ubu bushakashatsi bugamije guhuza abantu mirongo inani n'umwe barimo abaturage 54 n'abayobozi 27 bayobora ibyiciro bitandukanye aho batuye. Abazitabira ubushakashatsi bagabanyije mu matsinda icyenda bazitabira ibiganiro mu itsinda, nibura rigizwe n'abantu 9.

Ubu bushakashatsi nta ngaruka buzagira ku muntu uwo ariwe wese uzabwitabira. Twizeye ko buzafasha kwiga ibi bikurikira:

4. Uko imiturire n'imibereho yatumye abaturage barushaho kumva ubukana bwa COVID-19 Mu duce twa Karama, Kiruhura na Mwendo.
5. Kuganira uburyo abaturage hagati yabo babashije kuganira cg gusobanurirana ubutumwa bwo gukumira COVID-19, uburyo amabwiriza agenga kuganira yagiye yinjiramo, ibimenyetso bigaragaza uruhare cg amabwiriza abaturage bishyiriyeho basubiza ubutumwa bwo gukumira icyorezo.
6. Kugaragaza uburyo itumanaho ryakoreshejwe ryoroheje cg rikabangamira ibiganiro hagati y'abaturage n'amahirwe agaragara aho batuye yatuma barushaho kuganira neza ku ndwara zibugarije.

Icyitonderwa:

8. Amakuru mutanze azifashishwa ku mpamvu z'ubu bushakashatsi gusa.
9. Kwitabira ni ubushake. Ufite uburenganzira bwo kwitabira, kutitabira cg guhagarika kwitabira.
10. Ibitekerezo byawe muri ubu bushakashatsi bizagaragazwa mu buryo bw'ibanga hatagaragajwe amazina cg umwirondoro wawe.
11. Ibiganiro mu matsinda bizamara hagati y'iminota 60 na 90.

12. Urahabwa amazi cg ibinyobwa bidasembuye kugirango ikiganiro kigende neza.
13. Amajwi cyangwa inyandiko zose zijyanye n'ikiganiro zizabikwa kandi zibungabungwe mu buryo bw'ikoranabuhanga hifashishijwe umubare w'ibanga uzwi n'umushakashatsi n'umwarimu uyoboye ubushakashatsi gusa.
14. Niba wemera kwitabira ubu bushakashatsi sinya inyandiko ibihamya iri ku mugeraka w'ubu butumire.

Impamvu y'bu bushakashatsi yagenzuwe kandi yemezwa n'akanama gashinzwe kwemeza ubuziranenge bw'ubushakashatsi k'ishami ry'ubumenyamuntu n'imibanire muri Kaminuza ya KwaZulu-Natal, UKZN, Bwahawe Nomero **HSSREC/00005649/2023**.

Ugize ikibazo wabaza umushakashatsi kuri aderesi zikurikira:
Telefoni: [redacted]
Email: 221115959@stu.ukzn.ac.za cg ukabaza akanama gashinzwe kwemeza ubuziranenge bw'ubushakashatsi k'ishami ry'ubumenyamuntu n'imibanire muri Kaminuza ya KwaZulu-Natal (UKZN) kuri aderesi zikurikira:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Tubashimiye kwakira no guha agaciro ubu butumire.

Murakoze,

Odette Mpungirehe

Guhamya ubushake bwo kwitabira ubushakashatsi

Njyewe………………………………………………………………………….. nasobanuriwe ubushakashatsi bwitwa **" Kuganira ku Ndwara z'Ibyorezo: Kwiga uko abatuye umujyi wa Kigali baganira kuri Koronavirusi. Twifashishije Ubukangurambaga bwiswe Shishoza na Sindohoka".** Bukorwa na Mpungirehe Odette.

Nsobanukiwe neza intego yabwo n'uko buzakorwa, nkaba nemeza ko nzabwitabira ku bushake bwanjye, ko nemerewe guhagarika kwitabira igihe icyo ari cyo cyose bibaye ngombwa kandi ntibingireho ingaruka. Namenyeshejwe ko nahabwa ikiguzi cg ubuvuzi igihe naba nkomerekeye mu bikorwa bijyanye n'ubu bushakashatsi.

Ndamutse ngize ikibazo nabaza umushakashatsi kuri aderesi zikurikira:
Telefoni: [redacted]
Email: 221115959@stu.ukzn.ac.za cyangwa nkabaza akanama gashinzwe kwemeza ubuziranenge bw'ubushakashatsi k'ishami ry'ubumenyamuntu n'imibanire muri Kaminuza ya KwaZulu-Natal (UKZN) kuri aderesi zikurikira:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Nemeye kandi ko:

Hafatwa amajwi y'iki kiganiro YEGO / OYA

______________________ ______________________
Umukono **Itariki**

Appendix 3: FGDs guide (English)

Discussions will be conducted in Kinyarwanda to help participants express themselves openly because most residents of the three communities are native Kinyarwanda speakers but not fluent in English. However, the collected information will be translated into English to help the reader understand the discussed information. The Kinyarwanda questions are on the second page of this guide.

Question 1: In what ways have local community settings catalysed consciousness of the COVID-19 outbreak in Kiruhura, Karama and Mwendo settlements?

1. Describe this community's social and economic characteristics that influence your well-being with regard to knowledge and information sharing.
2. How has the social context been a solution or problem in your communication about COVID-19?
3. How have you found these COVID-19 prevention messages and guidelines match your community's social and economic life/ living conditions? What was matching, and what do you think should have been changed?
4. Describe how you found (your family's and) your community's intention to prevent COVID-19 in relation to the shared prevention messages and the community characteristics that should have been considered or utilised in the communication process to grow and satisfy the community's COVID-19-related knowledge needs.

Question 2: How have the dialogical principles evolved in re-developing the central prevention messages to apply them to the community contexts and the evident epistemological adaptation or community-founded directions in response to the pandemic messages?

1. How have you been (di)-satisfied by these COVID-19 prevention messages?
2. Have you ever transformed COVID-19 prevention messages to be well-understood in your community?
3. Describe the process of adapting and communicating that message. What were the challenges, and how did you deal with them?
4. Provide evidence of people helping each other to change their perception of COVID-19 prevention and enabling factors.

Question 3: In what ways has the communication approach adopted by local Rwandan communities promoted and/or hindered dialogue and conscientisation, and what are the community-situated opportunities for improvement?

1. In what ways did the adopted communication process hinder or enable consciousness-raising and dialogue in your community?
2. If you were asked to propose a change in the messages creation and communication process to fit your community's social-economic context, what would you propose to consider or add?
3. What do you think your community should have learned from others or would have shared with other communities?

NB: The requests will be enhanced by curious queries generated by participants' responses.

Appendix 4: FGDs guide (Kinyarwanda)

Ikibazo cya 1: Mu buhe buryo imiturire n'imibereho yatumye abaturage barushaho kumva ubukana bwa COVID-19 Mu duce twa Karama, Kiruhura na Mwendo?

1. Nimunganirize uburyo imibereho yo muri uyu mudugudu ibafasha kubungabunga ubuzima bwanyu cyane cyane mwungurana ubumenyi cg muhanahana amakuru.
2. Ni gute imibanire n'imibereho yo muri uyu mudugudu yabaye imbogamizi cyangwa igisubizo mu guhanahana amakuru kuri Koronavirusi?
3. Mwumvise gute ubutumwa bukurikira ugendeye ku mibereho n'imibanire y'abatuye uyu mudugudu? Ni ibiki bihura cg bidahura ?
4. Nimunganirize uko ubushake ubushake bwo kwirinda bwari buhagaze mu muryango wanyu cg uyu mudugudu igihe ubu butumwa bwatambukaga n'ibyagombaga kwitabwaho mu kuzamura ubushake bw'abaturage mu gushaka no kugira ubumenyi buhagije kuri COVID-19.

Ikibazo cya 2: Ni gute amabwiriza agenga kuganira yagiye agaragara mu buryo mwaganiraga cg musubiramo ubutumwa mwahawe n'izego z'ubuzima, ni ibihe bimenyetso bigaragaza uruhare cg amabwiriza abaturage bishyiriyeho basubiza ubutumwa bwo gukumira icyorezo.?

1. Ni gute mwanyuzwe cg ntimunyurwe n'ubu butumwa?
2. Ni gute mwaba mwaravuguruye ubutumwa bwo gukumira COVID-19 kugira ngo burusheho kumvikana neza no kugera ku batuye uyu mudugudu bose?
3. Nimunganirize uburyo mwahinduye ubwo butumwa inzitizi mwahuye nazo n'uko mwahanganye nazo.
4. Nimunganirize / mumpe ibimenyetso bigaragaza uko abantu bafashije abandi guhindura imyumvire kuri COVID-19 muri uyu mudugudu.

Ikibazo cya 3: Ni mu buhe buryo itumanaho ryakoreshejwe ryoroheje cg rikabangamira ibiganiro hagati y'abaturage, ni ayahe mahirwe agaragara aho batuye yatuma barushaho kuganira neza ku ndwara zibugarije?

1. Ni gute itumanaho ryakoreshejwe ryafashije abatuye uyu mudugudu kugira cg kutagira ubushake bwo gukumira cg guhanahana amakuru kuri COVID-19?
2. Ni iki wumva cyakwitabwaho cg cyakongerwa mu gutegura no gutanga ubutumwa bwo gukumira icyorezo kugirango buhure n'imibereho yo muri uyu mudugudu?
3. Ni iki mwumva uyu mudugudu wakwigisha cg ukigira ku bandi cyabafasha gukumira ikwirakwira rya COVID-19?

Appendix 5: Ethical Clearance Certification

15 June 2023

Odette Mpungirehe (221115959)
School Of Applied Human Sc
Howard College

Dear O Mpungirehe,

Protocol reference number: HSSREC/00005649/2023
Project title: Communicating about pandemics: Exploring coronavirus disease communication in Kigali City's settlements, Rwanda. A case of Shishoza and Sindohoka campaigns
Degree: PhD

Approval Notification – Expedited Application

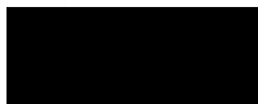
This letter serves to notify you that your application received on 11 May 2023 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

<u>This approval is valid until 15 June 2024.</u>
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours sincerely,



____

Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee
Postal Address: Private Bag X54001, Durban, 4000, South Africa
Telephone: +27 (0)31 260 8350/4557/3587 **Email:** hssrec@ukzn.ac.za **Website:** http://research.ukzn.ac.za/Research-Ethics

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

INSPIRING GREATNESS

Appendix 6: Gatekeeper Letter

Republic of Rwanda
City of Kigali

Ref. n° ..4690../07.01.16/22 Kigali, on...11 NOV 2022

Mrs. Odette MPUNGIREHE
Tel: [redacted]
Email: [redacted]
221115959@stu.ukzn.ac.za

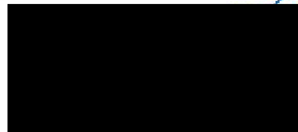
Dear Madam,

<u>Re</u>: Your request for permission to conduct research

Reference is made to your letter dated on 31st October 2022 requesting for permission to conduct research in Kigali Sector/ Nyarugenge District in the City of Kigali on "***Exploring community message adaptation to influence COVID-19 prevention behaviours in Kigali City's settlements, Rwanda. A case of Shishoza and Sindohoka campains***";

We would like to inform you that your request is hereby granted. However, before starting your research, you must first introduce you to the **Administration of Kigali Sector,** and clarifying your need.

Sincerely,



Joseph NIYONGABO
Director General of Corporate Services

<u>Cc:</u>
- City Manager of the City of Kigali
- District Executive Administrator/ Nyarugenge
- Executive Secretary of Kigali Sector

<u>KIGALI</u>

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