



**SCHOOL OF MEDICINE AND HEALTH SCIENCES**

**Attitudes, knowledge and perceptions of people in rural areas about the transmission and prevention of COVID-19: A Case Study on residents in Kaoma Western Province.**

**BY**

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**A research dissertation submitted to the University of Lusaka in partial fulfilment of the requirements of a Degree in Bachelor of Science in Public Health**

## **DISSERTATION CLEARANCE AND DECLARATION**

I, Daniel Mbazima, do hereby declare that this dissertation is my own original work. It has been guided and marked by my supervisor in accordance with the guidelines for Bachelor of Science in Public Health at the University of Lusaka. It has not been submitted elsewhere for a degree at this or any other University.

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I, Dr. Joseph Sitali, guided, read this dissertation and approved it for Submission. I am satisfied that this is the original work of the author under the name it is presented. I confirm that the work has been completed satisfactorily and ready for Submission.

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## **ABBREVIATIONS**

<b>LMIC</b>	Low middle income communities
<b>KAP</b>	Knowledge Attitudes and Practices
<b>W.H.O</b>	World Health Organization
<b>MOH</b>	Ministry of Health

## **ABSTRACT**

The modern world of medicine has over the past couple of decades witnessed and experienced significant changes in combating various diseases that have since threatened the health and well-being of the world's population. Despite these triumphs, a new threat to the health of the global community emerged in late 2019 in the city of Wuhan China. The Coronavirus (COVID-19) which is a respiratory infection caused by the Severe Acute Respiratory Syndrome Coronavirus 2 has made a name for itself as a universal health threat due to its rapid geographical spread since its discovery (WHO 2019). As of March 2020, the World Health Organization declared it to be a pandemic and has since worked with various governing health bodies worldwide to create several vaccines to combat the spread of the virus. A year later, COVID-19 has caused nearly 113 million confirmed cases and over 2.5 million deaths (Li, Y, et al, 2021). Objectives of the study were; to investigate and assess the attitudes, knowledge and perceptions residents in Kaoma area of Western Province have about the transmission and prevention of Covid-19, to assess the level of understanding residents have of what COVID-19 is and the manner in which it is transmitted and prevented, to evaluate the approaches the council and health personnel have taken towards educating the residents about the dangers of COVID-19, its transmission and prevention measures and to investigate the various measures that residents in Kaoma are putting to prevent the transmission of COVID-19 in their communities. A qualitative study design was used to collect all necessary data through the use of in-depth interviews and a total of 20 respondents were interviewed on their attitudes, knowledge and perceptions about the transmission and prevention of Covid-19

Overall the feedback provided by the participants was that as compared to when the pandemic first emerged they were not as knowledgeable and cautious of practicing the 5 golden rules against Covid-19. There were concerns of whether the disease was actually real and the rate of infection. Results from the study also indicated that residents were more precautious and practiced the 5 golden rules f Covid-19 in order to reduce the transmission of the virus and contain it in their town. Challenges faced by the healthcare workers were initially getting the general populace to comply with the recommendations provided by the Ministry of Health in terms of sanitizing, social distancing and masking up.



## **CHAPTER ONE**

### **1.0 Introduction**

The modern world of medicine has over the past couple of decades witnessed and experienced significant changes in combating various diseases that have since threatened the health and well-being of the world's population. Despite these triumphs, a new threat to the health of the global community emerged in late 2019 in the city of Wuhan China. The Coronavirus (COVID-19) which is a respiratory infection caused by the Severe Acute Respiratory Syndrome Coronavirus 2 has made a name for itself as a universal health threat due to its rapid geographical spread since its discovery (WHO 2019). As of March 2020, the World Health Organization declared it to be a pandemic and has since worked with various governing health bodies worldwide to create several vaccines to combat the spread of the virus. A year later, COVID-19 has caused nearly 113 million confirmed cases and over 2.5 million deaths (Li, Y, et al, 2021).

### **1.1 Background of the study**

Although SARS-CoV-2 belongs to the same Beta coronavirus genus as SARS-CoV, and MERS-CoV, this virus is more widely transmitted in the community with greater risk of wider spread than the other two. Primarily transmission is through respiratory droplets, and contact routes from touching the mucosae of the nose, mouth, and eyes. The rapid spread of the infection with a short incubation period of 2-14 days causes immense burden on the health care system with high case fatality rates. 5 Symptoms include fever, cough, sore throat, fatigue and/or shortness of breath, diarrhea, nausea, and vomiting with risk of death in individuals above 50 years, and those with comorbidities such as hypertension, diabetes etc.

The Coronavirus disease has overcome geographical barriers achieving a remarkable proliferation. Because of that, different countries started public health protocols to control the spread of the virus, much of them related to social distancing, hand wash, and lockdown the cities. This critical condition has raised a variety of reactions among the population, causing anguish, and massive fear (Deblina R, 2020).

## **1.2 Statement of the Problem**

The response of citizens towards health related issues in Zambia leaves much to be desired in how serious individuals take their health and safety. Their attitudes and cultural beliefs are some of the main driving forces that determine how serious certain threats to their health are perceived and acted upon. It is no secret that most Zambian traditions and customs play a major role in people's acceptance and embrace towards modern medicine and other health practices. It is well-recognized that containing COVID-19 successfully is determined by people's prevention measures which are related to their knowledge, attitudes, and practices (KAP). This perception has attracted attention in low- and middle-income countries (LMIC) due to their fragile health systems and economies. Zambia has been identified as one of the top 18 risk countries in Africa that is most vulnerable to be affected by the fast-spreading virus. Vulnerable/risk groups include children, the elderly, immune-compromised, and others with underlying chronic conditions such as diabetes, high blood pressure are at higher risk (Water Aid, 2020). There is also a high risk of infection where the communities have inadequate infrastructure and rural areas are the most disadvantaged.

## **1.3 Justification of the Study**

Low awareness and perception of diseases among the population is known to have a negative impact on preventive measures which may influence early detection and acceptability of vaccines that can be provided to the population to reduce the rate at which the COVID-19 virus is being spread. With regards to Zambia, there is little to no research providing insight into the attitudes, knowledge and perceptions of COVID-19 transmission and prevention in Kaoma area of Western Province. It is therefore important to conduct this research to bring into light the opinions of citizens living in rural areas. This study aims to create awareness on the magnitude of the problem and will present what could be done to alleviate the problem.

## **1.4 Objectives**

To investigate and assess the attitudes, knowledge and perceptions residents in Kaoma area of Western Province have about the transmission and prevention of Covid-19.

### **1.4.1 Specific Objectives**

1. To assess the level of understanding residents have of what COVID-19 is and the manner in which it is transmitted and prevented.

2. Evaluate the approaches the council and health personnel have taken towards educating the residents about the dangers of COVID-19, its transmission and prevention measures.
3. To investigate the various measures that residents in Kaoma are putting to prevent the transmission of COVID-19 in their communities.

#### **1.4.2 Research Questions**

1. How well informed are residents in Kaoma district concerning COVID-19 and its transmission?
2. What are the prevention strategies that have been put into place by the council, health institutions and residents to ensure the transmission of COVID-19 is reduced?
3. How do Kaoma residents get information about Covid-19 prevention and transmission?
4. What are the major influencing factors to Kaoma resident's attitudes, knowledge and perceptions on Covid-19 transmission and prevention?

## CHAPTER TWO

### LITERATURE REVIEW

#### **2.1 Perceptions of COVID-19 transmission and prevention globally.**

One of the first and recent studies analyzing attitudes and knowledge, about Coronavirus was carried out in Hubei Province in China. The study concluded that attitudes towards government measures to contain the epidemic are highly associated with the level of knowledge about Covid-19 (Zhong B et al, 2020). The authors detail that the higher the level of information, and education, the more the individuals would maintain a positive attitude towards Covid-19 preventive practices. A key factor is therefore the perception of risk that would contribute to the commitment to symptom prevention during outbreaks of global epidemics. The perception of risk of being infected by the Coronavirus would be mediated by the type of information that the individual hold. Disinformation or lack of information would be an additional barrier, increasing this probability of infection (Prensa N. De et al 2020). What is interesting to consider is that, people make judgments based on their own perception of risk, but not on the real risk. In fact, in an examination during the spread of the SARS epidemic, it is noted that psychological responses potentially generate massive distress. The author even describes these as "disproportionate" reactions, the same ones that any citizen might be susceptible to experience.

Despite the level of advancement in health systems in high-income countries, they appeared to be the worst hit in terms of disease burden and the total COVID-19 related deaths. The epidemic curve is still rising in Russia and some low- and middle-income countries like India, Peru, and Chile. This is a strong warning to the low- and middle-income countries in Africa especially with the enormous socio-economic and health-related challenges observed in the continent (Acter T et al, 2020). No proven treatments or vaccines are available to control COVID-19 and thus pose a significant threat to health care delivery. To flatten the curves, most nations, including African countries, have applied strict prevention and control measurements to curb the disease including regulations such as general lockdown, obligatory home quarantine, ban on public gatherings, international flights restrictions and raising awareness on proper hand wash, hygiene, and sanitation as well as social distancing.

## **2.2 Perceptions, knowledge and attitudes of COVID-19 transmission and prevention in Southern African Countries.**

The-CoV diseases are not common to African countries. With the rising number of confirmed cases to COVID 19 in various countries across the continent, there was need to identify the knowledge and behavioral responses of the populations during epidemics as such information was limited in most of the countries which are enlisted as Low Middle Income Countries (LMIC). Low awareness, and perception of diseases among the population is known to have a negative impact on preventive measures which may influence early detection and acceptability of the test for SARS-CoV-19. The attitude of individuals influences the effectiveness of containment measures which would eventually affect their own health status and that of their close relatives. Understanding the people's perception of risk is critical to ensure efficient health protection practices during virus outbreaks. What is interesting to consider is that, people make judgments based on their own perception of risk, but not on the real risk. While 79.5% respondents believe that COVID-19 is real, majority (80.6%) however claimed they had neither seen nor know anyone with the disease, supporting the general belief that the disease is the disease of the rich affluent people leaving in air-conditioned places and those returning from overseas. (Chiaha et al, 2021.)

To mitigate the impact of the disease, sub-Saharan African governments implemented public health strategies such as bans on public gatherings and travel, social distancing, and use of face masks. Compliance with these measures varied, however, and was largely dictated by economic and other factors. With no antiviral treatment or vaccine recommended explicitly for COVID-19 at the time management of severe hospitalized cases consisted of ensuring appropriate infection control and supportive care (Di Gennaro et al, 2020). A confused comprehension of an emerging disease combined with inadequate expert knowledge can lead to fear and chaos, further aggravating the pandemic.<sup>19</sup> Past experiences, such as the severe acute respiratory syndrome and Ebola outbreaks, showed that misconceptions and excessive panic in the public led to resistance to comply with public health control measures and contributed to the rapid spread of the diseases.

### **2.3 Perceptions, knowledge, and attitudes of COVID-19 transmission and prevention in Zambia.**

In Zambia, the first cases of COVID-19—caused by SARS-CoV-2—were identified on March 18, 2020 (Ministry of Health, 2020). The Zambian Government acted swiftly to control the spread of SARS-CoV-2, initiating a whole-of-government response, restricting travel into the country, closing public gathering spaces (eg, restaurants, bars, churches), and invoking the Public Health Act to expand authority of the Zambian Government agencies.<sup>2</sup> From the outset, contact tracing teams rapidly responded to newly reported cases. With the exception of a localized outbreak in Nakonde District in May, 2020, the number of positive cases remained sporadic until June, 2020. Zambia was experiencing a second wave of SARS-CoV-2 infections that began in mid-December, 2020, which coincided with detection of the more transmissible SARS-CoV-2.

With regards to Zambians overall perceptions concerning COVID-19 and the mode of transmission and its prevention, little research has been conducted. There are still ongoing studies in the country with regards to its spread and peoples measures to follow the safety guidelines and the containment of the spread of the disease.

### **2.4 Gaps in Literature Review**

Despite the numerous studies that have been conducted in relation to people's perceptions of COVID-19 its transmission and prevention, thorough studies that have been conducted over the last two years since the pandemic are specifically tailored to regions and countries outside Zambia. There is much research that is needed to be done from collecting information about population views towards the pandemic in order to build the knowledge base of the Zambian health sector. This is a cardinal aspect that must be looked into in order to assess its how best the Ministry of Health and healthcare providers can continue to spread awareness of the pandemic and therefore educate residents of Kaoma district and the nation at large.

### **2.5 Related Research**

On the other hand, (Ríos et al 2020) analyzed in their study the correspondence between attitudes and practices, being the first ones adequate, but not the second one. Therefore, it is necessary to promote health education to enhance knowledge about COVID- 19 and thus generate positive attitudes towards prevention. According to findings, in the presence of perception of lack of

knowledge, attitudes towards COVID-19 improve, which may be related to the fact that people with a lower level of education, poor access to a variety of information about the disease or simply within timely and appropriate information about it, only get basic practical knowledge about basic measures to ensure effective control of the spread of COVID-19. Among the studies that differ from our findings, we find the study of Azlan et al.(21), who concluded that the Malaysian population has an acceptable level of knowledge and, therefore, a positive attitude in their perspective to overcome the crisis caused by the COVID-19 pandemic. These studies must also take into account the educational, cultural and social differences of the community studied. Furthermore, our result also contradicts the findings of (Montaño et al, 2021) that identified that 100% of the sample studied showed a high level of knowledge about the causative agent of COVID-19, 80% knew the incubation period of the virus, and 95% had an excellent knowledge about the main symptoms of this disease.

## **2.6 Theoretical Framework**

This study intends to use the Knowledge, Attitude and Practice (KAP) Model to thoroughly investigate the perceptions and experiences that influence the beliefs and perceptions of Kaoma residents towards COVID-19 its transmission and prevention during the course of the pandemic. It must be noted that despite the inclusion of the model this study aims to be exploratory with the intention to not be restricted by the preconceived theoretical and conceptual frameworks provided. This is to allow the researcher to carry out the study with an open mind to allow for new insight as data is collected.

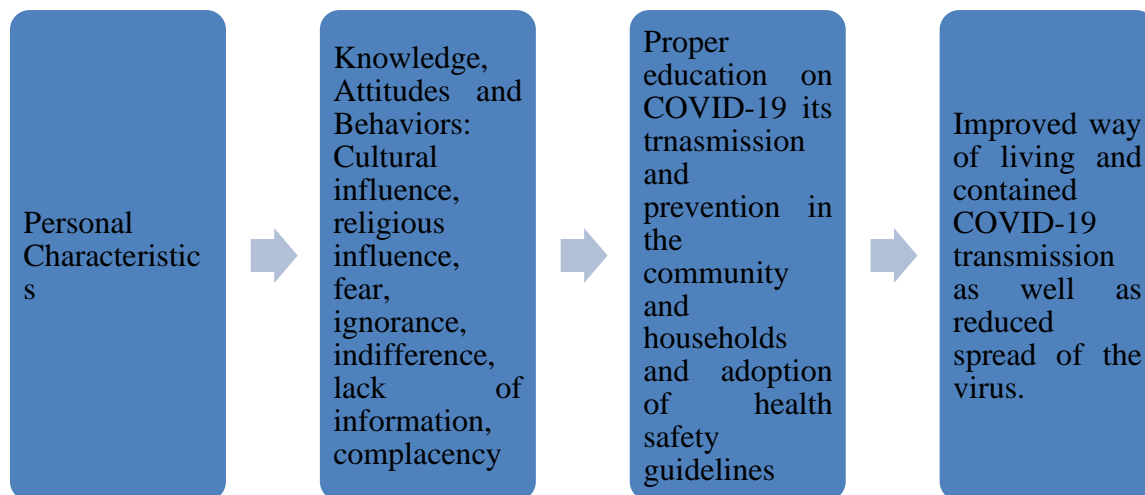
## **2.7 The Knowledge, Attitude and Practice (KAP) Model**

The knowledge, attitude, and practice (KAP) model is widely used in the medical field. The model suggests that practices (behaviors) are determined by the person's attitude and knowledge. Assessing KAP in terms of COVID-19 would help us to understand public perception and their response to COVID-19, which is related to public adherence to the preventive measures. There have been some KAP surveys conducted in LMIC. Several surveys (conducted in Iran, Syria, Malawi, Nigeria and Bangladesh) revealed a low or middle level of KAP among the public, indicating the enormous challenges faced by LMIC for containing COVID-19. Some of the surveys in LMIC were online surveys, in which the electronic questionnaire usually could not cover the vulnerable populations in LMIC since they have less access to the Internet. Thus,

further surveys based on field interviews are important for a better understanding of COVID-19 in LMIC.

## 2.8 Conceptual Framework

This framework looks into the different types of interrelated outcomes as a result of Kaoma residents understanding how their level of knowledge, their attitudes and perceptions of COVID-19 can determine how they either quicken the transmission of the virus or prevent it entirely. Through the adoption of the health guidelines and following them in a strict manner, as well as having changed their beliefs and attitudes the virus can be easily contained in the district. By virtue of accepting the health preventative measures it will equally help improve the quality of living and make the duties of the health care providers in the district much easier to deal with.





## CHAPTER THREE

### METHODOLOGY

#### 3.1 Research Design

This study was a qualitative study and phenomenological study design was utilized. The purpose of the phenomenological approach is to illuminate the specific, to identify phenomena through how they are experienced and perceived by the actors in a situation (Stan, 1999). To be specific, the study used the transcendental phenomenology. Transcendental in this context means looking at the phenomenon with a fresh eye and open mind, resulting in acquiring new knowledge derived from the essence of experiences (Moustakas, 1994). The phenomenon in this case was gathering data with regards to the attitudes, knowledge and perceptions of people in rural areas of Kaoma district in Western Province about the transmission and prevention of COVID-19.

#### 3.2 Research Setting

The study was conducted in Western Province, specifically the town of Kaoma in Kaoma District. It was intentionally selected due to the fact that it met the required sampling criteria for the study. The main focus was on gaining the views of individuals living in the town as well as health practitioners concerning Covid-19 and their management of the pandemic.

#### 3.3 Study Population

The study population consisted of healthcare providers, residents and representatives from the district council office. The sample size of the healthcare providers, residents and representatives was determined solely by their demographics.

##### Inclusion Criteria;

- Male or female
- Must be between the ages of 18 and 65 years of age.
- Must reside/work in Kaoma town.
- Must work/seek health care services from health facilities in Kaoma town.

##### Exclusion Criteria;

- Respondent was below 18 years of age.

- Does not reside/work in Kaoma town.
- Has not worked in a health facility in Kaoma for over 5 years.
- Has no active medical record at any health facility in Kaoma town.
- No consent provided.

### **3.4 Sampling Techniques**

The study comprised of 20 respondents. The respondents who did participate in the study were 5 health care providers, 13 ordinary citizens and 2 representatives from the district council. Purposive sampling was utilized in this study to come to a conclusion in the selection of the district and the respondents. The district was intentionally selected due to most low income citizens being unaware, uninformed and less knowledgeable of the ongoing Covid-19 pandemic and the threat it poses to their health. Study sites consist of market places, residential areas and clinics.

### **3.5 Data Collection Techniques**

The data collection techniques used in this study was In-depth interviews and data was collected from 5 healthcare workers 13 residents and 2 council representatives who served as key informants of the overall study. The screening tools utilized were demographics such as occupation, age, sex and level of education.

### **3.6 Data Analysis**

All the audio interviews recorded on the audio recorder were loaded onto a laptop in high definition so as to clearly hear the voices of the participants as they spoke. The information was then analyzed and transcribed into verbatim which was reviewed by the researcher. This procedure allowed the researcher to become familiar with the data as a result of reading the information paying attention to specific information that occurred often. Thematic analysis was used through the familiarization of data, generation of initial codes, theme generation from the codes and finally the final report. Once theme generation is done the next step will include the defining and naming of the themes and to conclude the analysis of data gathered a write up will be conducted. Braun and Clarke (2006).

### **3.7 Ethical Considerations**

In this study the following ethics will be adhered to:

- A detailed, prescribed application will be submitted to the Research Ethics Committee for approval to conduct the research.
- Introductory letters will be sought from the University of Lusaka to conduct research in the different health facilities. This will be presented to the District Health Office, District Council for confirmation to proceed.
- Permission will be obtained from the District Council and District Health Offices.
- Written informed consent will be obtained from participants and respondents to ensure all work is done within ethical guidelines.
- Participants and respondents will not be subjected to any risk of unusual stress, embarrassment or loss of self-esteem;
- The researcher will ensure that participants and respondents remain anonymous throughout the data gathering.
- The right to professional privacy and confidentiality of information obtained will be guaranteed by a written statement in the cover letter.
- The research will be conducted in accordance with the ethical requirement to report the findings in a comprehensive and honest way.

## CHAPTER FOUR

### PRESENTATION OF FINDINGS

#### 4.0 Introduction

This chapter begins with an introduction into the qualitative perspective and brief description of the participants that participated in the study on the attitudes, knowledge and perceptions of people in rural areas about the transmission and prevention of COVID-19 as well as present the major and sub themes generated such as; major themes, categories and codes which emerged as a result of the primary data gathered. To further illustrate the primary data, verbatim quotations have been utilized to illustrate the sub-themes and in order to ensure anonymity and confidentiality of the participants as agreed, demographic characteristics have been used.

#### 4.1 Description of study participants

The study was comprised of 20 participants from the enlisted clinics with which all individuals gave both verbal and written consent to participate in the study. The study took place in one district, namely Kaoma district.

#### 4.2 Demographic characteristics of study participants

**Table 1: Characteristics of participants**

Job Description	Number Interviewed	Knowledge of COVID-19	Prevention of COVID-19	Factors affecting attitudes	Sources of Information
In Charge	1	Well informed	Well informed	Information disseminated on social media.	Ministry of Health & World Health Organization
Doctors/Nurses	3	Well informed	Well informed	Ministry of Health and	Ministry of Health & World

				social media.	Health Organization
Clinical Officer	1	Well informed	Well informed	Information disseminated on social media.	Ministry of Health & World Health Organization
Marketer	6	Partially informed	Partially informed	Personal beliefs and social media.	Word of mouth, social media and healthcare workers
Resident	5	Partially informed	Partially informed	Personal beliefs and social media.	Word of mouth, social media and healthcare workers
Business Owner	2	Well informed	Well informed	Personal beliefs and social media.	Word of mouth & social media
City Council Worker	2	Well informed	Well informed	Ministry of Health.	Ministry of Health & Government offices
Total	20				

### 4.3 Detailed Findings

#### 4.3.1 Level of understanding residents have of what COVID-19 is and the manner in which it is transmitted and prevented.

All the participants had very opinionated views on their knowledge and perceptions of Covid-19 its transmission and prevention from the time they first heard about the pandemic. Based off data gathered during the research, the participants did express not knowing which media sources they

should fully follow. Some of the participants expressed having no idea of the existence of credible health platforms such as the World Health Organization but were more familiar with the Ministry of Health and even then were still not fully confident with the information being relayed.

#### **4.3.1 Knowledge of Covid-19 transmission**

Despite gaining more information of Covid-19 and its transmission from the announcement of the breakout some residents did confess that they were still uneducated on the pandemic and were willing to learn more provided simplified information was given considering not many of them had obtained education levels beyond primary level and junior secondary school. One of the interviewed participants stated;

*“I did not believe something like covid-19 truly existed. I do have a smartphone and a lot of information I saw on Facebook indicated that it was something that was happening more in the international community. When I heard that there was a chance it could reach Africa ad Zambia I was a bit worried but when I read how it was transmitted I realized that there is a very low chance I could get it as I am very fit and healthy. I take extremely good care of my health and I had hand sanitizer” (Resident 3).*

A verbatim statement given by a nurse at a clinic states;

*“When I first heard about the likelihood of Covid reaching Zambia I became extremely worried because I knew as health care providers it would be very hard to convince people about the high possibility of them contracting the virus. I was scared for the safety of my family and myself because being a health care provider I was more susceptible to contracting the virus and risked infecting them” (Nurse 2).*

#### **4.3.2 Prevention of covid-19**

Sensitization of residents by health care providers and the district health officers was widespread and targeted to reach a wide number of people in Kaoma about how to go about the prevention of Covid-19. Posters were put up all over the town and especially in clinics and health centres. Information on radio and television were relayed, community gatherings were also held in which key informants were selected to provide information and educate members of the community on measures taken to prevent the spread of Covid-19. Measures such as masking up, practicing

social distancing, avoiding mass gatherings, using hand sanitizer and most recently vaccination were shared. One of the interviewed participant's states;

*"I am still not used to wearing face masks and I try to mask up everywhere I go but it's very hard for me. I feel like they really block my breathing and so I only put them on when I visit a busy place like the market or a shop whenever I step out to buy things." (Resident 1).*

When asked to make a comment an In Charge from one of the clinics states:

*"It was very hard to get the information out to the general public. a lot of people had already read and heard things about Covid -19. Our biggest problem was trying to get people not to believe everything they saw on social media especially with regards to the prevention of covid-19." (In Charge 4)*

#### **4.4. Major factors influencing Kaoma resident's attitudes towards Covid-19 transmission and prevention.**

##### **4.4.1 Factors influencing attitudes**

Participants interviewed expressed different views concerning their attitudes towards the preventive measures. There was an evident difference between health workers who were more seriously inclined towards taking precautionary measures and following guidelines as compared to the residents in the districts who were not as bothered about the pandemic and continued to go about their business. Most community members displayed a negative attitude towards adherence to the preventive measures provided and were thoroughly convinced it was a hoax despite being aware of the rising number of cases and deaths related to Covid-19.

##### **4.4.2 Preventive measures put into place.**

Some of the main benefits of adhering to the preventive measures provided were protection against the virus, a rise in overall hygiene practices and cleanliness in the community, fewer chances of other diseases spreading. One health worker highlights;

*"the main concern we had when it came to implementing the measures such as quarantine for people who were sick and social distancing. Personally it was something I could manage on my own and tried to bring to the members of the community as well" (Doctor 6).*

Another respondent states;

*“a lot of people I know kept telling me Covid -19 was not real, it was just a means of the government trying to control us. There were a lot of things I saw on the internet about how chips had been put into the face masks as a means of tracking people. It was also extremely inconveniencing to have to postpone or cancel many plans that I had made to travel as well as celebrate certain events” (Resident 5).*

#### **4.5 Sources of information**

Many sources of information weighed heavily on the decisions and perceptions people had with regards to Covid-19. A number of people cited social media as the main source of where they got information, some through their churches and others simply by word of mouth.

##### **4.5.1 Social Media**

When it came down to tabulating the information gathered, social media networks played a key role in their interaction and awareness of the pandemic. Some stated their church leaders encouraged people to avoid following social media frenzies as it was believed that social media was pushing the agenda of covid-19 as an attack on the church and believers.

*“personally I did think Covid was a serious matter when I first heard about it, but then when the issue of closing down places which had mass gatherings came up I was a bit concerned about the approach the government and Ministry of Health took. They decided to close the churches and yet some taverns and bars were still in operation. Other places where activities happen with a lot of people were still functional and that did not sit well with me seeing as we are a Christian nation. If anything we really needed to be more prayerful at the time.” (Resident 8).*

Another respondent comments:

*“For me I’m not as educated I only ended my school in grade 5 so for most of the knowledge and things I heard about Covid it was through my phone and the radio. Sometimes I used to listen to just the conversations from different people and some things they said didn’t make sense. It was only when the health care workers started passing in communities educating us was when things started to make sense” (Resident 10)*



#### **4.6 Theories concerning the vaccine**

When it came to the acceptance and uptake of the vaccine many people were adamant about getting vaccinated despite being encouraged and educated on the benefits of the vaccines. An account given by a resident state;

*“I didn’t think it was necessary for me to take the vaccine. I had already survived the first wave of covid without one and even though we kept being told the new strains were different personally it was just not for me. I would rather just maintain the usual guidelines provided”*  
(Resident 12)

Another compelling argument arose as there was a divide in which most health care providers opted not to take the vaccine despite encouraging members of the community.

*“In my experience and from what I know, the average period of drug trials and testing take much longer than usual. It was very odd for me that they had come up with vaccines in such a short period of time yet it takes much longer for other diseases and viruses that have been around for much longer. Of course I don’t discourage people from taking the vaccine because I would not be doing my job well, but I would rather wait a little longer before taking the vaccine myself.”* (Nurse 15)

## CHAPTER FIVE

### DISCUSSION AND FINDINGS

#### **5.0 Introduction**

This chapter looks into the discussion of the qualitative research findings of the study in relation to the topic; Attitudes, knowledge and perceptions of people in rural areas about the transmission and prevention of COVID-19: A Case Study on residents in Kaoma Western Province. The discussion will relate the objectives of the study to those of the findings of the research and literature review.

#### **5.1 Level of understanding residents have of what COVID-19 is and the manner in which it is transmitted and prevented.**

Study findings reveal that residents of Kaoma district confidently state they are more knowledgeable of Covid-19, its transmission and how it can be prevented. They did state that initially when the outbreak was first reported and information concerning the pandemic began to roll out there was a lot of skepticism as to the gravity and seriousness of the disease. Many residents stated they were not very open to information concerning to the virus as they were not sure of what to believe with regards to details being put out in public. Residents of the town also stated that they were more educated on how Covid-19 is transmitted and its prevention. Some stated knowing that it could be transmitted through coughing and sneezing resulting in droplets or aerosols being spread into the atmosphere which is then inhaled by people in the event they don't wear masks. The above findings are similar to what Prensa N. De et al (2020) stated in which 'The perception of risk of being infected by the Coronavirus would be mediated by the type of information that the individual hold. Disinformation or lack of information would be an additional barrier, increasing this probability of infection.' Similar trends between knowledge and attitudes have also been seen in similar studies in Zambia (Adon Chawe, 2021), regional studies by (Kanu S, 2020) as well as international studies by (Muhammed Elhadi, 2020). The study showed low levels of knowledge and attitudes on social distancing when residents were first informed of the pandemic but have now significantly began to practice social distancing. Maintaining social distancing in public places has been marketed as part of the Golden Rules of infection prevention for COVID-19 (UNICEF SA, 2020).

## **5.2 Evaluate the approaches the council and health personnel have taken towards educating the residents about the dangers of COVID-19, its transmission and prevention measures.**

Study findings on the health care provider's and council approaches towards educating the residents of Kaoma district depict that the campaigns and sensitization approaches had a positive outcome with regards to the feedback as well as behavioural changes from most residents. They did express that they initially faced challenges with acceptance of information from residents and stated the period in which lockdown was implemented by the government was a good initiative as it significantly helped reduce the spread of Covid-19.

## **5.3. Investigation into the various measures that residents in Kaoma are putting to prevent the transmission of COVID-19 in their communities.**

When asked about preventive measures being implemented in the town by the residents, district council and the health care providers, it was established that public health and safety guidelines as administered by the Ministry of Health were followed by residents. Interventions such as shutting down of pubs, closures of churches, restricted movements, denial of residents to enter establishments without face masks and sanitization points were all put into place to limit the movement of residents and therefore reduce the spread of the virus. When the rollout of the vaccinations began, there was a challenge in encouraging the populace to be vaccinated as there were concerns from the residents based on the numerous theories and stories heard about the efficacy as well as the side effects of the vaccines.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.0 Conclusion

The main purpose of this research was to determine the attitudes, knowledge and perceptions of people living in rural areas particularly Kaoma district in Western Province about the transmission and prevention of COVID-19. The motivation was to investigate how they responded to the pandemic and the steps and measures taken as a town to ensure the spread of the virus is minimal as well as the practices put into safeguarding their health and finally how many of them were very well versed with what the disease is and how they could prevent the mass transmission of it.

From the study findings, a number of issues were identified such as the health care providers and city council having a challenge with trying to inform and educate the residents of the town on the dangers and transmission of Covid-19 and how best to avoid contracting the disease. There was a mixed receipt of the information from the residents who were either misinformed on what Covid-19 was or questioned if the virus really did exist. The participants stated when the pandemic first came to be accessing credible information concerning the virus was hard to come by. Towards the end of the study conduction participants did state they were more confident in their awareness of the virus.

#### 6.1 Limitations

One of the major limitations of the study was the inability to find research that focused on the point of view of resident's perceptions of the virus, its transmission and prevention. Considering the pandemic is still ongoing and there is still much to learn the research can only provide a minimal insight into the current mind set of residents of Kaoma district who are still familiarizing themselves with the pandemic. More research needs to be conducted to constantly evaluate the ever changing perceptions and experiences. Another challenge was the inability of most participants to fully express themselves in fear of being exposed despite reading and signing the confidentiality agreement. Due to the impact of Covid-19 and the revision of working hours some participants who were healthcare providers were not easily accessible due to their working schedule and despite being contacted for further comments were unable to.

## 6.2 Recommendations

1. Health facilities in Kaoma town should ensure that there is enough equipment for testing COVID-19 among residents.
2. District Health Office must ensure all health personnel working in clinics be provided with the protective uniforms while dealing with COVID-19 patients.
3. Ministry of Health must mobilize to invest more resources into the provision of more vaccination points in the town for longer periods to ensure residents are vaccinated.
4. The study indicates that most of the residents in Kaoma perceive themselves to be at lower risk of being infected by Covid-19. There is therefore need for government to take serious action and continue sensitization campaigns.
5. Ministry of Health through the designated District Health Offices must engage local radio stations and televisions to sensitize citizens in local languages. The messages must promote the benefits of practicing social distancing, vaccination, hand washing, wearing of masks and promote a combination of prevention methods.

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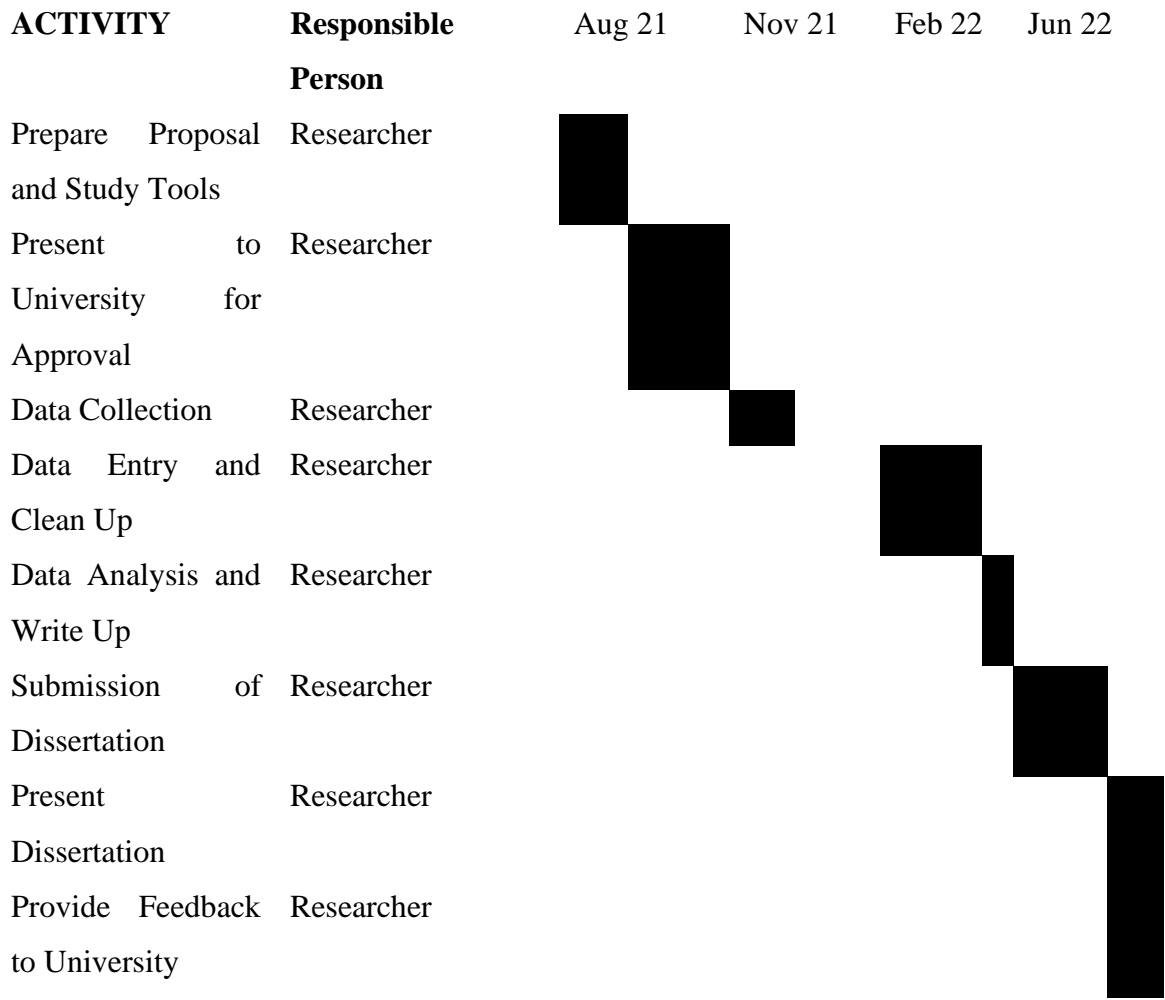
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**APPENDICES**

**APPENDIX A: Work Plan**



**APPENDIX B: Budget**

<b>Activity</b>	<b>Description</b>	<b>Unit</b>	<b>Amount (K)</b>
Data Collection	Transportation	1 (single person)	200
	Recording Device	1	350
Proposal Write-Up	Binding/ Printing	1 Document	150
Pre-Testing	Questionnaire Printing	10	100
	Transportation	1 (single person)	120
Data Analysis and	Printing of Final Report	1 Document	150

Write Up	Binding	2 Documents	300
Total Amount			<b>1,370</b>

## **APPENDIX C: CONSENT FORM**

### **CONSENT FORM FOR PARTICIPATING IN A RESEARCH STUDY**

**TITLE OF STUDY: Attitudes, knowledge and perceptions of people in rural areas about the transmission and prevention of COVID-19: A Case Study on residents in Kaoma Western Province.**

You are requested to participate in a research study to be conducted by Daniel Mbazima a final year (4<sup>th</sup> year) student at the University of Lusaka. The purpose of this study is to assess the level of knowledge residents of Kaoma district have with regards to the transmission and prevention of COVID-19. The research also intends to investigate the type of perceptions people have of COVID-19 and their attitudes towards the measures put into place towards containing the spread of the virus.

Your participation will involve answering questions that will be asked through an interview and questionnaire. There are no known risks or known benefits to you that would result from your participation in this research.

Protection of confidentiality is assured to you as your identity will not be revealed in any publication resulting from this study. Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

#### **Contact Information**

If you have any questions or concerns about this study, or if any problems arise, please contact, Daniel Mbazima. Cell phone numbers: +260 975 849489.

#### **Consent**

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

Participants Signature:

Date:

## **QUESTIONNAIRE**

### **APPENDIX D**

#### **QUESTIONS TO BE ASKED DURING THE INTERVIEW**

1. What do you understand about the ongoing COVID-19 pandemic?
2. How did you hear about COVID-19?
3. Do you believe it is a viral infection that can be spread easily if one does not follow health safety guidelines?
4. What rumors have you heard circulating regarding COVID-19 and its transmission?
5. Have you or anyone in your family ever contracted COVID-19?
6. In the event someone contracts COVID-19, how long should the infected person avoid being around people?
7. Have you practiced any of the health safety guidelines such as social distancing and hand sanitizing?
8. Do you understand the importance of wearing a mask at all times?
9. How often do you sanitize your hands and interact with people whenever you are outdoors?
10. How capable are you of differentiating COVID-19 from a regular flu?
11. Do the health care personnel in your district offer educational materials on what COVID-19 is?
12. What are your thoughts on the issue of vaccination?
13. Have you been vaccinated or do you consider getting vaccinated?
14. Have your cultural or religious beliefs influenced how you perceive COVID-19?
15. Do you believe seeking medical help can cure you of COVID-19?
16. If for some reason you contract COVID-19 will you seek medical attention?



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RESEARCH ETHICS COMMITTEE**

Ref no: IORG0010092-2022/048

Date: 17<sup>th</sup> January, 2022

DANIEL MBAZIMA – BSPH18212773

27 APR 2022

*Noted*  
*[Signature]*

**Re: Research Title; ATTITUDES, KNOWLEDGE AND PRACTICES  
OF PEOPLE IN RURAL AREAS ABOUT THE TRANSMISSION AND  
PREVENTION OF COVID-19: A CASE STUDY ON RESIDENTS IN  
KAOMA WESTERN PROVINCE**

The above research was submitted to the research ethics committee for review. The study has no major ethical problems and is approved subject to the following:

1. The study cannot be changed without express permission of the UNILUS Research ethics committee
2. Approval from the Lusaka District health Management or equivalent health authorities should be sought.
3. The study tools should be added.
4. An informed consent form should be attached and filled by all study participants (If dealing with primary data)
5. The risks and benefits should be included in the consent form.

Congratulations and the committee wishes you success in your work.

*[Signature]*

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