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THE INFLUENCE OF ILLNESS REPRESENTATION ON PSYCHOLOGICAL DISTRESS AND HEALTH SEEKING BEHAVIOUR IN GHANA: A RURAL - URBAN STUDY

BY

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DECLARATION

The thesis **"The Influence of Illness Representation on Psychological Distress and Health Seeking Behaviour in Ghana: A Rural-Urban Study"** was submitted to the School of Graduate Studies (University of Ghana - Legon) for a Master of Philosophy in Clinical Psychology degree. I officially declare that, with the exception of the sources listed, this research was carried out by Adzo Xolali Gertrude Ladzekpo during the 2020/2021 academic year under the supervision of Dr. ADOTE ANUM and Prof. CHARITY S. AKOTIA. This material has never been submitted for a degree at the University of Ghana or anywhere else in its entirety or in part. As a result, I accept full responsibility for any inadequacies in this work.

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28th April 2022

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PROF. CHARITY S. AKOTIA **DATE**

(CO-SUPERVISOR)

DEDICATION

I dedicate this work first to God for his immeasurable grace and then to my parents Mr. Godson Ladzekpo and Mrs. Regina Ladzekpo for their unwavering support.

I also specially dedicate this work to the parents of my 2 friends who granted them permission to go with me on the data collection journey.

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My utmost gratitude is to God for His immeasurable grace and strength which was abundant all through my period of study. I could not have come this far without Him.

I am grateful to my supervisors, Dr. Adote Anum and Prof. Charity S. Akotia of the University of Ghana, Legon, Department of Psychology, for their participation and advice in making this research a success.

I owe my parents a debt of gratitude for their financial, emotional, and spiritual assistance. During the process, your prayers and sage advice inspired and motivated me.

And to the residents of Obom, Sogakofe, Mafi Dove, and Devime, as well as the people of Teshie Nungua, I thank you for your warm reception and eager participation in making this project a success.

Finally, to my sister and all my friends who served as a great support system, may grace be multiplied unto you.

God bless you all, abundantly.

TABLE OF CONTENT

LIST OF TABLES

ABSTRACT

The purpose of this study was to determine the impact of illness representation on psychological distress and health seeking behavior, as well as to comprehend the interpretation of illness, particularly COVID-19, in the Ghanaian population. A mixed method design was used, and 240 participants were purposively sampled for the quantitative aspect while 32 participants were interviewed for the qualitative aspect of the study. Participants were drawn from selected rural and urban communities in Ghana. Quantitative data for the study was gathered using the General Help Seeking Questionnaire, the Brief Illness Perception Questionnaire, the Kessler 10, and semi-structured interviews for the qualitative study. Hierarchical analysis of the quantitative data revealed that illness representation and age significantly predicted health seeking behavior. Illness representation had no effect on psychological distress, however, gender significantly predicted psychological distress. According to the one-way ANOVA analysis, there was no significant difference in illness representation between participants from rural and urban communities. The findings of the interviews supported this finding, as there were no significant differences in illness representations of COVID-19 in the selected communities. Findings of the qualitative study unearthed themes such as the pluralistic views about illness, knowledge about COVID-19, general views about COVID-19, emotional reactions towards COVID-19 and barriers to health seeking. These findings have implications for research into health choices and practices, as well as policy development.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

There is a frightening burden of diseases in Low- and Middle-Income Countries and the World Health Organization reports that the burden of communicable disease is higher than the burden of non-communicable diseases (Boutayeb, 2010). The African continent is especially vulnerable due to the high prevalence of infectious and non-communicable diseases. According to the 2016 Infectious Disease Vulnerability Index (IDVI), Africa is home to 22 of the top 25 countries most vulnerable to infectious diseases (Lone and Ahmad, 2020). The illness burden in the sub-Saharan African region according to Narayan and Donnenfeld (2016) is dominated by infectious diseases. However, the region is undergoing a demographic transition which has led to the increasing prevalence of non-communicable diseases as well (Gouda et al., 2019). Due to the large number of diseases, it was predicted that the COVID-19 pandemic would wreak unpardonable havoc in the Sub-Saharan African region; however, reports reveal that the virus has so far caused a much less impact on the region's health (Ebun et al.,2021). In the COVID-19 experience, the continent's deficient health-care system, as well as a large immunocompromised population due to high rates of malnutrition, anaemia, malaria, HIV/AIDS, tuberculosis, and lack of economic discipline, sets it apart from other continents (Tessema et al., 2021).

The illness burden in Low- and Middle-Income countries is largely due to poor infrastructure in the health sector as well as limited access to health care facilities.

Okereke et al. (2021) reports that despite the huge burden of illnesses, healthcare facilities in Africa are grossly underfunded and weak. Additionally, high cost and lack of qualified personnel also escalate the problem in Low- and Middle-income countries like Ghana. Due to these difficulties, the avenues people seek to treat illness depends on a myriad of factors such as their level of education, the type of illness as well as the perceptions held by society. Available treatment options and the location of the individual plays a huge role in determining health seeking behaviour (Muriithi, 2013).

How people decide whether they are ill, what explains their symptoms as well as what influences their readiness to seek and follow treatment is largely dependent on the information they have about the illness. Knowledge increases an individual's ability to make informed decisions regarding their health. Knowledge can be garnered from family, friends, the mass media, among others. The amount of knowledge an individual is exposed to usually affects the decisions that the individual will make concerning their health (Ayers et al., 2007).

Knowledge also plays a role in how individuals respond to illnesses emotionally. Studies have indicated that illness perceptions are linked to current and future psychological and physical consequences (Norton et al., 2014). Other research has found that a lack of understanding or health information about the COVID-19 pandemic has increased anxiety and distress across several populations, resulting in a substantial drop in mental health wellbeing (Ye et al., 2021). The understanding individuals ascribe to an illness influences their feelings about the illness as well as the interpretation of the illness.

The COVID-19 pandemic is anticipated to have an impact on health and illness representations. Individuals' representation of COVID-19 has an impact on the decisions they make concerning their health or illness (Attema et al., 2021). Also, representations of illnesses have been shown to vary among healthy and unhealthy populations. Most of the research on illness representation focuses on patient's perceptions of illness. Less attention is paid to how healthy people think about health and sickness, as well as how their thoughts connect to health-related activities (Figueiras and Alves, 2007). Few studies have identified some representations of COVID-19 in certain populations and how these representations have affected response to the pandemic both physically and psychologically (Ciancio et al., 2020; Gohel et al., 2021). Findings from Okereke et al. (2021), suggest that there are widespread misrepresentations of COVID-19 in Africa and these misrepresentations influence the response to the pandemic.

This study intends to elucidate the representations of COVID-19 in the Ghanaian setting and its subsequent effects on psychological distress as well as health seeking behaviour.

1.2 Illness Representation

Illness representation refers to the lay constructions, beliefs and expectations individuals hold about an illness (G/Tsadik et al., 2022). In contrast to the other health belief models, illness representations contain emotional responses to illness and treatment (Edgar and Skinner, 2003). Beliefs, values, and perceptions are largely responsible for health practices. How individuals understand illness influences their interpretation of physical and psychological symptoms. These in turn influence the choice that individuals make about health and illness. According to Hughner et al. (2004), these lay theories are not

necessarily tied to particular illnesses or symptoms but can influence how individuals interpret and respond to illness in general.

Illness representation comprises both emotional and cognitive representations which influences health practices and choices. Cognitive representations according to Sirri and Fava (2013), refers to how individuals mentally represent health and illness while emotional representations refer to the feelings individuals attach to illnesses. Emotional representation of illness looks first at the concern or worry about the illness from both patients and healthy individuals and the emotional response associated with the illness. This could be fear, distress, or even anger. The way the illness is pictured and stored in the mind is reflected in cognitive representations. Illness identity, the cause of the illness, the timeline or duration of the illness, control of the illness (both treatment control and personal control), illness consequences, and coherence or understanding of the illness are some of the dimensions that cognitive representations are described along (Bower et al., 2012). These cognitive representations, according to Arat et al. (2016), significantly influence an individual's emotional response to illness. As a result, the cognitive interpretations that people give to specific illnesses have a massive effect on the feelings they experience.

Components of illness representation include identity, cause, duration, control, and consequences of the illness (Leventhal et al., 2003) . Identity refers to an identifying label that names the illness, for example a fever or a headache. Timeline on the other hand explains the beliefs about the course of the illness, that is, whether the illness will be short term or long term and if the symptoms will wax and wane with time. Control entails

holding beliefs about whether the illness can be remedied or must be managed over time. Coming down to consequences, this dimension of illness representation concerns itself with questions such as, “how will this illness affect me?” Here, individuals pay attention to the amount of change the illness will contribute to their lifestyle and they begin to evaluate the extent of adjustment they would have to make to cope with the illness. Finally, cause as a component, refers to the individual’s beliefs about the origin of the illness. These dimensions of illness representation have been proven to significantly predict several features of illness behaviour as well as functional recovery (Sirri and Fava, 2013).

A number of factors have been identified as having an impact on people's health views, including but not limited to education, age, and marital status (Adegoke, 2008).

The traditional African system of thought is often linked to the African view of illness etiology. According to Adegoke (2008), despite cultural and ethnic diversity, there is a widespread belief throughout Africa that physical and mental illnesses are caused by a variety of factors, including supernatural powers, and that no two communities have the same views on health and illness.

1.3 Health Seeking Behaviour

Health-seeking behaviour is the result of a complex set of influences at the individual, family, and community levels (Oberoi et al., 2016). Individual and/or household behavior, community norms and expectations, and provider-related characteristics and conduct all have an impact on health-seeking behavior. According to Latunji and Akinyemi (2018), the concept typically refers to the activities individuals engage in to

discover a suitable treatment when they feel ill. It addresses whether and when aid will be sought for an illness, as well as when and where help will be sought. Hoeven et al. (2012), believe that perception of the illness as well as the individual and even the community play a role in health seeking behaviour.

A myriad of factors influences health seeking behaviour, including illness type, severity of the illness, pre-existing lay beliefs about an illness, the range of therapeutic options available, their accessibility, and efficacy (Sarfo, 2015). Omotoso (2010) agrees with this assertion, stating that the primary reason for seeking health care in Ekiti state, Nigeria, is the type of illness the individual is suffering from. Also, accessibility and availability of health services in the community also has been identified as a determining factor in health seeking. Health seeking according to Kalki et al. (2017) is largely dependent on trust in the services as well as the cost of the services. The use of available health services and, as a matter of fact, the health outcomes are determined by a community's health seeking behavior.

Corno (2014), reiterates that a considerable part of the population in African communities seek help in the informal health sector or do not seek help at all for their health concerns due to the factors highlighted above. According to Kaamel (2018), in Ghana, consumers of healthcare resort to one of these avenues to addressing health issues; seeking medical care at a government facility or a private facility, faith healing, traditional or herbal care, self-medication using either pharmaceutical products or herbal drugs. Nyamongo (2002) asserts that the kind of health care sought is intricately linked to the beliefs and values of the individuals. Belief systems according to Sarfo (2015) lead to different patterns of

health and illness prevention. Thus, individuals who believe their illnesses to be caused by supernatural powers tend to seek help from traditional healers while those who held on to the biomedical cause of illness were more likely to resort to orthodox health providers.

The heritage consistency theory argues that the more a person identifies with their traditional heritage, the more likely they are to adhere to traditional health and illness beliefs as well as practices derived from their ethnocultural heritage. According to Idriss et al. (2020), urban areas are primarily influenced by Western practices, whereas rural areas are primarily influenced by traditional practices. As a result, people in cities are more likely to deviate from their cultural heritage. Understanding the lay conception of illness is thus imperative because it influences diagnosis, health seeking, and communal response to illness.(Olafsdottir and Pescosolido, 2011).

Some studies report that gender among other demographic characteristics affect health seeking behavior and illness representation (Edelstein et al., 2012). According to Evangelista (2001), significant gender differences exist in representation and health seeking decisions. Failing to seek help and even delay in seeking help could lead to adverse health outcomes.

1.4 Psychological Distress

Arvidsdotter et al. (2015), define psychological distress as a state of emotional suffering often characterized by symptoms of depression, anxiety, and tense feelings. Recent studies suggest that illness representation significantly explains anxiety and depression (Chittem et al., 2015). The COVID-19 pandemic, like previous pandemics, is associated with increased psychological distress among various populations (Hu et al., 2021;

Wissmath et al., 2021). There are several sources of stress, which typically include the fear of contracting the illness and its complications, the fear of illness or death of a loved one, and the fear of the effects of physical and social isolation as a result of the pandemic(Gray et al., 2020). The way individuals respond to and interpret illness is more strongly associated with levels of psychological distress. Inaccurate representation of illness leads to undue distress (Bower et al., 2012).

Psychological distress can also be precipitated by both the illness and its treatment as well the gender of the individuals (Dickson, 2016). Researchers offer several perspectives on the nature of gender disparities in psychological Gender variations in mental health may exist, and females have been observed to have a higher prevalence than their male counterparts, according to Adewuya et al. (2018). These gender differences have been attributed to gender inequality, as well as gender based violence and gender discrimination (Idowu et al., 2022). On the other hand, Olaseni et al. (2020), reports no gender differences in psychological distress among the general public in Nigeria during the COVID-19 pandemic.

Owing to the COVID-19 pandemic, the experience of individuals with respect to stress and anxiety have been heightened by the suspected exposure to the COVID-19 virus as well as the behavioral modifications individuals have had to make since the outbreak of the pandemic (Kumar and Kumar, 2020).

1.5 Problem Statement

COVID-19 is a novel disease for which treatment routines continue to metamorphose. Limited knowledge and treatment are likely to cause stress and anxiety among people.

The extent of distress is a function of representations of the illness and other cultural indices. Understanding these relationships in COVID-19 is limited because first, it is a novel illness and second because research on social construction of illness is limited in Low and Middle-Income Countries like Ghana. The representation of illness as already stated varies across illnesses and settings, thus, aside understanding the medical notion of illness, it is essential to pay attention to the meanings ascribed to illness. Illness representations are not expected to be static and the study of illness representation in healthy individuals has helped examine prevention and early detection of certain illnesses.

According to Liddell et al. (2005), illness representation theories in the sub-Saharan Africa have evolved to accommodate biomedical concepts, however, the fundamental principles on which these representations are founded are deeply rooted in the historical culture of the people in this sub region. Thus, the gap this study seeks to fill is to identify these historical views as well as the extent to which the biomedical concept is accommodated.

Extensive research has been done on illness representations and health beliefs and their relation to various health behaviours. However, according to Figueiras and Alves (2017), majority of these studies are centred on specific behaviours and beliefs within specific groups of patients or groups at risk of a particular disease. Less focus has been given to healthy individuals, their representation of illness and how these in turn influence their health behaviours.

Few studies have been found to compare residents' health behaviours in different parts of the country, hence the need to embark on this study.

Then again, though there is quite an extensive literature on health seeking behaviour, according to Annang (2016), there is limited literature in analysing health behaviour in both rural and urban communities in single research in Ghana and this study seeks to bridge that gap in literature. Typically, studying health behaviour in both the rural and urban contexts is necessary because there are variations in the socioeconomic characteristics, health status, beliefs about illness and health as well as healthcare utilization. These variations can largely be explained by the distinct effects of urbanization on health according to Hoeven et al. (2012). Designing healthcare policies and programs requires knowledge about the existent routines so as to identify possible difficulties.

As a low-income country, Ghana has a burden of illnesses and according to de Graft Aikins et al. (2012), Ghana has a serious chronic illness burden and a health system that is unable to adequately cater for the country's burden of chronic and infectious diseases. Adopting healthy practices thus remains the most efficient way to prevent illnesses especially in the wake of the COVID-19 pandemic.

People's actions when they are ill are largely determined by their understanding and interpretation of the illness. Thus, health decisions may be suboptimal in contexts where interpretation is dependent on informed positions, such as in novel diseases, chronic illnesses, or among rural or less educated people. Illness representation may be a determinant of novel responses to the COVID-19 pandemic and is highly relevant in

influencing individuals' self-regulation, preventive measures adoption, and psychological responses, particularly when studying community responses to new and emerging infectious diseases. Recent studies have found reports of people delaying or avoiding seeking medical care due to concerns about the COVID-19 virus. (Saah et al., 2021). Postponing or avoiding necessary consultations can have grave ramifications, especially for people with pre-existing health conditions.

Differences in preventive behaviours amidst the pandemic was identified between residents living in rural and urban areas in China (Chen and Chen, 2020). The study also revealed that rural populations engage less in preventive health behaviours as compared to the urban populations.

1.6 Objectives of the Study

The objectives of the study are as follows:

i. Examine the association between illness representation and psychological distress.
ii. Examine the association between illness representation and health seeking behaviour.
iii. Examine the levels of distress in the selected communities.
iv. To find out if gender will significantly predict health seeking behaviour and psychological distress.
v. Identify the barriers to health seeking in the selected communities.

1.7 Research Questions

The following research questions were posed in accordance with the reviewed literature.

i. What are the lay representations of COVID-19 compared with representations of well-known diseases?

ii. Are there differences in lay representation of illness among rural and urban populations?

iii. What factors hinder health seeking in the rural and urban populations?

1.7 Relevance of Study

Even though the medical construction of illness is principal for prognosis and management, the lay perceptions of individuals in the society are equally as important. The essence of the study thus is to explore the lay representations of new diseases like the corona virus disease among Ghanaians and compare it with the representations of other known diseases.

The study will also explore the differences in lay representation between rural and urban populations, paying attention to the factors that shape illness representation and health seeking behaviours.

Findings of the study will throw more light on lay representation of illnesses in Ghana, adding to the already existing data on illness representation and health behaviours. Identifying and understanding the influence of the coronavirus pandemic on psychological distress is central to crafting effective policy responses to safeguard the psychological wellbeing of nationals

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter examines the literature on the topic at hand. It begins with an overview of key theories relevant to the topic at hand. This chapter also includes a review of relevant studies, which brings together studies that have looked into the variables under consideration. It highlights research on illness representation, psychological distress, and health-seeking behavior. The chapter concludes with the research hypotheses.

2.2 Theoretical Framework

2.2.1 Social Representation Theory (Moscovici, 2000)

This theory was developed to explain the various enunciative positions that people take on socially relevant issues such as illness and health. The theory concerns itself with the way in which new ideas and events are integrated by lay persons. The focus of this theory is on the group-based symbolic understanding and communication regarding health issues. The social representation theory focuses on the dynamic and contradictory structure of everyday knowledge.

The social representation theory proposes that knowledge of the world is a collective construction that expresses the understanding of a community. Representations are born through social interactions and should not be seen as mere psychological tools that enable individuals to orient the understanding of the world, they live in. The theory is predicated

on two assumptions. The first is that the social world is constructed through a group's or society's thoughts and interactions, and the second is that this social world is constructed through discursive practices.

The theory contributes to the psychology of health and illness by its ability to enhance understanding of how lay people make meaning of health and illness, and how these meanings evolve over time. The theory emphasizes that representations are prescriptive and coercive in nature and are not merely products of human agents acting upon their society. Social Representations can be challenged, modified, and changed, considering they were created and are largely influenced by human interactions.

2.2.2 Self-Regulatory Model (Leventhal, 1980)

This theory proposes that to make sense of an illness, individuals construct representations of the illness. These representations tend to have both cognitive and emotional content and lead to the generation of coping responses.

According to this theory, a stimulus, such as a symptom or diagnosis, prompts individuals to form cognitive and emotional representations of the condition. Cognitive representations are beliefs about a condition held by the general public. This is based on personal experience and knowledge. Information from the media and other significant others, who could be family or friends. Identity, causal beliefs, duration, control or cure, and consequences are the five (5) main components of cognitive representations. Identity refers to one's beliefs about symptoms, as well as the labels and lay meanings associated with the condition. Causal beliefs are primarily concerned with the factors that the individual believes must have contributed to the development of the condition.

This theory is significant in the context of studying community responses to new and emerging infectious diseases because it suggests that individuals seek to understand illness threats by developing an understanding of what the illness is, what it means, the causes, the consequences, the duration of the illness, and whether or not it can be cured or controlled. Appraisal of the situation then determines the turn health behaviour will take and what strategies will be employed by the individual to deal with the condition.

2.2.3 Health Belief Model (Rosenstock, 1999)

The health belief model is essential to this study because it helps expound and forecast health behaviours and attitudes. This is used to predict health behaviours and explains that a person's willingness to change their behaviour is primarily dependent on their perceptions of health. According to the theory, health behavior is determined by perceived susceptibility, perceived severity of the illness, perceived benefits of behavior, and perceived costs or barriers to the desired behavior.

The model hypothesizes that actions related to an individual's health are dependent on a myriad of factors that occur simultaneously. These include the motivation to make issues of health noteworthy, the belief that one is vulnerable to the condition and thus perceives the condition as severe and life threatening. And finally, the belief that taking heed to a particular recommendation would cause a reduction in the threat which will come as a cost. This cost could be in time, emotional resources, or finances. The individual thus weighs the recommendation against the expense or impediment of action and consequently makes their choice.

Individuals vary gravely in their feelings of personal vulnerability and the perception of susceptibility influences preventive health behaviours.

2.2.4 Heritage Consistency Theory (Estes and Zistow, 1980)

This theory explains how much a person's lifestyle reflects his or her traditional culture. There is a spectrum of values indicating heritage consistency. According to the theory, an individual may possess value characteristics that are consistent with their heritage (traditional), otherwise, individuals possess value characteristics that are inconsistent with their heritage, values which may be acculturated or modern. The concept explains that the more one identifies himself or herself with a traditional heritage, the greater the chance there is that they will follow traditional health and illness beliefs and practices derived from their ethnocultural heritage.

This theory is essential to this study as it will aid in understanding the degree to which health behavior is influenced by lifestyles in both rural and urban communities. It explains the values individuals hold on to and how these translate into health behaviors.

2.3 Review of Related Studies

2.3.1 Illness Representation and Health Outcomes

Existing research argues that illness representation is an essential predictor of health behaviors and outcomes. It has been discovered that the variable can explain both physical and psychological outcomes, as well as medically unexplained symptoms (Hagger and Orbell, 2003). Hagger et al. (2017) incorporates moderating factors. This study explains that illness characteristics as well as personality and individual differences

are key moderators of representation effects on health outcomes. Kugbey et al. (2017), also assert that people tend to have varying perceptions of their health and illness. These perceptions are often independent of the actual physical conditions that are being suffered. A growing body of literature has investigated the potential influence of illness representation on health outcomes such as psychological distress.

Existing literature on previous pandemics indicate that illness representation plays a key role in predicting health outcomes such as psychological responses. Williams et al. (2012), conducted a cross sectional study involving 235 participants in Scotland with the aim of establish the levels of knowledge and state anxiety of participants about H1N1. The study also sought to ascertain the perceived risk of H1N1. Self-report measures of knowledge, anxiety, and perceived risk about H1N1 as well as the brief illness perception scale were used as measures for this study. Findings indicate that, there were low levels of knowledge about the causes and symptoms of H1N1. Additionally, the study also emphasized on the key role of illness representation in predicting psychological responses.

Similar findings from Vartti et al. (2009) revealed that though the Finns and Dutch were unaffected by the SARS pandemic, participants showed diverse levels of knowledge which in turn affected their levels of worry concerning their health risks as well as that of their families. This study was conducted during the SARS outbreak with the purpose of comparing knowledge, perception, behaviours and knowledge between the Finns and the Dutch.

2.3.2 Health Seeking Behaviour and Health Outcomes

Health seeking behaviour is a part of the bigger picture called health behaviour. It includes but is not limited to behaviours such as promoting good health, preventing illness as well as dealing with the deviation from a good state of health. Health seeking behaviour is said to be disrupted by the COVID-19 pandemic (Saah et al., 2021).

Several factors have been identified as predictors of health seeking behaviour including illness representation, psychological distress and other demographic variables like gender, age, educational level, and ethnicity (Neighbors et al., 2007).

Psychological distress according to (Obasi and Leong, 2009) influences attitudes towards health seeking among African Americans and the Black Caribbean. Findings from the study showed that an increase in psychological distress led to negative attitudes towards health seeking. The study sought to understand the relationship between psychological distress, acculturation and help seeking attitudes among people of African descent. A total of 130 participants with age ranged between 18 to 63 were sampled for this study. Psychological distress was measured using the Global Severity Index from the Brief Symptom Inventory.

Another study by Dai - Kosi et al. (2021), in Ghana sought to assess the level of psychological distress and health seeking behavior among patients with orofacial tumours. The study adopted a cross sectional design to arrive at its conclusion. A total of 272 patients aged between 18 and 83 years were purposively selected from 3 tertiary hospitals in Accra. Findings from this study showed that the type of condition

significantly influenced psychological distress among the patients. Additionally, findings showed that spirituality was the most significant predictor of health seeking behaviour.

Concerning health seeking among residents in rural and urban communities, de-Graft Aikins (2003) asserts that communities play a pivotal role in shaping health seeking behavior. Idriss et al. (2020) assert that urban areas are more likely to be influenced by western culture while rural settings on the other hand will be more skewed towards using traditional practices. Contrarily, de-Graft Aikins (2003) asserts that traditional knowledge is drawn on in explaining illnesses, however, it does not directly influence illness action. Findings from Hoeven et al. (2012) showed differences in health beliefs as well as health seeking behaviour and even the prevalence of infectious diseases between rural and urban communities. A study in Nigeria also reports that as many as 71% of rural dwellers report inappropriate health seeking behaviour during their last illness episode. The same study reports a relatively lower percentage of the population in urban dwellings.

2.3.3 COVID- 19 and Psychological Distress

On COVID-19 and psychological distress Anand et al. (2021), report that the COVID-19 pandemic has altered life routines and introduced additional stressors to the general population resulting in severe psychological responses and a mental health crisis. The study was conducted in India with the aim of identifying psychosocial factors that predicted distress among the Indian population. An online survey was conducted to address the objective. A total of 1060 respondents were recruited for this study. Findings from the study confirms the prevalence of high distress. Respondents between the ages 21 to 35 and females were reported to have high distress levels. Other groups of participants

who showed high distress levels included participants who had pre-existing conditions and also respondents who perceived COVID-19 as a serious illness. Groups who were likely to be distressed according to the study included those with higher social support and psychological capital. Distress was measured using the Kessler 6 scale.

Findings from Soza et al. (2021) concluded that the pandemic is having dire effects on mental health. High levels of stress, anxiety, and depression as well as low quality of life was reported among the Polish population as well. The study made use of a total of 700 participants aged 18 and above using an anonymous online questionnaire. This cross-sectional study sought to investigate the psychological impact of COVID-19 on the participants. Instruments used for the study includes The Revised Impact Scale and the Depression, Anxiety and Stress Scale, (DASS 21).

2.3.4 Illness Representation of COVID-19

Human behaviour is largely influenced by the knowledge and beliefs the population is privy to. Thus, the knowledge and beliefs individuals hold about the COVID 19 pandemic is likely to influence the course of the pandemic. Due to this reason, it is necessary to explore the knowledge persons hold concerning the pandemic.

According to Wilder-Smith (2021), COVID-19 may be new, however, corona viruses are not. Corona viruses are responsible for other illnesses such as the common cold and thus might similar symptoms to COVID-19, such as fever, cough, chills, and fatigue. There are however certain distinguishing symptoms that sets COVID-19 apart. It is thus necessary to compare COVID-19 to other illnesses so as to ascertain the extent to which the COVID-19 pandemic is viewed as a threat.

Eiguren et al. (2021) carried out a qualitative study on the elderly in Spain. A total of 115 participants from North Spain were sampled for the study with the aim of assessing the emotional and social representations of the COVID-19 pandemic. A free association exercise was elicited by the word COVID-19 and thus completed by the participants. Results showed that fear, nervousness, uncertainty, and insecurity emerged as negative emotions associated with COVID-19.

Liu et al. (2020), conducted a cross sectional survey on patients with COVID-19 in a hospital in the Hunan Province in China. A total of 118 participants were recruited for this study with the aim of evaluating the perceptions and mood states of the selected participants. The Revised Illness Perception Questionnaire as well as the Profile of Mood state were used as data collection instruments. This study concluded that family cluster patients have more negative illness perceptions of COVID-19.

Findings from Okereke et al. (2021), suggest that rural Africa is burdened with misinformation regarding COVID-19, which is largely due to the misconceptions about the virus. Low health literacy compromised access to accurate information as well as the influence of culture and religion have been identified as challenges linked with this burden of misinformation. The study makes mention of the belief that the genetic makeup of an African provides immunity against the virus.

2.3.5 Illness Representation and Health Seeking Behavior in Ghana

A qualitative phenomenological study done by Oppong Asante et al. (2017) explored illness representation and coping strategies among women with breast cancer. A total of eleven (11) participants were purposively sampled for this study. It emerged that

participants perception about the causes of illness was rooted in the biopsychospiritual model of illness. Participants relied on spirituality and social support as the main coping strategies.

Another study by Nyaaba et al. (2019) assessed illness representation regarding hypertension among Ghanaian migrants and non-migrant Ghananians. The study also sought to understand how this influenced their coping. A total of 55 Ghanaians were interviewed for this qualitative study. Participants were sampled from the Netherlands as well as urban and rural Ghana. Results from this study revealed that contextual factors from within participants' social and physical environment shape their illness representation and coping strategies. Participants in rural Ghana used traditional remedies due to financial difficulties.

Concerning health seeking among residents in rural and urban communities, de-Graft Aikins (2003) asserts that communities play an essential role in shaping health seeking behavior. Idriss et al. (2020) assert that urban areas are more likely to be influenced by western culture while rural areas on the other hand will be more skewed towards using traditional practices. Contrarily, de-Graft Aikins (2003) asserts that traditional knowledge is drawn on in explaining illnesses, however, it does not directly influence illness action.

2.4 Research Questions

The following research questions were posed in accordance with the reviewed literature.

i. What are the lay representations of COVID-19 compared with representations of well-known diseases?

ii. Are there differences in lay representation of illness among rural and urban populations?

iii. What factors hinder health seeking in the rural and urban populations?

2.5 Hypotheses

1. Illness representation will significantly predict health seeking behavior among adults in Ghana.
2. Age will significantly predict health seeking behaviour among adults in Ghana.
3. Illness representation will significantly predict psychological distress among adults in Ghana.
4. Gender will significantly predict psychological distress among adults in Ghana.
5. Participants in the Ghanaian urban populations will experience higher levels of distress compared to those in rural populations.
6. Participants in the urban Ghanaian population will have negative representation of illness as compared to those in the rural populations.

2.6 Operational Definition of Terms

Illness Representation: Lay representations, beliefs and expectations individuals hold about illness.

Psychological Distress: A state of emotional suffering characterised by symptoms of depression, anxiety, and tense feelings.

Health seeking behaviour: Any decision or action taken for any health-related problem.

Illness: An unhealthy condition of the body or mind.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

Chapter three presents all procedures employed in the investigation of illness representation and its influence on psychological distress and health seeking behaviour. It involves in detail all steps taken in data collection, the research design, setting, the population and sample techniques as well as the measures employed in the study. The ethical considerations are also described in this chapter.

3.2 Research Design

This study made use of a concurrent mixed method approach. Östlund et al. (2011) argues that the mixed method approach to research is particularly useful in healthcare research as only a broader range of perspectives can fully address the complexity of the phenomena being studied. This approach is essential to this study because it highlights the similarities and differences between particular aspects of the phenomenon under study. It includes the collection of both quantitative and qualitative data. Specifically, the study made use of the concurrent design using nested samples to achieve its objectives. In this type of mixed design, data for both the qualitative and quantitative aspects of the study were collected at the same time. Participants who filled the questionnaires and were willing to partake in the interview process were interviewed for the qualitative aspect of the study. Findings from both methods were integrated at the interpretation stage. The qualitative aspect of the study was done using an interview guide. For the quantitative aspect, the study employed the use of a survey.

3.3 Research Setting

The study was conducted in the Greater Accra and Volta Regions of Ghana. Both regions accommodate people of diverse cultural backgrounds making it suitable for the research. More so, the Ghana Health Service records show that the Greater Accra Region records the highest number of COVID-19 cases (Ghana Health Service [GHS], 2021). The Volta Region was selected in order to compare the Greater Accra Region with a region which has not recorded as many cases as the Greater Accra. In the Greater Accra Region, data for the urban study was sampled from Teshie Nungua in the Ledzokuku Krowor municipal District, while Domeabra- Obom in the Ga South District furnished the research with data for the rural population. Data for the urban population in the Volta Region was collected from Sogakofe in the South- Tongu District in the Volta region while data for the rural population was collected from Mafi Dove and Mafi Devime in the Central Tongu District.

3.4 Population

The target population for this study was adults in the selected communities. Criteria for inclusion was first; the individual must be an adult, aged 18 and above. Hence children below 18 years of age were excluded from the study. The exclusion was necessary because decisions regarding a child's health are usually made by the parents or guardians.

3.5 Sample and Sampling Technique

For the quantitative aspect of the study, a total of 240 participants were sampled, with 60 participants drawn from each research setting. Using G*Power 3.1.9.2, the research

sample size was calculated (Faul et al., 2007). It is a simple computer program designed to help social and behavioral researchers perform power analyses for statistical tests. The sample was generated using an analysis based on Cohen's (1988; 1992) acceptable power of.80, an alpha of 0.05, and a medium effect size of 0.15. The analysis determined that a minimum of 103 participants was required for the study.

It is advisable that the sample size in a qualitative study be large enough to allow the unfolding of new and richly textured understanding into the experiences of the participants but small enough for deep and oriented analysis (Vasileiou et al., 2018). Then again, Kindsiko and Poltimäe (2019) suggests that the composition of a sample also plays a role in determining the sample size in a qualitative study and heterogenous samples prevail in studies with more than 30 interviews. Thus, a total of 32 participants were recruited for the qualitative study. Each setting furnished the project with a total of 8 participants for the interview. The ages of participants for the interviews ranged from 18 years to 81 years. Table 3.1 gives a summary of the participants interviewed.

Table 3.1: Demographic Characteristics of Participants Interviewed

Participant	Age	Gender	Setting	Occupation	Religion
Participant 1	24	Male	Teshie	Student	Christian
Participant 2	58	Female	Teshie	Public Servant	Christian
Participant 3	26	Female	T/N Estates	Finance Official	Christian

Participant 4	21	Male	Nungua Buade	National Service Personnel	Christian
Participant 5	24	Male	T/N Estates	Administrative Assistant	Christian
Participant 6	30	Male	Teshie Camp	Civil Servant	Christian
Participant 7	34	Female	Tsui-Bleoo	Trader	Christian
Participant 8	23	Female	Teshie	Student	Christian
Participant 9	20	Male	Obom	Welder	Christian
Participant 10	47	Female	Obom	Farmer	Christian
Participant 11	18	Male	Obom	Student	Christian
Participant 12	35	Female	Obom	Trader	Christian
Participant 13	32	Male	Obom	Teacher	Christian
Participant 14	32	Male	Obom	Environmental Health Officer	Christian
Participant 15	55	Male	Obom	Peasant Farmer	Christian
Participant 16	41	Male	Obom	Pastor	Christian
Participant 17	63	Male	Dove	Farming/pastor	Christian

Participant 18	66/63	Female	Dove	Market woman	Christian
Participant 19	50	Female	Dove	-	Christian
Participant 20	55	Female	Dove	Trading	Christian
Participant 21	27	Female	Devime	Househelp	Christian
Participant 22	73	Female	Devime	Pensioner	Christian
Participant 23	81	Male	Devime	Retired Officer	Christian
Participant 24	28	Male	Sogakope	Nurse	Christian
Participant 25	28	Female	Sogakope	Field supervisor	Christian
Participant 26	20	Female	Sogakope	Student	Christian
Participant 27	21	Female	Sogakope	Student	Christian
Participant 28	21	Female	Sogakope	Student	Christian
Participant 29	20	Male	Sogakope	Student	Christian
Participant 30	22	Female	Sogakope	Farmhand	Christian
Participant 31	22	Male	Sogakope	Student	Christian
Participant 32	26	Female	Devime	Unemployed	Christian

T/N = Teshie Nungua

The convenience non-probability sampling technique was used to sample participants for the quantitative aspect of the study. This is because it aids the researcher to gather useful information that might not have been possible using probability sampling techniques. Purposive sampling was however used to sample participants for the qualitative aspect. Participants who took part in the quantitative part and were willing to partake in the qualitative aspect were sampled for this aspect of the study.

3.6 Measures

Three instruments were used to gather the quantitative data. These are the brief illness perception questionnaire to measure illness representation, while psychological distress was measured using the Kessler (10) and finally the general help seeking questionnaire was used to measure health seeking behavior.

Brief Illness Perception Scale (Weinman, et al., 1996)

The brief illness perception questionnaire is a rapid assessment for illness perceptions. The scale is made up of 9 items in total, rated from 0 to 10. The first 5 items assess cognitive perceptions, while 2 items assess emotions and mood, and 1 item assesses the degree of understanding. The last item is open ended requiring the respondent to rank the 3 most important causes of illness. According to Broadbent, Petrie, Main, & Weinman (2006) the test showed a good test re-test reliability and concurrent reliability with relevant measures. Cronbach reported for this study was 0.72. Scores range from 9 – 45 with higher scores indicating positive illness perception.

An overall perception score is arrived at by computing the total of 8 items on the scale. A higher score presents a more threatening view of illness.

Kessler 10 (Kessler & Mroczek, 1992)

The Kessler 10 is a non-specific psychological distress screening tool. It is a 10-item questionnaire that assesses a person's anxiety and depressive symptoms over a 4-week period. The scale also considers nervousness and stress symptoms and is widely used in both clinical and non-clinical settings (St-Pierre et al., 2019). The test is measured on a 5-point Likert scale. The instrument has been found to have acceptable psychometric properties with a Cronbach Alpha of .80 (Vissoci et al., 2018). Similarly, for this study a Cronbach Alpha of 0.87 was arrived at.

General Help Seeking Questionnaire (Deane et al., 2001)

The General Help Seeking questionnaire is primarily used to assess help seeking intentions from different sources and for diverse reasons. Previous studies have established that the intention-behaviour relationship has proven to be generally stronger than other constructs (Wilson et al., 2005). The instrument makes use of a matrix format that allows for modification to suit the purpose and need for the research. Thus, for this study, the matrix was slightly adjusted to assess for physical and psychological issues only. The range of people listed in the original version was however maintained. The scale is measured on a 7-point lickert scale ranging from 1 (extremely unlikely) to 7 (extremely likely). Scores were combined for each matrix and a higher score was an indication of higher intentions which translates to behaviour. A Cronbach alpha of 0.81 was arrived at.

The study made use of semi structured interviews as the main instrument for the qualitative aspect of the study. A brief interview guide was used to collect the data. It

comprised two sections, a demographic section which obtained information on the demographic information of all participants and the main section of the guide which assessed illness representation, psychological distress, and health seeking behaviour. The interviews focused on the representation of COVID-19 as compared to other illnesses as well as the views of individuals concerning health seeking amidst the pandemic. Examples of questions in the guide includes, "How do people treat individuals who have been infected by the covid-19?" and "What are your personal beliefs about COVID-19?" Interviews were audio recorded with the consent of the participants.

3.7 Procedure

The research process was initiated after the Review Board granted ethical approval. The Ethics Committee for the Humanities provided the ethical clearance for the research to be carried out with identification number ECH 137/20-21. To begin, a pilot study was carried out to determine the internal consistency of the various measures. A pilot study is a smaller-scale study that precedes the main trial and aids in determining the study's validity (In, 2017). A pilot study is also necessary because it aids in the planning and modification of the primary study. A total of 50 people were recruited for the quantitative aspect of the pilot, while two pilot interviews were conducted to determine the effectiveness of the interview guide in capturing relevant information for the study. The pilot analysis revealed that participants understood the items on the questionnaire. Despite the small sample size, the pilot results indicated that the measures would be reliable in a larger sample.

Subsequently, participants were selected by the researcher for the study. Participants who were willing to be involved in the study were recruited. The use of coercion was avoided. Participants were first recruited to fill the questionnaires; individuals were selected from the various communities and their consent sought to participate in the process. Data was collected in all the four communities by going from house to house and also in taxi stations and other areas where people had gathered to go about their duties like the market square. However, in the rural communities, the researcher first sought the approval of the chiefs or leaders of the community and then an announcement was made to announce the presence of visitors in the town. The purpose for the visit was also communicated and residents encouraged to welcome us to their homes and places of work.

The interviews were conducted concurrently using the researcher's semi-structured interview guide. Individuals who completed the questionnaires and agreed to be interviewed for the qualitative component of the study were interviewed. Depending on the participant's preference, all interviews were conducted in either English or Ewe. The interview sessions lasted anywhere from 20 minutes to an hour. In order to validate the findings with participants, probe questioning was employed. Clarification questions were used to aid eliminate misunderstanding of the points the raised by participants also, participants were encouraged to cite specific examples in order to paint a better picture of their opinions and beliefs. Finally, the use of evaluation questions was employed so as to enable the participants extensively and honestly express their opinions on the subject matter. For their time, each participant was compensated with a package containing toiletries. The collected data was then prepared for analysis.

3.8 Analysis of Data

Data collected quantitatively was analysed using various statistical tests. Hypotheses 1, 2, 3, and 4 were analysed using hierarchical regression analysis to ascertain whether illness representation and some demographic characteristics will significantly predict health seeking behaviour and psychological distress. Because one-way analysis of variance (ANOVA) is used to determine if there are any statistically significant differences between the means of three or more independent groups, Hypothesis 5 was examined using the One-way ANOVA (Tabachnick et al. 2007). Hypothesis 6 was analysed using the independent t-test to ascertain the difference between the participants in the rural and urban areas on illness representation.

The qualitative data collected from the interviews was transcribed and analysed using thematic analysis. Thematic analysis of the data involved 6 major steps according to Braun and Clark, (2017). The initial steps included transcription of the data collected. Here all recorded data was translated into written documents manually. Transcription was done manually to prevent errors that occurred due to diverse accentuations while using the data analysis software.

Next was the familiarisation process. This started during transcription because listening and typing out the recordings provided an opportunity to get familiar with the data. Nonetheless, a careful reading of the transcribed data followed with the theoretical lens in view so as to identify how these are echoed in the data. At this point, patterns were also identified.

Finding codes was the next step in the thematic analysis process. At this stage, relevant pieces of data which answer the research questions were identified and noted. Data driven codes were mostly derived from the data set, however, latent codes were also welcomed.

As soon as coding was completed in the entire data set, time was then taken to identify patterns. Patterns that were most relevant for answering particular questions were identified. The frequency of appearance of particular codes was noted to at this stage.

From the codes, themes and sub-themes were then derived. This was achieved by searching and reviewing the codes. After finding the initial themes, the process was reviewed, and the themes finalized.

The final themes and sub-themes derived from the data were presented in the light of empirical evidence concerning the focus of this research.

Establishing Rigour in the Qualitative Study

Rigour according to Nowell et al. (2017) in a qualitative study is a way to establish trust or confidence in the findings of the study. It allows the researcher establish consistency in the methods used over the period of the research. It also provides an accurate representation of the population studied. Unique components of the qualitative aspect of this research includes credibility, transferability, consistency, and neutrality.

Credibility

Credibility refers to the confidence in the study's veracity. It responds to the issue of whether or not the study measures what was actually intended. To achieve this, transcripts were reviewed individually and similarities within and across participants were identified. Iterative questioning and probe questioning which ensured that data collected was comprehensive was used. Regarding probe questioning, clarification questions were used to aid eliminate misunderstanding of the points the raised by participants also, participants were encouraged to cite specific examples in order to paint a better picture of their opinions and beliefs. Finally, the use of evaluation questions was employed so as to enable the participants to extensively and honestly express their opinions on the subject matter. Peer and academic reviews of the results made it possible to shape and redefine the results.

Transferability

This refers to the ability to transfer research findings or methods from one group to another. To achieve this in this research, the same data collection method was employed in the different locations. A thorough description of the method of collection and the duration of the data collected was given to allow results to be understood in the context of participants and the geographical area, in which the research was carried.

Consistency

This refers to reliability in quantitative terms. To Achieve this, peers were involved in the process of analysis, identifying the themes and subthemes. Also, a thorough description

of the research methods as well as the step-by-step repetition of the study to enhance findings was also necessary to establish consistency.

Confirmability

According to Nowell et al. (2017) once consistency, credibility and transferability have been achieved, confirmability occurs. This refers to how objective a study finding is. Connelly, 2016 detailed notes of activities decisions and analysis during the research process were kept ensuring that the findings were rid of researchers bias and truly reflected participants experiences and opinions.

3.8 Ethics

The Ethics Committee for Humanities was consulted for ethical approval. Informed consent, an ethical consideration in research, requires that participants be fully informed about the procedures and risks involved in research before agreeing to participate. In the study, informed consent was used to explain and provide participants with detailed information about the study's purpose.

Participants were made aware of the minimal risk involved in the research. However, participants were also notified that if during the interview process, they should be in any form of distress the service of a licensed psychologist will be sought to provide psychotherapy to help ease the distress. The researcher assured the participants' confidentiality with a verbal statement put in strict privacy or secrecy. Participants were

also assured that their information would not be shared with anyone who was not directly involved in the study.

To protect the privacy of the respondents, pseudo identification was used, thus treating all personal information of participants in anonymity.

COVID-19 protocols were observed during the interview process. Social distance between the interviewer and the respondents as well as the wearing of face masks and washing of hands were employed by both the interviewer and the participant to reduce the risk of infection.

CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

The primary goal of this study was to ascertain the influence of illness representation on psychological distress and health seeking behavior. Also, the study sought to explore the lay representations of new diseases like the corona virus disease among Ghanaians and compare it with the representations of other known diseases. This study was conducted in 2 phases. Both the quantitative and qualitative data were collected concurrently. This chapter presents the findings from both aspects of the study. The analysis from the quantitative section is presented first followed by analysis from the qualitative aspect of the study. Five hypotheses were tested using hierarchical regression analysis and ANOVA, this was in line with the research objectives. The qualitative results were discussed in themes and sub-themes.

4.2 Preliminary Analyses

Preliminary analyses of the quantitative data gathered are presented in four sections. These include the analysis of the distribution of the variables, reliability analyses, descriptive statistics and finally, the computation of the correlations between all variables.

The normality of the data was verified. The analysis illustrated in the table below reveals that the variables for the study are normally distributed. Normality tests for the kurtosis and skewness revealed no challenges as all the scales used for the analyses had values

ranging from between ± 1. All variables are thus cleared to be used in the analyses. Table 4.1 below illustrates the results of the mean, standard deviation, kurtosis, skewness, and internal consistencies.

Table 4.1: Mean Scores, Standard deviation, Normality, and Internal Consistency of Scales

	Cronbach's Alpha	M	SD	Skewness	Kurtosis
Kessler 10	.87	20.95	7.76	.69	.31
General Help Seeking Questionnaire	.81	76.22	20.54	.19	.31
Brief Illness Perception Questionnaire	.72	46.20	13.10	-.57	.31

M= Mean SD= Standard Deviation

As illustrated in table 4.1, the reliability coefficients reported for the Kessler 10, General Health Seeking Questionnaire and the Brief Illness Perception Questionnaire are .87, .81 and .72 respectively. Cronbach's alpha is a measure of the internal consistency of a scale. The internal consistency describes the interrelatedness of all items on the scale.

Cronbach's alpha ranges from 0 to 1. Acceptable values of alpha ranges from 0.70 to 0.95. Thus, the reported values of all the scales used in this study meet the requirement.

The correlation between the various variables used in the study was also analyzed and the results are presented in the table below.

Table 4.2: Pearson Moment Product Correlation Matrix among the Study Variables

	1	2	3	4	5	6	7	8
1. Gender	1	-.01	-	.09	-.15*	.18**	.01	.06
2. Age		1	.63**	.21**	.05	.10	.27**	.14**
3. Marital Status			1	.15*	.03	.15*	.19**	-.05
4. Education				1	-.01	.22**	.13*	.00
5. Religion					1	.06	-.04	-.03
6. K10						1	.04	.07
7. GHSQ							1	.20
8. BIPQ								1

K10= Kessler 10, GHSQ = General Help Seeking Questionnaire, BIPQ = Brief Illness Perception Questionnaire, * Correlation is significant at 0.05 level (2-tailed), ** Correlation is significant at 0.01 significance level.

At the significance level of 0.05, the following variables correlated, gender and religion, Marital status and education, Education and Health Seeking. Also, at the significance level of 0.01, there was a correlation between the following variables, Gender and Psychological Distress, Age and Marital Status, Age and Education, Age and Health Seeking, Age and Illness Perception, Marital status and health seeking behaviour and education and psychological distress.

For the qualitative data, preliminary analysis included the initial steps of the thematic analysis process. Data was translated from recordings to written data. After transcription was done manually, the familiarization stage followed after which initial codes were derived from the data set. At the familiarization stage, the data transcribed was carefully read and re-read to identify the thoughts echoed by the respondents. Patterns were also identified, and the codes made ready.

4.3 Testing for Hypotheses

A total of 6 hypotheses were tested in this study.

Hypotheses 1 and 2 sought to find predictors of health seeking behaviour. Hypotheses 1 states that Illness representation will predict health seeking behaviour in the study population. Hypothesis 2 also states that age will predict health seeking behaviour. Both hypotheses were supported. The table below gives a summary of the analysis.

Table 4.3: Results of hierarchical regression analysis showing the demographic variables and illness representation as predictors of general health seeking behaviour.

Predictors	B	SEB	B	t	P	ΔR^2
Model 1						0.11**
Gender	-1.00	2.81	-0.02	-0.36	0.72	
Age	3.66	1.37	0.22	2.68	0.01*	
Marital status	1.26	2.28	0.05	0.55	0.58	
Educational Background	3.09	1.35	0.17	2.29	0.02*	
Religion	-2.15	2.95	-0.05	-0.73	0.46	
Study site	3.40	1.44	0.18	2.36	0.02*	
Model 2						0.03*
Gender	-1.70	2.78	-0.04	-0.61	0.54	
Age	2.79	1.38	0.17	2.01	0.05	
MS	2.49	2.29	0.09	1.08	0.28	

Educational Background	3.29	1.34	0.19	2.47	0.01*
Religion	-1.92	2.91	-0.04	-0.66	0.51
Study site	3.59	1.42	0.19	2.52	0.01*
IP	0.29	0.10	0.18	2.76	0.01*

Note: PD= psychological distress, IP= Illness Perception questionnaire. $\Delta R^{2} = 0.11$, (p =0.00) for step 1, $\Delta R^{2} = 0.03$, (p =0.01) for step 2. ** p< 0.01, * p < 0.05.

In model 1 of table 4.3 which included the demographic variables, the model was significant. [$\Delta R^2 = 0.11$, p= .00, step 1] indicating that the demographic variables entered in the first model significantly predicted health seeking behaviour. The first step explained 10.6% of the variance in general health seeking behaviour.

Observing the second model where illness representation and age were entered as independent variables, the model was significant [$\Delta R^2 = 0.03$, p= 0.01, step 2] indicating that illness representation and age significantly predict general health seeking behavior after controlling for the demographic variables. At step 2, the total variance explained by the model as a whole was 13.4%, F (6, 230) = 4.53, p< 0.01. The control measures explained an additional 2.9% of the variance after controlling for the demographic measures. R^2 change =2.9, F change (1, 229) = 7.601, p > 0.05.

Looking at the beta coefficients, it was observed that age (β= 0.22, p = 0.01), study site (β=0.18, p =0.02), illness representation (β=0.18, p = 0.01) and educational background (β= 0.17, p = 0.02) were independent predictors of general health seeking behavior.

Hypotheses 3 and 4 sought to find predictors of psychological distress in the study population. Hypothesis 3 which stated that illness representation will significantly predict psychological distress was not supported, however, hypothesis 4 which predicted that gender will significantly predict psychological distress was supported. Table 4.4 below gives a summary of the analysis

Table 4.4 Results of hierarchical multiple regression analysis showing the demographic variables and illness representation as predictors of psychological distress.

Predictors	B	SEB	B	T	p	ΔR^2
Model 1						0.09**
Gender	2.65	1.01	0.17	2.62	0.01*	
Age	-0.09	0.49	-0.01	-0.17	0.86	
Marital status	1.07	0.82	0.11	1.30	0.19	
Educational Background	1.20	0.49	0.19	2.46	0.02*	

Religion	1.41	1.06	0.08	1.32	0.19	
Study site	0.00	0.52	0.00	0.00	0.99	
Model 2						0.01
Gender	2.54	3.41	0.16	2.51	0.13	
Age	-0.21	1.01	-0.04	-0.04	0.68	
Marital Status	1.24	0.51	0.12	0.12	0.01*	
Educational Background	1.23	0.84	0.19	2.52	0.01	
Religion	1.44	0.49	0.86	1.35	0.18	
Study Site	0.28	0.52	0.00	0.05	.96	
IP	0.41	0.38	0.07	1.07	.28	

Note: IP = Illness Perception Questionnaire, $\Delta R^2 = 0.09$, ($p = 0.00$) for step 1, $\Delta R^2 = 0.01$, ($p = 0.28$) for step 2, ** $p < 0.01$, *$p < 0.05$.

In model 1 of the table 4.4, which looked at the demographic variables, the model was significant [$\Delta R^2 = 0.09$, $p = 0.00$, step 1] indicating that the demographic variables significantly predicted psychological distress. The first step explained 9.1% of the variance in psychological distress.

In model 2 where illness representation and gender were entered as independent variables, the model was not significant indicating that illness representation and gender did not predict psychological distress after controlling for the demographic variables. At step 2, the total variance explained by the model as a whole was 9.5%, F (7, 231) = 3.48, $p < 0.05$. The control measures explained an additional 0.5% of the variance after controlling for the demographic measures. R^2 change =.05, F change (6, 232) = 3.86, $p < 0.05$.

Looking at the beta coefficients, educational background ($\beta = 0.19$, $p = 0.02$), gender ($\beta = 0.17$, $p = 0.01$) and marital status ($\beta = 0.12$, $p = 0.01$) were observed to independently predict psychological distress.

Hypothesis 5

Hypothesis 5 states that participants in the urban population will experience higher levels of distress as compared to participants in the rural population. A one-way ANOVA was performed to compare the effect of the different study sites on psychological distress. Tukey's HSD test for multiple comparisons found that the mean value of psychological distress did not differ significantly.

Table 4.5: One-way ANOVA comparing the effect of the different study sites on psychological distress.

Variable	Rural		Urban		F	P
	Obom	Mafi	Sogakope	T/N		
Psychological Distress	19.91 6.67	23.05 8.14	23.10 8.34	17.73 6.48	7.33	.000

Table 4.8: Post Hoc Analysis

Tukey HSD

Study Site	Study Site	Mean Difference	SE	Sig	95% Confidence Interval	
Obom	Mafi	-3.13	1.37	.10	-6.68	.41
	Sogakope	-3.18	1.37	.10	-6.68	.36
	T/N	2.18	1.37	.38	-1.41	5.32
Mafi	Obom	3.13	1.37	.10	-.41	6.68
	Sogakope	-.050	1.36	1.00	-3.57	3.47

	T/N	5.31*	1.36	.00	1.79	8.84
Teshie-	Obom	-2.18	1.37	.095	-.36	6.73
Nungua	Mafi	-5.31*	1.37	1.00	-3.47	6.73
	Sogakope	-5.37*	1.36	.001	1.84	8.89

Note: * *p* < *.05, T/N = Teshie Nungua*

Hypothesis 6

Hypothesis 6 states that participants in the Ghanaian urban population will have a negative representation of illness as compared to those in the rural population. An independent t- test was used to analyse this hypothesis. Table 4.5 below provides a summary on the results of this analysis.

Table 4.5: Results of the Independent t-test showing the comparison between rural and urban areas (study site) on illness representation.

Study Site	***N***	***Mean***	***SD***	***df***	***t***	***p***
Rural	120	47.23	13.06	238	1.22	.11
Urban	120	45.17	13.11			

Note: p > 0.05.

The result from the table above indicates that there is no statistical difference between participants in the urban population (M= 45.17, SD = 13.11) and those in the rural

population (M= 47.23, SD = 13.06) on illness representation, t (238) = 1.22, p > 0.05. Thus, this hypothesis was not supported.

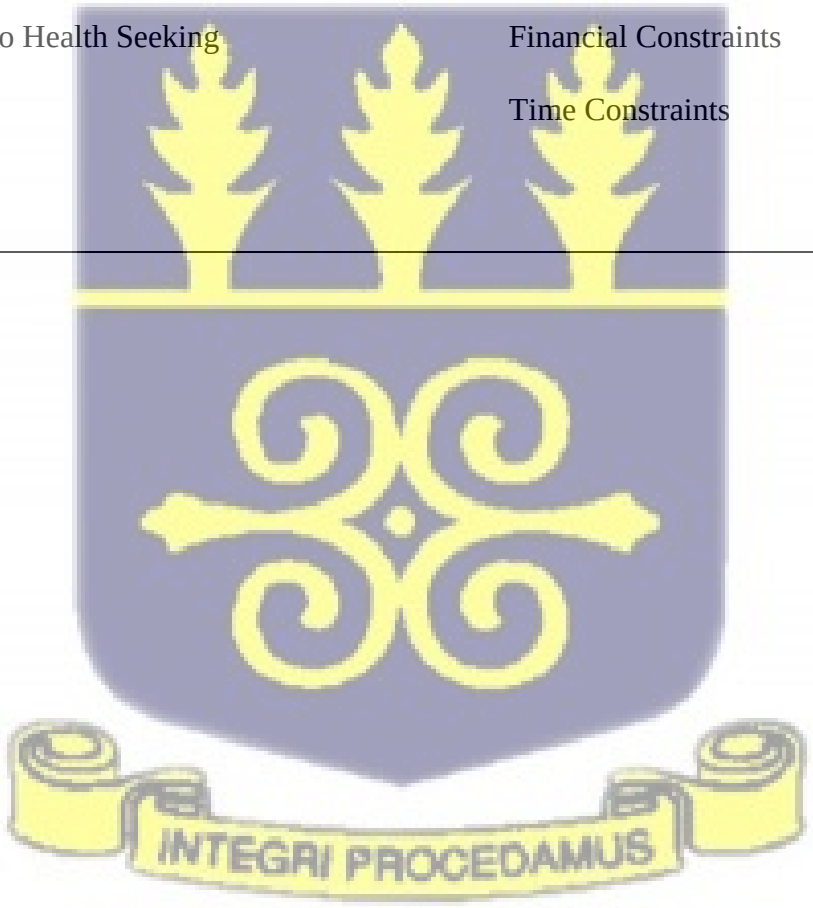
4.4 Qualitative Results

The results of the in-depth interviews with the respondents are presented in this section. It highlights the main themes and sub-themes that emerged from the transcript analysis. There are sub-themes for each theme that capture important voices expressing the perspectives or experiences of the participants. Alphanumeric codes were used to identify the participants to prevent disclosing their identities and to ensure the privacy of their comments. For example, P1 represents Participant 1. (See table 3.1 above). The themes and their respective sub-themes are summarized in the table below:

Table 4.9: Summary of Themes and Subthemes

Themes	Sub-themes
Pluralistic views about the causes of Illness	Physical
	Spiritual
Knowledge about COVID-19	Mode of transmission
	Symptoms of Illness
	Duration of Illness

General Beliefs about COVID-19	Illness Description
	Comparative illnesses
	Consequences of Illness
	Illness Control
	Duration of Illness
	Illness Susceptibility
Emotional Reactions towards COVID-19	Fear
	Social Stigmatization
Barriers to Health Seeking	Financial Constraints
	Time Constraints



4.5 Pluralistic Views about The Causes of Illness

This theme captures the general views of participants about the causes of illness. The narratives of all participants prove that participants did not subscribe to just one view about the causes of illness. Causes of illness were attributed to either spiritual or physical factors. This information led to the formation of two sub themes.

4.5.1 Physical Causes of Illness

Majority of the participants stated that they believed illness was caused by physical factors, which includes poor living conditions, poor diet, genes, stress from work and overthinking. These factors, they report, are some of the main reasons why people become ill. The quotes below illustrate this:

Some are from hygiene… hygiene… also if some illnesses are passed on through blood. Some also just happen suddenly when you get scared. You have to keep yourself well and take care of your area else it will cause certain illnesses like malaria and typhoid fever. [Participant 22, Female, Age: 76]

… in this community where we live, I will say people do know that cleanliness is one factor that when you are not observing you will be sick. And then, presence of mosquitoes giving malaria. Apart from that they also have this belief in spiritually causing illness. Ahuh so that is the main causes of illness that they think. [Participant 14, Male, Age: 32]

4.5.2 Spiritual Causes of Illness

For the spiritual causes of illness, few participants believed that illnesses could be caused by witches or wizards and also by black magic or Juju. Aside their beliefs, participants also reported that people in the society subscribed to these beliefs about the spiritual, influencing the physical and causing illness. These views are illustrated in the quotes below,

Based on where I live, people believe in the spiritual aspect as well. They believe that lesser gods can cause illness, "juju" that's what we call it. [Participant 24, Male, Age: 28].

From the quotes above, it is obvious that the views of the participants are not only influenced by their own thoughts or experiences but also by the societies in which they live.

4.6 Knowledge About COVID-19

Considering Covid 19 is the most recent pandemic that has hit the world and wreaked havoc across countries around the globe, this theme identifies the knowledge participants have acquired about the Covid 19 and whether or not this knowledge is influencing their way of life in any significant way. The analysis generated the following sub-themes, Mode of transmission, Duration of Illness and Symptoms of the Illness. These sub-themes are further discussed using quotations from participants in the subsequent paragraphs.

4.6.1 Mode of Transmission

Most participants had fair knowledge about the mode of transmission of COVID-19 and could explain in basic language the means through which one could get infected. The quote below gives an example of such a comment,

Oh, they said the virus is in the air. If you get too close to someone who has been infected with the illness when they talk you can also be infected. Also, if the person touches their nose and shakes you or hugs you, you can also be infected. Different things have been said about how this disease is spread. Also, if you sit in a vehicle with an infected person. And also, if you refuse to wash your hands and wear your nose masks. Actually, a lot has been said, so whatever they have said, we are following. [Participant 7, Female, Age: 34]

Yeah, I know it a virus yeah and it can be spread from one person to the other from droplet yeah hmmm talk about the prevention and everything of and some ways you can prevent this is like wearing nose mask and....and ensuring some distance between you and…. And the next person… I will say that… [Participant 27, Female, Age:27].

However, few of the participants were not exactly clear about the mode of transmission and added information that was not necessarily right according to research. The quotes below buttress the point made above,

Ideally the illness is through unhealthy environment, you see something like eerr where we dump refuse you see eerr you see when you're closer to or where you have open defecation where people squat out somewhere and this flies get in touch with it and then you see so there's some difference uh huh but this one you see I don't think when you're here alone this covid will come to you unless you go closer to somebody or where that place has been

infected with covid that's why we use eerr every 30 minutes you have to use this thing sanitizer to clean your hand so unhealthy situation is the most dangerous place whereby people attract, get more illness from that place because when you live in bad environment you know this diarrhea, how do you call the senior……diarrhoea or what. [Participant 15, Male, Age: 55].

Nonetheless, the narratives showed that, generally, participants could talk about the common and basic modes of transmission of this virus.

4.6.2 Duration of the Illness

Concerning this sub-theme, participants had varying views on the exact duration of the illness should one get infected. While many participants were of the view that the illness was short term, few participants disagreed with this assertion stating that the nature and metamorphosis of the virus makes it difficult to actually ascertain how long it will take for an individual to recover and if they actually will recover totally.

It depends on the individual and it depends on the severity of what you got and how fast it was able to multiply in your system and what it destroyed so if it's just the taking of the medicine and it helps and that is faster, and you don't need this the oxygen and those things then but there are extreme cases. [Participant 2, Female, Age: 58]

Most participants were of the view that the duration of the illness was largely dependent on other factors such as the complications that the individual has, the individual's immunity

and even other factors which they could not explain. The extracts below illustrate this point.

4.6.3 Symptoms of the Illness

Most participants were able to identify the most common symptoms of COVID-19. In fact, in the description of the illness, participants were more comfortable listing the symptoms of the illness. So, they made comments such as the extract quoted below,

COVID-19 is a striking disease that has come to Ghana for some time now and very dreadful and the signs they say you feel headache, you cannot breathe properly, cold, coughing these are some of the signs we are told… covid signs [Participant 23, Male, Age: 81].

4.7 Beliefs About COVID-19

Beliefs ordinarily hinge on knowledge. Despite the knowledge garnered, some participants still hold on to certain beliefs and ideologies concerning the description and severity of COVID-19 which is contrary to scientific evidence presented. This theme is further broken into 5 sub- themes which are discussed in the subsequent paragraphs.

4.7.1 Illness Description

While a section of the participants believed that COVID-19 is existent, dangerous and a strange illness taking the lives of people around the globe, others hold on to contrasting views on the phenomenon. Experience seems to be a determining factor as to whether or not participants believe in the existence of the illness. Participants who had experienced

first-hand the havoc wreaked by the pandemic held dispositions that mirrored their experiences, and thus made remarks such as the quotation below,

…its real and its serious because I have a family member who got some who had an encounter with that and God being so good, he's okay but just that when you're recovered, you're not fully recovered from it. [Participant 26, Female, Age; 20]

On the other hand, the second group of participants express their doubt about the existence of the virus, describing it as hearsay because they have not seen or heard of anyone who has ever gotten infected. These responses were mostly found in the rural settings, even though few participants in the urban settings held such beliefs as well. The extract below clearly explains the above point,

Actually, I say, hardly before I do believe it… uh huh seeing is believing. If you haven't seen anything, you haven't experienced anything… you see when you experience something and you touch hot substance it is then that you will feel that eeeii this thing… or even electric wire, if you get a shocked then it will tell you that if you don't take care, you'll die then you'll be electrocuted. [Participant 15, Male, Age: 55].

Certain participants also described the illness as strange or mysterious. Few participants even attributed its cause to spiritual factors making remarks such as

When you get asthma, you cannot breathe and you will also be coughing and so I think this illness is spiritual asthma. Because you can just touch someone and get asthma… errhnn that is why I think that it is spiritual asthma. [Participant 9, Male, Age: 20].

Yeah, the old people around are saying they don't believe in this covid thing but they think eeermm in Ga they say "ay3i ahela" meaning it is sickness which was brought by witches and wizards. You know Africans and our beliefs. So, they are saying that they don't think it's something serious like that so once you're a believer and you worship God you shouldn't be afraid of the virus but I think that is a misconception yeah that they must do away with [Participant 4, Male, Age: 24].

4.7.2 Comparative Illness

Generally, participants' beliefs about the severity of COVID-19 were in comparison to other already known illnesses. Illnesses such as HIV/AIDS, malaria, asthma, cancer, and typhoid were listed as similar to COVID-19 in a way, with malaria being pointed out the most.

Even though participants likened COVID-19 to illnesses they already knew about, most participants also pointed out differences that they believed existed between illnesses they already knew and COVID-19. The intensity and frequency of symptoms stood out as the main difference. The extract below expresses the sentiments of participants concerning the point stated above,

The only thing that I think separates covid 19 from the normal malaria is the difficulty to breath. Because you have runny nose in malaria, you even feel feverish with malaria, you cough, and you even have a headache [Participant 5, Male, Age: 24].

In fact some of the symptoms of covid are actually like malaria eermm but bi don't think malaria, for me I even think malaria is severe than covid, I've seen malaria kill more people than covid did to us. I see malaria attack many people than covid too, in my area I

don't know how many people that I know have covid but even in my house just about a month ago almost everybody has been attacked so I even see malaria as severe [Participant 16, Male, Age:41]

4.7.3 Consequences of the Illness

Participants unanimously believed that the utmost consequence of COVID-19 is death. However, many of the participants insisted that an intervention could stop or delay death. These interventions could either be physical or spiritual in nature. Certain participants insist that, due to the strange nature of the illness, it would require some divine intervention to prevent someone from dying. The extract below explains this.

…Unless they go to the hospital. As for at home I just think that they should wash their hands often. And also wear the nose mask. If God shows them mercy, then they will be fine. Our first is to call God, and God's friends(doctors) are also making medicine for us so if God lifts his hands, then you can be better [Participant 19, Female, Age: 50].

Others also believe that medical interventions could be beneficial. However, they remarked that it would also depend on how early the illness is identified and urgency with which the illness is treated.

It is a serious illness paaa, (very serious illness) because if it infects someone, it will make you cough and feel cold and if you do not go to the hospital quickly, then you will die. [Participant 21, Female, Age: 27].

4.7.4 Illness Control

For this sub-theme, codes identified include personal control and treatment control. Participants believed that both worked hand in hand. According to most participants individuals can gain control over this illness by adhering to the safety protocols and also a healthy diet. Even though most participants due to various reasons did not adhere totally to the safety protocols, they still held on to the belief that these protocols are able to give some amount of protection against COVID-19.

Participants acknowledge that the safety protocols are not fool proof in themselves and that external forces which could be spiritual in nature could also protect one from this illness.

Because, since I was born, no one has used the nose mask and I have seen before. But because of the way the illness is serious when you get it if God, does not deliver you, it will kill you. That is why now we use the nose mask and the sanitizer. At first, we only see it in the hospital, we did not even know the name, we just see the nurses, if they want to put the thing in your armpit, they use it to clean it before putting it there. But now this thing has become so common that even us in the village, we are using it. That means this illness is so serious that when it touches you, if you do not treat yourself well, you will die [Participant 10, Female, Age: 47].

*It is possible you know it is possible though eerr I am trying my best to observe the protocols but eerr it is not that easy it is God. Aside God eerr you don't know who you might come into contact with or what you might touch, and you end up picking these viruses, so we have to be extra careful and then we have to do our best to keep up to the protocol*s [Participant 14, Male, Age: 32]

Concerning treatment control, participants are of the view that boosting the immune system through diet and other home remedies was just one way of getting treated for COVID-19. Other avenues for treatment identified by participants included going to the hospital which most participants subscribed to. A few other participants believe that herbal medication was an alternative. Extracts are quoted below,

Though people believe in herbal medicine, people believe in eermm the spiritual that's going to the prophets, and then going to the shrines, I would advise as an Environmental Health Officer that the best place to seek help eerr in terms of covid is to go to the hospital [Participant 14, Male, Age; 32 years].

I thought they talk about boosting, about boosting your immune system uh huh so taking some of the natural foods that they have described at least and the herbs [Participant 16, Male, Age; 41 years].

4.7.5 Illness Susceptibility

Narratives showed that most of the participants acknowledge that everyone is susceptible, however, a determining factor that was identified across the narratives was the ability to keep up with the safety protocols. Participants were of the view that people who threw caution to the wind and did not adhere to the safety protocols were likely to get infected.

Errh the people who do not follow the rules. Some people do not care, they do not wash their hands even after using the toilet, and they do not cover their food. These people. [Participant 30, Female, Age: 22].

Few of the participants, however, were of the view that certain groups of people like children and the aged were more susceptible to the illness than the youth.

The elderly because, I feel their immune system is a bit compromised. I mean both children and the elderly, so their system might not be able to fight the virus as much or as well as those within the young adult population. I also feel people who have not been vaccinated are likely to catch the virus. I mean comparing a young person whose immune system is even strong to an elderly person who has taken the vaccine, I will say the young person is more susceptible to contracting the virus. [Participant 8, Female, Age: 23].

4.8 Emotional Reactions to COVID-19

Participants described the emotional reactions to the COVID-19 pandemic using diverse vocabularies. Feelings such as fear, discrimination, and avoidance were identified in the narratives and are discussed in the subsequent paragraphs.

4.8.1 Fear

On the issue of fear, there were diverse views, while some participants believe that there is no more fear, others expressed the view that the feeling of fear had not totally diminished as some might think. This feeling of fear had an impact on how seriously people adhere to the safety protocols according to the participants. Fear of death was highlighted as the main feeling of fear regarding COVID-19. Others also mentioned the fear of infecting others close to them and also fear of feeling so ill that they will be unable to work and fend for themselves. The quotations below elaborate the points raised,

Because we do not care again. A lot of people do not wear nose masks like they used to. Even in trotro. People do not wash their hands like they used to. Nobody is afraid.

Uh huh initially before the lockdown people were…. we were all afraid and we knew by year, 2 years, 3 years the population of Ghana will reduce drastically you see were afraid but now eerr it got to a time we saw most of them have been cured and therefore it was only a few people that have been quarantined. You see so the fear is now wading away. [Participant 15, Male, age; 55 years].

4.8.2 Social Stigmatization

Participants held the belief that it was not right to discriminate against people who have tested positive for COVID-19. Despite this knowledge, their stand about avoiding them for safety's sake did not change.

They shouldn't be issues of stigma but it is something that happens and all and we have classified all……we look at the disease in the way that when someone contracts it, we think eerr I don't know how to describe it but like the person is a danger to us and then we see the person in a different way, we picture the person a different way so a lot of people eerr become stigmatize and stuff like that uh huh. I have an instance in my church where a woman whose daughter doesn't stay in this community, stays somewhere in Accra happens to contract this covid-19 and then the day this woman came back from Accra, though she was confirmed negative, you could see that people don't want to go close to her though she was confirmed negative people wouldn't want to go closer to her even if she sits beside somebody the person will get up from there and you know… [Participant 14, Male, Age: 32].

According to the participants, shame is a by-product of the social stigmatization that came with contracting the virus. Even though most participants agreed that it was needless to feel ashamed as COVID-19 is just like any other illness, participants mentioned that people still feel ashamed, and this could be the reason why people do not even report the symptoms they feel in case they end up getting diagnosed of COVID-19.

people do get ashamed of the illness, even if it's your family member people will be, you'll also be ashamed maybe your daughter, your mother, your brother gets the virus and then people will be pointing you that your household, they won't go there because the virus is there, somebody is affected. Then you'll also feel ashamed even not to tell anybody, if you're seeing the symptoms, you won't even, people say they won't tell people so that they know.

4.9 Barriers to Health Seeking

This theme explains the challenges with health seeking that participant highlighted. The accounts show that most participants faced financial constraints, emotional burden as well as time constraints.

4.9.1 Financial Constraints

For most participants both in the rural and urban areas, the biggest hurdle seemed to be financial constraints. Many indicated that even though there was the national health insurance, they still had to pay some money when they go to the hospital, and this prevents them from going to the hospital and rather seek other cheaper alternatives to health care.

ehhh… the only thing that… financially, if I don't have money, I find it difficult to go to the clinic. That is when I just walk to the chemical shop and get some drugs. Apart from that nothing else [Participant 13, Male, age: 32].

4.9.2 Time Constraints

Aside from the financial constraints, time constraints were also highlighted as a reason that deters participants from going to the hospital. The long queues as well as the numerous tests that individuals had to do amounted to spending a lot of time in the hospital which some participants found luxurious and would rather use simpler methods.

Ohh as for the hospitals, I do not go there; they waste a lot of time. Me, I do not have time. [Participant 5, Male, 24]

CHAPTER FIVE

5.0 DISCUSSION

5.1 Summary of Findings

5.1.1 Quantitative Study

The purpose of this study was to assess the influence of illness representation on psychological distress and health seeking behaviour among the Ghanaian population. The study sought to explore the lay representations of COVID-19 in the Ghanaian context as well as the differences in representation in both the rural urban contexts. It was predicted that illness representation and age will significantly predict health seeking behaviour among the population. Furthermore, the study explored the influence of gender and illness representation on psychological distress. Finally, it was hypothesized that participants residing in the urban areas will experience higher levels of psychological distress as compared to participants in the rural areas.

Results of the study indicated that illness representation significantly predicted health seeking behaviour in the study population as hypothesized. In addition, as hypothesized, gender significantly predicted psychological distress while age was a significant predictor of health seeking behaviour. On the other hand, illness representation did not significantly predict psychological distress.

5.1.2 Qualitative Study

Findings from the qualitative study indicated that for diverse reasons, participants compared COVID-19 to well-known illnesses such as malaria, HIV/AIDs, cancer, and asthma. Additionally, there were no glaring differences in illness representation between

the rural and urban populations. Participants from both settings held similar views and beliefs concerning the causes, duration, consequences, and description of COVID-19.

Finally, financial and time constraints were the main factors that influence health seeking behaviour in the rural and urban areas.

5.2 Integration of Findings

According to Bronstein and Kovacs (2013), integration of findings in a mixed study is essential because it enables the researcher duly communicate and highlight the points of divergence and convergence in the study. Also, it aids in puling together the findings of the research.

The quantitative aspect of this study focused on exploring the influence of illness representation as well as certain demographics like age, place of residence and gender on the psychological distress and health seeking behavior. The findings showed that even though illness representation did not significantly predict psychological distress, it was a significant predictor of health seeking behaviour. Additionally, gender and age also significantly predicted psychological distress and health seeking behavior respectively.

Both studies identified the predictors of health seeking behavior. The qualitative data also revealed that aside the findings highlighted by the quantitative data on the predictors of health seeking behavior, financial as well as time constraints also influenced health seeking behavior. Then again results from both studies also indicate that there is no significant difference between the rural and urban population on illness representation. Participants from both settings held similar views and beliefs on the causes of illness as well as the choice of treatment especially concerning COVID-19.

Finally, the qualitative studies disclose that in understanding the representation of COVID-19, participants compared the illness to illnesses they were already familiar with such as malaria and asthma among others.

5.3 General Discussion

5.3.1 Influence of Gender on Psychological Distress

Gender was anticipated to be a significant predictor of psychological distress in the population, and the findings support this notion. Gender was found to be an independent predictor of psychological distress. This is consistent with previous research which states that gender has a significant impact on psychological distress. The influence of gender on psychological distress tends to vary across contexts and this variation is largely due to sociocultural influence (Fenollar-Cortés et al., 2021).

In the sociocultural context, the roles assigned both males and females play a role in their mental wellbeing. Gender roles play a defining role in the way individuals respond to stressors (Mayor, 2015). While females are expected by society to be feminine; nurturing and emotional, males on the other hand are expected to be dominant. Some of these defining roles become a source of increasing stress and anxiety on both genders as these gender roles dictate the experiences of individuals.

According to Matud et al. (2015), women more than men are likely to be psychologically distressed. Distress in women could be attributed to the traditional gender roles that women play. Time allocated daily to childcare as well as the upkeep of the home, leaving little to no time for relaxation could be explained as a contributor to the high distress levels in

women. Moreover, when it comes to new illnesses such as the COVID-19 pandemic, women's position as mothers causes them to be concerned not only about their own health but also about the well-being of their children.

5.3.2 Illness Representation and Psychological Distress

It was expected that illness representation will impact psychological distress, this however was not supported in the data. This finding contradicts what is previously known in the psychological literature. These findings suggest that people's emotional responses to illnesses are unaffected by the meanings they ascribe to illnesses. This could be explained by the fact that culture has a significant impact on how emotions are experienced and expressed. Culture, according to Lim (2016), shapes people's feelings in a variety of situations. Hence illness representation not influencing psychological distress could be attributed to this factor.

Another possible explanation for this finding is that participants had differing opinions about the causes of illness and the ideal way to treat illness. The majority of participants believe that illnesses can be caused spiritually or physically. Whatever the cause of the illness, the belief in a supernatural being capable of assisting, serves as a buffer against the emotional effects. Thus, even when illness is thought to be horrendous in nature, people's religious nature causes them to relinquish their concerns to a higher being, thereby alleviating their discomfort.

Also concerning COVID-19 pandemic and psychological stress, findings from the qualitative study showed that both rural and urban dwellers expressed some level of fear

concerning the pandemic. They however explained that this did not significantly affect their way of life. Even though they followed some precautionary measures it did not get in the way of their comfort to the extent of causing them distress. This was attributed to the fact that participants had reportedly not seen anyone close to them suffer from the illness. Thus, all that they knew about COVID-19 was hearsay which was not significant enough to cause such distress.

5.3.4 Illness Representation and Health Seeking Behaviour

The hypothesis which stated that illness representation will significantly predict health seeking behaviour in the population was supported. Findings proved that illness representation significantly predicted health seeking behaviour above and beyond the demographic variables. These findings are in line with reports from Bam et al. (2014) which explains that illness representation had an influence on the practice of health seeking.

Individuals' actions to seek help are strongly affected by the meanings they ascribe to their illnesses. This is consistent with the health belief theory, which states that a person's willingness to alter their behavior is primarily determined by perceptions of their health. It goes on to say that health behavior is influenced by factors such as perceived susceptibility, perceived severity of the illness, perceived benefits of behavior, and perceived costs or barriers to the desired behavior. As a result, the more vulnerable a person believes they are to a specific illness, the more likely they are to seek treatment. Furthermore, the severity of the condition influences whether or not help is sought and from whom. If the individual believes the condition is not serious, he or she may refuse medical treatment in favor of home remedies and self-medication. When an illness becomes life-threatening, individuals

are more willing to seek professional help because they believe they are incapable of helping themselves.

Moreover, the beliefs people hold about the causes of illness influence the type of help they seek. According to de Graft Aikins et al. (2012), Ghanaians have differing perspectives on the causes of illness. They also use a variety of treatment options for their illnesses. A seemingly appropriate avenue for treatment of the illness is chosen based on the belief about the origin of the illness. As a result, people who believe their illness is spiritual in nature are more likely to seek help from spiritual sources. These people will thus resort to touring prayer camps, traditional healers, and other locations. Those who believe that their illness is the result of physical or environmental factors, on the other hand, are more likely to seek treatment from medical or herbal facilities. Interestingly, these groups are not mutually exclusive in the sense that certain individuals can hold beliefs about both spiritual and physical causes of illness depending on the kind and nature of the illness and this in turn determines their help seeking behavior.

5.3.5 Barriers to Health Seeking

Findings from the study showed that financial and time constraints were a major barrier to health seeking behaviour. This is similar to findings from Bam et al., (2014) which explains that financial difficulty was the prime factor that hindered health seeking behaviour. Due to the high cost of health seeking in the African region, individuals are more likely to delay in health seeking or avoid it totally. According to Fenny, Asante, Enemark, & Hansen (2015), despite the introduction of the National Health Insurance

Scheme in 2005 to subsidise the cost of healthcare for the average Ghanaian, accessing healthcare remains expensive due to premiums and other costs such as transportation, prescription drugs, and the opportunity cost of time, particularly for informal workers. The findings of this study are aligned with those of the present study, as participants again mentioned that time restrictions were a key impediment to seeking health care. This is primarily due to the long queues and processes that participants must endure when visiting hospitals.

5.3.6 Lay Representations of COVID-19

Another objective of the study was to explore the lay representations participants in the selected communities had about COVID-19. Participants held diverse beliefs about the causes, consequences as well as duration and control of the illness. This was in conformity with Adegoke (2008), who asserts that Africans have a widespread belief that mental and physical illnesses are caused by a variety of factors, including supernatural factors. For this reason, some participants describe COVID-19 as spiritual asthma, because they believe some symptoms of the illness as familiar and thus comparable to asthma but with the mystery and uncertainty surrounding the course of the illness as well as the avenues of treatment, it might be birthed from a supernatural force.

Participants displayed various levels of knowledge concerning the illness and this influenced their interpretation of the causes of the illness as well as its effects and other characteristics. In the bid to understand COVID-19, participants compared it to already known illnesses like malaria and asthma among others. Generally, participants had fair knowledge about the mode of transmission, symptoms, and duration of the COVID-19

illness. However, most participants had little knowledge and were misinformed about the treatment avenues. Due to the widespread use of alcohol-based sanitizers as a safety measure, few participants held on to the belief that consuming alcohol could stifle the growth of the virus and thus serve as a form of treatment. This finding is in line with Okereke et al. (2021) which states that low health literacy compromises access to accurate information and this is linked with a burden of misinformation. Thus, it is obvious that participants' level of knowledge about the illness directly influenced the perceptions they had about it.

Concerning emotional representation of COVID-19, findings from this study were in line with Eiguren et al. (2021) which states that participants expressed negative emotions like fear towards COVID-19. Although participants in this study did not exactly believe that the COVID-19 illness was real, expressed fear of contracting the illness and the dire consequences which the media reports it comes with.

5.3.7 Differences in Rural and Urban Areas

Drawing from both the qualitative and quantitative analysis, no significant differences were found between the rural and urban areas in representation of COVID-19. These results were inconsistent with findings from Idriss et al. (2020), which argues that urban areas are mostly influenced by western practices while rural areas are influenced by traditional practices. Findings from the qualitative study corroborates the results of the quantitative study. It further explains that there were no clear differences between rural and urban dwellers on their opinions concerning illnesses in general. Specifically, concerning illness causation, both rural and urban dwellers held on to beliefs that illness is caused by various

factors which could either be physical or supernatural in nature. These results could be attributed to the fact that illness representation is dynamic and thus over time, people dwelling in the rural areas have been exposed to new information that has changed their beliefs about illnesses and thus bridged the gap between them and their counterparts living in the urban areas.

Then again due to rural urban migration, it could be argued that individuals who move from rural settlements to urban settlements might not totally let go of their beliefs and ideologies. Thus, their views and beliefs concerning illness behaviours do not change much despite the introduction of new information. Moreso, it is very common now to find individuals moving across settlements due to jobs and other important engagements. This arrangement leads to exchange of information across settlements; hence it is not a surprise that participants in both rural and urban areas share similar views on COVID-19.

Okereke et al. (2021), also suggest that rural Africa is burdened with misinformation regarding COVID-19, which is largely due to the misconceptions about the virus. Results from the research showed that, both people living in the rural and urban areas held on to certain beliefs and expectations about COVID-19 which are heavily influenced by misinformation about the virus.

Then again, the sources of information individuals rely on could also be a contributing factor. Most participants mentioned that they relied on the television, radio, and public health announcements for information on health and especially on COVID-19. These media are available in both the rural and urban areas, hence information reaching both groups are similar if not the same.

5.4 Recommendations

Regardless of the fact that this work has added to knowledge in the domain of illness representation and other health implications, particularly in the context of the COVID-19 pandemic, and thus fills key gaps in the field, it also serves as a useful foundation for future research. Future research should focus on how illness is represented from the perspective of children and adolescents. Although children and adolescents lack autonomy when it comes to health decisions, they have opinions, mental and emotional representations of illness that, if examined, could add to knowledge in this field and should not be overlooked.

Then again, future studies should consider examining the individual items/dimensions of illness representation both in terms of exploring differences between the rural and urban participants, but also for examining relations with psychological distress and health seeking behaviour separately for rural and urban participants as this might uncover some interesting differences.

Despite the fact that this study used multiple sites and a relatively large sample size, future research in the field should employ a considerably larger sample size and a larger geographic area. This will help researchers better understand how different populations perceive and respond to illness.

Future studies should also look into the impact of illness representation on individuals' psychological well-being. The study of psychological distress, which this study focuses on, only provides a portion of the picture. As a result, it is also important to look into psychological well-being in order to have a whole picture of the impact of illness representation.

The focus of future studies could also include designing an intervention based on participant's beliefs.

5.5 Limitations

Notwithstanding the research fulfilling the intended goals, there were a few drawbacks that should be highlighted. The study had low correlations which could be attributed to the presence of outliers in the data. Outliers in the data weaken the relationship and should ordinarily be deleted to improve the correlation. However, deleting these outliers would have affected the sample size of the research. Even though, the use of the cross-sectional approach provides good control over the measurement process and also provides correlated data that can be used to draw conclusions about populations it does not offer data about the causal relationship. Also, with the use of the convenience sampling there could be an under or over representation of the population. Finally, the measure for health seeking behavior did not assess the use of traditional medicine.

5.6 Conclusion

The weak healthcare system in Sub-Saharan Africa coupled with the huge burden of illnesses and the emergence of the COVID-19 pandemic with its varying phases has made it necessary to take a critical look at illness representation, psychological distress as well as the health seeking behaviors of individuals in this region.

This study thus investigated the representation of illness as well as the experience of individuals living in Ghana. Focus was also placed on the influence of illness

representation on psychological distress and health seeking behavior. Findings indicate that, even though illness representation significantly influenced health seeking behavior, the impact of illness representation on psychological distress was not significant. Also, the participants experience of the COVID-19 pandemic threw more light on the interpretation and behavior of lay persons in the selected Ghanaian communities. This in turn provides information on the actions individuals are most likely to take in periods such as this.

In summary, the outcome of this study serves as a basis for further studies on illness representation and other related health outcomes among the Ghanaian population. The study also demonstrated that illness representation as a construct is not static in nature but rather dynamic.

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APPENDICES

Appendix A- Ethical Clearance from Ethics Committee for the Humanities (ECH)

UNIVERSITY OF GHANA
ETHICS COMMITTEE FOR THE HUMANITIES (ECH)
P. O. Box LG 74, Legon, Accra, Ghana

My Ref. No...ECH 137/ 20-21 ...

May 9, 2021

Ladzekpo Adzo Xolali Gertrude
Department of Psychology
University of Ghana
Legon

ETHICAL CLEARANCE
(ECH 137/ 20-21)

The protocol title below has been reviewed and approved by the ECH Committee.

TITLE OF PROTOCOL: **THE INFLUENCE OF ILLNESS REPRESENTATION ON PSYCHOLOGICAL DISTRESS AND HEALTH SEEKING BEHAVIOUR IN GHANA, A RURAL URBAN STUDY**

PRINCIPAL INVESTIGATOR: **GERTRUDE XOLALI ADZO LADZEKPO**

Please note that the final review report must be submitted to the Committee at the completion of the study. Your research records may be audited at any time during or after the implementation. Any modification of this research project must be submitted to ECH for review and approval prior to implementation.

Please report all serious adverse events related to this study to ECH within seven (7) days verbally and in writing within fourteen (14) days.

This certificate is valid till May 8, 2022. You are to submit annual reports for continuing review.

Please accept my congratulations.

Yours Sincerely,

Professor C. Charles Mate-Kole
ECH Chair

Cc: Dr. Adote Anum, Department of Psychology, UG
Prof. Charity S. Akotia, Department of Psychology. UG

INTEGRI PROCEDAMUS

Tel: +233-303933866 Email: ech@ug.edu.gh

Appendix B - Introductory Letter from the Department of Psychology

UNIVERSITY OF GHANA
DEPARTMENT OF PSYCHOLOGY
SCHOOL OF SOCIAL SCIENCES

PSYC 2/33/03

Ref. No.:.....

March 29, 2021

The Administrator
Ethics Committee for Humanities (ECH)
Office of Research Innovation and Development
University of Ghana
Legon

Dear Sir/ Madam,

LETTER OF INTRODUCTION
MISS LADZEKPO ADZO XOLALI GERTRUDE - ID NO: 10535661

The above-named student is an MPhil Clinical Psychology student in the University of Ghana.

As part of the requirement, Miss Ladzekpo Adzo Xolali Gertrude has to write and submit an original thesis. The title of her thesis is **"The Influence of Illness Representation on Psychological Distress and Health Seeking Behaviour in Ghana; A rural Urban Study".**

She is planning to conduct her study in Greater Accra and Volta Region.

She is applying to your board for institutional approval/clearance to enable her carry on with her research work. She has received approval from our department.

Yours faithfully,

Prof. Joseph Osafo
(Head of Department)

COLLEGE OF HUMANITIES
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Appendix C - Questionnaires

UNIVERSITY OF GHANA

DEPARTMENT OF PSYCHOLOGY

SURVEY QUESTIONNAIRE

Thank you for agreeing to participate in this study. This questionnaire assesses your beliefs about illness and health choices. The information you provide in this study will be used solely for academic purposes. Please answer the questions as best as you can and please be as honest as possible. Do not write your name anywhere on this questionnaire.

Demographic Information

Gender Male [] Female []

Age: [] 18 – 25 [] 26- 35 [] 36-45 [] 46-55 [] 56 and above

Marital Status: [] Single [] Married [] Widowed [] Separated [] Divorced

Educational Level: [] Degree [] Diploma [] WASSCE [] Other

Religion: [] Christianity [] Islam [] Traditional Religion [] Other

Study Site: Shai Osudoku District [ ] South Tongu District (R) [ ] South Tongu District (U) [ ] Ledzokuku Krowor [ ]

SECTION A

These Questions concern how you have been feeling over the past 30 days. Tick the box that best represents how you have been.

1= None of the time 2= A little of the time 3= Some of the time	4= Most of the time 5= All of the time

Question	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1. During the Last 30 days, how often do you feel tired for no reason?	1	2	3	4	5
2. During the last 30 days, about how often do you	1	2	3	4	5

feel nervous?					
3. During the last 30 days, about how often do you feel so nervous that nothing can calm you down. ?	1	2	3	4	5
4. During the last 30 days, how often do you feel hopeless?	1	2	3	4	5
5. During the last 30 days, about how often do you feel fidgety or restless?	1	2	3	4	5
6. During the last 30 days, about how often do you feel so restless you could not sit still?	1	2	3	4	5
7. During the last 30 days, how often do you feel depressed?	1	2	3	4	5

8. During the last 30 days, about how often do you feel that everything was an effort?	1	2	3	4	5
9. During the last 30 days, about how often do you feel so sad that nothing could cheer you up?	1	2	3	4	5
10. During the last 30 days, about how often do you feel worthless?	1	2	3	4	5

SECTION B

Question 1 – Personal or physical illness

Question 2 – Psychological distress

If you were having a personal or physical illness, how likely is it that you would seek help from the following people.

ıely ly	ately ly	y Unlikely	r likely or y	y Likely	ately Likely	ıely Likely

	1	2	3	4	5	6	7
a. Intimate partner							
b. Friend (not related to you)							
c. Parent							
d. Other relative or family member							
e. Phone helpline							
f. Doctor or GP							
g. Mental health professional							
h. Minister or Religious leader							

i. I would not seek help from anyone							
j. I would seek help from another not listed above.							

If you are experiencing psychological distress, how likely is it that you would seek help from the following people?

Please indicate your response by putting a line through the number that best describes your health seeking behavior.

Extremely Unlikely	Moderately Unlikely	Slightly Unlikely	Neither likely or unlikely	Slightly Likely	Moderately Likely	Extremely Likely
1	2	3	4	5	6	7

Intimate Partner							
Friend not related to you							
Parent							
Other relative/Family member							
Mental health professional							
Phone helpline							
Doctor/GP							
Minister or Religious leader							
I would not seek help from anyone							
I would seek help from another not listed							

SECTION C

For the following questions, please circle the number that best corresponds to your views about illness.

How much does illness affect your life in general?

0	1	2	3	4	5	6	7	8	9	10
No effect at all										Severely affects my life.

How long do you think illness will continue when you are ill?

0	1	2	3	4	5	6	7	8	9	10
A short time.										Forever

How much control do you feel you have over illness in general?

0	1	2	3	4	5	6	7	8	9	10
Absolutely no control										Extreme amount of control

How much do you think treatment can help?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Extremely helpful

How much do you experience symptoms from illness when you are ill?

0	1	2	3	4	5	6	7	8	9	10
No severe symptoms										Many severe symptoms

How concerned are you about illness in general?

0	1	2	3	4	5	6	7	8	9	10
Not at all concerned										Extremely concerned

How well do you feel you understand illness in general?

0	1	2	3	4	5	6	7	8	9	10
Do not understand at all										Understand very clearly

How much does illness affect you emotionally? (e.g., does it make you angry, scared, upset, or depressed?

0	1	2	3	4	5	6	7	8	9	10
Not at all emotionally affected										Extremely affected emotionally

Please list in rank-order the three most important factors that you believe causes illness.

The most important causes for me: -

1. _____

2. _____

3. _____

Appendix D- Semi-structured Interviews

Interview Guide

General Question to build Rapport

1. How are you doing today?

2. How are you feeling?

Demographic Information: I would like to know more about you

- How old are you?
- Where do you live currently?
- What do you do for a living?
- What is your Religion?

i. What are your general beliefs about causes of illness?

What do you hear people say about causes of illness?

What do you also think about causes of illness?

ii. What are the beliefs society holds concerning illness?

iii. Have you heard of COVID-19?

iv. What is COVID-19?

In your opinion what is the severity of COVID-19?

What illness do you think covid is comparable to? (Is there any known illness you can compare covid to in terms of severity?)

v. What are your personal beliefs about COVID-19?

(Probe: what are your concerns and worries?)

i. What are the symptoms of Covid-19 that differentiate it from other illness?

(Probe severity and frequency)

ii. Do you think you are likely to be infected with COVID- 19?

a. Why?

iii. Who do you think is likely to be infected with the COVID-19 virus? (Which group of people)

a. Why?

i. How different is Covid-19 from other illnesses like malaria in terms of,

a. Causes of the illness.

What in your view can cause COVID-19?

b. Identity (local vocabularies that are used to describe illness)

How is COVID-19 described in your local parlance?

a. Consequences (illness outcome)

What in your view will happen to anyone who is infected with the COVID-19 virus and why?

b. Duration and Predictability.

Do you think one can recover from the COVID-19 virus?

How fast do you think someone will recover from COVID-19?

(Probe: long term or short term)

a. Control (personal and treatment control).

**What control do you think an individual has over the symptoms of covid-19?

What preventive measures can you take to prevent covid-19?

What treatments do you know are available to those infected with covid-19?

Can the covid-19 illness be cured or kept under control?

(Probe: what role does the individual play to control the covid-19 illness?)

a. Issues of stigma (shame or embarrassment)

What do people say/think about people who have been infected covid-19?

How do people treat individuals who have been infected by the covid-19?

(Probe disrespect, rejection, avoidance, intimidation)

What feelings are attached to the illness covid-19. (Explore anxiety and fear)

i. What sources of information inform your health decisions?

a. Probes: **television, radio, social media etc.

b. What kind information do you receive from these sources?

ii. When you are unwell, who or what makes you feel better?

iii. What are the treatment options available when you are ill?

iv. What is the first point of call when you are feeling ill?

{explore herbal and self-medication option)

v. What are the available health facilities in the community? (Pharmacy, clinics, hospitals etc.)

vi. What cultural values or beliefs influence health choices?

d. Do you think the way of life of people in your ethnic group influences your health choices?

e. If yes, how?

f. If not, why?

vii. What barriers affect health seeking behavior?

What or who prevents you from seeking help when you are ill?

viii.

a. What influences your choice?

What in your view is the best way to treat a COVID-19 infection?

Debriefing

1. How did this interview make you feel?

2. Are there any questions you want to ask me for clarification?

3. Tell me if there are other questions you wished I had asked