UNIVERSITY OF KWAZULU-NATAL™

INYUVESI YAKWAZULU-NATALI

# Probing health adversities and pluralistic interventions employed by the community of Bulwer (Gqumeni location), KwaZulu- Natal in response to COVID-19.


**By**

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## DEDICATION

To my grandparents, who have always believed in me and supported me in all my endeavors, your love, guidance, and unwavering support have been my anchor throughout this journey, and I dedicate this thesis to you.

I also dedicate this thesis to all those who have been affected by COVID-19, including those who have lost their lives or their loved ones. Your resilience and courage in the face of this pandemic have inspired me. I hope this thesis contributes to our collective understanding of the cultural and social impacts of COVID-19, and ultimately, to the development of more equitable and effective responses to the pandemic in the future.

## DECLARATION

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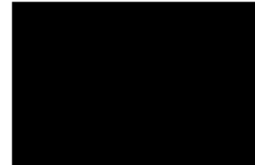
Supervisor Name: Dr Balungile Prudence Zondi Signature: 

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## ABSTRACT

Studying people's experiences during pandemic times has been an anthropological research interest. In 1960 medical anthropologists theorized that people are affected by epidemiological transitions that have shaped their explanatory models (meaning to their state of being sick/ill) and they have recorded medical interventions as their immediate response. Methodologically, medical anthropologists undertake qualitative research that provides a holistic lens on people to (i) understand the political economy which permits or hinders people's access to medical care and facilities, (ii) understand the cultural and social dimensions of the pandemic (iii) its impact on individuals, communities, and societies (iv) and the extent to which people give meanings to their illness/diseases and the interventions they employ. This qualitative research purposively and snowball sampled twenty participants to probe health adversities and pluralistic interventions employed by the community of Bulwer (Gqumeni location), KwaZulu- Natal in response to COVID-19. Data analysed through the Critical Medical Anthropology Theory and the Explanatory Model Theory revealed COVID-19 health risk-related adversities that hindered the Gqumeni community to access health facilities in the rural area. The study revealed that when all has failed or when all else seems inaccessible in the presence of rural communities during pandemic times, people rely on ethnomedicine as their hope. The community escaped COVID-19 adversities by relying on medical pluralism which is the use of medical herbs drawn from cultural epistemics of indigenous knowledge systems such as *raw garlic, umhlonyane "Artemisia Afra", Gumtree (omhlophe), unsukumbili, "senecio gregatus", isibhaha "Pepper bark tree", ikhathazo "alepidea amatymbica", uhlunguhlungu "mountain bitter-tea", ukalumuzi, and unukani "black stinkwood"* as an alternative for biomedicine. The study thus contributes these ethnomedicinal herbs towards medical pluralism as an intention to advance the decoloniality of health interventions in Africa. Study findings also contributed to the decolonial conversation that sought to endorse the use of ethnomedical herbs as the cradle of healing in Africa and mostly in rural communities. The study also recommends the improvement of rural medical facilities so that people's choices of medical interventions will be broadened. It further recommends that the Department of Agriculture should perverse the extinction of indigenous plants within the community. More studies are still needed to advance medical pluralism in rural areas in South Africa and in Africa.



**Keywords:** *Healthcare, Health facilities, Biomedicine, Ethnomedicine, Covid-19, Decoloniality.*

## DEFINITION OF KEYWORDS

- **COVID-19 –** The term COVID-19 is an acronym that comes from 'coronavirus disease 2019'. Cennimo (2021) identified COVID-19 as a sickness caused by a novel coronavirus currently known as severe acute respiratory syndrome coronavirus 2, SARS-CoV-2, originally known as 2019-nCoV and spread from person to person. COVID-19 was discovered in December 2019 in the Chinese city of Wuhan.
- **Pandemic** – A pandemic, according to Lockett (2020), is a virus that has spread to at least three nations within the WHO region. The World Health Organization (WHO) oversees determining when a global pandemic has occurred.
- **Medical Pluralism -** Medical pluralism, as defined by Kalmuss et al. (2008), is the use of more than one medical system or the use of both orthodox and complementary and alternative medicine (CAM) for health and illness.
- **Medical anthropology** – According to Jaiswal (2018), medical anthropology is a branch of anthropology that combines social, cultural, biological, and linguistic views to acquire a better knowledge of the elements that influence health and well-being. It delves into topics such as illness experience and distribution, illness prevention and treatment tactics, healing processes, social dynamics involved in therapy management, and the cultural meaning and application of various medical systems. The goal of medical anthropology is to explore and evaluate these elements in depth in order to improve our understanding of health-related events and encourage more holistic approaches to healthcare.
- **Biomedicine –** This is a "branch of medical science that applies biological and physiological principles to clinical practice, emphasizing standardized, evidence-based treatment authenticated through biological research, with treatment managed by professional doctors, nurses, and other such qualified experts" (Quirke and Gaudilliere, 2008).
- **Ethnomedicine** – Nkosi (2012) says ethnomedicine characterizes the object of study in ethnographic research on indigenous, usually non-Western, forms of healing and classifications of disease and illness.

- **Traditional Healer –** A traditional healer is defined as an unlicensed individual who practices the art of healing through traditional methods, herbal treatments, and even the power of suggestion. (Gragera, 2013).
- **Rural communities** – According to Summer (1986) rural communities are geographic areas that are situated outside towns and urban civilizations.

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# CHAPTER ONE

# INTRODUCTION AND BACKGROUND TO THE STUDY

## 1.1 INTRODUCTION

Existing debates in the medical anthropology field pay attention to the spread of epidemiological transitions, patterns of illness and disease in populations, the explanatory model (meanings attached to the interpretation of illness and diseases) as well as the rationale behind the use of biomedicine and ethnomedicine or pluralistic interventions employed when curbing or fighting various diseases. This study probed health adversities and pluralistic interventions employed by the rural community of Bulwer (Gqumeni location), KZN in response to COVID-19. The argument that the study brings to the fore revolves around the fact that COVID-19 brought health risk-related adversities that hindered the accessibility of health facilities in rural areas, however knowing that rural communities are very rich in indigenous knowledge systems which recognize the use of ethnomedical plants/ herbal remedies, they opted for this as an alternative for the use of biomedicine. This study is also undertaken with the scope of advancing decolonial/indigenous use of medicinal plants and medical pluralism in the existing body of literature. This chapter is aimed at providing an outline of the research study. The content of the chapter also focuses on depicting the background of the study, the conceptualization of key and relevant concepts, delineating the problem statement and the rationale of the study, and briefly introducing the methodology and theoretical frameworks that guide the study. The chapter will also expand to elucidate the importance and relevance of the study within the field of anthropology as a discipline, proceed to outline the research questions, followed by the research objectives, sequence of chapters of the thesis, and a chapter summary.

## 1.2 BACKGROUND OF THE STUDY

COVID-19 is an epidemiological disease that rapidly left people in both developing and underdeveloped communities socio-economically devastated. The rapid spread and historic mortality rate threatened the longevity of people from all economic categories but people residing in rural areas were affected the most by the pandemic when compared to urban residents. In December 2019, COVID-19 was recorded and reported as an endemic in Wuhan city located in China, but because of globalization and the nature of it being communicable,

it became a pandemic experience of the world, which includes South Africa and its urban and rural communities. Edemekong and Huang (2022) defined communicable diseases as, sicknesses caused by viruses or bacteria that individuals transmit to each other via contact with contaminated surfaces, bodily fluids, blood products, insect bites, or through airborne transmission. Thus, making COVID-19 a communicable disease since the virus spreads from an infected persons mouth or nose in small particles when they cough, sneeze or through airborne transmissions (WHO, 2020).

It was on the 11th of March 2020, when the COVID-19 pandemic was declared a pandemic by Dr. Tedros Adhanom Ghebreyesus the director of the World Health Organization (Cohut, 2021). The COVID-19 pandemic proved to be an infectious illness, that is communicable/ transmitted from one person to another. Consequently, the devastating circumstances that came with the pandemic brought nations to a state of profound vulnerability. The World Health Organization became the lead recorder of the spread of the pandemic across countries. Their statistical analysis revealed that as of 31 December 2020, COVID-19 infected over 82 million people and killed more than 1.8 million worldwide. This proves how fast the pandemic was spreading. Through globalization and other migration patterns, people that had traveled abroad also contaminated the virus because it is a communicable infection.

The aged and those with underlying morbidities were classified as more vulnerable and succumbed to the death rates that were recorded across pandemic waves. The virus invaded people's immune systems by being in contact with an infected person or touching contaminated surfaces hence many mitigation interventions were enforced such as the hard lockdown, the masking up, sanitation and social distance advocacy, testing, and vaccination were offered as alternatives of discouraging the spread of the pandemic. Medical facilities and satellite arrangements were put in place to respond to the demands of the pandemic. The motive was to save lives and to ensure accessibility of medical care to everyone in need of urgent medical care.

The spread of the COVID-19 pandemic around the world has raised concerns around the political economy as well as inequality towards service delivery amongst rural populations and urban populations. In South Africa, the pandemic exposed the African National Congress

(ANC) and led the government to be known that it had not really advanced the health sector for it to be ready for such trying times. It became clear that rural communities and people living below the poverty line are always subjected to harsh realities of economic trajectories. The pandemic exposed how the rights to the attainable standard of health for rural residents have been violated or overlooked and this questions what has been achieved by the government during the 29th years of the democratic dispensation. It further exposed the political economy which is affecting rural communities as they were observed being unable to access healthcare facilities. While there is a growing body of research on how urban communities were impacted by the COVID-19 pandemic there is limited research on COVID-19 in rural communities and little attention paid to how rural residents and their indigenous plants rescued them during the pandemic. Cennimo (2021) and Shafi et al. (2021) confirm that "Covid-19 is an illness that caused many fatalities in the world, but rural communities were impacted harshly because of the inaccessibility of medical facilities in rural areas". Backing this was The World Health Organization (2020) proving that rural areas suffered more fatalities because they are geographically isolated, and do not have quick access to health services/facilities. This has been a socio-economic and geo-structural challenge that rural populations still face. Due to poverty, prevalent unemployment, and lack of immediate access to advanced healthcare services, rural communities are highly prone to lack of treatment for such pandemics. Accessing healthcare facilities and systems remain a luxury they cannot afford. Consequently, many individuals in these communities turn to their traditional knowledge systems to treat flu and other illnesses.

According to Shafi et al. (2021), the emergence of the COVID-19 pandemic exposed several disruptions. Firstly, it revealed that developing countries' health systems and facilities were ill-prepared to respond effectively to global pandemics. Secondly, poverty and unemployment prevalent in these countries acted as barriers, preventing people from accessing healthcare when they needed it most, because limited finances make it hard for one to access healthcare or buy medication. The ability to access healthcare became a commodity accessible mainly to the wealthy. Thirdly, developing countries were observed relying on their indigenous knowledge systems to manage flu symptoms, highlighting ethnomedicine's significance as a source of hope for impoverished populations. The COVID-19 pandemic indeed highlighted significant vulnerabilities in developing countries' as a result these regions

faced a double-edged challenge: insufficient healthcare infrastructure and a population already struggling with poverty and unemployment. As a result, accessing healthcare became a privilege for the affluent, further exacerbating the disparities in health services. This situation emphasizes the urgent need for targeted interventions, improved infrastructure, and global cooperation to ensure more equitable access to healthcare for all, regardless of socioeconomic status. The World Health Organization (WHO) (2020) supports the notion that even though there may have been bureaucratic obstacles to the utilization of indigenous herbs, rural communities still relied on these ethnomedical plants to mitigate the risks of death associated with COVID-19. Due to possible well-known factors that contribute to poor health delivery in many developing countries, such as medication not being delivered on time, limited resources required for treating COVID-19 patients in rural clinics and hospitals, and a limited number of staff, rural communities faced difficulties dealing with the strain that came with the pandemic (Huang et al., 2021). Supporting this was Huang et al. (2021) who stated that "rural populations consistently encounter difficulties arising from the closure of hospitals and a shortage of healthcare providers". They talked about how "the adverse impacts of existing health differences for people living in rural areas remain a key source of concern during preparation for and response to widespread disasters", leaving the poor more vulnerable during this time.

### 1.3. CONTEXTUALIZING THE STUDY IN MEDICAL ANTHROPOLOGY

Contextualizing health-related issues has been a rule of thumb in medical anthropology. Coreil (2008) averts that the field of medical anthropology emerged in the 1960s to study epidemiological transitions and communicable infections that were experienced by people in their geographic spaces hence the context becomes the core of the field. Medical anthropology, as described by McMahan and Nichter (2011: p273), is an interdisciplinary branch of anthropology that has a rich research tradition focusing on environmental health-related matters. It particularly examines the relationship between human health and environments characterized by risk, as well as how processes of development and globalization influence both environmental and human health. Medical anthropology is aligned to various branches of anthropology, including social, cultural, biological, and linguistic anthropology, to gain a comprehensive understanding of the factors that impact

health and well-being. It encompasses the study of various aspects such as the experience and distribution of illness, strategies for illness prevention and treatment, processes of healing, and the cultural significance and utilization of diverse medical systems. The aim of medical anthropology is to examine and analyze these factors in order to enhance our understanding of health-related phenomena in a broader sense. Pioneers in the field such as Armelagos and Barnes (1999) further confirm the niche of medical anthropology and they confirm that humans have struggled with infectious diseases from different transitions (i) disease in agricultural populations: the first epidemiological transition, (ii) the rise of the industrial revolution and medical advancement: The second epidemiological transition, (iii) the contemporary / delayed transition of disease epidemiology, that often threatens their adaptation, survival, and longevity. As discussed by Panter-Brick and Eggerman (2017), conceptually and methodologically the medical anthropology field supports a "big-tent" research agenda on health and society, meaning it incorporates people-centered narratives, it accommodates a wide array of perspectives and experiences, contributing to a more comprehensive understanding of health and society. Medical anthropology as a sub-field in anthropology recognizes that people can employ (i) Western remedies (biomedicine), (ii) traditional remedies (ethnomedicine), or (iii) pluralistic interventions, which is the use of biomedicine and ethnomedicine as an attempt to escape etiologies in context. Brown et al. (2005) state that in medical anthropology, all societies have medical systems that provide etiological methods, and practices for curative or palliative treatment. Studying the COVID-19 pandemic from a medical anthropology perspective can provide important insights into the social and cultural dimensions of healthcare and medicine. Ethnographic fieldworks is employed as a method of data collection strategy through which the researcher immerses him/herself within the community to interview and document the phenomenon under study or to shed insight on the social causes of sickness and well-being. Medical anthropology seeks to provide a thorough understanding of the complex interplay between culture, community, and individual experiences in creating health outcomes by concentrating on the social context in which health-related phenomena occur.

In the context of COVID-19, especially in rural areas, the principles of medical anthropology play a pivotal role in understanding and addressing health-related challenges. Rural communities often possess unique cultural, social, and environmental contexts that significantly influence their experiences with health and disease. The interdisciplinary nature

of medical anthropology, integrating social, cultural, biological, and linguistic anthropology, provides a comprehensive framework for exploring the multifaceted impact of the pandemic. Understanding the relationship between human health and the environment becomes particularly crucial in rural settings where environmental factors might affect the spread and containment of diseases like COVID-19. Moreover, the acknowledgment within medical anthropology that individuals can utilize various medical systems, such as Western biomedicine, traditional ethnomedicine, or a combination of both, aligns with the diverse approaches observed in rural areas to combat health issues. This recognition emphasizes the importance of culturally sensitive interventions that account for local practices and beliefs, a significant factor in combating COVID-19 in rural communities.

The historical perspectives offered by pioneers like Armelagos and Barnes (1999), discussing the various epidemiological transitions and how these transitions threaten adaptation and survival, shed light on the challenges faced by rural populations during health crises. These transitions might illuminate the vulnerabilities and adaptations required in rural areas facing the impacts of COVID-19. In essence, applying the lens of medical anthropology to COVID-19 in rural areas allows for a more comprehensive understanding of the pandemic's impacts on these communities. It facilitates the exploration of culturally embedded healthcare practices, community responses, and environmental influences, which are crucial in designing effective, context-specific strategies to address the challenges posed by the pandemic in rural settings.

## 1.4 PROBLEM STATEMENT

The COVID-19 pandemic presented unprecedented health adversities globally and proved to be a life-threatening infectious pandemic in the 21st century. It escalated rapidly thus signalling that health policies be revised, the need for decentralized resources and a pool of health practitioners who will put their lives at risk while rescuing others. The pandemic also exposed other country's leaders who had not invested in the medical advancement of their countries hence corruption was recorded on issues such as medication, testing kits and many other things. The pandemic also exposed that people in rural areas are still reliant on medicinal/ethnomedicinal plants to bring healing. As explained by Rankoana (2021), COVID-19 has presented new research interests that scholars should tap into in order to aid

the health sector as they prepare for new and unknown pandemics. Gqumeni community at Bulwer was not immune to the harshness of the COVID-19 pandemic. As a result, it has become crucial for the study to record how the community responded to the pandemic, the study takes further interest in the use of pluralistic interventions considering the unique cultural and socio-political factors that influence the community's healthcare practices and the rurality of the area. This research adds to the existing understanding of the health challenges faced by the community under investigation. Additionally, it provides insights into the various interventions that the community found effective in preventing and managing COVID-19 infections. Though research has been done on COVID-19 and its effect on the nation, limited literature or evidence of research specifically focused on COVID-19 in rural populations, indicates that more research should be done on this phenomenon. Farrel et al. (2020) also stated:

*"Research on the impacts of the Covid-19 pandemic has predominantly overlooked rural populations, despite the fact that these communities, housing tens of millions of individuals with varied backgrounds in the United States, are among the most vulnerable populations in the country. They may also have lower resilience to cope with the effects of a widespread external shock such as a pandemic".*

Not only is it in the United States that rural communities are most vulnerable when compared to urban areas, but even in South Africa rural communities are most vulnerable when it comes to pandemics such as COVID-19. Also, it is these rural communities with sums of people that have a shortage of essential resources, lack of infrastructure, and limited healthcare facilities of services, thus making them vulnerable to health-related difficulties and putting them at high risk when pandemics such as COVID-19 hit their communities. This proves why research on rural communities should be done to gain knowledge of the health adversities they were faced with and the options or interventions they opted for during their trying times. This study is aimed at tackling this knowledge gap with the hope that it will be of benefit to the body of knowledge, and in case there is another pandemic they should know how to face or tackle any difficulties that come, because research would have been done and people would have found the platform to share the difficulties they faced and interventions they employed to fight the pandemic, thus passing the information to many people.

To address this knowledge, gap the researcher conducted a scoping literature review. The existing literature review revealed a notable gap as most scholars had lacked in exploring how rural areas navigated through the tall of the Covid-19 especially in Pietermaritzburg and how rural communities escaped adversities that came with it.

This study is theoretically valuable as it attempts to assist narrate the health adversities and pluralistic interventions employed by local/rural communities. Most past research has concentrated on the rapid spread of the pandemic. Medical researchers and healthcare workers face higher levels of exposure to the disease due to the nature of their work (Nguyen et al, 2020). It is even evident in research conducted by Shafi, Liu, Shafi, Rahman, and Chen (2021) that "less attention has been paid to local communities in rural areas". As far as this research is concerned, it is by far the first empirical research on COVID-19 in Bulwer (Gqumeni location) focusing on health adversities and pluralistic interventions employed by the community members in the wake of the COVID-19 pandemic. It is therefore important to conduct this study in this specific community and gain information that will help in the future, should there be a similar outbreak and to contribute towards medical pluralism as well as decolonial/indigenous knowledge systems that will advance the discourse in medical anthropology.

## 1.5 ASSUMPTIONS OF THE STUDY

Patidar (2013) defined an assumption of a study as a realistic prospect, which is something that we believe to be true. They are statements that are considered to be true even though they have not been proven or tested. Patidar (2013) further explains that research is built on assumptions since a foundation is considered necessary to build something, a researcher must assume something in order to find out something. The assumption that this study has made is that the Bulwer (Gqumeni) community is (i) a vulnerable community in terms of its geographical location and (ii) people living in rural communities have limited access to healthcare services, specifically modern healthcare services (bio medicine) which makes it difficult to access COVID-19 testing, treatment, and vaccines due to geographical barriers, lack of infrastructure, and, shortage of healthcare professionals, consequently, they search for alternative ways to cure or fight illnesses or diseases such as COVID-19. Having limited

access to conventional healthcare services and lacking resources has led to a reliance on ethnomedicine as a primary form of healthcare for rural communities. Also, there is an assumption that individuals living in poor rural communities have strong traditional beliefs and practices related to health and healing, which influenced their decision to use ethnomedicine to treat COVID-19. Another assumption for this study is 'limited health literacy'. Individuals living in rural communities have limited health literacy and may lack knowledge about COVID-19 prevention, symptoms and treatment, disease management, and available healthcare services hence why the pandemic could spread quickly. It is therefore important to find out the health difficulties Bulwer (Gqumeni) Community members faced due to COVID-19, the pluralistic interventions they opted for, and what motivated their decision.

## 1.6 THE RATIONALE OF THE STUDY

The rationale for conducting this study branches from my personal interest. As an aspiring anthropologist, I find it essential to undertake this study because although COVID-19 has been extensively researched, the existing literature fails to capture the unique experiences of the specific community being sampled. Additionally, only a limited number of studies have delved into the diverse range of interventions that rural communities have employed to mitigate the risks posed by this life-threatening pandemic in Soth Africa. Hence, there is a need to bridge this gap in knowledge and provide a more comprehensive understanding of the pandemic's impact on rural populations and the various strategies they have adopted to confront it. The rationale for such studies is also supported by the Health and Democracy report (n.d.) by Pemunta and Tabenyang (2020) which opines that the historical neglect of indigenous knowledge systems, including a lack of government acknowledgment, research, and focused development, has resulted in a gap in standards between these traditional systems and biomedicine. Colonialism, cultural imperialism, and apartheid skewed the use of African Traditional herbs with the intention of giving Western herbs more prominence over traditional herbs hence this study will also contribute to the decolonial discourse of health and illness (Abdullahi, 2011). A decolonial discourse is important because Africa has suffered a historic invasion that compromised the cradle of medical plants in Africa. Decolonial discourse is a critical approach that questions and challenges the lasting impacts of colonization on societies, cultures, and knowledge systems (Passada, 2019). This can be

practiced by promoting indigenous knowledge, amplifying marginalized voices, and advocating for cultural diversity.

During the colonial era, European medical systems were imported, leading to the stigmatization and marginalization of pre-existing African medical systems. Indigenous knowledge systems have been systematically suppressed and not given the opportunity to thrive and receive recognition (Abdullahi, 2011). In 1953, the Medical Association of South Africa declared alternative therapies as illegal and unscientific, and measures were implemented within the medical code to discourage collaboration between allopathic (conventional) and alternative practitioners. The Witchcraft Suppression Act of 1957 and the Witchcraft Suppression Amendment Act of 1970 further restricted the practices of traditional healers, imposing prohibitions on their activities (Mothibe & Sibanda, 2019). Today, the debate between traditional versus allopathic treatment is frequently politicized and confusing. African traditional healthcare is undeniably a genuine field of medicine that has long been ignored. However, this historical context does not imply that traditional and alternative health systems should not be held to the same standards as allopathic healthcare today. Standards that ensure the safety and efficacy of medicines, for instance, are crucial regardless of their origin. These standards are essential for traditional and alternative healthcare systems to gain recognition and to protect people's rights. The debate over traditional vs. allopathic treatment is indeed complex and often politicized. While African traditional healthcare is a legitimate field, ensuring equal safety and efficacy standards is essential, irrespective of origin. Universal standards, often based on evidence-based research, should be applied, but adapting them to respect cultural diversity and traditions is the challenge. The World Health Organization (WHO) and national health regulatory bodies play roles in establishing and harmonizing these standards, but it's an ongoing, collaborative process involving healthcare professionals, policymakers, and researchers. The goal is to provide safe and effective healthcare options while preserving cultural heritage.

Zondi and Ehaine (2022) in their publication argued that the rise of ethnomedical research is an intention to debunk the wrong information that colonizers concluded about African traditional herbs. Moshabela et al., (2016) stated that South Africa must address historical wounds caused by colonization, missionaries, and apartheid that have affected traditional

healing/people’s beliefs in traditional healing. Additionally, the country must tackle current challenges such as the lack of trust between practitioners and redress the belief that traditional medicines have potential dangers. The authors also suggest that promoting the institutionalization of traditional healing in policy discussions is a crucial aspect of achieving social justice and redressing past wrongs/injustices.

## 1.7 THE SIGNIFICANCE OF THE RESEARCH STUDY

The purpose of this study is to investigate and probe health adversities and pluralistic interventions that were employed by the community of Bulwer in response to the COVID-19 pandemic. Studying COVID-19 in rural areas is significant for several reasons, such as:

- **Understanding the community's response to COVID-19**: This study helps to understand how the community of Bulwer responded to the COVID-19 pandemic. The responses of communities to the pandemic have varied widely, and it is essential to study and find out the importance of this particular community also, with the hope that these responses will contribute to identifying successful strategies and challenges that need to be addressed.
- **Identification of health adversities:** This study identifies health adversities faced by the community, which can in the future help in developing targeted interventions to address them. These interventions can help in improving the health outcomes of the community in the short and long term. It is known that rural areas have unique challenges such as limited healthcare resources, lack of public transportation, and a higher proportion of elderly residents who are more vulnerable to the virus.
- **Recording of pluralistic interventions:** The study examines the pluralistic interventions employed by the community of Bulwer to respond to the pandemic. These interventions include traditional and modern medicine. Understanding the impact of COVID-19 in rural areas and finding out the pluralistic interventions they opted for during trying times can help policymakers and healthcare providers address these challenges and develop tailored tactics to combat the spread of the virus. Therefore, the study will help obtain and provide insightful information in this regard.

## 1.8 AIM, OBJECTIVES, AND RESEARCH QUESTIONS

### 1.8.1 The aim of the study

The research aims to probe the health adversities and pluralistic interventions employed by the rural community of Bulwer (Gqumeni location), KZN in response to COVID-19.

### 1.8.2 Objectives of the Study

Kielmann et al. (2012) confirm that medical anthropology research is largely focused on how an illness is recognized and classified (endemic/epidemic/pandemic), is communicable or non-communicable, what risk factors mean in a context, how people interpret, respond, and cope with risk and illness. Pfeiffer and Nichter (2008) recognize that anthropologists are well placed to observe and document the consequences of acute and chronic illnesses on families and individuals. They underline that anthropological study, which goes beyond merely measuring the number of people impacted by sickness, provides vital insights into the broader repercussions of illness.

**The primary objective of the study is as follows:**

- To probe health adversities and pluralistic interventions that were employed by the community of Bulwer, KZN.

**Secondary objectives of the study are as follows:**

- To document the factors that have played a role in creating health challenges for the rural community of Bulwer (Gqumeni) during the COVID-19 pandemic.
- To examine the health-related effects experienced by members of the Bulwer (Gqumeni) community due to the COVID-19 pandemic.
- To explore the strategies and approaches adopted by the Bulwer (Gqumeni) community to safeguard their health and well-being during the COVID-19 pandemic.

### 1.8.3 Research key questions

Using qualitative research methods, anthropologists pay close attention to the active participant's social reality-societies and 'culture-specific narratives on the interpretation of illnesses and diseases' Kielmann et al. (2012). Secondly, medical anthropologists' research interest is guided by ecological perspectives to understand patterns of diseases from the view of human populations and their cultural and biological entities. Some anthropologists do not like to deal with yes/no answers they want to know details of why, when, & who (open-ended

question-------explanatory model----reflexivity takes place/ peoples narratives) (Merrild et al., 2016). But the phenomenon being studied and the kinds of questions asked determine the study approach to be used.

**The primary question of the study is as follows:**

- What are the health adversities and pluralistic interventions that were employed by the community of Bulwer, KZN?

**Secondary questions of the study are as follows:**

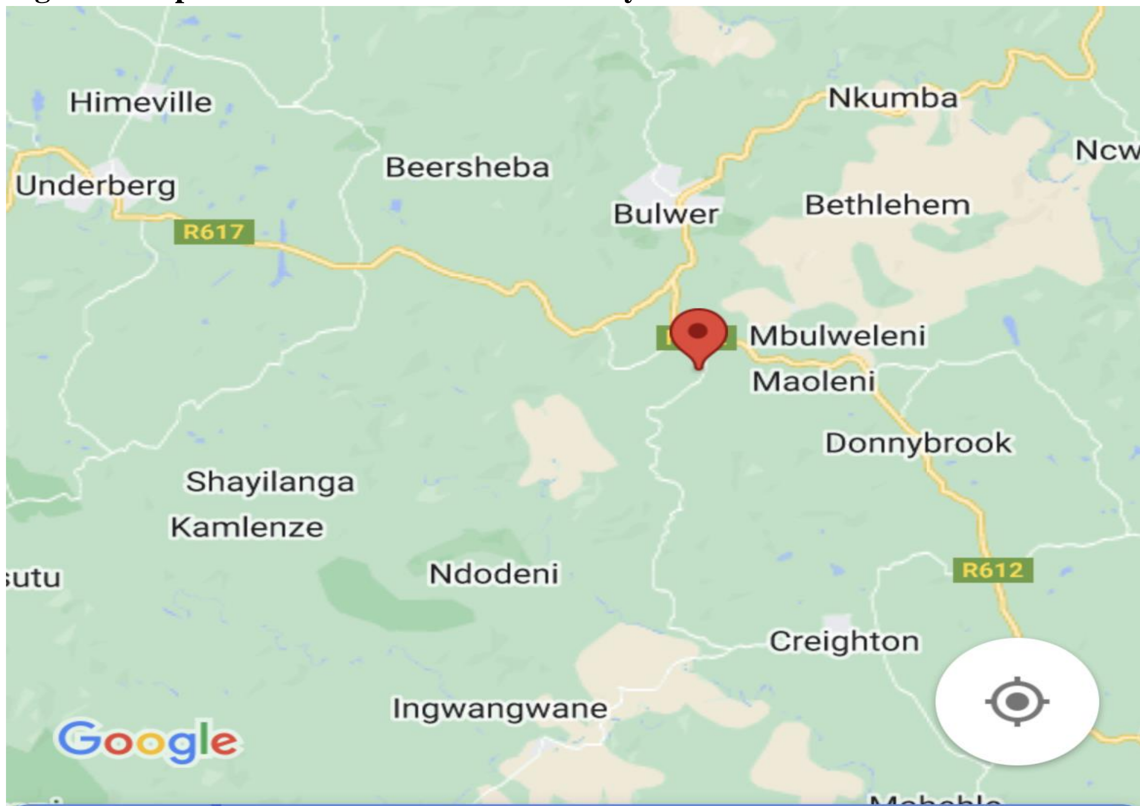
- What are factors that have played a role in creating health challenges for the rural community of Bulwer (Gqumeni) during the COVID-19 pandemic?
- What health-related effects were experienced by members of the Bulwer (Gqumeni) community due to the COVID-19 pandemic?
- What are the strategies and approaches adopted by the Bulwer (Gqumeni) community to safeguard their health and well-being during the COVID-19 pandemic?

## 1.9 RESEARCH SITE

The town of Bulwer was named after Natal Governor, British colonial administrator, and diplomat by the name Sir Henry Bulwer who died in September 1914 (Denis, 1975). This town is located in the Midlands region of KwaZulu -Natal, South Africa. It is situated along the R617 regional road, positioned between the towns of Boston and Underberg. It is approximately 60,7km northwest of Ixopo when traveling on the R56. Bulwer is located 100 km west of Pietermaritzburg. Pietermaritzburg is the closest city to Bulwer, and people from Bulwer travel to Pietermaritzburg for shopping and are often transferred to hospitals in Pietermaritzburg when in critical health conditions. This town is rural, and the main industry in this rural area is farming. There are several tribal specialists in the area and traditional leaders are the most influential. Bulwer (Gqumeni) is currently governed by or falls under the Ingwe Municipality now known as the Dr. Nkosazana Dlamini Zuma local municipality (NDZ municipality) named in respect of the first woman chairperson of the African Union Commission and national order recipient and former Minister Cooperative Governance and Traditional Affairs who was born in one of the rural areas of Bulwer called Inkumba. The Nkosazana Dlamini Zuma Municipality falls under the Harry Gwala District. The NDZ

Municipality was established after the former Ingwe Municipality and Kwa Sani Municipality merged in the year 2016. The municipality includes Underberg (located a few km from Bulwer), Bulwer (which is where the study is based) and lastly Creighton also located a few km from Bulwer), outlined in the Dr Nkosazana Dlamini Zuma Local Municipality-KZN 436 Report (2020).

**Figure 1 Map of where the Bulwer community is located**

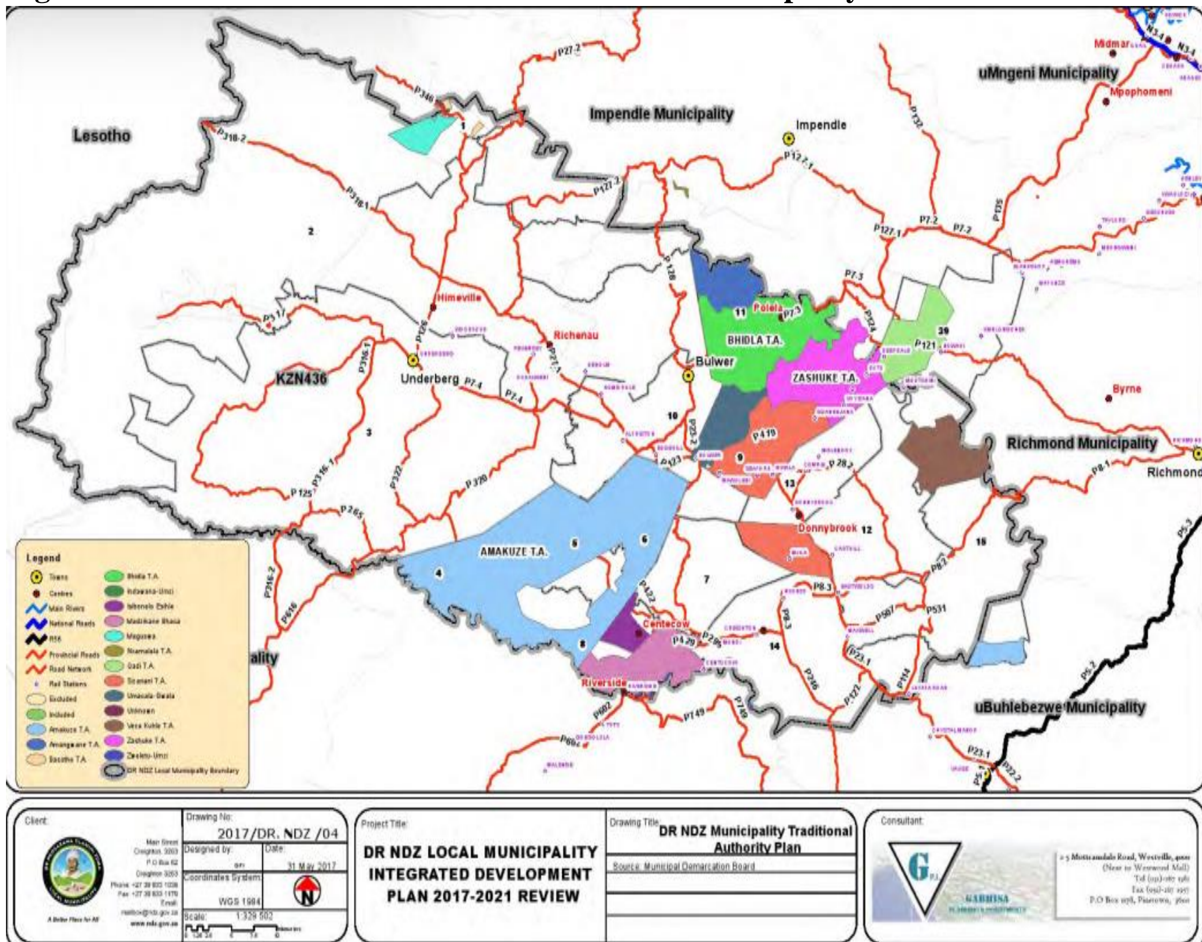



The Nkosazana Dlamini Zuma Municipality has 15 local wards, and this study is based in ward 7 which falls under Bulwer (Gqumeni location). In terms of the municipal population and area, it is home to 119 640 people: 3 602 square kilometers. Whilst Bulwer on its own according to the census 2011 the area of Bulwer community totals up to 12.70 km2 with a population of l. 322. Divided, the population has a racial makeup of 93.2% Black African, 0.3% Coloured, 0.6% Indian, 5.1% White, and 0,8 Other. Of all these races 89.2% are Zulu speaking. (Census 2011 by Frith 2013).

The Nkosazana Dlamini Zuma Municipality has 13 Traditional Councils in total. Bulwer is one of the communities that is under the rule of traditional Councils. These Traditional Councils include Bhidla Traditional Council, Amangwane Traditional Council, Zashuke

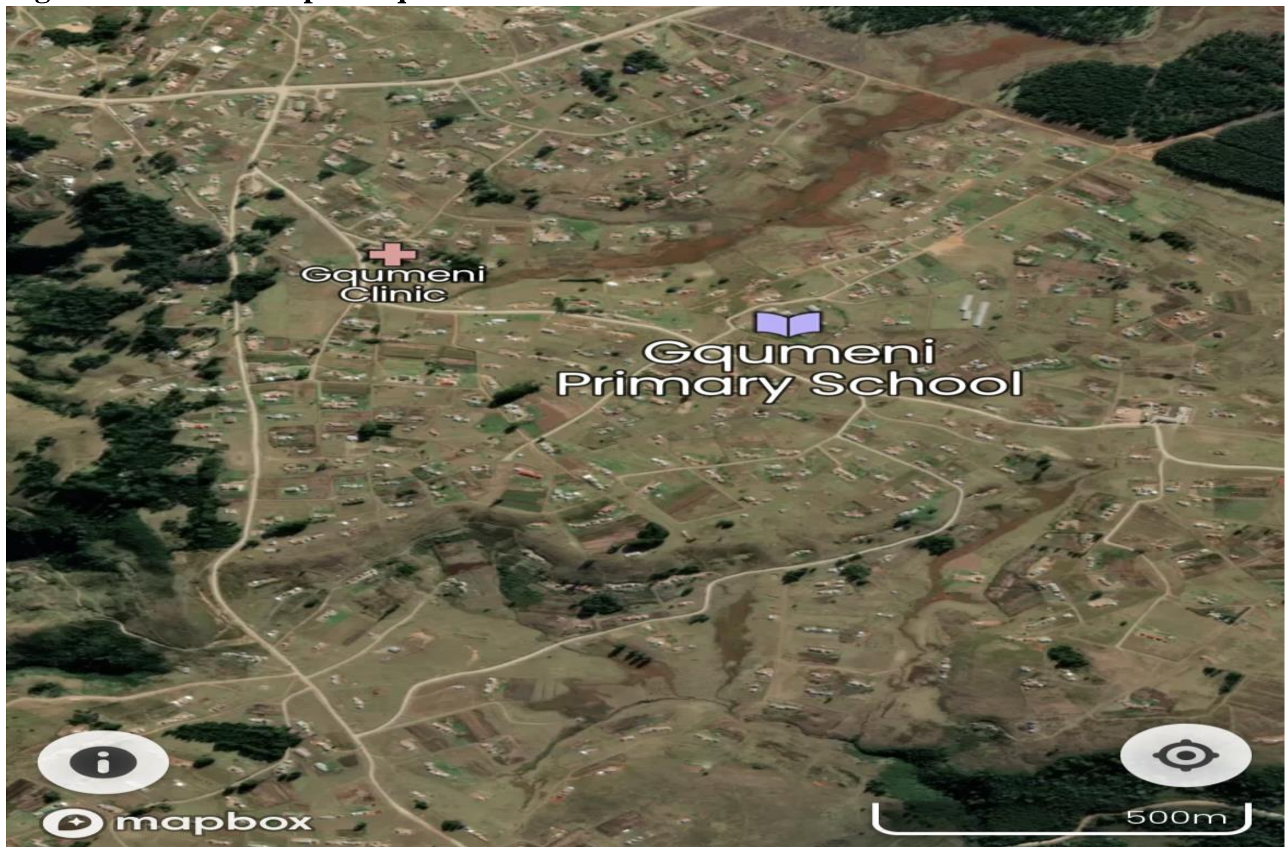
Traditional Council, and Amakuze Traditional Council. Bulwer Gqumeni location, where the study will be specifically conducted is ruled by the Amakhuze TribalAuthorityy under the chieftaincy of Chief Bhekizazi Dlamini and Ward 7 Councillor Sifiso Phoswa who is the Speaker of the Nkosazana Dlamini Zuma local municipality. (Dr Nkosazana Dlamini Zuma Local Municipality-KZN 436 Report, 2020)

**Figure 2: Traditional Councils within NDZ Local Municipality**



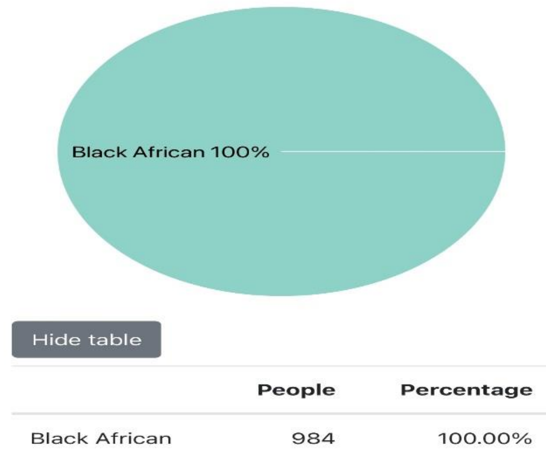

Gqumeni Location (ward 7) is a rural community that falls under a small Village/Town called Bulwer (3244) with an area of 28.79 square kilometers.

**Figure 3: Satellite Map of Gqumeni Location**



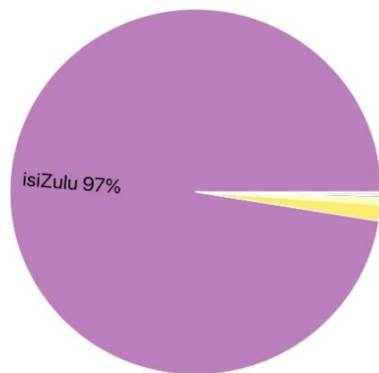

This community has a population size of 984 (34.18 per km2) and 213 (7.40 per km2) households, a population group of 984 (100%) black Africans and a high percentage of these black Africans being IsiZulu speakers 97. 46%, IsiNdebele 1.42%, English 0.61%, Sepedi 0.20%, IsiXhosa 0.20% and Sesotho 0.10% (Census 2011 by Frith 2013). The community is deeply rural and is classified as the poorest community under the Nkosazana Dlamini Zuma Municipality, Gqumeni locations have one local clinic, with limited/poor health care facilities, which is not only accessed by Gqumeni community members as people from other parts of NDZ also access/utilize the clinic, people from eGala, Nkwezela, Bulwer Village and Donnybrook, (Dr Nkosazana Dlamini Zuma Local Municipality-KZN 436 Report, 2020)

**Figure 4: Population Group**



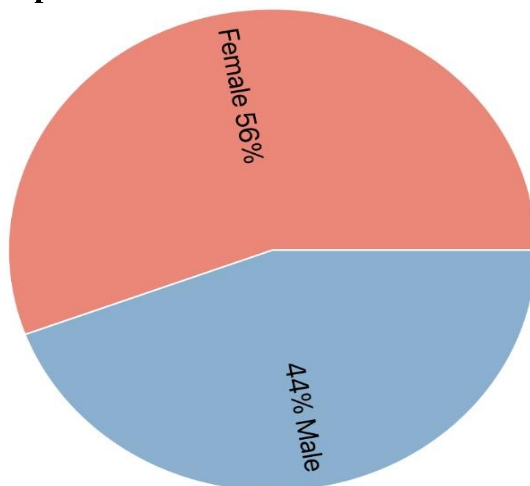

| | People | Percentage |
|---|---|---|
| Black African | 984 | 100.00% |

**Figure 5: First Languages**




The population of eGqumeni is made of 100% Black Africans, and amongst the Black Africans 97% are IsiZulu speaking (Census 2011 by Frith 2013).

**Figure 6: Gender Representation**




The pie chart above demonstrates the gender representation of the population of Gqumeni, according to the chart it is evident that the population of eGqumeni has a high percentage of females compared to males (Census 2011 by Frith 2013).

## 1.10 BRIEF INTRODUCTION OF THE THEORETICAL FRAMEWORKS AS WELL AS THE RESEARCH METHODOLOGY

The following theories are relevant to conceptualize and explore health adversities and pluralistic interventions that were employed by the community of Bulwer during the severe effects of COVID-19.

### Critical Medical Anthropology Theory

Witeska-Mlynarczyk (2015) theorized that CMAT focuses on how economics and politics shape the overall status of human health and human behavior. The theory questions disparities in healthcare in the presence of social inequalities. At the center of inequalities are social factors such as race, ethnicity, gender, class, and access to health care. Singer (2004) asserts that the theory is focused on (1) the political economy of people which examines the social origins of disease and ill health in light of the world economic system; (2) analyses health policy, and health resource allocation, (3) recognizes medical pluralism, which gives recognition to existing knowledge corridors which translate how cultures explain their disease experiences; (4) studies structural issues that hinder access to health and health care and geo-political dynamics. As discussed by Singer (2004) CMA believe that in health and medicine, the social is just as vital as the biological, because epidemics are ultimately a social

phenomenon. Thus, when undertaking research related to health and illnesses, critical medical anthropologists are more likely to focus on the social aspects of health (individual behaviour, social relations, social structure, economic forces, political economy as well as existing systems of belief).

## Explanatory Model Theory

There is considerable evidence from medical anthropology that suggests that cultures uniquely explain their disease experience and they respond to their health experiences differently from each other. This theory is authored by Arthur Kleinman (1978), a prominent scholar in medical anthropology and qualitative research. Theory enables anthropologists during their ethnography to collect emic perspectives "symbolic meanings" which emerge from a particular phenomenon. The theory permits the social construction of knowledge from the perspective of the studied population. Kirkman and Lacey (2016), Hammarberg et al. (2016), Nagarkar (2012) and Jaiiswal (2018) posit that the EMT enables anthropologists and many qualitative researchers to ask what, why, and how questions, it accommodates meanings and interpretations which all the researcher to understand the depth of the subject. These theoretical lenses are considered appropriate since they are relevant to the study's context and have impacted the formulation of the research objectives and questions.

## Research Methodology and Research Design

This is an empirical-based study; it is based on the observed phenomenon, and it is aimed at finding knowledge from the authentic experience of community members. Under types of empirical research, the research will make use of the qualitative method of study. As defined by Radu, "Qualitative research is a study method that focuses on finding information or data through an open-ended conversation". (Radu, 2019). For example, information is gained by conducting interviews in order to gain insightful information on the phenomenon that is under study. Moreover, it helps understand and answer a specific research topic from the standpoints of the local populace or their experience on that topic.

Two research designs will be used in this study. The type of research design that I will use in investigating the challenges that COVID-19 had on rural communities is the phenomenological research approach. According to Smith (2007), this approach was developed to elucidate how individuals ascribe significance to a social phenomenon in their daily existence. Phenomenology's purpose, as described by Smith (2007), is to delve into "the fundamental nature of consciousness as it is subjectively experienced." The second research design is the exploratory research design which will help explore the health adversities and pluralistic interventions that were employed by the community of Bulwer (KZN). The nature of the study means that it is impossible to generalize the results, but rather, the aim is to get in-depth knowledge of the phenomenon under study and improve understanding. Both research designs are appropriate in this study as they grant participants an opportunity to narrate their experiences on the COVID-19 Epidemic. In this case, the investigator will want to know the lived experiences of Bulwer community members during the COVID-19 pandemic. Furthermore, this design relies on participants and researchers providing a detailed and accurate representation of the participant's experiences to allow for more precise interpretation (Chesebro & Borisoff, 2007; Jackson et al., 2007).

**Sampling and sample selection techniques**

Primary data was obtained through conducting in-depth interviews and recording the interview sessions between the researcher and participants residing in the community of Bulwer (Gqumeni location) who were affected by the COVID-19 pandemic. The twenty+ participants that were deemed suitable for the study were recruited using the Purposive-snowball sampling technique.

**Method of data collection and data analysis**

In-depth interviews were conducted in isiZulu for 45mins to 1 hour for a period of 3 months and interviews were audio recorded. In-depth face-to-face interviews were conducted as they are deemed relevant in qualitative research (Boyce & Neale, 2006.p3). Data was analyzed thematically following all steps. Transcribing was done by me.

**Ethical considerations**

Ethical considerations in Social Science Research were adhered to during data collection and in the data analysis process. Participants were recruited with respect, before data collection the researcher sought and received ethical clearance from University of KwaZulu-Natal's Human and Social Science Research Ethics Committee and gatekeeper clearance from the Bulwer (Gqumeni) counselor, before interviews began the researcher read the informed consent form to the participants those who could sign were asked to sign while who could not sign an 'X' was written on their behalf by the researcher, which was proof that they have agreed to voluntarily participate, being audio recorded and are fully aware of the purpose of the interview also verbal consent was also recorded for every participant. Participants consent to voluntarily participate in the and be audio-recorded during the interview was taped. Participants were also made aware that they were allowed to exit the study should they wish to do so. Pseudonyms were used to ensure the safety and confidentiality of participants.

## 1.11 STRUCTURE OF THE THESIS

This thesis will consist of six chapters as briefly outlined below:

- Chapter One: Introduction
- This chapter will present an introduction of the topic and background of the study, and also outlines the problem which the study attempts to address the relevance of the study will be outlined, and lastly the research objectives and key questions on which the study focuses.
- Chapter Two: Literature Review
- This section contains a literature review that combines useful information regarding the phenomenon under investigation. The chapter focuses on the health difficulties that rural people face, with a special emphasis on the lack of access to healthcare facilities in these locations. Furthermore, it explores the pluralistic interventions used in the fight against the COVID-19 epidemic, which include both biomedical and ethnomedical interventions.
- Chapter Three: Theoretical Frameworks
- This chapter will discuss and define these theoretical frameworks and state the contributions of the Critical Medical Anthropology Theory and the Explanatory Todel theory to the phenomenon under study. These two theoretical frameworks will be used

in chapters four (research design and methodology) and five (data analysis and generation) of this study.

- Chapter Four: Research Design and Methodology
- Chapter four of the research document presents an overview of the research design and methodology, specifically addressing the strategies and approaches employed for data collection. This chapter emphasizes the selection and description of data collection methods, the determination of an appropriate sample size, and the utilization of various sampling techniques. Ethical considerations relevant to the study are also discussed. Furthermore, the chapter outlines the planned data analysis procedures and acknowledges any limitations that may have affected the study.
- Chapter Five: Data Analysis
- This chapter presented the findings of the study, these findings were presented in the form of themes that were generated by the researcher from the obtained data. It also presented all information that was collected following the guide of interview questions, and the gained information thus comparing it to that of the existing literature.
- Chapter Six Recommendations and Conclusion
- This chapter draws the research conclusions which is a summary of the research's findings and provides further recommendations for the following studies.

## 1.12 CHAPTER SUMMARY

Chapter one of the study introduced the study thus outlining the argument that the study brings to the fore, it gave a background of the study focusing on the background of COVID-19 and the challenges it gave rise to, the problem statement, assumptions of the study and the rationale was outlined. The writer also stated the significance of the research study, the aim, objectives and key questions guided by the theoretical frameworks. This chapter also gave a background and description of the research site, supported by maps of the site and pie charts of the statistics. A brief introduction of the theoretical frameworks, as well as the research methodology and key terms were defined and lastly the structure of the entire thesis was given. Chapter two of the study will focus on the existing literature on the phenomenon under study.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 INTRODUCTION

Access to health care is recognized as a fundamental human right globally, unfortunately, rural communities continue to experience the hefty brunt of the problem. Dr. Tedros, the director of the World Health Organization (WHO), supports the notion that "every human being, regardless of race, religion, political belief, economic or social condition, has the fundamental right to enjoy the highest possible standard of health." (WHO, 2017). Chapter 2: Bill of Rights, Section 27 of The Constitution of The Republic of South Africa (1996) states that:

> *"Every individual is authorised to access healthcare services, including reproductive healthcare, as well as adequate food, water, and social security. This includes the provision of appropriate social assistance for those who are unable to support themselves and their dependents. The state has a responsibility to enact reasonable legislative and other measures, within the limits of its available resources, to gradually realize each of these rights." It further states, "Emergency medical treatment must not be denied to anyone".*

This chapter presents the literature review on issues discussed around the studied phenomenon. Mweetwa (2020) defines a literature review "as a critical review of existing knowledge on areas such as theories, critiques, methodologies, research findings, assessments and evaluations on a particular topic". Therefore, conducting a literature review is necessary when one wants to formulate a research idea. A literature review helps you put together what is already known about a topic, pinpointing knowledge gaps, and determining how your research could contribute to a particular field. The content of the chapter is focused focusing on the rise of pandemics in contemporary times; an overview of access to health facilities by rural communities in normal times and during the COVID-19 pandemic; discusses South African policies that legislate access to health care and delineates a review of how various cultures responded to their illness during this inclement period in the history of epidemiological transitions.

## 2.2 THE RISE OF PANDEMICS IN CONTEMPORARY TIMES

### 2.2.1 ACCESS TO HEALTH FACILITIES BY RURAL COMMUNITIES DURING COVID-19

The accessibility of healthcare facilities and medication has made it difficult for rural communities to fight the COVID-19 pandemic, which was one of the health-related adversities with which rural communities were faced. When compared to other natural disasters, COVID-19 presented a new experience in terms of its predictability and effects on society. In this regard, rural areas have been negatively affected to a larger degree. Mainly because of limited healthcare facilities, in worse cases one healthcare facility per rural area, limited isolation rooms for infected patients to quarantine, and limited resources and healthcare facilities being located kilometers away from most people's homes. The inaccessibility of health facilities as a result of historic-structural conditions such as poverty, employment, and geographical locations of rural communities proves to have worsened health conditions of people in rural areas and has presented adversities that have contributed to the death of people (Frost et al. (2017: 2). Such structural conditions such as the political history that South Africa has recorded, poor governance and corruption, shortage of qualified healthcare workers/practitioners in rural health facilities and increased rural residents' vulnerability to the COVID-19 pandemic (Kaufman et al., 2020).

The shortage of healthcare workers is also a significant challenge for rural communities during the pandemic. Many rural areas already face a shortage of healthcare providers, and the pandemic has only exacerbated this problem. Healthcare workers in rural areas face additional challenges such as a lack of access to personal protective equipment (PPE), inadequate training, and limited resources. Africa, being one of the underdeveloped countries was also hit by the pandemic, and in comparison, with the other regions it was stated in an article by Mishra (2020) that "The availability of health resources in Africa, such as hospital beds, nursing and midwifery personnel, ICU beds, ventilators, and medical doctors, is significantly insufficient". In areas with limited health facilities, the few available facilities become quickly overwhelmed with COVID-19 patients. The shortage of beds, medical supplies, and healthcare workers resulted in suboptimal care for patients. Among the countries that had too few medical resources (nursing and midwifery personnel, medical doctors, and Hospital Beds) were Mali, Madagascar, and Niger to name a few. Countries

with a small number of hospital beds and ventilators in African countries, include Lesotho, Chad, Zimbabwe, Malawi, Mozambique, etc. Even though South Africa was also among the countries that had limited resources, according to the statistics provided by Mishra it was better than the mentioned countries (Mishra, 2020: p14).

According to an article published by Africanews & AFP in 2020, hospitals in South Africa were facing a significant surge in coronavirus infections, leading to an overwhelming number of patients. The article further highlights that the overcrowding in Intensive Care Units (ICUs) has caused delays in admitting patients and waiting rooms have been repurposed as makeshift wards (Africanews & AFP, 2020). Consequently, patients had to sit in chairs day and night as they receive oxygen, which was the case in many healthcare facilities in rural areas. There are many hazards that prove how impossible it was for rural communities and the health facilities in rural communities to make an effective fight against COVID-19. This includes, limited access to infrastructure, limited access to information, healthcare worker shortage, transportation barriers, socioeconomic disparities etc. Also, rural hospitals face challenges in managing a surge of COVID-19 patients due to their limited number of specialists and fewer technological resources and capacities, such as a lower availability of intensive care unit (ICU) beds per person, as stated by the OECD (2020).

It was predicted that because of overpopulation in urban areas, the disease would spread faster compared to rural areas which have lower population density. Urban areas were hit the most by the pandemic at the beginning but as the pandemic escalated rural communities suffered more, which was mainly because of the inaccessibility of healthcare facilities and because rural areas are home to many old, aged people. Individuals living in rural areas, particularly the elderly population, tend to experience a higher prevalence of chronic illnesses. Despite their greater healthcare needs, they continue to face challenges in accessing health facilities promptly when they require immediate care. According to Kaufman et al. (2020) rural populations are more susceptible to the COVID-19 pandemic due to various factors. Firstly, rural communities tend to have a higher proportion of older individuals and individuals with existing health conditions, making them more prone to hospitalization and mortality during the pandemic. The Center for Disease Control and Prevention (2019) also highlights that people with chronic illnesses are at a heightened vulnerability to COVID-19. Additionally,

rural residents often exhibit a higher prevalence of pre-existing conditions and comorbidities such as diabetes, heart disease, obesity, and smoking, which further increase their susceptibility to severe complications arising from COVID-19 (OECD Regional Outlook, 2021). Also, the virus is specifically dangerous for older persons and rural areas mostly have higher proportions of older residents.

Besides the issue of lack of sufficient health care services in rural areas and the vulnerability of older people with chronic diseases there were other challenges. Not only did the lack of resources in rural areas include health care facilities resources, but amongst these resources was the inaccessibility of transport, which presents another hindrance to accessing health care, and therefore patients were less likely to travel to see a doctor if they live far from one. This includes hospitals with deficient rural health infrastructure (Jackson et al., 2021, IDSA, 2020 and Morris et al. (2020). According to Dr. Ohler (2020) of KZN Eshowe, rural communities have healthcare access problems such as greater distances between clinics, fewer health resources, and complex governance systems. This is consistent with Kapur's (2019) findings and the publication by Shafi et al. (2021), which demonstrate that rural people had substantial health challenges during the COVID-19 pandemic, as they frequently had to travel to far places or urban areas to receive medical care.

Lastly, there was the issue of people living in a household of more than five people making effective progress against COVID-19 difficult, and people living in crowded housing do appear to be more vulnerable than those that are better resourced and less crowded (OECD, 2020). In a fight to stop the rapid spread of COVID-19, the world's authorities implemented a range of measures, including national lockdown, mandatory mask-wearing, and restrictions on public gatherings. In South Africa, level 5 of the lockdown was announced on the 26th of March 2020 by President Cyril Ramaphosa (SAnews, 2020). According to Zhang et al. (2021), "lockdowns are a successful method of managing the spread of Covid-19 across populations". Though the implementation of these restrictions and safety protocols was for a good cause, it was impossible for them to be effective. The protocols that people were expected to abide by included maintaining 6 feet of social distancing, avoiding poorly ventilated spaces and crowds, washing, and sanitizing hands often (CDC, 2022). Social distancing and regular sanitizing of hands as part of the COVID-19 protocols were proven to

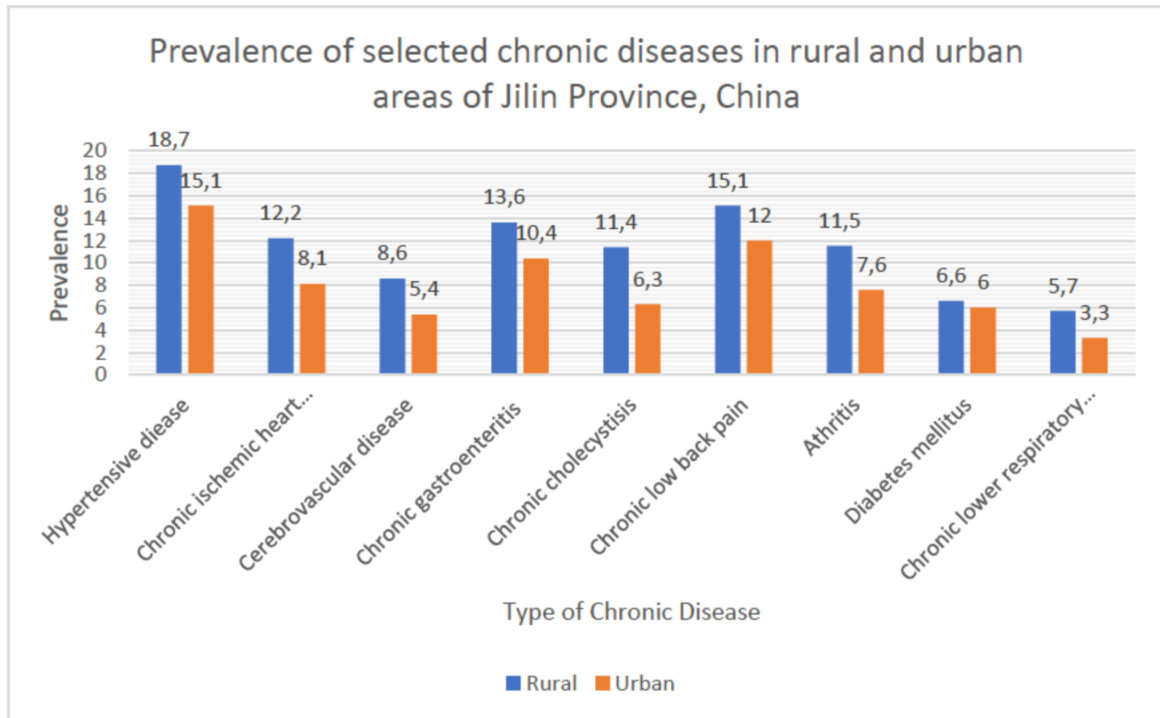
be effective in curbing the spread of the pandemic. As stated by Staunton, Swanepoel, and Labuschaigne (2020), “In settings where multiple individuals share a bedroom or among the estimated 200,000 homeless individuals in South Africa, practicing self-isolation and quarantine becomes extremely challenging if not practically impossible”. Also, as proven by the Stats SA National Household Travel Survey back in 2013 (Cited in Labuschiagne, et al., 2020) “A considerable segment of the population depends on crowded and congested public transportation systems, with 69 percent utilizing public taxis, 20.2 percent utilizing buses, and 9.9 percent relying on trains”. Such issues outline how impossible it is to maintain social distancing and at the same time guarantee hygienic practices especially living in these types of locations.

### 2.2.2. UNDERLYING HEALTH CONDITIONS FOR RURAL RESIDENTS

As discussed in chapter one, rural communities faced unique challenges in responding to the COVID-19 pandemic, including a range of social determinants of health that may impact the spread and impact of the virus. People with underlying health morbidities together with limited access to healthcare may contribute to higher rates of COVID-19 transmission and more severe health outcomes in rural communities. Underlying health conditions, such as hypertension, diabetes, and chronic respiratory illness, are more prevalent in rural communities than in urban areas because rural communities have not been beneficiaries of medical advancements since colonial times till such democratic times. These conditions can increase the risk of severe illness or death from COVID-19, making rural communities more vulnerable to the impacts of the pandemic. Rural areas have more older adults, and it is stated in an article by the National Institutes of Health, older adults experience more chronic health issues than the young (NIH, 2022), thus putting them at high risk of contracting COVID-19. Like the National Institutes of Health, White, et al also supports that “Rural residents have a higher likelihood of being elderly and having pre-existing health conditions such as cardiovascular disease, chronic obstructive pulmonary disease, diabetes, and obesity. These underlying health conditions further increase the vulnerability and impact of Covid-19 on this population.” (White et al, 2021).

The epidemiological landscape of Jilin province in China reveals a stark contrast in the prevalence of chronic diseases between its rural and urban regions. This bar graph analysis

sheds light on the considerable disparities in chronic disease occurrence, unveiling higher percentages in rural areas compared to their urban counterparts. Through a comparative exploration, this graphical representation aims to elucidate the distinct health challenges faced by individuals residing in these differing geographical settings, offering valuable insights into the healthcare dynamics within China.




(Wang, Kou, Liu & Li. 2014)

Also supporting the above information is Peters (2020) cited in OECD Regional Outlook (2021) who says rural residents have a higher prevalence of pre-existing conditions and comorbidities that are communicable, non-communicable and degenerative, for example, diabetes, heart disease, obesity, and tuberculosis, HIV and many other respiratory lung infections such as lung cancer. These chronic health conditions put people from rural communities at a greater risk of COVID-19 complications. On that note people with/under such conditions are at a high chance of getting very sick from COVID-19 because they have a compromised immune system (CDC, 2022). Complementing the risks of people residing in rural communities during COVID-19 is an article by TRACIE (2020) that speaks of people with substance use disorders and their vulnerability to COVID-19, the article outlines:

*"Individuals residing in rural areas who struggle with addiction to both legal and illegal substances, such as alcohol, tobacco, methamphetamine, and opioids, face an increased risk of severe Covid-19 infection. Moreover, these individuals may also have pre-existing lung damage or physical injuries resulting from substance abuse, further heightening their vulnerability to the virus."*

## 2.3 SOUTH AFRICAN POLICIES THAT LEGISLATE ACCESS TO HEALTHCARE

In South Africa, access to healthcare is governed by several policies and laws. All human beings irrespective of their economic status, their geographic location, and background should have a right to standard health and equal access to healthcare facilities, and it should be ensured that their rights are not violated in any way (WHO, 2017). When I speak of healthcare facilities, I am referring to pharmacies, hospitals community healthcare centers, and clinics with health treatment administered by general healthcare practitioners or primary healthcare nurses and doctors.

According to this right to health no one may be refused emergency medical treatment. Based on the results from an 'Access to Health Care' survey conducted by the South African Human Rights Commission (2016) "In South Africa, the society continues to exhibit significant inequality, whereby the quality and nature of services individuals receive are greatly influenced by their socio-economic status and their ability to access those services. This disparity persists regardless of the level of need for care". Although the nation continues to experience inequality regarding such human rights, the World Health Organisation has always prioritized and made the importance of this right known to everyone, "No one should get sick and die just because they are poor, or because they cannot access the health services they need" stresses the WHO (2017). Unfortunately, for rural residents from poor backgrounds mostly, areas where there are only one or two healthcare facilities located far from their homes, the COVID-19 pandemic proved that their right to the highest attainable standard of health continues to be violated. Kathleen (2019) conducted research supporting the fact that approximately 75 percent of rural Americans reside more than an hour away from the closest location offering testing kits and COVID-19 treatments which hindered them from accessing healthcare facilities, especially during these times when they should have

access to these facilities. In line with this, various authors outlined that “The inadequate healthcare systems and the detrimental impact of health inequalities on individuals residing in rural areas will exacerbate their vulnerability to the pandemic compared to those living in urban areas.” (Ibrahim et al., 2020).

- The **‘The National Health Act 61 of 2003’** (Government Gazette, 2003) which aims to provide access to healthcare services for all citizens of South Africa, with a focus on vulnerable groups such as women, children, and the elderly. The National Health Act provides a framework for the delivery of healthcare services in the country, including traditional and alternative healthcare services. Section 27of the Constitution (p.209-210) outlines that when the Constitution of the Republic of South Africa speaks of the equal right to accessing healthcare services it does not discriminate between the distinct systems of healthcare services, but rather gives people the right to decide on the type of healthcare services they want to access.
- **Traditional Health Practitioners Act (No. 22 of 2007):** this is a law in South Africa that regulates the practice of traditional medicine and the authorization of traditional health practitioners (THPs). The Act was introduced to recognize the important role that traditional medicine plays in healthcare delivery in South Africa and to ensure the safety and efficacy of traditional healthcare practices (Government of South Africa, 2007). For poor rural people who may not have access to modern medical facilities or cannot afford modern medical treatment, traditional health practitioners can be an essential source of healthcare. The act aims to promote the development of traditional healing practices, which can lead to a better understanding of traditional medicines and their potential uses in modern medicine. This can be particularly beneficial for poor rural people who may rely on traditional medicines as a primary source of healthcare or have limited access to Western medical facilities or treatment.
- **National Health Insurance (NHI) Bill (2019):** This bill aims to provide universal access to healthcare services for all citizens of South Africa. It proposes the establishment of a centralized fund to finance healthcare services and the restructuring of the healthcare system to improve efficiency and equity (South African Government, 2021). One of the main aims of the NHI Bill is to address the inequalities in healthcare access that exist in South Africa. therefore, according to the NHI Bill,

no person should be deprived of access to quality healthcare because of their socio-economic status. The National Health Insurance Bill was/is particularly relevant in the context of COVID-19, as it seeks to address the unequal distribution of healthcare resources across the country and not to some parts of the country. This is particularly important in rural areas where access to healthcare services is limited.

In summary, these laws and policies are critical in ensuring that healthcare services are accessible to everyone, including those living in rural communities. The COVID-19 pandemic has highlighted the importance of this section, and how much the South African government needed to take steps to ensure that healthcare services are accessible to all regardless of their location.

## 2.4 THE NICHE OF ETHNOMEDICINE ON PEOPLE

In medical anthropology, ethnomedical and biomedical interventions are two different approaches to treating illnesses (Morrison, 2000) and COVID-19 is no exception. While both ethnomedical and biomedical interventions can be effective, they differ in their underlying philosophy and methods of treatment. Cited in Zondi and Ehaine (2022: 63-64) Karunamoorthi et al. (2013) and Ria et al. (2020) assert that the African continent is abundant in valuable plant resources and is recognized as the birthplace of humanity, characterized by its rich biological and cultural diversity, including variations in healing practices across regions. Traditional medicine systems have historically been the primary healthcare option in many Southern African countries, particularly in rural areas, prior to the introduction of modern approaches for preventing, diagnosing, and treating social, mental, and physical illnesses. Simply put 'Ethnomedical interventions' are based on traditional knowledge and practices that are rooted in a specific cultural context.

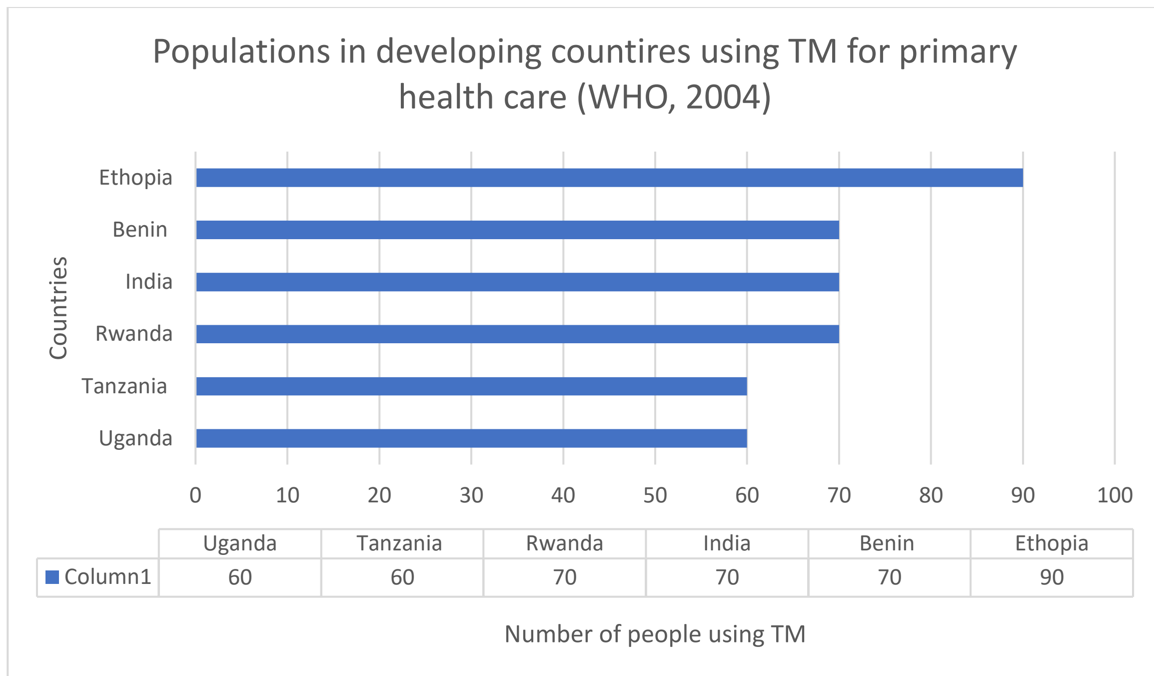
Mutola et al. (2021:2) state that in "South Africa, traditional medicine encompasses a wide range of health practices, knowledge, and beliefs, including plants, animals and mineral-based medicines, spiritual therapies, manual techniques, and exercises. These practices are either used alone or combined, to promote or ensure a patient's well-being, and to stop, diagnose and treat certain illnesses". As known, health, illness, and medicine related beliefs vary from indigenous tribe to indigenous tribe, hence some tribes opt for biomedicine

(Western medicine) while other tribes prefer utilizing ethnomedicine (which includes the use of Eastern traditional medicine), therefore people from different tribes treat illnesses in their preferred way.

According to Gagwani and Cheprasov (2021), ethnomedicine can be defined as a subfield of anthropology that focuses on the cultural interpretations, beliefs, and perceptions surrounding illness and health within ethnic or indigenous communities across various regions and over an extended period of time. It encompasses the study of diverse healing practices employed by these communities for various diseases. The use of ethnomedicine dates back, mainly because of its affordability, availability, and accessibility. Since the 1990s, there has been an increase in the use of Traditional medicine in developing countries, (WHO, 2008. Cited in Mothibe & Sibanda, 2019). The utilization of Traditional Medicine in Africa is significant, with approximately 80% of Africans relying on it, compared to 60% of the global population. The general public has been reported to use African Traditional Medicines for many years. It is estimated that 72% of the Black African population utilizes Traditional Medicine, averaging 4.8 uses per year. In the early 1990s, South Africa had an estimated 350,000 traditional health practitioners, and by 2009, there were approximately 500 traditional healers for every 100,000 people, in contrast to 77 medical doctors for the same population (Mothibe & Sibanda, 2019). According to fossil records, human beings have been utilizing plants and herbs as remedies for at least 60,000 years. According to Zondi and Ehiane's (2022) findings from an Indigenous Herbs and Drugs study it was confirmed by some participants that the use of ethnomedicine is societally known and is a cultural inheritance from their ancestors.

Also, we have well-known TM such as Traditional Chinese medicine (TCM), Ayurveda, Kampo, traditional Korean medicine (TKM), and Unani which have been made from using natural products or natural plants, the use of these traditional medicines has been practiced all over the world for hundreds or even thousands of centuries, and are now growing into orderly-regulated medical systems. (Yuan, Ma, Ye and Piao, 2016). To this day many people rely on traditional medication for treating illnesses.

Even today, various studies have shown that 90% of Ethiopians still depend on Traditional Medicine.




| | Uganda | Tanzania | Rwanda | India | Benin | Ethopia |
|---|---|---|---|---|---|---|
| Column1 | 60 | 60 | 70 | 70 | 70 | 90 |

Cameroon is among the countries that were known for their strong use and belief in ethnomedicine/traditional medicine mainly because it was the type of medication they could afford, "The economic crisis that occurred in Cameroon during the late 1980s led to a notable rise in the utilization of medicinal plants as a growing trend in herbal medicine" (Ndikum et al., 2011). In most developing countries specifically the rural areas of Cameroon, for one to receive medical treatment be it in a clinic or hospital, or even a pharmacy they have to travel for days before finding these healthcare facilities, which requires money for transport and purchasing or paying more for the required medicine. Consequently, Cameroon joined most developing countries in acknowledging that they cannot afford expensive healthcare/Western medication and due to lack of healthcare systems compared to developed countries they became interested in promoting the use of traditional remedies with the help of the Cameroon Ministry of Health Department which has established Departments of Traditional Pharmacopeia within the ministerial organigram to implement the policy of traditional medicine (Ndikum et al., 2011). Many Cameroonians, specifically those that fall within the rural and urban poor hierarchy depend on herbal medicine to curb illnesses just like those from African rural communities where traditional medicine is the major source of healthcare available (Bloom et al., 2002; Derita et al., 2009). Cameroon even has a day dedicated to the acknowledgment and appreciation of traditional medicine, which they call'African

Traditional Day' which is celebrated on the 31st of August every year where traditional and biomedical health practitioners collaborate (Ndikum et al., 2011).

Results of a study conducted in Qokolweni (Eastern Cape) South Africa portray that the reason why community members consult Traditional Health Practitioners (THPs) is due to their convenient accessibility and because they offer services that are trusted and confidential. Most community members, as well as some nurses, believe that it is essential to integrate traditional medicine into the healthcare system to achieve Universal Health Coverage (UHC) without excluding anyone (Mutola & Pemunta, 2021). This serves as proof that despite the existence of modern healthcare systems, traditional medicine still plays a significant role in the healthcare of many South Africans.

Traditional Health Practitioners in South Africa receive their calling to practice from their ancestors or spiritual guides, and their knowledge is often passed down orally from generation to generation rather than being documented in written form. THPs may use a combination of spiritual and physical approaches to healing, and their remedies may be based on spiritual forces or energies, rather than purely on the chemical or pharmaceutical properties of plants or other natural substances. (Moshabela, 2016). Ethnomedicinal plants, rooted in ancestral wisdom, hold a profound historical significance and serve as crucial resources in the treatment of diverse human ailments. These plants represent a valuable asset for rural communities, showcasing their capacity to address various health conditions and embodying their resilience in the face of different illnesses. Indigenous wisdom is one of the reasons why many people in Africa still rely on the use of medical plants to respond to these illnesses. Other socio-economic issues include poverty, unemployment and the inaccessibility of medical facilities at the convenient need of African people (Zondi and Ehaine, 2022). Kabyemela (2020) agrees that traditional medicinal herbs are utilized in Africa due to several factors, including a shortage of medical professionals, high costs associated with modern healthcare services, and the undesirable side effects often associated with biomedical treatments. People turn to traditional medicine as an alternative, seeking to avoid the challenges and limitations posed by conventional biomedical approaches.

Ethnomedicine includes traditional healing practices, such as herbal medicine, acupuncture, and spiritual healing. There is no doubt that the use of traditional medication has always been an alternative for most rural communities, mainly because of its accessibility and affordability. Mahomoodally (2013) posits that "According to the World Health Organization (WHO), traditional medicine is used by 80% of the population in developing nations as a method of therapy". In recent decades, there has been a growing trend in the developed world towards the use of complementary and alternative medicine (CAM), with a particular emphasis on herbal remedies". He proceeds and states that these herbal medicines include herbs, "herbal preparations, and finished herbal products that contain parts of plants or other plant materials as active ingredients" (Mohomoodally, 2013). Also complementing what was said by Mohammodally is Ragno et al. (2017) who support that "Research indicates that 80% of rural populations depend on traditional medicine (TM) as their primary source of healthcare services". The use of ethnomedicine is often passed down through generations and may be deeply ingrained in cultural beliefs and values. Ethnomedicine has also been used during the pandemic, particularly in regions where traditional healing practices are deeply ingrained. For example, in some parts of Africa, traditional healers have used herbal remedies to treat COVID-19 symptoms, while in India, Ayurvedic medicine has been used to boost immunity and promote overall health (WHO, 2020). Similarly, according to reports, traditional medicines have been used in China to treat COVID-19 patients from the early days of the outbreak, and it has been claimed that 90 percent of the 214 patients with these medicines have recovered (Zondi & Ehiane, 2022). Further discussion on ethnomedicine is in the chapter below. While both ethnomedical and biomedical interventions have been used during the COVID-19 pandemic, it is important to note that biomedical interventions have been shown to be highly effective in preventing severe illness and death from COVID-19 (Bachir & Atanasio, 2020). It is also important to ensure that any ethnomedical interventions used are safe and effective and that they do not interfere with biomedical treatments (Hodek, Hagen & Kohler, 2014). Ultimately, the most effective approach to treating and preventing COVID-19 will likely involve a combination of both ethnomedical and biomedical interventions, tailored to the specific needs and cultural beliefs of different communities.

Kabyemela (2020) further states that in Tanzania, traditional medicine is commonly used in rural areas as the primary source of healthcare due to factors such as its widespread

availability, affordability, and accessibility. This is further compounded by the decline of the biomedical healthcare system which can be traced back to the 1970s when the government began reducing funding for the health sector. Over the course of a decade, funding for the health sector was cut by approximately six percent, which was exacerbated by a high inflation rate ranging from 25-29 percent throughout the 1980s. As a result of these factors, the quality of healthcare services declined and there were chronic shortages of essential drugs, leading to further reliance on traditional medicine. The health and democracy (n.d.) report further states that in South Africa and across the continent – people make use of traditional forms of health care instead of (or in addition to) biomedicine.

However, even though some people make use of or find hope in traditional forms of healing, in some places traditional medication is still side-lined or looked down upon. In the context of Equatorial Guinea, the dictatorship of biomedicine has resulted in the marginalization of traditional healers, who are often the primary healthcare providers in rural areas. Consequently, by promoting biomedical practices and neglecting traditional healing methods, the government is limiting access to healthcare in the community (Nve Diaz San Francisco, 2020). The dominance of biomedicine in Equatorial Guinea has not only led to the loss of traditional knowledge and practices but has also contributed to the perpetuation of health disparities and inequities (Nve Diaz San Francisco, 2020). According to San Francisco (2020) traditional healers in Equatorial Guinea have been historically marginalized and discriminated against. They have been portrayed as "witches" or "charlatans" by Western-educated leaders who see their practices as unscientific and irrational. This has led to the stigmatization of traditional medicine and the exclusion of traditional healers from the formal healthcare system. San Francisco (2020) argues that this exclusion has had negative consequences for public health in Equatorial Guinea. Many people in rural areas, where traditional medicine is often the only option, have limited access to biomedicine and Western healthcare practices.

## 2.5 THE NICHE OF BIOMEDICINE ON PEOPLE

Biomedicine emerged in the 19th century and became a standard for comparing and evaluating the effectiveness of other medical systems. It set a benchmark against which other medical practices could be tested (Sivasubramaniam, 2020). Biomedical interventions are based on scientific research and evidence (Hill, 1965). Biomedicine includes treatments such as

vaccines, antibiotics, and other pharmaceuticals that are developed through rigorous testing and clinical trials. Biomedical interventions are generally standardized and administered according to specific protocols and guidelines. Moshabela et al. (2016:85) aver that biomedicine is often associated with the promotion of what is perceived as "culture-free representations of disease", which are considered neutral and objective. In contrast, traditional healing is sometimes criticized for being filled with "dangerous and ultimately mistaken metaphors". However, biomedicine often operates in a manner that resembles a missionary approach, aiming to free individuals from what it deems as 'irrational' beliefs rooted in religious knowledge systems. Also, Sivasubramaniam (2020) says biomedicine is a scientific initiative that views the human body as a machine and sees a diseased body as a malfunctioning unit that requires repair. This model places emphasis on practicality, objectivity, standardization, and clinical testing, among other things. It seeks to understand the causes of diseases and illnesses through scientific inquiry and aims to develop a treatment based on this understanding. In essence, it focuses on the physical aspects of disease and illness and seeks to cure them through standardized medical interventions. Furthermore, biomedicine was influenced by socio-cultural factors that contributed to the development of empirical thinking. This approach led biomedical practitioners to search for the causes of diseases in the natural world, while anything outside of it was considered irrational and primitive (Sivasubramaniam, 2020).

## 2.6 CONTEXTUALIZING MEDICAL PLURALISM

Medical pluralism implies the combination/intersection of ethnomedicine and biomedical interventions. As discussed by Khalikova (2021) medical pluralism refers to the availability of various medical techniques, treatments, and institutions to individuals in their quest of health. This includes merging biomedicine with other types of treatment, such as traditional or alternative medicine (ethnomedicine). We take a closer look at how people deal with diseases, navigating between home remedies, Western medication, religious healings, and other alternatives that are the indigenous knowledge of people. Moshabela et al. (2016) explained that biomedicine is strong in its healing approach based on biology, while traditional healing holds strength in its spiritual approach, creating potentially opposing world views between the two modalities. They further state that the strength of biomedicine lies in its biological healing approach, while traditional healing dominates in terms of a spiritual

approach with the two modalities representing potentially opposing world views. Agbor and Naidoo's (2016: 133) contribution pointed out that "Contemporary communities operate on a pluralistic health system whereby highly developed biomedical health co-exist and even competes with traditional medical practices". They also acknowledge that traditional medicine has the potential to provide alternative and complementary treatment to certain illnesses and improve access to healthcare for marginalized communities. Agbor and Naidoo (2016) emphasize the importance of collaboration between traditional healers and biomedical practitioners in the management of oral diseases. They suggest that traditional healers can play a crucial role in proving culturally appropriate care and promoting community engagement, while biomedical practitioners can provide access to modern technologies and diagnostic tools. They further speak of how contemporary African communities operate a pluralistic health system where people are given the opportunity to choose which of the health systems between the two (biomedicine/ethnomedicine) is suitable for them (Agbor and Naidoo, 2016).

In South Africa, the plural healthcare system offers multiple options for healthcare seekers and it is crucial for healthcare providers to collaborate in harmony to serve patients' best interests rather than prioritizing their own professions. The diversity in South Africa's culture, race, language, ethnicity, and religion poses a challenge to the healthcare system. Patients bring with them a worldview shaped by religious or indigenous beliefs when visiting healthcare providers, and healthcare providers also hold their own beliefs, regardless of whether they provide care in the biomedical or traditional healing system. These varied worldviews influence patients and providers to different understandings, explanations, and treatments of health issues. Historically, biomedical structures were used as a tool for missionaries to convert people who held traditional worldviews to Christian beliefs. It is essential to recognize and acknowledge the co-existence of plural healthcare systems and optimize them in ways that benefit patients the most (Moshebela et al., 2016).

According to the Health and Democracy report by Avert, both traditional and alternative healthcare systems have the potential to contribute significantly to improving the health of the population in South Africa. Moshebela et al. (2016) emphasize that while the coexistence of traditional healing and biomedical systems is evident in existing research, there is still

limited understanding of the potential benefits of integrating both traditional healing and biomedical care to achieve optimal health outcomes. The literature suggests that the presence of medical pluralism can lead to delays in accessing appropriate biomedical services, high healthcare costs, and potential risks associated with traditional medicines, particularly among individuals seeking mental healthcare and HIV/AIDS services. However, for patients who subscribe to indigenous belief systems, medical pluralism may be the only option available to them. It is important that healthcare providers in South Africa work together in harmony to best serve people's interests rather than prioritizing their professions, trades, or personal interests. Therefore, it is essential to have a well-functioning plural healthcare system that provides a multiplicity of options for healthcare seekers in the country.

To fight the COVID-19 pandemic, both ethnomedical and biomedical interventions have been used to treat and prevent the disease. Biomedical interventions focused primarily on the development and distribution of vaccines, as well as treatments such as Biomedicine has played a pivotal role in the development of COVID-19 vaccines. It focused primarily on the development and distribution of vaccines and treatments such as redeliver and dexamethasone and monoclonal antibodies which had been authorized for emergency use based on clinical trials and scientific research. The treatment has been shown to be effective in reducing hospitalization and mortality rates among COVID-19 patients, backed by extensive scientific research, and has shown to be highly effective in preventing severe illness and death from COVID-19 (Wyler et al., 2022). Multiple vaccines have been developed and authorized for emergency use based on rigorous clinical trials and scientific research. Vaccines have been shown to be highly effective in preventing severe illness and death from COVID-19 (Watson et al., 2022). The vaccines were distributed globally to achieve herd immunity and reduce the spread of the virus.

Biomedicine played a role in the development and implementation of COVID-19 testing and contact tracing for patients that show symptoms of COVID-19. Tests such as the polymerase chain reaction (PCR) test, and antigen tests (using a nasopharyngeal swab or throat swab) are widely used to diagnose COVID-19, which was done in hospitals and clinics, after testing, the samples are sent to a lab for examining. Common symptoms of COVID-19 include fever, non-productive cough, dyspnea, myalgia, fatigue, diarrhea, lung damage, etc. (WHO, 2020).

Also, contact tracing has been used to identify and isolate individuals who may have been exposed to the virus. “Innovations, such as isolation hoods that cover half of the body of patients infected by COVID-19, to protect not only the patients but also front-line medical personnel were used” (Alexis et al., 2020: p5). Doctors and nurses provided patients with antibiotics, antivirals, corticosteroids, and convalescent plasma (Yang et al., 2020), they also provided healthcare sectors with an increased number of mechanical ventilators which are priority devices for the intensive care unit (ICU), also, clinics and hospitals provided patients with oxygen using oxygen tanks.

However, before health scientists produced vaccines to help suppress the virus, they created biomedical interventions such as public health measures to reduce the spread of COVID-19. Measures such as surgical mask mandates, social distancing, and restrictions on large gatherings were implemented to reduce the risk of transmission, which proved to be effective in reducing the spread of COVID-19 (Aravindakshan, 2022). From the year 2021, vaccines were distributed. In an article by the Mayo Clinic (2023), the Food and Drug Administration (FDA) first approved the Pfizer-BioNTech COVID-19 vaccine to prevent the disease in people from 5 years and older (which was 91% effective), the second approved vaccine was Moderna COVID-19 vaccine for people aged 18 and older (94% effective) and lastly the Johnson and Johnson COVID-19 vaccine for people from ages 18 and older. The Pfizer-BioNTech vaccine was the first to be available on the 10$^{th}$ of May 2021, (FDA, 2021).

The WHO has played a huge role in the acknowledgment and recognition of traditional medicine:

- The WHO urged its members to use their traditional medical systems.
- During the Alma Ata International Conference on Primary Health Care in 1978, the World Health Organization (WHO) proposed that governments give priority to integrating traditional health practitioners and birth attendants into the healthcare team. The WHO also emphasized the importance of incorporating scientifically validated traditional remedies into national drug policies and regulations (WHO, 2010).

- The WHO Regional Committee for Africa implemented an approach for African countries in 2000, with the purpose of contributing to the achievement of health for all in the African Region through the optimal use of Traditional Medicine. (Urging members of government to create national policies on TM and encouraging members of government to take necessary measures to promote and protect TM nationwide).
- Together with the Department of Essential Drugs and Medicines Policy, the WHO Regional Office for Africa planned a chain of meetings on the regulation of traditional medicines to assist members of the government in creating procedures for assessing traditional medicines for registration purposes (WHO,2011).

## 2.7 A REVIEW OF HOW VARIOUS CULTURES OPTED FOR ETHNOMEDICINE IN RESPONSE TO THE COVID-19 PANDEMIC

Faced with fear for their lives, and the inability to access healthcare facilities, rural residents were forced to opt for ethnomedicine/traditional medication to help them fight the virus. Traditional medicine is a collection of health practices, beliefs, knowledge, and procedures that include the use of plant, animal, and mineral-based medications, spiritual treatments, manual techniques, and exercises. These traditional therapeutic methods are used alone or in combination to cure, diagnose, and prevent a variety of diseases, as well as to enhance overall well-being (Fokunang et al., 2011). Traditional medicine, as defined by Ozioma and Nwamaka Chinwe (2019), is a holistic healthcare approach that covers three unique areas of expertise: divination, spiritualism, and herbalism. Traditional healers in this system provide healthcare services that are profoundly steeped in their community's culture, religious background, knowledge, attitudes, and beliefs. They provide a holistic approach to healthcare that considers the interconnectedness of the mind, body, and spirit and draws on a variety of traditional practices and remedies to promote well-being.

The COVID-19 pandemic has led to a surge of interest in traditional remedies and practices, including those associated with ethnomedicine. Known for their history of utilizing traditional medicine, many developing countries make use of traditional medication/ethnomedicine as an alternative to biomedicine for reasons not only related to culture but financial costs, and healthcare facilities being geographically located far from

people's homes, etc.). It is well-known in the world that "Africa has a long history of traditional medicine and practitioners that play a crucial role in providing care to populations" (Ezekwesili-Ofili and Okaka, 2019). This is also evident in Fokunang et al.'s (2011) article which outlined that "In rural areas of Cameroon, individuals often have to endure long journeys lasting several days in search of the nearest pharmacy or health clinic for medical consultations. This not only results in the loss of working days and additional transportation expenses but also entails considering the high cost of medications". Hence why the people of Cameroon and other African countries opted for herbal/ traditional medication to cure illnesses. However, it lost some of its significance during the colonial era because it was thought to be inferior to Western medicine and some countries saw it as witchcraft. Nevertheless, most people still use and believe in traditional medicine (Ozioma & Nwamaka Chinwe, 2019), this was evident during the outbreak of the COVID-19 Pandemic. India, China, and Japan alongside the African nations have been utilizing plants as remedies for illnesses since the early ages. The World Health Organization (WHO) acknowledges traditional, complementary, and alternative medicine of proven quality, safety, and efficacy have many benefits. (WHO, 2013)

Medical plants being the most accessible, affordable, oldest, and most diverse healing system were able to once again show their importance to people from rural communities and people with little money during their vulnerable time. Results from a study conducted by Chali, Melaku, and Mulugeta (2021), showed that 46% of the participants they had interviewed used traditional medicine for the prevention and treatment of COVID-19, the study proved that seeds and leaves were the most used parts of medical plants. Before scientists came up with a vaccination for the cure and curbing of the pandemic the world relied on self-care practices that included the use of traditional medicine to protect themselves from being infected by the pandemic

As a response to issues of health and the inaccessibility of health care facilities, Rankoana (2021) conducted a study in Limpopo which revealed that parents and elders of diverse cultures particularly in rural areas have historically used plant-derived medicine to cure illnesses hence there is a usage of about 75-90%. This knowledge has been most valuable and has been used as a treatment for emerging diseases. In Beyers's article, it was stated that the

chairperson of The Traditional Healers Association of the Southern African Development Community (SADEC) region whose name is DR Sylvester Hlathi, responded to the South African government regarding the actions taken to curb the COVID-19 pandemic. The chairperson of the association pleaded with the government to include traditional healers residing in rural communities to partake in or contribute to fighting the continuous spread of the pandemic. (Beyers, 2020). Beyers emphasizes:

*"The association did not assert that they had a definitive cure for the virus. Hlathi suggested that traditional medicine could be employed by healers to address the symptoms associated with the virus. The argument put forth by Hlathi emphasizes that individuals residing in rural areas may turn to traditional healers for healthcare during times of illness due to limited access to health treatments provided by the Department of Health in those regions. In certain cases, traditional healers may be the initial healthcare resource for individuals infected by the virus."* (Beyers, 2020).

This proves that the awakening of COVID-19 led local communities and scientists to draw from the roots of indigenous health practices to fight the pandemic, more especially its common symptoms such as influenza, cough, sore throat, and fever. The different plants used during the fight against the COVID-19 pandemic provided preventive and curative care (Oyebade and Oyebamiji, 2021: Ahmad et al., 2021). Among countries such as Madagascar, South Africa is one of the counties that made use of a plant or herb called Umhlonyane to fight early symptoms of COVID-19. These countries use these herbal remedies to boost their immune system and alleviate symptoms of illnesses. During the COVID-19 pandemic, some people have turned to traditional herbal remedies to treat their symptoms, such as umhlonyane, ginger, turmeric, and elderberry. Other traditional practices include steam inhalation with herbs such as umhlonyane, eucalyptus, or mint which is a traditional practice that is believed to help clear respiratory passages and alleviate symptoms of respiratory illnesses as a result have used steam inhalation to relieve respiratory symptoms associated with COVID-19, even though steam inhalation was not scientifically proven to treat COVID-19 symptoms people continued with steaming. A case report published in the Journal of Family Medicine and Primary Care in 2020 described a patient with mild COVID-19 who used steam inhalation as a treatment for respiratory symptoms. The authors noted that the patient's symptoms improved after steam inhalation. On the one hand, in a study published

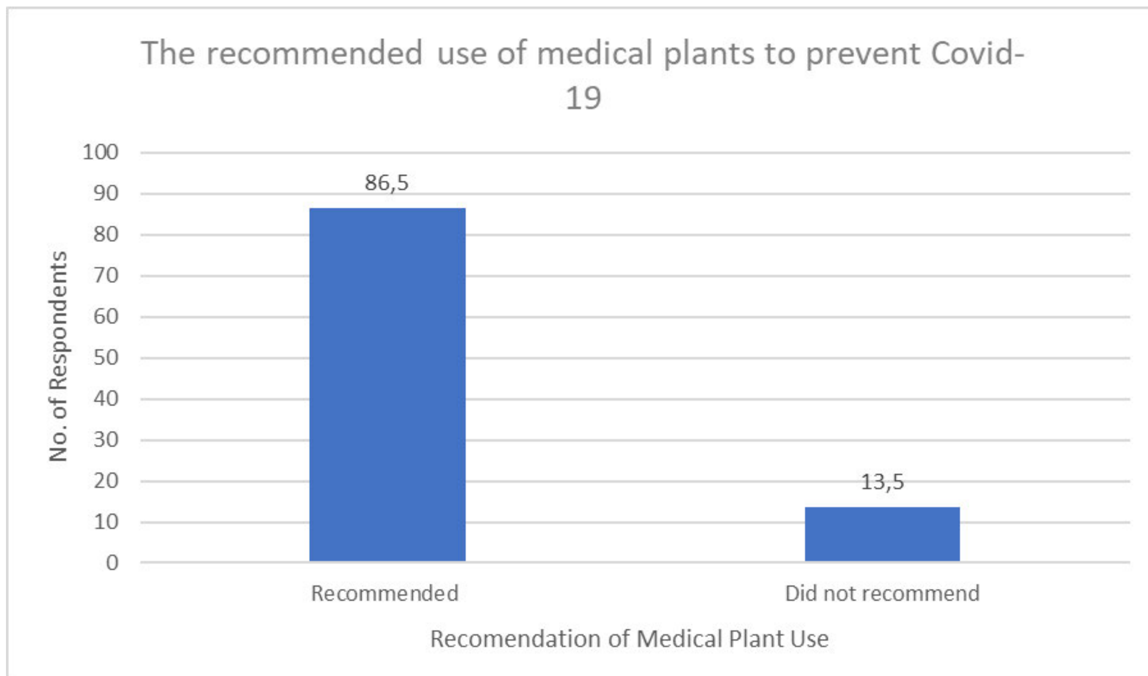
in the Journal of Hospital Infection in 2020, researchers tested the effectiveness of steam inhalation in reducing the viral load of SARS-CoV-2, the virus that causes COVID-19. The study found that steam inhalation was not effective in reducing the viral load of the virus in vitro. Similarly, in an article published in the Journal of Herbal Medicine in 2020, the authors explored the potential of herbal remedies and steam inhalation for the treatment of COVID-19. The authors noted that while steam inhalation has been used to relieve respiratory symptoms associated with other illnesses, there is no evidence to support its efficacy in treating COVID-19.

According to research by the Academy of Science of South Africa (2020) Umhlonyane also known in other countries as lengana (in Lesotho), zengana, African wormwood, and called Artemsia afra, umhlonyane is an indigenous plant that has been used for centuries to cure flu/cough related symptoms, however, it was in the year 2019 when it became popular. For a considerable time, the leaves of this plant have been utilized in traditional medicine to address various conditions such as coughs, colds, flu, and fever. The product from Madagascar, known as COVID Organics, was formulated by the Malagasy Institute for Applied Research. It is derived from Artemisia annua, a plant native to Asia and Eastern Europe that has since spread and established itself in various regions across the globe (The Academy of Science of South Africa, 2020). Hedima (2021) argues that during the first wave of the pandemic, people utilized herbal medication, boiling these herbs, drinking them, and using these herbs when steaming. These herbal compounds are assumed to modulate the immune system of patients, and they might have beneficial effects (Hedima, 2021). Zondi and Ehiane (2022) conducted a study in Ixopo, Bulwer, and iMpendle, which revealed that residents in these areas utilized various herbal remedies for medicinal purposes. Some of the commonly used herbal medications included raw garlic and raw honey from bees, Umhlonyane (Artemisia afra), Ihlaba, inhlabane, inkalane (Aloe), Isivimbampunzi (Alliaceae), Umqwili (Alepidea amatymbica), Ikhathazo (Alepidea amatymbica), Ikhambi lombila (Amaranthaceae), and Uwatela (Black wattle). This proves that herbal medication/ethnomedicine is indeed used by many societies and cultures.

In a study conducted by Tejada et al. (2021), participants mentioned other medicinal plants that they had utilized during their trying times. The most used medical plant was "eucalyptus

(*Eucalyptus globulus* Labill.) followed by ginger, garlic, matico (leaves), chamomile and coca" (Tejada, 2021). People even made a cough mixture using turmeric powder for COVID-19 symptoms, made by mixing the turmeric powder with cloves ginger, and garlic, which in India was called kashayam and was believed could cure COVID-19. Dwivedi (2021) supports that "Curcuma longa, also known as turmeric root, is a well-known option that is valued for its potent antiviral properties. The rhizome of his plant contains active ingredients such as curcumin (75%), demethoxycurcumin (20-25%), and bisdemethoxycurcumin (5-15%). These compounds exhibit a wide range of beneficial effects, including antioxidant, anti-inflammatory, antibacterial, antiviral, antitumor, and hepatoprotective properties". In support of this Nugraha, posits that turmeric "has been used traditionally by many countries in Asia as a drug or supplement because of its antioxidant, anti-inflammatory, antimutagenic, anticancer, and antimicrobial effects" (Nugraha et al., 2020). Not only was this mixture used in Asian countries even I remember we used to make this at home. It was reported in an article by Etimes (2020) this famous powder has been an essential part of Indian homes, best known for its in religious related ceremonies, using it as part of their cooking recipes and being used for health-related purposes. As per the ETimes report this spice has long been used for health-related purposes but it has made its mark now during COVID-19 "This particular spice has been regularly used for ages to boost immunity and increase overall health. With the advent of the terrible Coronavirus pandemic, there has been a huge increase in the usage of this extraordinary spice, particularly in the creation of medicines, health tonics, and other cures." (ETimes, 2020).

According to White et al. (2021), it became clear that rural communities, as well as communities in China, depended largely on indigenous knowledge and ethnomedical plants during the COVID-19 pandemic. This observation highlights the importance of conducting further research to acknowledge and understand the role of cultural epistemics in the context of COVID-19. Numerous ethnomedical interventions have been implemented to combat the virus. A study was conducted in Nepal on the use of medicinal plants to prevent COVID-19, and the results revealed that 670 (86.5%) of the participants had recommended medicinal plants to prevent COVID-19, while 104 (13.4%) did not recommend medical plants to prevent COVID-19. (Khadka et al., 2021).




(Khadka et al., 2021).

Several countries used traditional medication as an alternative (Zhao, 2021); Benarba & Pandiella;(2020) and Hedima et al., 2021). China employed the use of Chinese traditional medicines called Shu Feng Jie Du and Lianhuaqingwen during the COVID-19 pandemic. These traditional medicines have a history of being effective against influenza and were utilized due to their demonstrated efficacy. Alam et al. (2021) stated that The National Health Commission of China has legalized/approved using herbal medicine as a substitute treatment for the COVID-19 pandemic in combination with Western medicine. In anthropological terms we call this medical pluralism, which involves "using more than one medical system or using complementary and alternative medicine for health and illness" (Wade et al., 2008). Chinese people also utilized 'Acupuncture' to cure COVID-19 symptoms, Acupuncture is said to be a traditional Chinese practice that involves the insertion of thin needles into the body at specific points. (Lin E, 2015). Studies suggested that acupuncture may be effective in treating some of the symptoms associated with COVID-19, such as shortness of breath and cough, known for its relief from headaches, boosting the body's immune system, and reduce the duration of a cold. In the current epidemic of COVID-19 acupuncture and moxibustion were actively used for both prevention and treatment (Zhao et al., 2020).

## 2.8 CHAPTER SUMMARY

Chapter two of the study presented existing literature on the phenomenon under study, giving an introduction that outlined chapter 2: Bill of Rights, Section 27 the right to healthcare, focused on health disparities and vulnerabilities: Access to health facilities by rural communities during COVID-19: Underlying health conditions for rural residents. This chapter also outlined South African policies that legislate access to healthcare, gave the niche of ethnomedicine and biomedicine on people, discussed the intersection of ethnomedicine and biomedical interventions and lastly gave a review of how various cultures opted for ethnomedicine in response to the COVID-19 pandemic. Chapter three of the study will focus on theoretical frameworks that are deemed relevant to conceptualize and explore health adversities and pluralistic interventions that were employed by the community of Bulwer under the effect of COVID-19.

# CHAPTER THREE

# THEORETICAL FRAMEWORK

## 3.1 INTRODUCTION

This chapter will discuss the theoretical frameworks that were deemed most suitable for the study. In trying to probe health adversities and pluralistic interventions that were employed by the community of Bulwer, KZN the study made use of two theories, namely the: Critical Medical Anthropology and the Explanatory Model Theory. This chapter first defines the key term 'Theoretical Framework' and moves on to discuss the two theories and state how they were deemed relevant for this study. These two theoretical frameworks were used in chapter four (research design and methodology) and chapter five (data analysis and generation) of this study.

## 3.2 SIGNIFICANCE OF A THEORETICAL FRAMEWORK IN RESEARCH

As discussed by Vinz (2015), "A theoretical framework is a basic assessment of current theories that act as a guide for formulating the arguments that were used in your work." In this study the Critical Medical Anthropology Theory and the Explanatory Model Theory are the two theories that are utilized to support and guide the study. Vinz (ibid) says in a theoretical framework, you explain the existing theories that back up your study, demonstrating that your work is based on well-established concepts. The theoretical framework you use for your study should be determined by the topic of your research paper, as this theory should be relevant to your study and should be able to guide your research. It also guides the development of the research. The main aim of a theoretical framework is to link new research to already existing knowledge and provide an explicit statement of theoretical assumptions to the reader.

A Theoretical Framework is important in research as:

- It provides a theory-driven approach to the current research.
- It provides a clearly defined and verified foundation for the study's argument.
- It provides an explanation of the study's significance and validity.
- It demonstrates where the researcher seeks to fill knowledge and practice gaps,
- It provides a broader guiding principle and a typical set of ideas within which a research study can fit.

- It establishes the framework for how the researchers will approach the thesis (2020, Afribary).

The theoretical framework supports the research in the following ways: (Trochim, 2006)

- A quick articulation of theoretical assumptions allows the reader to evaluate them fundamentally.
- The theoretical framework connects the scientist to existent data. You are given a reason for your hypotheses and exploration tactics based on an appropriate theory.
- Articulating the theoretical allows you to mentally go from simply portraying a peculiarity you have observed to making speculations about various aspects of that feature.
- Having a hypothesis can help you identify the cut-off points for those speculations. A theoretical framework defines which important aspects influence a problem of interest and emphasizes the necessity to consider how those key factors may differ and under what situations.

## 3.3 THEORETICAL FRAMEWORK IN RESEARCH

### 3.3.1 THE HISTORY OF CRITICAL MEDICAL ANTHROPOLOGY THEORY

Critical Medical Anthropology Theory emerged in the late 1970s and early 1980s as a response to the limitations of traditional biomedical approaches to understanding health and illness (Singer & Baer, 1995 cited in Newnham et al., 2016). Critical Medical Anthropology was coined by two Anthropologists Merrill Singer and Hans Baer who were essential and core in the development of the term. According to Witeska-Mlynarczyk (2015) Critical Medical Anthropology dates to the 1980s when the interdisciplinary movement called political economy of health was developed and is one of the most powerful perspectives today.

Carroll (2013) defines the Critical Medical Anthropology theory "as a subfield of cultural anthropology that focuses on medicine and medical practices". She further states that it is also a specific set of theories and approaches to medicine that consider the philosophical, cultural and moral systems that are rooted in health practices. The Critical Medical Anthropology theory is among the three theoretical approaches that are aimed at understanding human health, illness as well as the well-being of humans, with the other two theories being the Epidemiological or Ecological approach and the Interpretive Approach.

Witeska-Mlynarczyk (2015) theorized that CMAT focuses on how economics and politics shape the overall status of human health and human behavior. The field of medical anthropology had previously focused on studying traditional healers and their practices in non-Western societies. However, with the growing awareness of health disparities and inequities, medical anthropologists began to explore the social, cultural, and political factors that shaped health outcomes in diverse populations. One key figure in the development of Critical Medical Anthropology Theory was Nancy Scheper-Hughes, who argued that biomedicine was culturally constructed and influenced by political and economic factors (Scheper-Hughes, 1990). She called for a more critical approach to the study of biomedicine and its impact on health outcomes, particularly in marginalized communities. Another influential figure in the development of Critical Medical Anthropology Theory was Paul Farmer, who worked to bridge the gap between medical anthropology and public health. Farmer emphasized the importance of social justice and health equity in addressing health disparities and advocated for a more politically engaged approach to health research and practice. Critical Medical Anthropology Theory has continued to evolve and expand since its inception, with scholars applying critical perspectives to a range of health issues and contexts. This includes studies on the social determinants of health, healthcare access and delivery, health inequities, health activism, and global health. Critical Medical Anthropology Theory has also contributed to the development of interdisciplinary approaches to health research and practice, including collaborations between medical anthropologists and public health practitioners.

In the absence of fairness and equality amongst societies, Critical Medical Anthropology theory's main aim is to question disparities in the quality of health and care in the presence of social inequalities. At the center of inequalities are social factors such as race, ethnicity, gender, class, and access to health care. Singer (2004, p:196) asserts that the theory is focused on the "(1) examination of the social origins of disease and ill health in light of the world economic system; (2) analysis of health policy, health resource allocation, (3) recognizes medical pluralism, which gives recognition to existing knowledge corridors which translate how cultures explain their disease experiences; (4) development of a critique of biomedical ideology, practice, and structure; (5) studies structural issues that hinder access to health and

health care and geo-political dynamics; (6) investigating of health and health programs in socialist-oriented countries".

As discussed by Singer (2004) CMA takes the view that the social is equally important as the biological in questions of health and medicine, because epidemics are fundamentally social processes. Thus, when undertaking research related to health and illnesses, critical medical anthropologists are more likely to focus on the social aspects of health (individual behaviour, social relations, social structure, economic forces, political economy as well as existing systems of belief) and how these aspects shape the overall status of human health. In the case of this study, this theory will focus/study how falling under the lower-class category of the hierarchy, being less fortunate, and coming from a rural area with a lack of needed health-related services negatively impacted a successful fight against the COVID-19 pandemic, or how it had a negative impact on the health of rural residents and increased the vulnerability of rural populations during the pandemic. When examining the occurrence of a specific disease or illness and ways to prevent it, Critical Medical Anthropologists acknowledge social factors such as class, race, and ethnicity which can in a sense influence access to health care and vulnerability. CMA does not solely focus on the body of a human when conducting a study or observing but rather on a person's experience of well-being and his/her experience with a certain illness or disease. Carroll (2013) theorizes that when Critical Medical Anthropologists conduct a study related to people's health and illnesses, chances are they will concentrate more on the social aspects of health instead of concentrating on quantitative data that could inform traditional statistical or epidemiological studies. Critical Medical Anthropologists will focus more on the individual or communities' behaviour towards a certain illness, their systems of beliefs, how they alternatively deal with illnesses, the social structures and economic forces that push them into looking for the alternative medication (ethnomedicine) to fight a certain illness for example.

A well-known Critical Medical Anthropologist by the name of Merrill Singer in the year 2004, came up with seven key notions in CMA such as (i) health, (ii) disease, (iii) syndemics, (iv) sufferer experience, (v) medicalization, (vi) medical hegemony, (vii) medical pluralism, and (viii) they further probe the political economy of communities. When Singer (2004) speaks of the sufferer experience which is one of the concepts of CMA he says that "the way

people cope with an illness is influenced by socially constructed connotations as well as the political and economic pressures that govern daily life." This means the way in which people fight or heal from sicknesses will depend on whether they are deprived quality health-care services, or whether these services are provided to them equally when required. Hence Critical Medical Anthropology theory's main aim is to question disparities in the quality of health and care in the presence of social inequalities. Medical pluralism was another concept in CMA, on which part of this study focuses. According to Witeska-Mlynarczyk (2015) the term medical pluralism "implies that in contemporary societies several healing traditions are present". Basically, medical pluralism is an umbrella term for biomedicine and ethnomedicine. Witeska-Mlynarczyk (2015) outlines that according to Singer, national medical systems have a "dominative" aspect, in which one medical system, such as biomedicine, has supremacy over other healthcare practices, including ethnomedical traditions. This dominance frequently leads to the subordination of alternative medical traditions within a culture. So, this study will also focus on finding out the medical pluralistic interventions employed by the community of Bulwer in their fight against COVID-19.

Overall, Critical Medical Anthropology Theory has played a critical role in highlighting the social, cultural, and political factors that shape health outcomes and healthcare access. It has challenged traditional biomedical approaches to understanding health and illness and has advocated for a more holistic and socially engaged approach to health research and practice.

The Critical Medical Anthropology Theory was deemed eligible for this study as it primarily helped interpret or shape the information that will contribute to the body of knowledge, information on how the health of rural Bulwer residents will be ensured should the nation face another pandemic, how the local, health-care management, the local counsellor, the municipality together with government can ensure the people residing in rural communities are not deprived or denied their right to a standard health and equal access to healthcare facilities, and this information can be obtained through giving the community members of Bulwer the platform through interviews to narrate their lived experiences under the COVID-19 pandemic.

### 3.3.2 THE RELEVANCE OF THIS THEORY IN MY STUDY

Critical Medical Anthropology Theory is relevant in this study because it provides a framework for understanding how social, cultural, economic, and political factors influence health and healthcare. This theory is particularly relevant in contexts where health disparities exist and where there are inequities in access to healthcare as in the case of this study. For example, to help understand how limited access to healthcare can significantly impact health outcomes. A Critical Medical Anthropology Theory can be used to investigate these social determinants of health and to understand how they shape health disparities and inequities. Overall, a Critical Medical Anthropology Theory is relevant in understanding the complex and multifaceted nature of health and healthcare. It highlights the importance of considering social and cultural factors in understanding health outcomes and promoting health equity. It also recognizes the role of power dynamics in shaping healthcare access and quality and encourages efforts to address these imbalances. In the case of this study Critical Medical Anthropology Theory was relevant in understanding how rural community members navigated COVID-19 as it provided a lens to analyze how social, cultural, and economic factors impact their access to healthcare resources, their perceptions of the disease, and the strategies they adopt to alleviate its spread. The theory enabled an exploration of how limited healthcare access in rural areas affects health outcomes during the pandemic, emphasizing the role of social factors of health in shaping disparities in COVID-19 impacts within these community.

### 3.3.3 EXPLANATORY MODEL THEORY

There is considerable evidence from medical anthropology that suggests that cultures uniquely explain their disease experience and they respond to their health experiences differently from each other. This theory was coined and authored by an anthropologist by the name of Arthur Kleinman (1988), a prominent scholar in medical anthropology and qualitative research. Kleinman et al. (1978) defined this theory as a multidimensional and culturally affected process of interpreting and comprehending one's condition. It entails giving meaning to symptoms, generating causal explanations, and expressing appropriate treatment and outcome expectations. Carroll (2013) defined Explanatory Model Theory as "culturally specific logics of disease, a narrative understanding of what illness is and what

can be expected from an illness". the author further states that the kind of logic or judgment we have on certain diseases shapes our insights and interactions with culturally constructed and socially organized lived experiences on illnesses.

Explanatory Model Theory is a theoretical framework in medical anthropology that emerged in the late 1970s and early 1980s. The theory was developed by medical anthropologists Arthur Kleinman and Byron Good, who sought to understand how cultural factors shape the way individuals understand and respond to illness. The origins of the Explanatory Model Theory can be traced to Kleinman's work in Taiwan in the 1970s. While researching psychiatric illness, Kleinman found that patients often described their illness in ways that differed from Western biomedical models of illness. He realized that understanding how patients interpret their illnesses was essential for providing effective healthcare. Kleinman and Good later collaborated to develop the Explanatory Model Theory, which emphasized the importance of understanding patients' cultural beliefs and practices in the diagnosis and treatment of illness (Kleinman, Eisenberg & Good, 1978). The theory argues that individuals construct their own explanatory models of illness, which are shaped by cultural, social, and environmental factors (Kleinman, Eisenberg & Good, 1978). Explanatory models can include a range of factors, such as the causes and symptoms of illness, the course of the illness, and the appropriate treatments. These models can differ significantly across cultures and can affect how individuals seek and receive healthcare. This theory has been applied in a range of settings, from psychiatric care to chronic illness management. The theory has also been used to explore how healthcare providers can work collaboratively with patients to develop culturally appropriate treatment plans. Generally, the Explanatory Model Theory has played an important role in promoting patient-centered care and in challenging the assumption that Western biomedical models of illness are universal. The theory highlights the importance of understanding patients' cultural beliefs and practices in providing effective healthcare and has influenced healthcare practice and policy in diverse settings.

This theory enables anthropologists during their ethnography to collect emic perspectives "symbolic meanings" which emerge from a particular phenomenon This is not an analytic tool, but rather an ethnographic (descriptive) method that helps find out how a patient understands their illness experience. The theory permits the social construction of knowledge

from the perspective of the studied population. Kirkman and Lacey (2016), Hammarberg et al. (2016), Nagarkar (2012), and Jaiiswal (2018) posit that the EMT enables anthropologists and many qualitative researchers to ask what, why, and how questions, and accommodates meanings and interpretations which allow the researcher to understand the depth of the subject. Nagarker states a researcher can visibly understand patients and families by using the Explanatory Model of sickness, which is exactly what this study is aiming for. This type of theory "provides a means of balancing the objective view of disease with the subjective experience of illness" (Nagarkar, 2012).

Kleinman (1988) suggested that by exploring the explanatory model of illness we can better understand our patients and families or in this case, participants and helps in finding answers to important questions about an illness. He also puts emphasis on the importance of asking what, why, how, and who questions. As an example, he gives the following questions to be asked when employing the Explanatory Model Theory: What do you think the illness does? What do you think the natural course of the illness is? What do you fear? Why do you think this illness or problem has occurred? How could one seek treatment and care for this disease/illness? Who do you turn to for help? (Kleinman, 1988). In the case of this study such explanatory questions will be asked:

1. What are pluralistic interventions (ethnomedicine and biomedical interventions) that were employed by the community of Bulwer, KZN?
2. If community members of Bulwer employed ethnomedicine as a tactic to escape COVID-19, what informed this decision?
3. What are medicinal plants that communities relied on to escape the adversities of COVID-19 in their lives?
4. How accessible were health facilities during COVID-19?

Explanatory Model Theories are created to help understand complex and confusing situations and they contribute to finding out and telling how people should act when confronted with an illness and how they should respond to a disease, thus helping prepare people should they experience unforeseen illnesses/diseases. Roger (1992) states Explanatory Model Theories offer explanations of sicknesses and treatments which guide choices among available

resources and give personal and social meaning to the experiences of a sickness. The author proceeds and supports that the "explanatory model generally provides explanations of different dimensions of the sickness. These are etiology, timing, and mode of onset of symptoms, pathophysiology, course of sickness, the severity of the sickness/disease, the treatment issues, the fears and problems associated with the illness". In this case, we would like to find out the people's experience of the sickness, the treatment issues that people from Bulwer faced, and the fears and problems associated with the disease. The study also looks at the timing given that the pandemic was at a time where there were restrictions that hindered rural residents from moving around, thus making it difficult to seek medical help without transportation. Explanatory Model Theories are utilized in qualitative research, to get the patient's or participant's explanation of a particular illness or disease.

In the context of this study the Explanatory Model Theory provides a framework to explore the participants understanding of the illness and the diverse interventions employed. It allowed the researcher to ask pertinent questions like the types of interventions utilized (ethnomedicine or biomedical), the rationale behind employing specific approaches to escape COVID-19, the medicinal plants relied upon, and the accessibility of health facilities during the pandemic. Such inquiries aimed to comprehend the community's varied experiences, treatment issues faced, and the challenges and fears associated with the disease, particularly within the constraints posed by the pandemic-related restrictions that limited access to medical help in rural light areas without adequate transportation. By employing the Explanatory Model Theory, the study sought to unravel the nuanced and culturally embedded responses to the pandemic, shedding on how the community coped with and responded to the challenges presented by COVID-19

### 3.3.4 THE HISTORY OF THE EXPLANATORY MODEL THEORY

Explanatory Model Theory is a theoretical framework in medical anthropology that emerged in the late 1970s and early 1980s. The theory was developed by medical anthropologists Arthur Kleinman and Byron Good, who sought to understand how cultural factors shape the way individuals understand and respond to illness. The origins of the Explanatory Model Theory can be traced to Kleinman's work in Taiwan in the 1970s. While researching psychiatric illness, Kleinman found that patients often described their illness in ways that differed from Western biomedical models of illness. He realized that understanding how

patients interpret their illnesses was essential for providing effective healthcare. Kleinman and Good later collaborated to develop the Explanatory Model Theory, which emphasized the importance of understanding patients' cultural beliefs and practices in the diagnosis and treatment of illness (Kleinman, Eisenberg & Good, 1978). The theory argues that individuals construct their own explanatory models of illness, which are shaped by cultural, social, and environmental factors (Kleinman, Eisenberg & Good, 1978). Explanatory models can include a range of factors, such as the causes and symptoms of illness, the course of the illness, and the appropriate treatments. These models can differ significantly across cultures and can affect how individuals seek and receive healthcare. This theory has been applied in a range of settings, from psychiatric care to chronic illness management. The theory has also been used to explore how healthcare providers can work collaboratively with patients to develop culturally appropriate treatment plans. Generally, the Explanatory Model Theory has played an important role in promoting patient-centered care and in challenging the assumption that Western biomedical models of illness are universal. The theory highlights the importance of understanding patients' cultural beliefs and practices in providing effective healthcare and has influenced healthcare practice and policy in diverse settings.

### 3.3.5 RELEVANCE OF THIS THEORY FOR MY STUDY

The Explanatory Model Theory is deemed relevant for this study because it will help the researcher understand how individuals and communities of Bulwer (Gqumeni) location understand and responded to the disease. COVID-19 has significant cultural and social dimensions that are influenced by factors such as social inequality, stigma, and healthcare access, which in turn pushed rural residents to search for alternative ways to combat the disease. An Explanatory Model Theory can help to uncover how these factors shape individuals' understanding of COVID-19 and their responses to the disease in terms of treatments. For example, the Explanatory Model Theory will be used to investigate how cultural beliefs and practices influence COVID-19 prevention and treatment. In some cultures, for instance, the use of herbal remedies or spiritual practices may be prioritized over biomedical treatments. Understanding how these beliefs and practices shape health-seeking behaviours can help to develop culturally appropriate COVID-19 prevention and treatment strategies. An explanatory model theory can also be used to investigate how social

determinants of health shape COVID-19 outcomes. For example, social inequality can lead to disparities in COVID-19 testing and treatment, as well as higher rates of infection and mortality in marginalized communities. Understanding how these social determinants of health shape COVID-19 outcomes can help to develop more equitable and effective COVID-19 prevention and treatment strategies.

Overall, the Explanatory Model Theory will help provide a valuable framework for understanding how cultural, social, and environmental factors shape individuals' understanding of COVID-19 and their responses to the disease. This will help to develop more effective and culturally appropriate COVID-19 prevention and treatment strategies, as well as identify and address health disparities related to the disease.

## 3.4 THE CONNECTION BETWEEN THE THEORETICAL FRAMEWORK AND THE ONTOLOGY AND EPISTEMOLOGY OF THE STUDY

**Critical Medical Anthropology:** The ontology and epistemology of this COVID-19 related study refer to the underlying assumptions and methods that shape the study's approach to understanding the virus and its impact on human health. In the context of this research, CMA is concerned with examining how social, economic, and political factors have shaped the rural community's response to the pandemic. This includes how inequalities in access to healthcare, and other resources have influenced the spread of the disease and its effect on vulnerable populations. CMA will also be interested in understanding how governments and pharmaceutical companies have influenced the advancement and spreading of COVID-19 treatments and vaccines.

In terms of ontology, the Critical Medical Anthropological approach will likely be grounded in a social constructionist perspective. This means that the study seeks to understand how social and cultural factors have influenced the way that COVID-19 is perceived, understood, and experienced by different individuals and communities. In terms of epistemology, the Critical Medical Anthropological Theory will be grounded in an interpretive and reflexive methodology. This means that the study seeks to understand the perspectives and experiences

of rural individuals and communities affected by COVID-19 and will recognize that these perspectives are shaped by their social and cultural contexts.

**Explanatory Model Theory:** In the context of a COVID-19 pluralistic intervention study, the EMT will be used to understand how different individuals and communities make sense of the pandemic and its impact on their health. This could involve an analysis of the cultural and social factors that shape health beliefs and behaviours related to COVID-19, and how these factors might influence the acceptance or rejection of different interventions or treatments.

In terms of ontology, an EMT approach to studying a COVID-19 pluralistic intervention study is grounded in a social constructionist perspective. This means that the study seeks to understand how social and cultural factors have influenced the development and implementation of different interventions or treatments, and how these interventions or treatments were used and experienced by different individuals and communities. In terms of epistemology, an EMT approach to studying a COVID-19 pluralistic intervention study is grounded in an interpretive methodology. This means that the study seeks to understand how individuals and communities make sense of the pandemic and the interventions or treatments they used to address it. It will involve exploring the meanings and experiences associated with COVID-19 and its treatments for different individuals and communities and would recognize that these meanings and experiences are shaped by social and cultural factors. The two theoretical lenses described above are deemed relevant for the research because they are within the context of the study and have influenced the wording of the problem statement, research objectives, and questions.

## 3.5 CHAPTER SUMMARY

This chapter defined what is meant by the term theoretical framework. It defined each of the two theoretical frameworks used in the study (Critical Medical Anthropology Theory and Explanatory Model Theory), the history of each theory was outlined and the relevance of each theory to the study was discussed. The writer also discussed the connection between the theoretical frameworks and the ontology and epistemology of the study. The subsequent chapter will delineate the research methodology that the study implored.

# CHAPTER FOUR
# RESEARCH DESIGN AND METHODOLOGY

## 4.1 INTRODUCTION

The methodology chapter will discuss different approaches that the study employed to answer research questions. The chapter will begin by briefly describing the type of research design that was used. It will then describe the setting in which the research is based and elaborate on the sample and sampling method/s utilized. Lastly, this part of the chapter will explain how the collected data is analyzed, expand to delineate ethical considerations that guided the research and then conclude.

## 4.2 DEFINING RESEARCH AND RESEARCH METHODOLOGY

The term research on its own can be defined as "an activity that involves discovering new things in a more or less methodical approach" (Walliman and Walliman, 2011, p.7). According to O'Donnell (2012), research is the process of producing fresh knowledge or utilizing existing knowledge in an innovative manner to generate novel ideas, methods, and insights. It involves combining and analysing previous research to the extent that it results in new and inventive outcomes. The research incorporates creative endeavours conducted systematically to expand the pool of knowledge, encompassing various aspects of humanity, culture, society, and the practical utilization of this knowledge to develop new applications. It is aimed at getting solutions to a common problem through objective and systematic analysis. Research can also be referred to as a quest for knowledge or information on a subject, or the discovery of unexplored evidence. The data may come from a variety of sources, including experience-studied participants/people, books, journals, etc. A study may yield new insights that contribute to our body of knowledge. Research is the only way to make progress in a field. To conduct research, studies, experimentations, observations, investigations, comparisons, and logics are used.

Whilst 'Research Methodology' according to Wilkinson (2000) "is the set of procedures or techniques used to identify, select, process, and evaluate data on a certain issue," according to Dawson (2019), a research methodology is a key theory that will serve as a guide in any research. Research methodology is a collective term for the structured process of conducting research (Gounder, 2012). The research methodology becomes a universal approach when

conducting research, it decides what research methods the study will utilize. A research methodology is said to be the most crucial part of a thesis as it explains to the readers how the researcher/writer designed their study, how the researcher plans to collect data, from whom data was collected, how data was collected and how the collected data was analyzed in order to reach a certain conclusion. This then grants readers the opportunity to critically evaluate the overall validity and reliability of the study, hence why proper/thorough research is needed when conducting a study. The methodology section answers two main questions, being, how was the data collected or generated? How was it analyzed? And what tools were used to analyse data? (Chris, 2021). According to Gounder (2012), research methodology strives to provide insights into the objective of a research study, the process of defining the research topic, hypotheses formation, data collecting and analysis, and the selection of specific methods and techniques.

There are three fundamental types of research methodology (Creswell, 2009); qualitative research method (entails collecting data from words, which can be written words, spoken, or transcribed from a dialogue), quantitative method (entails collecting data from numerical data and mixed method (combines both qualitative and quantitative).

### 4.2.1 THE IMPORTANCE OF RESEARCH METHODOLOGY IN RESEARCH

Research methodology is crucial in anthropology because it provides a systematic and objective approach to studying human societies, cultures, and behavior (Gounder, 2012). It is important in order for the research to be frank and for it to deliver systematically sound, accurate, valid, and reliable results, hence it is always needed that a researcher comes up with a strategic research methodology for the problem their study is aimed at addressing. The research strategy needs to include the study's objective, research design, methods to collecting data and also outline and state how ethical issues will be addressed, consequently all these will help produce valid data. The researcher needs to know not only the research methods necessary for the research undertaken but also the methodology. More specifically, research methods assist us in finding a solution to a problem. Research methodology, on one side, is focused on explaining the following:

- What kinds of information were gathered?
- What specific method was used?
- Why was a specific data analysis technique used? (Gounder, 2019).

Anthropologists use a variety of research methodologies, depending on the nature of their research questions and the type of data they need to collect. The significance of research methodology in anthropology can be understood in the following ways:

- Research methodology provides a framework for conducting a systematic inquiry into human societies and cultures. It helps anthropologists to structure their research questions, select appropriate research methods, and collect and analyze data in a systematic and rigorous manner.
- Enables the collection of diverse data: Anthropology is a holistic discipline that seeks to understand human behavior and societies in their entirety. Research methodology enables anthropologists to collect diverse data from different sources, such as archival records, participant observation, interviews, surveys, and ethnographic fieldwork.
- Ensures validity and reliability of research findings: Validity and reliability are essential components of any research project (Gounder, 2012). Research methodology provides a set of guidelines and procedures for ensuring the validity and reliability of research findings. This includes ensuring the accuracy and consistency of data collection methods and the soundness of data analysis techniques.
- Facilitates cross-cultural comparisons: Anthropology is a comparative discipline that seeks to understand the similarities and differences between human societies and cultures. Research methodology provides a common framework for conducting cross-cultural comparisons by ensuring that data is collected and analyzed in a standardized and systematic manner.
- Helps to address ethical concerns: Anthropological research often involves working with vulnerable populations and sensitive issues. Research methodology provides a set of ethical guidelines and protocols for ensuring that research is conducted ethically and responsibly.

## 4.3 RESEARCH APPROACH

This study is empirical in nature, meaning the study/research is based on an observed phenomenon and is aimed at finding knowledge from the authentic experience of community members. Under types of empirical research, we have two types of methodologies, the qualitative research method, and the quantitative research method. However, this study

adopted the qualitative research method/approach. As defined by Radu (2019) "qualitative research is a study method that focuses on finding information or data through an open-ended conversation". Qualitative research is mainly good at answering the 'why', 'what' or 'how' questions of a specific phenomenon. Conducting interviews is essential as the aim of qualitative research is to get the meaning, feeling and describe the situation. It helps understand and answer a specific research topic from the standpoints of the local populace or their experience on that specific topic. Furthermore, Hammarberg, Kirkman, and de Lacey (2016) indicated that a qualitative approach is essential, particularly when addressing concerns about the perspective, context, and viewpoint based on the perceptions of the respondents or the participants.

### 4.3.1 THE RELEVANCE OF QUALITATIVE RESEARCH IN ANTHROPOLOGY

Qualitative research is highly relevant to anthropology because it is a discipline that focuses on the study of human behaviour and culture. Anthropologists use qualitative research methods to collect and analyze data in order to gain an in-depth understanding of human beliefs, practices, and social systems. One of the main strengths of qualitative research is that it allows anthropologists to capture the complexity and richness of human experience (Cleland, 2017). Through methods such as participant observation, interviews, and focus groups, anthropologists can gain detailed insights into the ways that individuals and groups make sense of their world, and how they interact with others around them (Cleland, 2017). Qualitative research is also valuable in anthropology because it can help to challenge dominant narratives and power structures. By amplifying the voices and experiences of marginalized communities (Žikić, 2007), qualitative research can highlight the ways in which power and inequality are produced and maintained in society. Additionally, qualitative research is often used to explore questions that are difficult to answer using quantitative methods.

### 4.3.2 RESEARCH METHOD AND DESIGN

Firstly, it is important to note that the research method is different from a research methodology though in most cases they are confused as one. One of the differences being,

research methods are the different types of methods used to conduct research or gather information on a topic, these methods included sampling methods, data analysis methods, ethical considerations, research approach and research design. Research methodology describes the ways in which research is carried out and learning the various techniques used to conduct research. Gounder (2012) defines research techniques as "the various procedures, schemes, and sets of rules used in research. Theoretical techniques, experimental studies, numerical schemas, and statistical approaches are among them". Research methods are very important as they help researchers collect samples, and data and find a solution to a specific problem whilst research methodology helps researchers choose the correct techniques that will help them identify solutions or gather information for a topic (Gounder, 2012). Basically, what research methodology does is pave a path for research methods to be conducted appropriately.

This qualitative study employed the Phenomenological Research Design (PRD). This research design will be utilized to *Probe health adversities and pluralistic interventions employed by the community of Bulwer (Gqumeni location), KwaZulu- Natal in response to COVID-19.* There are numerous research designs employed in the social science field when conducting research, but according to Grossoehme (2014) amongst all qualitative research approaches the most chaplain-friendly is phenomenological research, simply because its fundamental aim is to search for meaning, hence why conducting in-depth interviews is one of the methods used or associated with phenomenological research.

Phenomenological Research Design was established in the 20$^{th}$ century and was coined by and is rooted in the philosophical work of Edmund Husserl (descriptive) and Martin Heidegger (interpretive) approach (Boss, Dahl, & Kaplan, 1996; Swinton & Mowat, 2006). Smith (2007) defined the phenomenological research method as a method that was developed to explain how individuals give meaning to a social phenomenon in their everyday lives. Unlike a narrative study mainly aimed at reporting the life of a single individual, phenomenological studies narrate the lived experiences of several individuals on a phenomenon. Phenomenological research design is descriptive in nature, meaning the researcher aims to describe as precisely as possible the structure of a phenomenon. It is aimed at describing what all participants have in common as they experience a phenomenon,

in this case, the study focuses on the health adversities employed by several individuals residing in Bulwer and the pluralistic interventions they employed.

The role of phenomenology was therefore used to explore "the core of consciousness as experienced from the first-person point of view" (Smith, 2007). Another definition of phenomenological research was one given by Davison (2013) who defines phenomenological research as a kind of design used to examine a phenomenon from the experience of those closest to the issue under study (Davison, 2013, cited in {Davison 2014}). This type of research design captures people's in-depth experiences and perceptions regarding a phenomenon that the researcher seeks to study and better understand (Jackson, Drummond & Camara, 2007). Furthermore, this design relies on participants and researchers providing a detailed and accurate representation of the participant's experiences to allow for more precise interpretation (Chesebro & Borisoff, 2007; Jackson et al., 2007). Interviews or direct observation of persons most familiar with the studied phenomenon are used in phenomenological research to provide descriptive answers to research questions.

According to Boss et al. (cited in Grossoehme, 2014), the phenomenological research approach is grounded on numerous assumptions, namely (1) meaning and knowing are societal structures, always unfinished and emerging; (2) the researcher is a part of the experience being studied and the researcher's principles play a part in the study; (3) unfairness/biasness is innate in every research and should be spoken or made clear from the get go; (4) participants and researchers collaborate and share knowledge; (5) It is crucial to use common means of expression, such as words or art; and (6) meanings may not be shared by everyone.

Like other research designs phenomenological research design has procedural systematic steps:

- The researcher assesses whether a phenomenological approach is the best way to investigate the study problem. The research problem should be one that will be able to give understandable shared or common experiences of several individuals of a phenomenon under study.
- The researcher understands and defines phenomenology's major philosophical assumptions.

- Data collected from the individuals who have experienced the phenomenon. (In this case, in-depth interviews will be conducted with the 20+ participants from Bulwer to obtain the required data).
- The participants are asked broad, general questions, ultimately this provides an understanding of the common experiences of participants.
- Phenomenological data analysis (interview transcription), highlighting important statements, sentences, or quotes from the interviews with participants, from these statements the researcher develops clusters of meanings and creates themes.
- The statements and themes identified during the analysis are subsequently utilized to create a descriptive account of the participants' experiences, known as a textural description.
- The researcher then develops a merged description of the phenomena based on the structural and textual descriptions. (Creswell, 2007)

Furthermore, because phenomenological research falls under qualitative research approaches it involves speaking to participants, therefore when utilizing the phenomenological research design a researcher can use the following methods, namely, in-depth interviews (open-ended), focus groups, recordings, in-depth surveys, etc. Through this phenomenological research, the researcher can deeply engage and cooperate with participants through in-depth interviews, in order to obtain rich and valid data. The phenomenological research design is a method that focuses mainly on people and their experiences. Ethics are said to play a huge part in phenomenological research, meaning they should guarantee that their study is morally sound by obtaining sufficient informed consent, keeping the data secure, and keeping the subjects anonymous.

The researcher opted for the phenomenological design, as it helps provide rich information about participant's experiences since it enables the researcher to conduct in-depth interviews built on open-ended questions.  Using this method of conducting data allowed both the researcher and the researched to be flexible when asking and when answering asked questions. Also, the researcher can record the session for later use with the consent of the

researched, and if the researched/participant approves the interview sessions being recorded the researcher records.

### 4.3.3 THE RELEVANCE OF THE PHENOMENOLOGICAL RESEARCH DESIGN IN QUALITATIVE RESEARCH AND THIS COVID-19 RELATED STUDY

Phenomenological research design seeks to explore people's subjective experiences, perceptions, and meanings related to a particular phenomenon or event. This approach is particularly relevant in qualitative research as it allows researchers to understand participants' perspectives and experiences in their own words, without imposing any preconceived notions or theories on them. One of the key benefits of the phenomenological research design is its ability to generate rich and detailed data about participants' experiences (Leach, 2021). By focusing on participants' subjective experiences, researchers can gain a deeper understanding of the phenomenon being studied. The phenomenological research design is highly relevant in this study because it helps the researchers gain a deeper understanding of how individuals in the community of Bulwer perceived and experienced health adversities related to COVID-19 and the interventions they used to cope with the adversities, such as traditional healing practices and self-care strategies. Phenomenological research design is well-suited for studying subjective experiences and meanings related to a phenomenon (Leach, 2014). In the case of this study, phenomenological research design helps the researcher explore the following:

- Researchers can gather rich and detailed data.
- Researchers can generate insights that are grounded in the experiences and perspectives of individuals in communities.

In relation to the context of the researcher, the researcher was able to empirically study experiences/ adversities as well as pluralistic interventions that Gqumeni Community implored to escape COVID-19-related health issues.

## 4.4 SAMPLING TECHNIQUE

### 4.4.1 SAMPLING TECHNIQUES EMPLOYED

As discussed by Alvi (2016), sampling is the process of choosing a sample from the target population. As part of qualitative research, the researcher is required to identify and sample

participants "who" they need to work with to answer research questions. In this study, participants were recruited only if they are in Bulwer. In finding participants that will partake in the study, the purposive sampling technique was used, which is a technique that falls under the non-probability sampling method. According to Russell (1940), purposive sampling involves identifying the specific purpose or objective for which informants or communities are needed, and actively seeking out participants from the target population to fulfil that purpose. This type of sampling is also known as a judgement or subjective sampling because the researcher depends on his or her own judgement when deciding on who will partake in the research or study.

Under purposive sampling, the research uses heterogeneous sampling, which encompasses sampling persons with different traits to find out their experiences about a common phenomenon that is being observed, as defined by Crossman (2020). Snowball sampling was also used, which falls under non-probability sampling methods. Snowball sampling is "where research participants recruit other participants for a study. It is used where potential participants are hard to find" (Glen, 2021). According to Glen (2021), snowball sampling derives its name from the concept of a snowball growing as it rolls downhill, accumulating more snow. Similarly, in snowball sampling, the initial participants refer or introduce additional participants, resulting in the sample size gradually increasing. In this study, initial participants will be purposively sampled/recruited, and the snowball sampling technique will be used to recruit subsequent participants through the initially recruited participants.

The purposive and snowball sampling technique is relevant to recruit research participants that will voluntarily participate in the study. Valeri et al. (2016) & Palinkas et al. (2017) agree that purposive and snowball sampling techniques are widely used in qualitative research. It is relevant to recruit participants that are hard to find but with nuanced information about the study. The total sample is achieved through chain referrals. Purposive snowballing sampling (PSS) relies on the first contact with the participants, the recruitment of other participants is referred by the first contact. This is the process followed to recruit participants for the study.

### 4.4.2 SAMPLE SIZE

The study targeted Bulwer Community (Gqumeni location) from where research participants were recruited. Twenty-two research participants were recruited to voluntarily participate in

the study, the study's participants are categorized as follows: 5 traditional practitioners, 4 medical health practitioners, 4 community leader (political) and 9 community members. Dworkin (2012) validates that qualitative studies accommodate small samples. He further asserts that the researchers can sample between 5 to 25 to interview when conducting phenomenological research, whilst Bertaux (1998) suggested that the smallest satisfactory qualitative sample size is 15 interviews. For such reasons, this study's sample befits qualitative research as well as anthropology research. Sim et al. (2018) agree that samples in qualitative research are fewer than in surveys. Qualitative researchers are mostly not interested in numbers but in the quality of narratives, therefore in order to deliver reliable and valid information Connelly (2009) reports it is crucial that the investigator samples participants that are suitable to produce valid information.

The sample size is deemed befitting and big enough to adequately describe the studied phenomenon and address or answer all the research questions at hand. The aim of qualitative research is mainly focused on the reaching/achievement of saturation, meaning it is aimed at reaching a point where adding more participants to the study does not result in obtaining additional perspectives or information but the repetition of already known or covered information.

### 4.4.3 INCLUSION AND EXCLUSION CRITERIA OF PARTICIPANTS FOR THIS STUDY

Nikolopoulou (2022) says defining inclusion and exclusion criteria is very important in any type of research, particularly research that studies the characteristics of a specific subgroup of people. Nikolopoulou (2022) defines inclusion and exclusion criteria as the criteria or features used to evaluate the eligibility of individuals within the target group to participate in a study. These criteria assist researchers in identifying and selecting volunteers who possess the necessary features while excluding those who do not. The inclusion criteria encompass the characteristics or qualities that potential research participants must have in order to be included in the study. Whilst on the other hand exclusion criteria encompass characteristics used to detect possible research participants who should not be included/excluded from the study. One of the typical exclusion criteria can be, 'considerations such as being a minor or not being able to give informed consent to participate in a study.' This study also has its own inclusion and exclusion criteria to help distinguish suitability for this study and will help provide insightful, reliable, and valid information. The study is not gender specific; however,

it is age sensitive, the inclusion criteria for the study were participants 18 years and above, and participants around that age were deemed eligible to participate. Participants who permanently reside in Bulwer and were affected by COVID-19 were recruited, bearing that everyone was affected by the pandemic either directly or indirectly. The exclusion criteria were that participants who did not reside in Bulwer cannot partake in the study, also participants below the age of 18 could not partake in the study as they are still minors and are not able to give informed consent to participate in the study. Data analysis will not include the names of participants as the anonymity of participants needs to be ensured following ethical considerations, participants will be called by pseudonyms, for example, 'Participant 1'.

## 4.5 METHOD OF DATA COLLECTION

In this study, in-depth interviews are employed as a means of data collection. According to Rutledge and Hogg (2020), an in-depth interview is a "qualitative research approach that involves conducting detailed interviews with a small number of participants. The aim is to gather information that provides insight into an individual's perspective, experiences, emotions, and the significance they attribute to a particular topic or issue". In qualitative research, the interview process is used to provide rich information from the interviewees' perspectives rather than identifying issues from the researchers' perspectives. In-depth interviews include structured, unstructured and semi-structured. Structured interviews are comprised of only a few main questions which are followed by supporting questions when necessary to provide more in-depth information (Davison, 2014). In-depth interviews are different from focus groups, surveys, and other interview methods as they involve one- on-one conversations between the researcher and the participant. These interviews provide individuals with the necessary psychological space and time to express their thoughts and experiences in their own language. This approach allows researchers to gather a variety of insights and emotions regarding a specific subject (Rutledge and Hogg, 2020). The idea is to ask open-ended, non-leading questions that allow the interviewee to determine the depth and direction of his or her response. The questions should be extensive enough so that they do not limit the number of responses or their richness. (Creswell, 2009).

This study employed open-ended questions as a data collection method in order to allow participants to give insightful responses to the phenomenon under study. In-depth interviews

were conducted in isiZulu. Data collection lasted between 45mins to 1 hour for a period of 3 months and they were dual recorded, meaning data was recorded on the data collection instrument as well using a voice recorder, with consent from the participant.

There are four steps involved in conducting in-depth interviews:

1. Developing a sampling strategy (Whose attitudes and opinions matter to your research, and how will you find participants?)
2. Writing an in-depth interview guide (Which contains the questions that will be asked during the interview.)
3. Performing the interviews (Contact possible interviewees to respond to your interview questions.)
4. Data analysis (making meaning of the findings.)

### 4.5.1 THE RELEVANCE OF DATA COLLECTION METHODS IN THE PROBLEM STATEMENT AND THEORETICAL FRAMEWORK.

To collect data for this study, in-depth interviews were utilized. In-depth interviews were relevant for this study because they provided a means of exploring the perspective and experiences of individuals and communities on the studied phenomenon In-depth interviews helped uncover the ways in which individuals and communities have been affected by COVID-19 and the interventions employed to address its impact on health, and uncover the health adversities faced by the community. The researcher was able to explore how individuals and communities experienced the pandemic, the challenges they faced, and how they adapted to the changes brought about by the pandemic. This data collection method helped the researcher identify the factors that have influenced the effectiveness of the interventions employed, such as the availability of resources, cultural beliefs and practices, and access to healthcare. Furthermore, this data collection method increased validity since it gave the interviewer a chance to probe and ask for clarification where needed. For this study, two theoretical frameworks were used, namely the Critical Medical Anthropology theory and the Explanatory Model theory. In order to fully support these theories, the use of in-depth was the most valid and reliable way to gain detailed information that is true and not biased.

Using this data collection method Bulwer (Gqumeni location) residents were able to speak out.

### 4.5.2 THE ONTOLOGY AND EPISTEMOLOGY OF KNOWLEDGE FOR THE STUDY.

The use of in-depth interviews implies an interpretive approach that values the perspectives and experiences of participants, emphasizing the subjective nature of reality and the importance of understanding the social and cultural contexts in which knowledge is produced. Ontologically, the study adopted a critical perspective that recognizes the socially constructed nature of the pandemic and its impacts. This perspective recognized that the pandemic is not solely a biological or medical phenomenon but is also shaped by social, economic, and political factors that influence the distribution of the virus, access to healthcare, and the effectiveness of public health interventions. Therefore, the study sought to understand the social and cultural dimensions of the pandemic and its impacts through the perspectives and experiences of participants. Epistemologically, the study adopted a constructivist perspective that recognizes the importance of interpreting and understanding the meaning of participants' experiences and perspectives. The use of in-depth interviews allowed for a rich exploration of participants' experiences and perspectives, which revealed the social and cultural factors that shape their experiences of the pandemic. The study sought to validate knowledge using reflexivity and member checking, which allowed for critical reflection on the researcher's assumptions and perspectives and the perspectives of participants.

## 4.6 DATA ANALYSIS, DATA HANDLING, AND FILTERING

After data collection, the researcher had a data set to analyse qualitatively. The process of data handling and filtering started when the first interview was conducted until the last interview was held. Soon after that, I listened to the recordings, transcribe and compare what I had generated during data collection against the data collection instrument that I used. This phenomenological study employed thematic analysis as a method of data analysis. Thematic analysis is "a method of analyzing qualitative data, where the researcher examines data to identify common themes, ideas, topics, and patterns of meaning that come up repeatedly" (Caulfield, 2020). Thematic analysis is also defined as "a qualitative analysis method that helps with the organizing, analysis, description, and interpretation of subjective participants'

data" (Nowell et al., 2017). This process led to the thematic analysis, after all the data is collected, the researcher listened to the recordings, transcribe, and compared the data that was collected by grouping it according to the similarity of points that were given and information that contrasts each other. This process is known as coding. The processes of coding which led to the development of the themes and subthemes from the study. The process of labelling and organizing qualitative data to identify different themes and links between them is referred to as coding (Medelyan, 2023). Coding the data allowed the researcher to organize the data making it easy for it to be analyzed, using the thematic analysis method. How well the researcher codes the data impacted upon the reliability and validity of the study (Buetow, 2010). Transcribing was done by the researcher. The interview was audio-recorded for ease of access to the conversation/interview session.

Steps in thematic analysis,

- Familiarization: Involves going through the interview transcripts, and field notes made during the interview sessions
- Coding the information - Identifying and coding important concepts, ideas or patterns in the data (Limited access to healthcare facilities, use of traditional remedies for COVID-19 symptoms)
    - Reviewing the initial codes and identifying potential themes that emerge
- Generating themes: Reviewing the initial codes and identifying potential themes that emerge. (Most vulnerable to COVID-19, Health adversities faced, types of ethnomedicine used, financial barriers to healthcare access, accessibility and availability of ethnomedicine, accessibility of healthcare facilities. Etc.)
    - Analyse the identified themes and assess their coherence and meaningfulness.
- Interpreting the information and writing a report: Developing a coherent report presenting the findings of the thematic analysis.

In collecting the data, the researcher audio recorded each interview session with a phone, while also jotting down important points, with the consent from each participant interviewed. The recording, as well as other items related to the interview, are kept and saved in a password-protected file that only I (the researcher) and my supervisor have access to. According to university policy, it will be disposed of after 5 years by permanent deletion, destroying, and burning.

## 4.7 ETHICAL CONSIDERATIONS

Ethics in anthropological research are important because they guide the researcher to respect the rights of the studied population from the inception of the study until the last stage of data analysis. Ethics in Social Science Research were adhered to during data collection and in the data analysis process. Prior to conducting the study, the researcher sought gatekeeper's clearance, with a formal written letter from the local councillor. The gatekeeper's clearance was then attached when applying for ethical clearance from the university. The researcher applied for ethical clearance from the University of KwaZulu-Natal's Human and Social Science Research Ethics Committee (Protocol reference number: HSSREC/00004627/2022). The researcher followed the terms of the ethical clearance letter, which included Any changes to the authorized study protocol, such as the Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, study Approach and Methods, must be reviewed and approved before implementation. For a period of five years, research data will be safely preserved in the discipline/department. Resnick (2015) says "Ethical guidelines for research are ethics that safeguard morality and guide researchers when they conduct a study they keep researchers liable, thus, ensuring prevention of research misconduct." Adhering to ethical considerations in research ensures that your work is honest, error-free, and earns the trust and support of the general public (Mazumdar, 2022). Dissertations may even be condemned to failure if the ethical consideration's part is missing. There are three core ethical considerations, namely, beneficence, vulnerability, and confidentiality/privacy outlined by Kaewkungwal and Adams (2019). Moreover, the most important part of ethical considerations is informed consent, which "means that a person knowingly, voluntarily and intelligently, and clearly and manifestly, gives his consent" (Armiger, 1997). Data collection was guided by the following ethical considerations in Social Science research:

### 4.7.1 INFORMED CONSENT

Seeking the approval of participation is key in research. As part of ensuring that all ethical consideration were adhered to in the study informed consent was solicited from research participants. Informed consent is defined by Yip, Han, and Sng (2016) as a procedure in which a participant actively verifies their decision to participate in a certain trial. This confirmation is given after receiving thorough information on all parts of the study that are relevant to the decision-making process of the participant. According to Denzin & Lincoln (2011) Informed Consent is the cornerstone of an ethical research (Denzin & Lincoln, 2011).

Adhering to this ethical consideration, I ensured that research participants were recruited openly and transparently. This means that I had to design an inform consent which outlined the intentions of the study, which clearly stipulated that the participation is meant to be voluntary without the expectation of any tokens of appreciation which were either paid before or after data collection. Research participants were made aware that they have every right to withdraw from the study should they wish to do so. I declared contacts for the supervisor as well as for the University of KwaZulu-Natal the institution that I am currently registered at. I further explained how the data was going to be collected and an emphasis was made on not posing double barrel questions or questions that entail ambiguity or misrepresent the objectives of the study. The consent form also explained that the rights of research participants will also include concealing their identities (the use of pseudonyms) and how the data will be stored and disseminated. Participants were then asked to sign a consent form which was also written in isiZulu which is the language that participants understood better.

### 4.7.2 POTENTIAL FOR HARM

Bhandari (2022) states that as a researcher you must consider all the possible sources of harm to participants and prevent them. The researcher strived 'to not harm' participants, and ensured the safety of participants, not putting them at risk. Fleming and Zegwaard (2018) suggest that when assessing the potential harm to participants, the recommended approach is to prioritize the elimination, isolation, and minimization of risks in descending order. It is crucial for participants to receive complete information about any potential risks involved, ensuring they are fully aware of the nature and extent of the risks, if present. In the case of this study there was no potential for harm. To ensure there was no harm I made sure that the interviews sessions were conducted in a safe environment to avoid any risks or harm. Thus, decreasing the possible risk of harm to participants. Also, avoiding the risk of psychological harm, by ensuring that offending or emotional questions are not asked, including minimizing physical and emotional risks, and ensuring that the study does not cause undue stress and harm. I ensured that sensitive questions that may trigger negative emotions were not asked during the interview session, and for the safety of participants some interviews were conducted at each participant's home and some participants came to my home, which was voluntary as they were busy during the day and suggested that I interview them in the evening.

### 4.7.3 CONFIDENTIALITY

Bhandari (2022) assert that, confidentiality means that as a researcher you know who the participants are, but you remove all identifying information from your report. In this way the confidentiality of participants will be ensured. In cases where interviews were conducted, and where the participant identities are known to the researcher, only confidentiality, not anonymity, is assured (Fleming & Zegwaard, 2018). I ensured that the identity of participants was kept confidential by using pseudonyms, any identifying information was when writing up the results and discussion session. Since face-to-face interviews were conducted, this meant that the participants were not anonymous to the researcher, however, they were ensured of their confidentiality. As the researcher I knew who the participants are, but I did not in any way reveal their identity. Before starting the interview, the participants were notified that no one will have access to the information that they will provide and that only the researcher and the researcher's supervisor will have access to the information they provide, thus ensuring that their identities are kept unknown or confidential. According to the UK Statistics Authority (2022) confidentiality is important and must be maintained in qualitative research, researchers should be transparent in their approach to data security and confidentiality to help participants better understand how their data is being protected.

By adhering to the above ethical considerations, the researcher was able to ensure that the study is conducted ethically and responsibly, and that the well-being of participants was prioritized and protected.

## 4.8 CHAPTER SUMMARY

This chapter contained the research design utilized in the study, it will then describe the setting in which the research is based and elaborate on the sample and sampling method/s utilized. Lastly, this content of the chapter will explain how the collected data is analyzed, expand to delineate ethical considerations that guided the study and then conclude. The research plan provided a comprehensive overview of the study, including details about the target population, the sampling procedure, and the methods of data collection. It discussed the importance of ensuring the validity and reliability of the questionnaire used to gather information. The objectives of the study were clearly outlined, along with the proposed

strategies for analyzing the collected data. The research plan also emphasized the significance of addressing moral considerations throughout the study.

# CHAPTER FIVE

## PRESENTATION OF DEMOGRAPHICS

## 5.1 INTRODUCTION

Chapter one of the thesis discussed that the COVID-19 pandemic has posed a major threat to people's lives. Chapter two also elucidated that rural communities have been severely affected by the pandemic due to a lack of resources, limited healthcare infrastructure and limited access to healthcare services. As a result, rural communities have been forced to take matters into their own hands and implement pluralistic interventions to escape the impact of COVID-19 on their lives. Chapter three depicted theoretical frameworks (Critical Medical Anthropology & Explanatory Model Theory) that guided the study and chapter four spoke to the methodology that the study employed to generate research findings that are presented in this chapter. This chapter outlines the demographics of the research participants/sampled population. It gives a clear picture of the studies participants, revealing the gender of participants, age of participants, marital status, employment and unemployment status, length of residency and the communal use of biomedicine and ethnomedicine.

## 5.2 DEMOGRAPHICS OF RESEARCH PARTICIPANTS

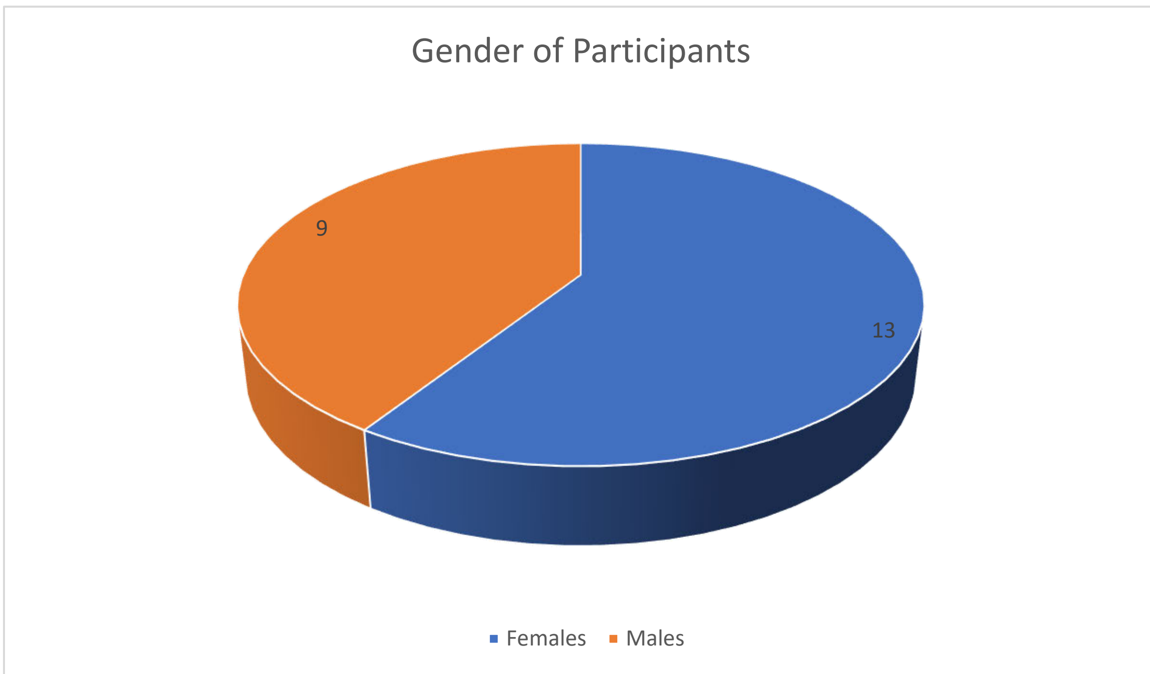
The demographic profile of participants is important because it gives an indication that the study was conducted on people. Demographics confirm the sample size of participants that participated in the study. Demographics are important to be presented in this study because this qualitative phenomenological study probed health adversities and pluralistic interventions that were employed by the community of Bulwer (Gqumeni location), KwaZulu-Natal in response to COVID-19. In anthropological research, demographics confirm the voice and experiences of people that were studied. In qualitative research the representation of participants leads to the validation of research findings and the regulate the extent to which findings can be generalized. In this study, findings are limited to the experience of the community of Bulwer (Gqumeni locations). They cannot be generalized as the experience of other rural communities, but other communities can make inferences.

## 5.3 DEMOGRAPHICAL PROFILE OF THE SAMPLE

**FIGURE 1: CATEGORIES OF PEOPLE WHO PARTICIPATED IN THE STUDY**

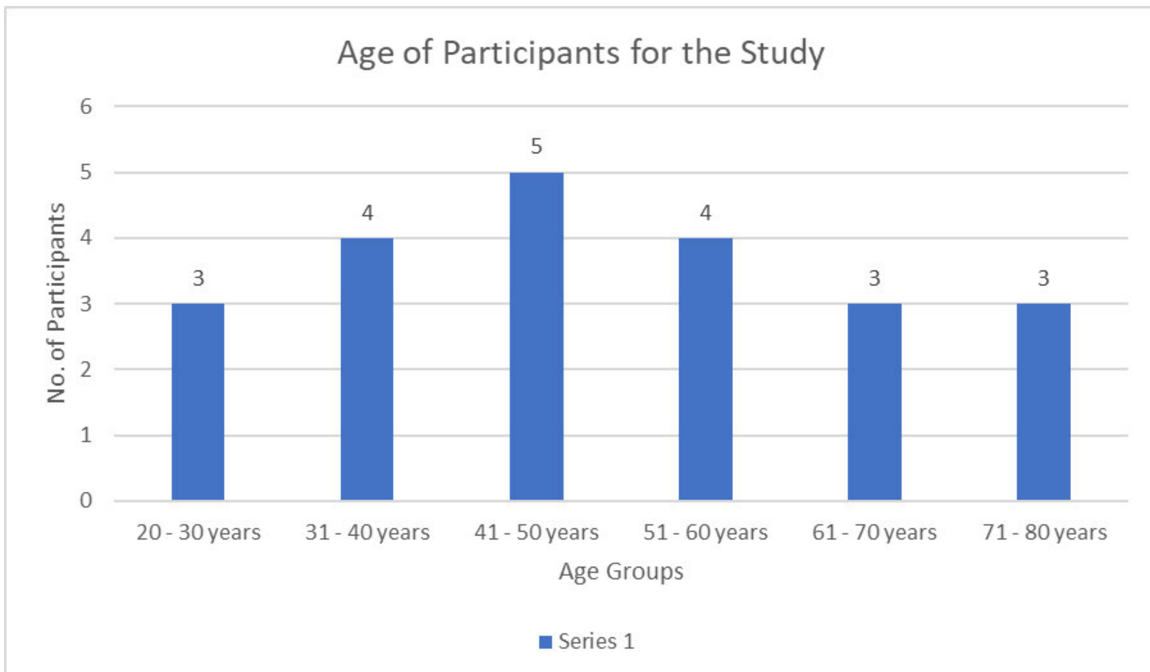
The pie chart shows the presence of various people in Gqumeni, and amongst these categories of these people narrated that they all utilized ethnomedicine during COVID-19, including people from the medical health department, this proves that people of Gqumeni have a strong belief in their indigenous plants.

**FIGURE 2: GENDER OF PARTICIPANTS**




The above figure shows the gender representation in the study. The pie chart depicts that the study sampled 22 participants. Thirteen females and nine males were participants interviewed for the study. In relation to gender, the study revealed that the study attracted more females than males, but the representation of males is also recognized.

**FIGURE 3: AGE OF PARTICIPANTS**



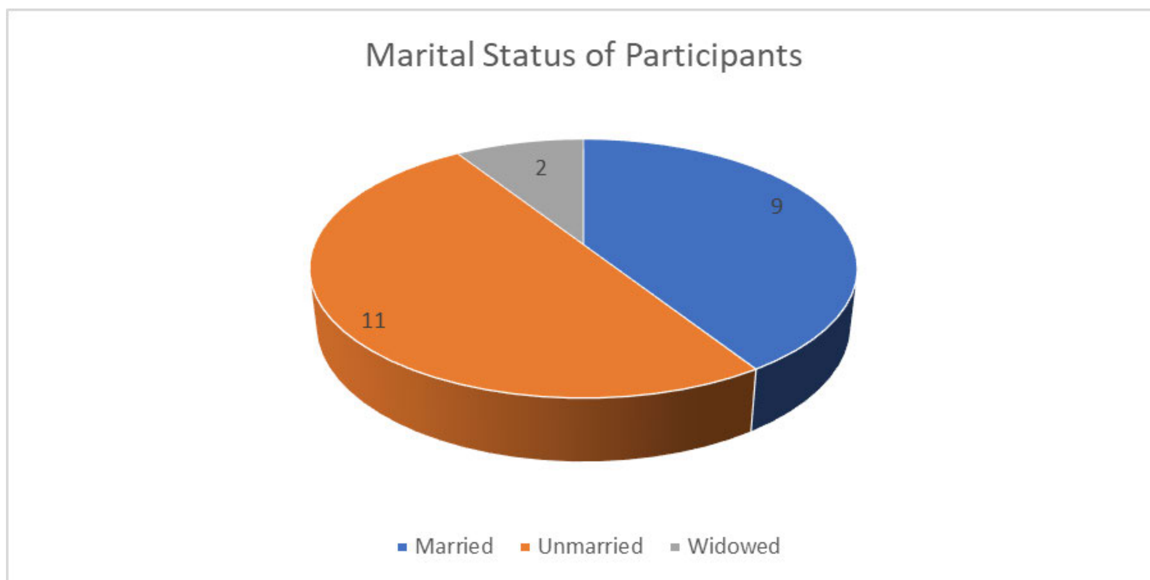
The bar graph above shows the age of the participants of the study. Only individuals above 18 were interviewed. The study did not allow any children to participate as informants as this would have implied the breachof ethical considerations that guided the study. The result from the interviews revealed that indigenous/medicinal plants are used from an early age in the community of Gqumeni. The use of medicinal plants informs the identity of people (as deeply rooted in their herbal plants). This finding confirms what Zondi and Ehaine (2022) have theorized in chapter where they argued that the use of medicinal plants is the cradle and the identity of users. It is important to also note that use of medical plants starts at an early age and increases at age 41, however the decreased use to those that are between 71-80 does not mean that it dies but it proves that medical herbs are used continuously as a life time cradle of hope for rural communities and households, also the decreased used of medical herbs for the older adults was due to fact that most of them became too ill that they had to be taken to hospitals for oxygen, but once they returned home continued with using their herbal plants. Demographics of this study also confirm that the life expectancy of people at Gqumeni is still high considering that the study was able to recruit participants between 71-80 years. Their life expectancy is attributed to the use of ethnomedicine. This is confirmed by the following narration from participant 1 who is 74 years old "also known as umkhulu/grandfather in the community".

*The use of traditional herbs does not only heal our illnesses and sickens. It strengthens our immune systems that's why sisakwelikamthaniya. We won't die because of illnesses/sickens of contemporary times but we will die because izindlu zethu zobe sesiphelile ezulwini*[1]*. These medicinal herbs are very safe to use. You don't have to eat first before you use them like amaphilisi esizulu. It is a mixture, you drink it like water. It does two things, it will fight the sickness and leave you full as it you have eaten a proper meal. This is an inheritance from our grandfathers.*

[1] Because God has invited us to heaven.

Participant 2 who is 31 years old narrated as follows *"The use of medicinal herbs before consulting with imithi yesilungu*[2]*is the life that we know. We have seen it being done in our families and we heard communities verbally sharing ingredients as and when they feel sick. There is no shame is using medicinal herbs because they define who we are. My grandfather use to tell me that back in the olden days, there were no hospitals, but sicknesses have always been there. People would gxoba*[3] *these plants, boil them and feel better. The use of herbs starts when a woman is still pregnant until the child is born, and they are still used on newborn. They don't have any side effects. Let me tell you "He smiled" When the child is born, elders in the family will mix medical plants and infuse them in the mouth of the newborn. This is done for two things, to clean the newborn stamoch ukuze akhiphe amatheketheke*[4]*. This one way of cleaning their stomach because they've been eating through the mother. Secondly, the use of medicinal herbs on new baby is mainly intended to make them stronger. Ingane ekhuliswa ngamakhambi ikhula ingabi incekenceke meaning they hardly get sick. The use of medical herbs has deeper meanings in our lives.*

**FIGURE 4: MARITAL STATUS OF PARTICIPANTS**

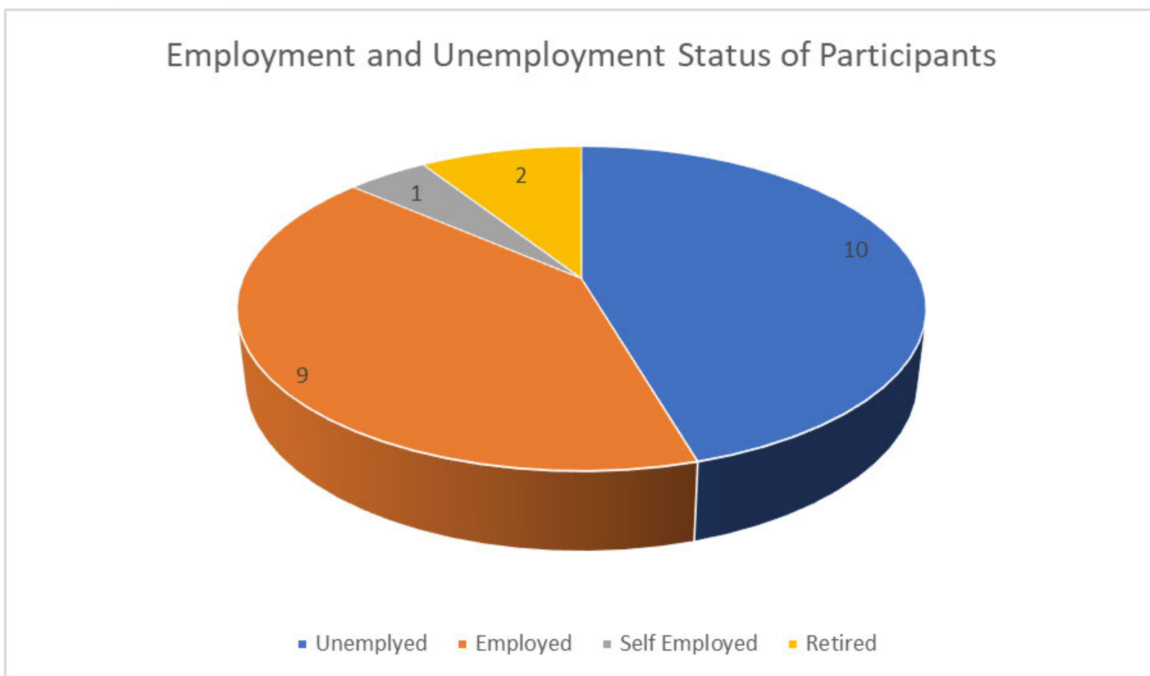



The pie chart above illustrates the marital status of the participants that were interviewed. Out of the 22 participants 9 are married and 11 are not married and 2 are widowed. The above pie chart implies the types of families that are found at Gqumeni community. Where married

[2] biomedicine
[3] Mix herbs
[4] To pass the first stool

implies the existence of nuclear families and extended families that influences the use of medicinal plants. Unmarried implies a single-headed family which also expands the continuation of indigenous knowledge systems as they still rely on medical plants even though they are heading families. Widowed also tells something that has to do with facing financial constraints or not being able to afford medical expenses hence the use of medical plants will be an option as it is more affordable which can be appealing to widows with limited financial means.

**FIGURE 5: EMPLOYMENT AND UNEMPLOYMENT STATUS OF PARTICIPANTS**




Apart from the expressed interest in the use of medicinal plants, unemployment is a critical variable that tells a story about the population of the Gqumeni community in relation to them not being able to afford commercialized health services. Gqumeni is dominated by unemployed people some of whom rely mostly on social grants as a means of survival some rely on part-time jobs which do not pay much, hence when it comes to health-related matters, they had no option but to rely mostly on ethnomedicine.

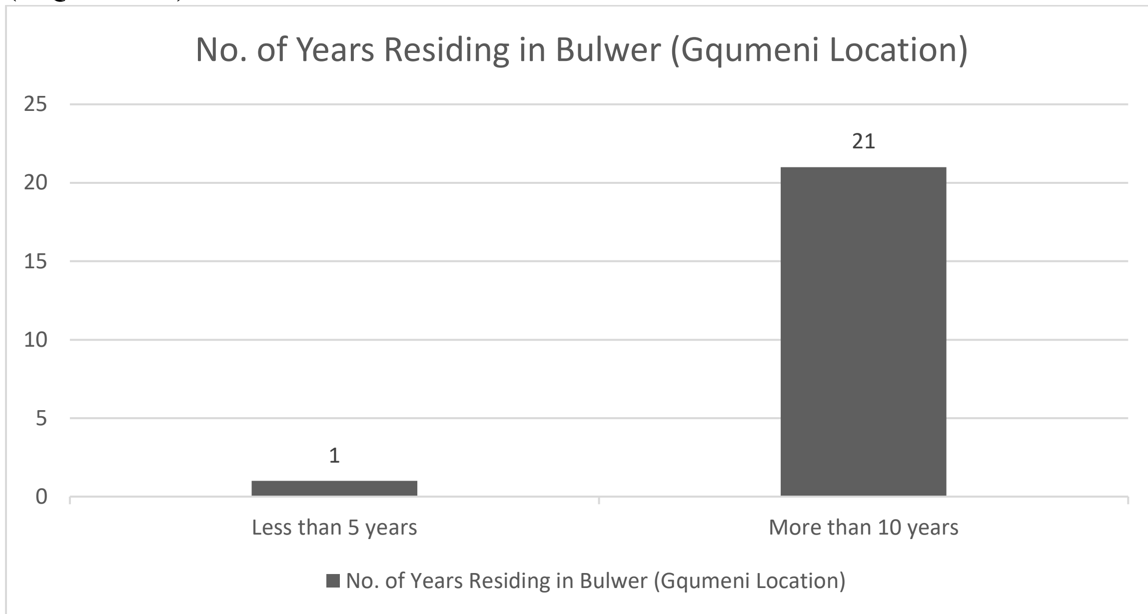
*The use of medicinal herbs is our identity, but we also need to make our voices heard now that we are part of this study. We hope that government will hear us and intervene. We are*

*still holding onto the teaching of our ancestors who taught us the use of medicinal plants but we also use them because even when we want to try amakhambi esilungu*[5] *we won't afford them because siyantula*[6] *in our community. Only a few people are economically active. Moreover, we won't afford transport money in order to advance to the nearest local clinic which is far from many of us. We then use medicinal plants because they are accessible "siyananelana"*[7]*. When getting them from izangoma kanke nezinyanga*[8] *we don't pay for it but siyawuhlaba*[9]*. Those who may for some reasons decide to sell them, they sell them at a cheaper price which is affordable.* (Participant 3)

Through the Explanatory Model Theory, the narrative above depicts the political economy of people in rural areas which confirms the theoretical perspectives of the Critical Medical Theory which is discussed in chapter three. The political economy of people in rural area limits preferential choices of people and it also excludes them medical advancements that are celebrated by people in urban areas as well as in big cities. While the use of medicinal herbs is categorized as their cradle, the emphasis of being unemployment is recognized as structural issue that does not maximize opportunities of people rural areas when faced by pandemics and other ailment.

[5] Still biomedicine
[6] We are unemployed
[7] We domestically share them as neighbors at no cost
[8] Traditional healers
[9] A social construct which simply says we are not buying these medicinal herbs but we give it praises.

**FIGURE 6: LENGTH OF RESIDENCY OF PARTICIPANTS AT BULWER (GQUMENI)**




The bar graph above shows the number of years the participants have been residing at Bulwer (Gqumeni Location). The graphs below reveal that 21 participants were born and have been residing in Bulwer (Gqumeni Location) for more than 20 years and 1 participant has been residing in this community for less than 5 years. The graph implies that the longer the people have been residing in Gqumeni the stronger they believe in and utilize indigenous plants to fight diseases/illnesses. As they grew up relying on traditional medication/herbal plants and consider them effective for various health conditions, also this type of intervention was used by their ancestors and was passed on from generation to generation. According to Aziz et al (2018) he widespread knowledge confirms that traditional herbal remedies are usually transfers from one generation to another generation orally and till this day rural people residing in developing countries rely of traditional herbal remedies.

*Participant 4 said "abaningi bethu bayimsinsi yokuzimilela kulendawo*[10]*. There were few people but now we are many people. People opted to stay this side simply because the area is far from the city, it is quiet and close to nature. You can see that our mountains are covered by medicinal herbs. When we go around the community and up in the mountains siyaququda nje*[11]

[10] We were born here and have lived for many years.
[11] We chew these medicinal plants.

The above narrative confirms what Zondi and Ehaine (2022) stated in their publication. They said rural communities do not have weeds or alien plants, but they have herbs because every tree or flower is used for a particular ailment in rural areas and the use of such trees and flowers dates back and plays a crucial role in healing people this corresponds with what was also said by Ezekwesili-Ofili & Okaka, (2019).

**FIGURE 7: THE COMMUNAL USE OF BIOMEDICINE AND ETHNOMEDICINE:**

| | Effective | Accessible | Affordable |
|---|---|---|---|
| **Biomedicine** | **2** | **2** | **0** |
| **Ethnomedicine** | **11** | **12** | **16** |
| **Both** | **9** | **8** | **6** |
| **TOTAL** | **22** | **22** | **22** |
| | | | |

The table above shows the results of what was considered by the participants to be effective, accessible and affordable, between biomedicine, ethnomedicine or both. Results prove that according to most participants ethnomedicine was seen or believed to be the most effective, accessible and affordable. The table also indicates that residents of Gqumeni believe in ethnomedicine compared to biomedicine, this is because this community has a long history of relying on ethnomedicine and this strong belief creates a sense of trust and belief in its effectiveness, leading them to perceive it as a reliable option during the COVID-19 pandemic. In terms of accessibility, it was also seen as the most accessible, since biomedical treatments, including COVID-19 testing, hospitalization, and medications, were expensive and hard to access. The rural community of Gqumeni being a poor community finds it difficult to afford such treatments and access healthcare facilities. So, for most of them ethnomedicine was their fighting tool.

## 5.4 CHAPTER SUMMARY

This chapter gave a demographical profile of the sampled participants (gender, age, marital status, employment and unemployment status length of residency) and gave statistics on what was seen by the community of Bulwer (Gqumeni) to be more effective, accessible and affordable between ethnomedicine and biomedicine, results show that most participants believe that ethnomedicine was effective, accessible and affordable.

# CHAPTER SIX

# NARRATIVE ANALYSIS OF RESEARCH FINDINGS

## 6.1 INTRODUCTION

This chapter will give a presentation, analysis and interpretation of themes that emerged from the qualitative data set that emerged from data collection. Qualitative findings for this study were gathered through in-depth interviews with, community members affected by COVID-19, community leaders, traditional healers, and medical health practitioners. These findings are derived from the data that the study gathered. Study findings depict the participant's experiences particularly the health adversities they faced and the pluralistic interventions they employed in response to COVID-19. This chapter presents the themes that were generated from the thematic analysis of the in-depth interviews. The data collected from the in-depth interviews will be discussed, linked/ compared to data from the literature review of this study and analyzed through theoretical frameworks. Eight major themes emerged from the data analysis amongst the critical medical anthropology theory was applied to analyze health adversities faced by the Gqumeni community due to COVID-19, and social inequality/ limited access to healthcare facilities which is influenced by broader social and political structures. Whilst the explanatory model theory was utilized to understand the pluralistic interventions employed and cultural beliefs/practices and knowledge systems employed and how the community interpreted and responded to health adversities that came with COVID-19.

This chapter of data presentation is also guided by the Explanatory Model which was introduced in chapter three of the thesis. This model is used in anthropological research because it recognizes voices as experiences of research participants. The model also supports the thematic analysis and interpretation of the gathered data set. Data sifting and handling led to generation of themes such as:

- the most vulnerable to COVID-19,
- health difficulties face by Gqumeni community,
- the type of ethnomedical plants they used to fight COVID-19,
- financial barriers to accessing healthcare,
- the accessibility and availability of ethnomedical plants in Gqumeni,

- rural communities and their strong belief in ethnomedical plants, the accessibility of healthcare facilities,
- availability of healthcare resources in the local clinic,
- and the collaboration between traditional healers and medical health practitioners.

The chapter is also guided by the Critical Medical Anthropology theory focusing social, economic and political factors hinder health care for communities. From a critical medical anthropology perspective, financial barriers to accessing healthcare are not solely individual problems but are deeply rooted in structural factors. These factors include the influence of capitalism, neoliberalism, and market-oriented healthcare systems, which prioritize profit and market forces over equitable access to care. As a result, healthcare becomes commodified, leading to high costs, privatization, and limited availability of affordable services.

## 6.2 THEME 1: MOST VULNERABLE TO COVID-19 AND THE HEALTH ADVERSITIES FACED

Rural communities have a higher risk of COVID-19 infection due to several factors. Also, rural communities often have higher rates of chronic health conditions such as obesity, diabetes and heart disease. These comorbidities can increase the risk of severe illness and death from COVID-19.

Most participants defined COVID-19 as follows:

*Covid-19 is an illness that had a significant impact on people with chronic diseases. (Participant 5)*

*Covid-19 is a communicable disease that can be transmitted through close contact with an infected person, it has symptoms like that of TB. It can be transmitted through coughing, touching and respiratory droplets." (Participant 6)*

Consequently, making older people suffering from diseases of the lungs/chronic diseases are most vulnerable to COVID-19 compared to young people, she adds (Participant 6). This supports what was stated by the National Institutes of Health in 2022, that older adults experience more chronic health issues than young people, thus putting that at high risk of contracting COVID-19.

*Old adults with chronic diseases were most likely to experience severe illness from Covid-19, while children were less affected because their immune systems are still developing and may not react as strongly as in older adults…. Older adults have a weak immune system and Covid-19 takes advantage of the immune system. (Participant 2)*

Supporting the Center for Disease Control and Prevention committees (2019), that people with chronic diseases are more vulnerable to COVID-19 due to a higher frequency of pre-existing conditions and comorbidities, most participants also narrated that older people were most vulnerable to and infected by COVID-19 the most compared to persons under the age of 50.

*Older adults were more vulnerable to Covid-19, be it those taking HIV treatment, arterial blood pressure (hypertension), diabetes TB, etc., this is due to the fact that their immune system is weak and needs to be boosted by medication, thus making them vulnerable to contracting diseases. (Participant 6)*

*Covid-19 is a disease that attacks mostly the lungs, it is said that people with Covid-19 fall under pneumonia, just because it affects the lungs, thus making breathing difficult, is had symptoms such as coughing, pain in the chest, difficulty in breathing, fever, and tiredness. (Participant 7)*

As it is rural communities before COVID-19 had a higher prevalence of underlying health conditions, COVID-19 further caused health-related difficulties for people with underlying conditions, such as obesity, diabetes, heart diseases, HIV, TB (Center for Disease Control and Prevention committees 2019, Peters 2020 & White et al 2021). Supporting this was a participant who said:

*People living in our community were faced with health difficulties due to high rates of chronic diseases such as diabetes, BP (hypertension), TB, HIV/AIDS, and Asthma, thus increasing the risk of severe illness and complications once an individual contracted Covid-19 which is why most older people in our community got sick form Covid-19. (Participant 8)*

Two of the healthcare practitioners interviewed said:

> *Since the beginning of Covid-19 people stopped coming to the clinic because of the fear of contracting Covid-19. Patients with chronic diseases ended up not coming to the clinic to collect their medication and this also increases their vulnerability to the diseases as they ended up not taking the treatments as expected. (Participant 6)*

> *People collecting Chronic treatments such as HIV/AIDS, TB, hypertension and diabetes treatment from our clinic, could not access their treatment/medications due to clinics being overcrowded and limited healthcare services and this put them at further risk of contracting the disease. (Partcipant 7)*

The COVID-19 pandemic had a significant impact on patients with chronic diseases (PWCDs), hindering their ability to attend health facilities for essential medical check-ups and medication retrieval. The narrative is confirmed by Mboweni and and Risenga (2023) who's study revealed that COVID-19 is a health crisis, coupled with limited access to quality care which disrupted the management of chronic conditions.

## THEME 2: TYPES OF ETHOMEDICAL PLANTS USED BY BULWER (GQUMENI) COMMUNITY TO HELP FIGHT THE COVID-19 PANDEMIC

Bulwer (Gqumeni) location is a rural area deep in indigenous plants, it is geographically located in the heart of forests, filled with lush indigenous plants, and surrounded by mountains and forests, thus making herbal plants accessible to community members. Bulwer Community residents have a wealth of knowledge about the plants and their uses passed down through generations of observation, experimentation, and tradition.

| | **Type of Ethnomedical Plants Used by Bulwer (Gqumeni) community members to Fight COVID-19** | **Source of knowledge e.g. indigenous knowledge, media, communal knowledge** | **Effectiveness of these interventions** |
|---|---|---|---|
| **1** | Raw Garlic | Media | Starts fighting flu symptoms around 24 hours, should be eaten daily until symptoms are no longer visible |
| **2** | Umhlonyane<br>*"Artemisia afra"* | Indigenous knowledge | Works better when used before one gets signs and symptoms of flu, once symptoms are present it takes 24 hours to fight them when used 2 times a day for steaming and drinking. |
| **3** | Gumtree Omhlophe | Communal knowledge | Effective after 3 days when mixed with vicks, and iboza. |
| **4** | Unsukumbili<br>*"Senecio gregatus"* | Indigenous knowledge | Boil and drinks, twice, daily.<br>Effective around 2 or 3 days. |
| **5** | Isibhaha<br>*"Pepper Bark Tree"* | Communal knowledge | But works well when mixed with Umhlonyane.<br>Effective around 24 hours. |

| | | | |
|---|---|---|---|
| **6** | Ikhathazo<br>*"Alepidea Amatymbica"* | Indigenous knowledge | Boil and drink daily, twice a day.<br>Effective around 3 or 4 days. |
| **7** | Uhlunguhlungu<br>*"Mountain bitter-tea"* | Communal knowledge | Boil and drink, three times a day.<br>Effective around 24 hours. |
| **8** | Ukalumuzi | Indigenous knowledge | But works well when mixed with Umhlonyane.<br>Effective around 24 hours. |
| **9** | Unukani<br>*"Black stinkwood"* | Indigenous knowledge | Boil, steam and drink daily.<br>Effective within a week. |
| **10** | Iboza | Indigenous knowledge | Works well when mixed with Gumtree.<br>Effective after 3 days. |

This study recognizes the use of the above medicinal plants and how they contributed to the discourse of medical pluralism in medical anthropology. The data above proves that indigenous knowledge systems have proven to be effective till date and deserve significant recognition and inclusion within the colonial discourse, it is vital to honor indigenous knowledge systems as valid and legitimate sources of wisdom, this will in turn offer the opportunity for mutual learning and exchange.

## THEME 3: ACCESSIBILITY AND AVAILABILITY OF ETHNOMEDICAL PLANTS

As stated in the literature review, ethnomedicine involves traditional healing practices, such as herbal medicine, acupuncture, and spiritual healing. When we speak of accessibility and availability, we are referring to the degree to which these traditional practices and remedies are accessible and available to the people of Bulwer (Gqumeni location), especially during the severe stages of COVID-19. These ethnomedical plants have proven to be homegrown, available, accessible and cheap in this community. Kabyemela (2020) traditional medicine is commonly used in rural areas as the primary source of healthcare due to factors such as its widespread availability, affordability, and accessibility. As known most rural communities rely on surrounding forests, mountains, and natural environments to gather plants. Bulwer (Gqumeni location) being a community where traditional healers and natural remedies are more prevalent, available, and accessible also with the community rooted deeply in indigenous herbs and with a strong belief in indigenous plants they had quick and easy access to ethnomedical/herbal plants during COVID-19. Research reveals that unlike biomedical remedies/modern medicine which are expensive and hard to access especially during COVID-19, ethnomedicine is/was the most affordable and accessible option for people residing in Bulwer (Gqumeni location). Some participants stated that because of poor access to healthcare they just relied on ethnomedical remedies.

Supporting that Bulwer (Gqumeni) has natural remedies/herbal plants prevalent is Mr. Gambu who narrated:

*This one time during Covid-19, a man from eMkhambathini came to Gqumeni and asked me to help him and show him uMhlonyane…. A while after I helped him, he saw me and said, "You helped us by showing us where we can get uMhlonyane, since the beginning of the pandemic we have been hearing people on the radio talk about and recommending it, we*

*had no idea what this herb was we have never seen it and where I come from we don't have it" (Participant 10)*

He further supported and said: *Our place is rich in indigenous plants as we are surrounded by forests and mountains. (Participant 10)*

Also supporting what was said by Participant 10 was Participant 22, a community leader who highlighted that geographically Bulwer (Gqumeni) is in an area that is rich in indigenous plants and that people traveled to this place to access traditional herbs/plants during Covid-19.

*We had people who came from Johannesburg to Bulwer to get uMhlonyane, we helped them and showed them where they can get uMhlonyane" (Participant 22)*

In most rural communities ethnomedicine was seen to be the most accessible, affordable, and effective intervention, some participants say both methods were helpful, whilst one participant (Participant 11) who was infected by COVID-19 tried possible ethnomedical remedies and failed said after spending15 days in a dying bed at the hospital, he believes that he is alive today because of the help he received from Medical Health Practitioners in Greys Hospital Pietermaritzburg.

Participant 16 mentioned that because some people such as older people could not go to the forests or mountains to access Umhlonyane. The community chief instructed men go to the forests to gather uMhlonyane so that it will be accessible to old people who could not access them easily.

Participant 16 further narrated that:

*Isona sikhathi lesi sokuba sisindiwe ifa esalishiyelwa ngobabamkhulu wethu "it is time we rely on the inheritance that we received from our ancestors". Kumele sikhumubule ukuthi thina asinawo amahlamvu namadlolo, sinezihlahla eziwumuthi ophilisisa abagulua "we must remember that we don't have trees with branches, but we have medical herbs that are giving life to sickly people."*

The narrative above validates that when all else fails in rural communities in Africa, ethnomedicine becomes the cradle of hope as discussed by Zondi and Ehaine (2022).

## THEME 4: ACCESSIBILITY OF HEALTHCARE FACILITIES

In the context of rural areas, critical medical anthropology emphasizes the structural obstacles and power dynamics that contribute to the limited accessibility of healthcare facilities. These challenges include inadequate healthcare infrastructure, lack of healthcare resources and personnel, limited transportation options, and disparities in funding and healthcare distribution inequalities.

Bulwer (Gqumeni location) has one clinic geographically located far from other resident's homes, the biggest clinic (Pholela Clinic) with better resources is located 35 km away from this clinic, which has made it hard for residents to access healthcare facilities during COVID-19 also considering the fact that the movement of transport and people was burned. Transportation disadvantage was widely recognized as a barrier to health care access before the pandemic and got worse during the pandemic. Syed et al., (2013) study revealed that many people were challenged not only by contracting the novel virus, but also by transportation which made it difficult for them to access medical services at the time of their need. In Bulwer Community residents living close to the clinic said they could reach the clinic easily, but could not receive the necessary help when they got to the clinic and therefore had to be transferred to Pholela Clinic, but transport was also an issue, whilst those living far from the community clinic said getting to the clinic was and has always been difficult as transportation is a major issue in Bulwer (Gqumeni location) due to the gravel road or poor road conditions and transportation got worse due to the national shutdown and traveling restriction. Rural populations are particularly disadvantaged regarding emergency transport to access healthcare facilities (Dikotla & Mothapo, 2021). Also supporting this are Mangundu, Roets, and Janse van Rensberg (2020) who said in developing countries, access to healthcare services is often influenced by long distances and travel times to health facilities, the availability of financial resources to travel or pay for care and the availability of medical drugs as well as lack of experienced healthcare workers. Dr Ohler (2020) from KZN Eshowe outlined in the literature review also speaks of the distance between clinics also hindering access to healthcare. Access can be further

hindered by a lack of infrastructure, such as dirty roads that are not maintained, resulting in poor road conditions and potholes that create barriers to transport.

Participant 3 stated: *If one needed to go to Pholela Clinic one needed transport and during the time public transport was banned and from one place to another one needed a permit, we couldn't get to Pholela Clinic because accessing a permit was difficult, the only place I could get a permit was if I went to the Police, to get there I need transport, so this made it very difficult.*

Adding to the issue of accessing healthcare facilities was Participant1 who said:

*Some people ended up losing their lives because they could not get help on time, if you would remember, Covid-19 was said to be suffocating and to prevent that you would need oxygen and there was no way to get it without easy access to a clinic. (Participant 1)*

Though accessing or getting to the clinic was an issue for residents one of the nurses narrated that when the pandemic was first discovered, and testing swabs were available at the clinic they made an initiative to get family members of an infected patient tested but as COVID-19 cases went high they stopped.

*When the pandemic was at level 5 some people could get to the clinic, but if a patient came in and tested and the result come back from the lab positive we would go to their home to test the rest of the family members, but as cases rose, we stopped and they had to come to the clinic, because it became a burden, due to shortage of facilities (cars) and staff. (Participant 6)*

The findings support what Kaufman et al. (2020) outlined as cited above in the literature review about the shortage of qualified healthcare workers/ practitioners in rural health facilities thus increasing rural resident's vulnerability to the COVID-19 pandemic, Bulwer (Gqumeni location) is no exception. Around February 2021, rural hospitals reported an ICU bed occupancy rate of around 33 percent, compared with around 72 percent for the urban ones (Bradford et al, 2021). This caused anxieties on those that needed to be hospitalized in order to access oxygens and many other aiding hospital resources.

Even though most participants outlined that ethnomedical plants were the most accessible, some participants said biomedical remedies/healthcare facilities were the most accessible.

Participant 7 outlined that going to the forest or mountains to look for Umhlonyane was unsafe.

*Accessing Western medication was easy because you know when you go to the clinic or hospital you will receive the help you need, the ethnomedical side was not easy, you are required to go to the forest to look for these remedies some of which you have never seen before but heard from people, also going to the forest is risky, one can get bitten by a snake even.*

Having one clinic in Bulwer (Gqumeni location) with limited resources, and also helping people from surrounding areas has affected community members during COVID-19 and before COVID-19 the clinic is often crowded and resources become depleted.

*The biggest problem we are faced with in our community is the issue of having one clinic that doesn't only service Gqumeni people, because we have Mnqundekweni residents using our clinic, Nkwezela people prefer living their community clinic, which is Gwala Clinic to come to our clinic, thus meaning the clinic becomes overpopulated, with that being said people from Gqumeni ended up suffering because of that. (Participant 12)*

Scholarly articles such as that of Kruk, Gage, Arsenault et al (2018) and Williams et al (2016) emphasize the significance of equitable access to healthcare resources to ensure fair and adequate services for all community members. Issues arising from overutilization of a particular clinic due to preference or limited services in neighbouring areas often lead to the overburdening of that facility, compromising the quality of care for the primary residents it's intended to serve.

## THEME 5: FINANCIAL BARRIERS TO ACCESSING HEALTHCARE

Critical medical anthropology theory sheds light on the systemic nature of financial barriers to accessing healthcare. Financial barriers are often exacerbated by income inequality, poverty, and social exclusion, all of which are major concerns within critical medical anthropology. Marginalized populations such as Gqumeni, with low-income individuals, or unemployed individuals bear a disproportionate burden of financial barriers due to systemic discrimination, lack of resources, and limited access to insurance coverage. The COVID-19 pandemic has brought to light many challenges related to accessing healthcare, particularly

for individuals living in rural communities. One significant issue is the financial barrier to accessing medication during the pandemic. Rural communities often have limited healthcare facilities, including pharmacies, this makes it difficult for individuals living in rural areas to access the medication they need to manage health conditions, due to limited finances. For Bulwer (Gqumeni location) people, have lower incomes, plus most of these residents rely on grants thus making it even more difficult to afford necessary medication or reach health facilities, especially given the fact that many people in rural communities do not have health insurance this makes it difficult for them to access healthcare services, one can classify this community as a financially poor community.

*Our community is the poorest community under the Nkosazana Dlamini Municipality, this affected community members severely during Covid-19, when our people needed to access better healthcare, they were forced to travel to Pholela Clinic, this became an issue because most community members did not have money to get to that clinic (Partcipant 9).*

This supports data by Statistics South Africa (2017, Sited by Ndlovu, 2022) that finances were seen as one the barriers hindering access to medical care for people in rural areas South Africa, therefore, costs remain a hindrance to accessing medical care for poor people in rural areas. (Ndlovu, 2022).

## THEME 6: RURAL COMMUNITIES AND THEIR BELIEF IN ETHNOMEDICINE

According to the explanatory model theory people and communities have their own frameworks for understanding health and illness. These models are shaped by cultural, social, and personal factors, and they influence people's perceptions, beliefs, and behaviors related to healthcare, and in the rural community of eGqumeni, there is a strong belief in and strong reliance on traditional medicine.

The study reveals that Bulwer (Gqumeni) community residents have a high belief in their indigenous plants, and most of the participants outlined that these plants have been used for centuries in traditional healing practices and are passed down from generation to generation, also rural communities often see these indigenous plants to promote health and well-being without relying on modern pharmaceuticals. Like China which has a strong belief/ high usage

of indigenous plants (White et al., 2021), the Gqumeni people also proved to have a strong belief in their indigenous plants.

*We have a strong belief in our traditional herbs, also our traditional herbs are strong and work fast in fighting illnesses in our bodies, that is why we use them, and you can get them anywhere in the forests, rivers, and mountains. (Participant 4)*

Findings from the study indeed prove that Bulwer (Gqumeni) community people are indeed fond of and rooted in their indigenous plants. One could tell by the way they emphasized the fact that people from faraway places even come to their community to gather herbal plants, the participants even mention that the use of traditional Zulu medicine is not something new, it dates way back, it has been used by their ancestors and elders for years. According to Mahapatra (2019) the use of plant or herb-based medicine in Africa dates as far back as 1500 BC, the author even mentions that even the Old Testament also references the use of medicinal herb and their cultivation. One could tell by the way these participants listed the different herbs they utilized during COVID-19 and in the past to cure flu related illnesses, that they know what they are talking about and have a strong belief in their herbal remedies. One traditional healer mentioned herbal herbs *(amakhambi)* such as *Umhlonyane "Artemisia Afra", Gumtree (omhlophe), Isibhaha "Pepper bark tree", Ukalumuzi, and Unukani "Black stinkwood"* (Participant 17). Participant 10 added *Unsukumbili, "Senecio gregatus", Ikhathazo "Alepidea amatymbica" and Uhlunguhlungu "*Mountain bitter-tea" to the list. These were different herbs that were listed by the participants and have been used in the past were seen by rural communities to be effective and seen to be fighting a good fight for most rural residents during COVID-19. The participants say they prepared these herbal remedies by pounding *(ukuwagxoba)*, boiling and then drinking, some were boiled and then used for steaming *(ukufutha/ ukugquma)* or inhalation, when asked about the dosage they were drinking the participants said they drank a glass of the remedy. These herbal remedies are known by the Southern Africans for the treatment of respiratory infections, such as coughs, headaches, colds and flu as well as digestive problems such as bloating, indigestion and constipation Cock & Vuuren, 2020).

*We have a strong belief in traditional remedies, because we grew up using them to treat ourselves, if you remember properly in the past we did not have clinics in rural communities, take me for example I have not been to the clinic for more than ten years, if I*

*have a cough I search for herbal plants around, I take* ***iboza ngiligxobe*** *then drink, to help fight the cough, or take* ***umhlonyane,*** *because it is not only now they people started using* ***umhlonyane*** *during Covid-19, people used it in the past and they still use it today because it has continued to show it effectiveness (Participant 2)*

The reliance on traditional medicine is not merely a reaction to the current health crisis but a long-standing practice deeply embedded in the community's culture. This theme contributes to our understanding of the resilient and enduring role of ethnomedicine in rural healthcare, reflecting a rich cultural heritage that persists despite modern healthcare advancements.

## THEME 7: AVAILABILITY OF HEALTH-CARE RESOURCES IN THE LOCAL CLINIC

Availability of healthcare resources at Bulwer (Gqumeni) location during COVID-19 was a significant challenge as stated in theme 1 that this community has one healthcare facility, and the clinic also had limited resources to manage and treat COVID-19 patients, another issue was the shortage of healthcare workers such as nurses, the community clinic does not have doctors, a doctor is only available at the clinic once a month and this further strains the healthcare system. Also, the community clinic had limited access to medical supplies and equipment, and medication.

One of the participants interviewed was the Youth Chairperson of the Bulwer (Gqumeni) community, he spoke on limited healthcare resources in their community:

He outlined: *Covid-19 had a negative effect on Bulwer residents, because as it is even governments health-care resources are limited/were limited even before Covid-19…. In our community in one shift, for example, you sometimes find that there is only one ambulance from the Pholela Clinic available to serve areas that are located above or beyond 6/7, I remember discussing this in a war room meeting that one ambulance is expected to service 3000+ people per day, this shows how hard it is for one needed an ambulance urgently and having to wait for the ambulance, given the fact that Bulwer is a very scattered place, you will need plus minus 4 hours for it to attend to you after dropping off another patient. (Participant 2)*

One of the questions asked was "When the pandemic was first discovered, did the Bulwer (Gqumeni) community clinic have enough healthcare resources to treat patients?"

*The community clinic did not have enough resources, we did not have enough machines/equipment, we only had one emergency room and one medical oxygen cylinder, and the only room we used as an alternative isolation room was this mobile which did not have an oxygen cylinder needed when a patient has signs and symptoms of Covid-19, alternatively, we had to improvise and use an emergency box to help give patients oxygen. (Participant 6)*

*As dangerous as Covid-19 was, I would say what I noticed is, it was a wake-up call to the Department of Health because it revealed that when it comes to resources they need to add, this includes healthcare workers. We must admit though that the Department of Health did try its best, as we have seen with the mobile clinics and healthcare workers checking people in their homes, however, the demand for services was overwhelming due to large populations of people there was an exhaustion of resources. Therefore, in the future, they should be prepared, as the outbreak of Covid-19 showed that we do not have enough resources to service people. (Participant 12)*

Due to the Bulwer (Gqumeni) local clinic not having enough resources and patients having to be transferred to Pholela Clinic, two of the participants mentioned that they had to find cars to transport them to Pholela Clinic.

*When my children took me to the community clinic the nurses suggested that they should take me to Pholela Clinic, that time could not even move, when we got, they could not help me and because there was no ambulance available my son had to call a private ambulance to take me to Greys Hospital in Pietermaritzburg. (Participant 11)*

One of the participants narrated that one community member could not receive help from the community clinic and was transferred to the Pholela clinic.

*She narrated: a lady that I used to church with passed away due to Covid-19, she was transferred from Gqumeni Clinic to Pholela Clinic because they did not have enough resources to help her, the ambulance took a long to come and they had to hire a car when*

*they got to Pholela clinic the hospital beds were full and she stayed on the benches until she lost her life. (Participant 20)*

This supports what was outlined by the Africanews & AFP (2020) on patient admissions being delayed due to Intensive Care Units and waiting rooms being transformed into wards thus resulting in some patients not receiving help and sleeping on benches.

## THEME 8: COLLABORATION BETWEEN TRADITIONAL HEALERS AND MEDICAL HEALTH PRACTITIONERS

The explanatory model theory which explores how individuals and communities make sense of illness and seek healthcare recognizes that people's perceptions and beliefs about health and illness are shaped by their cultural, social, and personal experiences, the explanatory model theory underscores the significance of understanding and respecting diverse healthcare beliefs and practices and collaborative work amongst these healthcare interventions.

The COVID-19 pandemic has highlighted the need for a comprehensive healthcare approach that integrates both traditional and modern medicine to combat diseases. Policies can be developed that promote the collaboration and integration between traditional healers and biomedical practitioners. This can involve developing protocols for referral and collaboration between the two healthcare systems and ensuring that healthcare providers are trained in both traditional and modern medicine thus ensuring that patients receive appropriate and effective care. Like Agbor and Naidoo (2016) in the literature review who emphasize the importance of collaboration between traditional healers and biomedical practitioners most participants also thought it would be a good initiative.

During the interviews, a follow-up question on whether there should be collaborative work between traditional healers and medical health practitioners was asked, or whether or not our government should promote the use of ethnomedical remedies.

Participant 12 narrated: *Luckily, I was once employed under the Department of Health, even though I was not a nurse, I worked as a Clinical Support Officer driving a mobile, that was in 2007 if I remember properly the Provincial Minister for Health was Mama Peggy Nkonyeni, this one year we had to transport traditional healers, she intended that traditional leaders should be given authority and recognized by the law and be given*

*certificates to practice, because herbal plants used to make western medicine is taken from traditional medicine, meaning they work hand in hand, even though medical practitioners are against some traditional practices (ukuchatha) there is to educate traditional healers on the dosage. Hence Mama Peggy Nkonyeni was advocating that the traditional and medical practitioners should educate each other.*

Also, policies can be developed to establish guidelines for the safe use of ethnomedicine in the management of diseases such as COVID-19, these guidelines can outline the criteria for selecting traditional treatments, the appropriate dosage, and any potential side effects or interactions with other medications.

*Traditional health practitioners and Western health practitioners can work together in exchanging knowledge, for example, if traditional healers tell a patient to practice ukuchatha, doctors can advise traditional healers not to use 20l of water because a human being's tummy cannot carry 20 liters of water for example. Sharing ideas in this sense will be helpful, should any disease burst traditional healers will know they work to a certain extent and Western medical health practitioners work towards a certain extent, thus meeting each other halfway. (Participant 5).*

Collaborations between traditional healers and biomedical practitioners have shown promising outcomes. Research, such as studies by Peltzer and Mngqundaniso (2008) and Langlois-Klassen et al. (2008), demonstrates that when traditional and Western healthcare providers engage in mutual dialogue, it enhances the quality of patient care. These collaborations facilitate an exchange of knowledge, ensuring a more holistic approach to health. By sharing insights, traditional healers and biomedical practitioners can provide patients with comprehensive care, drawing from the strengths of both systems, thereby meeting halfway to address health needs more effectively. This exchange helps to merge traditional healing practices with biomedical knowledge, allowing for a more nuanced and well-rounded approach to healthcare.

## 6.3 SYNTHESIS OF FINDINGS

When the COVID-19 pandemic started, rural communities faced severe health adversities due to a variety of factors, including limited access to healthcare facilities and resources/equipment, and limited testing skills. Rural communities often have fewer

healthcare resources and higher amounts of vulnerable populations such as older and people with underlying conditions, which made them more inclined to the health impacts of COVID-19, this was proven by the findings of this study. Based on this study which was aimed at Probing health adversities and pluralistic interventions employed by Bulwer (Gqumeni location) in response to COVID 19, several key findings were identified:

- The study revealed that in Gqumeni people that were affected the most by COVID-19 were older adults suffering from chronic diseases such as TB, hypertension, diabetes, heart failure, arthritis and HIV/AIDS.
- Bulwer (Gqumeni) community faced significant health adversities due to COVID-19, including a lack of access to healthcare facilities, limited testing capabilities, and limited resources. The findings reveal that the community has one clinic that is expected to serve many people with limited resources that it has.
- The study reveals that Bulwer (Gqumeni) community members are deeply rooted in and rich in indigenous plants and have a very strong belief in their traditional plants, which helped them respond to health-related challenges that came with the COVID-19 pandemic, they employed pluralistic interventions, such as traditional medicine practices.

Overall, the study highlights the lack flexibility and resourcefulness of rural communities in responding to the COVID-19 pandemic. However, there is a need for further research and support to ensure that these interventions are effective and sustainable in the long term.

## 6.4 CHAPTER SUMMARY

This chapter was aimed at analyzing, presenting and interpreting the findings obtained from the in-depth interviews conducted with 22 participants residing in Bulwer (Gqumeni) on probing health adversities they faced and the pluralistic interventions they employed in response to the COVID-19 pandemic. The chapter listed the types of ethnomedical plants they used, looked at the accessibility and availability of ethnomedical plants, went over to delineate why rural communities have a strong belief in ethnomedicine, looked at access to healthcare facilities, availability of healthcare resources in the local clinic and also looked at the idea of collaborative work between traditional practitioners and medical health practitioners, it also took us to the age group that was seen as most vulnerable to COVID- 19. Lastly the chapter looked at the financial barriers to accessing healthcare, it also incorporated

the two theoretical frameworks employed in the study (Critical medical anthropology theory and the explanatory model theory).

# CHAPTER SEVEN

## STUDY SUMMARY, RECOMMENDATIONS AND CONCLUSION

## 7.1 INTRODUCTION

The researcher strived to produce knowledge on the health adversities and pluralistic interventions employed by the community of Bulwer (Gqumeni location), KwaZulu- Natal in response to COVID-19. The study proves that rural communities have been affected and suffered from the COVID-19 pandemic, due to factors such as difficulties accessing healthcare facilities due to lack of infrastructure because of their geographical location, limited healthcare resources, financial related problems, thus pushing them to opt or look for alternative ways to help save themselves from the pandemic. The study also reveals that because Bulwer (Gqumeni) is geographically located in an area that is rich in indigenous plants and knowledge, this partially became an advantage, although they needed help from medical health practitioners, because of certain barriers they utilized what they could, and this was accessible to them, affordable and available. However, the study also revealed that due to the inaccessibility of healthcare facilities and the unavailability of healthcare resources in the community clinic some members of the community lost their lives. The difficulties that came with COVID-19 became extreme as the pandemic rose and cases increased as many community members faced multiple barriers to access to healthcare facilities. Also, the findings of the study reveal that the age group that was vulnerable and was infected the most, and with most of the people losing their lives and being admitted to hospitals were the older adults, participants supported because the older adults have chronic diseases, and their immune systems are weak and cannot fight diseases.

## 7.2 STUDY SUMMARY

The study probed health-related adversities that were faced by the Bulwer rural community in response to COVID-19 it also investigated the pluralistic interventions employed by the community to mitigate the effects of the pandemic. The study found that the community has one clinic which is geographically located far from most people's homes, as a result members of the community were faced with several health adversities, including limited access to healthcare, lack of healthcare resources needed to help patients during COVID-19, and lack of infrastructure (roads and transport), and inadequate medical personnel, these created a

barrier that hindered the community members from accessing health facilities. However, Bulwer (Gqumeni) being a community that is rich in indigenous plants that had to opt for ethnomedical remedies to respond to the COVID-19 pandemic, was said to be the most available, accessible and affordable in comparison with biomedicine. Furthermore, the study revealed that older members of the community were disproportionately affected by COVID-19 or were at high risk compared to older people, because they suffer from chronic disease (hypertension, diabetes, HIV, TB and arthritis) and COVID-19 was known to be a disease that affects mainly the lungs. To address these challenges, the Bulwer community employed a range of pluralistic interventions, including the use of indigenous plants for medicinal purposes and the provision of home-based care, community leaders also came up with policies to help those that could not get to the forests or mountains to access the required ethnomedical plants. Raw Garlic, Umhlonyane "Artemisia Afra", Gumtree (omhlophe), Unsukumbili, "Senecio gregatus", Isibhaha "Pepper bark tree", Ikhathazo "Alepidea amatymbica", Uhlunguhlungu "Mountain bitter-tea", Ukalumuzi, and Unukani "Black stinkwood and Iboza" were herbal plants used by the people of Gqumeni as an alternative for biomedicine. The study found that these interventions were effective in mitigating the impact of COVID-19 on the community. Overall, the thesis highlights the importance of pluralistic approaches to health interventions, particularly in rural communities with limited access to formal healthcare systems. The findings of the study could inform the development of public health policies that prioritize community-based and culturally sensitive interventions in response to pandemics such as COVID-19.

## 7.3 IMPLICATION FOR EXISTING THEORIES

The study aimed at probing health adversities and pluralistic interventions employed by the Bulwer rural community in response to the COVID-19 pandemic which has implications for both critical medical anthropology theory and the explanatory model theory.

- The critical medical anthropology theory highlights the issue of social inequality, and structural violenceX in shaping health outcomes. Basically, the theory questions differences in healthcare in the presence of social inequalities. The findings of the study support this theory, as the health adversities faced by the Bulwer rural community during the COVID-19 pandemic were linked to factors such as geography, age, and access to healthcare, which are influenced by wider social and political

structures. The study highlights the need to address these structural factors to improve health outcomes for side-lined communities during pandemics.

- The explanatory model theory, on the other hand, emphasizes the importance of cultural beliefs, practices, and values in shaping health-seeking behaviors and health outcomes. The study findings suggest that the Bulwer rural community employed pluralistic interventions that fused traditional and complementary healthcare practices alongside modern healthcare systems to mitigate the impact of COVID-19. The study highlights the importance of understanding and combining cultural beliefs and practices in health interventions to enhance healthcare access and improve health outcomes for side-lined communities.

Study findings contributed to the discourse of medical pluralism in medical anthropology. It also contributed to the research findings within the context of decoloniality which is an existing discourse. The conviction of the study is that medicinal herbs should be credited as ontology of reasoning of people from rural areas. They should not be recognised as harmful just because they do not meet pharmaceutical standards, but they should be recognized as the hope of rural areas in times of pandemics. Such findings also contributed to both critical medical anthropology theory and the explanatory model theory by highlighting the importance of addressing structural factors and incorporating cultural beliefs and practices in health interventions to improve health outcomes for marginalized communities during pandemics. The findings of the study could enlighten the development of culturally sensitive public health policies that prioritize community-based and pluralistic interventions in response to pandemics such as COVID-19 and many others that are still unknown.

## 7.4 RESEARCH EXPERIENCE

Even though conducting research in a rural community was a great experience, it had its challenges, one of which was having to walk long distances from one participant's household to another as dwellings are isolated. For older participants, I had to simplify the purpose of the study and the questions for them to understand and be able to answer because some of them were not formally educated, even though the questions were translated into IsiZulu I had to simplify them. Also, while transcribing the recordings for each interview it was challenging as all interviews were conducted in IsiZulu and people from Gqumeni speak

fluent Zulu and some words were difficult to translate when writing the data analysis chapter. Apart from that the participants had a welcoming and warm attitude. Some interview sessions were done while I was standing at the gate of the household and the participant was inside the gate for the whole session, even though that was not a problem, the problem was when people were walking by, and we had to pause to greet and then proceed. However, the interview sessions were insightful and informative as the participants provided valuable insights into their experiences. These perspectives provided a more nuanced understanding of the community's vulnerabilities and their strong beliefs in herbal plants.

## 7.5 RESEARCH LIMITATIONS

Despite the study being a good one, it had its limitations, such as sampling bias, the study only included participants from Bulwer (Gqumeni) rural community. This limited the generalizability of the study's findings to surrounding rural communities facing similar health adversities during the pandemic. Also, participants might have provided responses that they believed were expected of them, some could not accurately recall their experiences as they would state that they cannot remember properly.

## 7.6 STUDY RECOMMENDATION

Based on the findings and limitations of the study, the following recommendations could be made for future research or future purposes:

- The participant's understanding of COVID-19 had misconceptions as they had the belief that COVID-19 is a disease that affects people who are travelers, which is why most of them did not adhere to COVID-19 restrictions, such as the hard lockdown restriction on movement, the sanitation protocol and social distancing. Hence, I would recommend that the government and the health department should always explain such misunderstandings and advise people to either draw from their indigenous knowledge as their wealth of wisdom or respond with their indigenous herbs to escape adversities that come with the pandemic.
- Traditional healers should be recognized by the government/ health department and be allowed to participate in the healing of people should any pandemic come, instead of being sidelined or looked down upon.

- Future studies could include comparison groups from other rural communities facing similar health adversities during the pandemic. This could help to compare the health outcomes of different communities and identify factors that contribute to the different outcomes, this could also help identify common or different interventions employed across different communities.

## 7.7 RECOMMENDATIONS MADE BY THE STUDY

- The Department of Health needs to add health resources, which includes healthcare workers so that in the future, should a pandemic outbreak they know they have enough resources.
- The Department of Health should increase its budget in preparation for future pandemics, as the COVID-19 pandemic highlighted the importance of a well-funded and adequately prepared public health system to manage pandemics effectively.
- There should be collaborative work between traditional health practitioners (*abalaphi bendabuko)* and medical health practitioners.
- Since herbal plants have proved their effectiveness, I would recommend that community members are educated on sustainable harvesting methods to avoid over harvesting thus guaranteeing the renewal of herbs/plants, selective harvesting should be encouraged, where people are encouraged to only take a portion of the plant/herb instead of taking the whole plants and its roots, taking a portion will allow the remaining plant to continue growing to avoid the extinction of the herbs.
- Future researchers can expand by looking at many other contexts through which medicinal herbs have been used. This would be a great contribution in medical pluralism as well as in the decoloniality discourse.

## 7.8 CONCLUSION OF THE THESIS

This study aimed to explore the health adversities and pluralistic interventions employed by Bulwer (Gqumeni location) in response to the COVID-19 pandemic. Bulwer (Gqumeni) is a rural area in KwaZulu-Natal, South Africa, where most of the population lives in poverty and has limited access to healthcare services. The study found that Bulwer has only one clinic which was not well-equipped to handle the COVID-19 pandemic. The clinic had limited resources, including inadequate medical supplies and limited space to accommodate patients who needed to be isolated. This situation left many people in the community with no access

to healthcare during the pandemic. In addition to the limited healthcare resources, Bulwer has poor infrastructure, including poor road networks and limited public transport. These conditions exacerbated the health adversities faced by the community during the pandemic. The study also found that people with chronic diseases, such as HIV/AIDS and tuberculosis, hypertension and diabetes were particularly vulnerable during the pandemic. Many people with chronic diseases were unable to access their medications due to the limited healthcare services, which posed a significant risk to their health. However, the study found that the community was rich in indigenous plants, which could potentially be utilized in traditional healing practices. The use of indigenous plants for medicinal purposes has been part of the culture of the Bulwer community for many years. The community's traditional healers played a crucial role in treating people with COVID-19 symptoms using these plants. In response to the pandemic, the community also employed a range of pluralistic interventions to manage the health adversities they faced. These interventions included the use of herbal remedies, traditional healing practices, and modern medicine. The study concludes that there is a need for improved healthcare infrastructure and resources in rural communities like Bulwer (Gqumeni) to effectively respond to pandemics like COVID-19. In addition, it is important to recognize and respect the traditional healing practices of rural communities, such as the use of indigenous plants. Collaboration between traditional healers and modern healthcare providers can improve healthcare access and outcomes for rural communities during pandemics.

In summary, this study highlights the challenges faced by Bulwer rural communities during the COVID-19 pandemic, including limited healthcare resources, poor infrastructure, and vulnerability of people with chronic diseases. The study also highlights the potential of indigenous plants for medicinal purposes and the importance of pluralistic interventions in managing health adversities. The findings of this study have significant implications for the development of effective public health policies and interventions to improve the health outcomes of rural communities during pandemics.

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## INFORMED CONSENT DOCUMENT (ENGLISH)

Dear Participant,

My name is Malwande Sinesipho Ndlovu (217010150), I am an Honours candidate studying at the University of KwaZulu-Natal, Pietermaritzburg Campus. I wish to request that you participate in my research. The title of my research is: Probing health adversities and pluralistic interventions employed by the community of Bulwer (Gqumeni location), KZN in response to COVID-19. This is a medical anthropology study that is at Probing health adversities and pluralistic interventions employed by the community of Bulwer (Gqumeni location), KZN in response to COVID-19. I am interested in interviewing you to share your experiences and observations on the subject matter.

Please note that:

- The information that you provide will be used for scholarly research only.
- Your participation is entirely voluntary. You have a choice to participate, not to participate, or stop participating in the research. You will not be penalized for taking such an action.
- Your views in this interview will be presented anonymously. Neither your name nor identity will be disclosed in any form in the study.
- The interview will take about 40 – 60 minutes.
- The interview will be audio-recorded for ease of access to the conversation.
- The record as well as other items associated with the interview will be held in a password-protected file accessible only to myself and my supervisor. After a period of 5 years, in line with the rules of the university, it will be disposed of by permanent deletion, shredding, and burning.
- If you agree to participate, please sign the declaration attached to this statement (a separate sheet will be provided for signatures)

I can be contacted at the School of Social Sciences, University of KwaZulu-Natal, Pietermaritzburg Campus, Scottsville, Pietermaritzburg.

Email: 217010150@stu.ukzn.ac.za Cell: 0749269779

My supervisor is Dr Balungile Zondi who is located at the School of Social Sciences, Pietermaritzburg

Contact details: email zondil4@ukzn.ac.za Cell Phone number: 071 606 5062

The Humanities and Social Sciences Research Ethics Committee: email: hssrec@ukzn.ac.za; Phone number +27312603587.

Thank you for your anticipated contribution to this research.

DECLARATION

I………………………………………………………………… (*full name of participant*) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participate in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire. I understand the intention of the research. I hereby agree to participate.

I consent/do not consent to have this interview recorded (if applicable)

SIGNATURE OF PARTICIPANT DATE

…………………………………………………………………………………………………

SIGNATURE OF RESEARCHER DATE

…………………………………………………………………………………………………

**Idokhumenti Enolwazi**

Uuntu obambe iqhaza othandekayo.

Igama lami nginguMalwande Sinisipho Ndlovu (217010150), ngingumfundi we Masters ofunda eNyuvesi yaKwaZulu-Natal Campus, ePietermaritzburg Campus. Ngifisa ukucela ukuthi ubambe iqhaza ocwaningweni lwami. Isihloko socwaningo lwami sithi: Ukuphenya ngezinkinga zezempilo kanye nokungenelela okuxubile okuqashwe umphakathi wase-Bulwer (indawo yaseGqumeni), e-KZN ekulweni ne-COVID-19.
Lolu cwaningo olumayelana nokuphenya ngezinkinga zezempilo kanye nokungenelela ngokokulapha okuxubile okuqashwe umphakathi wase-Bulwer (indawo yaseGqumeni) ekulweni ne COVID-19. Nginentshisekelo yokukuxoxisana nawe ukuze wabelane nami ngolwazi lwakho mayelana nalesihloko.

Sicela wazi ukuthi:

- Imininingwane oyinikezayo izosetshenziselwa ucwaningo lwezazi kuphela.
- Ukubamba iqhaza kwakho kungokuzithandela. Unokukhetha ukubamba iqhaza, hhayi ukubamba iqhaza noma ukuyeka ukubamba iqhaza ocwaningweni. Ngeke ujeziswe ngokuthatha isenzo esinjalo.
- Imibono yakho kule ngxoxo izokwethulwa ngokungaziwa.igama lakho noma umazisi ngeke kudalulwe nganoma yiluphi uhlobo ocwaningweni.
- Ingxoxo izothatha imizuzu engama-30 - 60.
- Ingxoxo izorikhodwa ukuze kukwazi ukuth ibuye itholakale kalula mese idingeka
- Amarekhodi kanye nezinye izinto ezihambisana nengxoxo zizogcinwa ngefayela elivikelwe ngephasiwedi kuphela kimi kanye nabaphathi bami. Ngemuva kwenkathi yeminyaka emi-5, ngokuhambisana nemithetho yeNyuvesi, kuzolahlwa ngokususwa kwaphakade, ukuchithwa nokushiswa.
- Uma uvuma ukubamba iqhaza sicela usayine isimemezelo esinamathiselwe kulesi sitatimende (ishidi elihlukile lizohlinzekwa amasiginesha)

Ngingathintwa ku: School of Social Science, University of KwaZulu-Natal Campus, eScottsville, eMgungundlovu.

I-imeyili: 217010150@stu.ukzn.ac.za

Iseli: 0749269779

Umphathi wami nguDkt Balungile Zondi otholakala esikoleni sesayensi yezenhlalo, eMgungundlovu

Imininingwane Yokuxhumana: I-imeyili zondil4@ukzn.ac.za

Inombolo yocingo: 071 606 5062

Ubuntu kanye neKomidi Yezenhlalo Yezenhlalo Ikomidi: I-imeyili - hssrec@ukzn.ac.za; Inombolo yocingo +27312603587.

Ngiyabonga ngegalelo lakho elindelekile kulokhu kucwaninga.

Ukuzibophezela

Mina ...................................................................................................... (amagama aphelele ababambe iqhaza) aqinisekisa ukuthi ngiyakuqonda okuqukethwe kulo mbhalo, Futhi ngiyavuma ukubamba iqhaza kwiphrojekthi yocwaningo.

Ngiyaqonda ukuthi ngingakhululeka ukuhoxa kulolucwaningo nganoma yisiphi isikhathi,uma ngifisa kanjalo. Ngiyayiqonda inhloso yocwaningo. Ngalokho ngiyavuma ukuhlanganyela.

Ngiyavuma / angivumi ukuthi le ngxoxo irekhodiwe (uma ikhona)

Isiginesha Usuku Obambe iqhaza

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

Isiginesha yoMcwaningi:
Usuku:

## ENGLISH DATA COLLECTION INSTRUMENT

**Part A: Inclusion or rather exclusion (consent seeking) questions:**

1. Are you a Bulwer (Gqumeni location) community member/resident?

| Yes | |
|---|---|
| No | |

2. Are you above 18 years?

| Yes | |
|---|---|
| No | |

3. What is your specific age? ____________________

4. Are you holistically fit to participate in this research?

| Yes | |
|---|---|
| No | |

5. Have you been affected by COVID-19?

| Yes | |
|---|---|
| No | |

**Part B**

1. How long have been living here at Bulwer?
2. What is your basic understanding of Covid-19?
3. What is the age group that was mostly affected by Covid-19 in the Bulwer community?
4, What health-related impact did Covid-19 have on the lives of Bulwer community members?
5. When the pandemic was first discovered, did the Bulwer community clinic have enough healthcare resources to treat patients?
6. What political, cultural, and economic factors contributed to health adversities that were experienced by the Bulwer rural community during Covid-19?
7. What are pluralistic interventions (ethnomedicine or biomedical interventions) that were employed by the community of Bulwer, KZN?

8. If community members of Bulwer employed ethnomedicine as a tactic to escape Covid-16, what informed this decision?
9. What are medicinal plants that communities relied on to escape the adversities of Covid-19 in their lives?
10. How did they prepare such medicinal plants/ethnomedicinal remedies?
11. If community members of Bulwer employed biomedicine as a tactic to escape Covid-19, what informed this decision?
12. How accessible were health facilities during Covid-19?
13. Do you think there should be collaborative work between traditional healers and medical health practitioners?

Follow-up question:

Do you think our government should promote the use of ethnomedical remedies?

## ISIZULU DATA COLLECTION INSTRUMENT.

Ingxenye A: Ukufakwa noma ukukhishwa kulolucwaningo (kufuna imvume):

1. Ngabe uyilunga / uhlala endaweni yase Bulwer (Gqumeni)?

| Yebo | |
|---|---|
| Cha | |

2. Ngabe ungaphezu kweminyaka eyi-18?

| Yebo | |
|---|---|
| Cha | |

3. Iyini iminyaka yakho yobudala? ____________________

| Yebo | |
|---|---|
| Cha | |

4. Ingabe ukulungele ngokuphelele ukubamba iqhaza kulolu cwaningo?

| Yebo | |
|---|---|
| Cha | |

5. Ngabe ukewathinteka ekubeni khona kwe-COVID-19?

| Yebo | |
|---|---|
| Cha | |

**Ingxenye: B**

### Imibuzo yengxoko ehleliwe

1. Sekuyisikhathi esingakanani uhlala lapha eBulwer?
2. Ngokuqonda kwakho iyini iCovid-19?

3. Yiliphi iqembu leminyaka elithinteke kakhulu yiCovid-19 emphakathini waseBulwer?
4. Yimuphi umthelela ophathelene nezempilo iCovid-19 ebenawo empilweni zomphakathi wase Bulwer?
5. Lapho ubhubhane lutholakala okokuqala ingabe umtholampilo womphakathi waseBulwer ubunazo izinsiza ezanele zokunakekela nokusiza iziguli?
6. Yiziphi izinto zezepolitiki, amasiko nezomnotho ezibe nomthelela ebunzimeni bezempilo ezatholwa ngumphakathi wasemakhaya waseBulwer ngesikhathi seCovid-19?
7. Yiziphi indlela ezehlukile (ukungenelela kwe-ethnomedicine ukulapha ngokwesintu noma kwe-biomedical ukulapha ngendlela yabomdabu) ezasetshenziswa ngumphakathi waseBulwer, KZN?
8. Uma amalungu omphakathi waseBulwer esebenzise i-ethnomedicine (ukulapha ngokwesintu) njengecebo lokulwa neCovid-16, yini eyenza bathathe lesinqumo?
9. Yiziphi izitshalo zokwelapha amalunga omphakathi ethembele kuzo ukuze zibalekele ubunzima beCovid-19 ezimpilweni zabo?
10. Bazilungiselela kanjani lezo zitshalo zokwelapha / amakhambi esintu?
11. Uma amalungu omphakathi eBulwer esebenzisa indlela zabomdabu zokulapha njengecebo lokuphunyuka/lokulwa neCovid-16, yini egqugquzele lesi sinqumo?
12. Engabe bezitholakala kalula/ bekufinyelekela kalula ezikhungweni zezempilo ngesikhathi seCovid-19?
13. Ucabanga ukuthi kufanele kube nomsebenzi wokubambisana phakathi kwabalaphi bendabuko nodokotela bezempilo bezokwelapha?

Umbuzo wokulandela

Ucabanga ukuthi uhulumeni wethu kufanele akhuthaze ukusetshenziswa kwemithi yesintu/amakhambi esiZulu?