DETERMINANTS OF HEALTH-SEEKING BEHAVIOUR AMONG INTERNAL MIGRANTS IN GHANA: A STUDY OF THE NORTH SOUTH MIGRATION

By

COLLINS BRONI AMPONSAH

A Thesis submitted in Fulfilment of the Requirements for the Award of the **Degree of Doctor of Philosophy (PhD)** in Public Health and Health Promotion

Department of Health Sciences
College of Medicine, Health and Life Sciences
Brunel University London
London, United Kingdom

MAY 2024

Abstract

Background: Healthcare access and utilisation among internal migrants in Ghana present complex challenges influenced by various social, economic, and structural factors. Addressing these challenges requires a comprehensive understanding of the barriers and facilitators shaping health-seeking behaviour within this population. This study aims to provide such insights by thoroughly examining the determinants of health-seeking behaviour among internal migrants in Ghana.

Methods: This study utilised multiple approaches to answer the research questions. These approaches included a literature review, two quantitative analyses using regressions, two qualitative analyses involving a Delphi, and in-depth interviews. A systematic review was initially conducted to identify the gaps in the literature regarding the determinants of health-seeking behaviour in Africa. Regression analyses were then conducted to identify the barriers and facilitators of health-seeking behaviour among internal migrants in Ghana using the Ghana Living Standard Survey Round 7 (GLSS7) dataset from the Ghana Statistical Service (GSS). Using the same dataset, regressions were conducted to measure the impact of healthcare costs on the factors influencing healthcare service utilisation among this vulnerable population. Delphi study to solicit information on the perspective of healthcare deliverers regarding internal migrants' health-seeking behaviour in Ghana was conducted. Finally, in-depth interviews were conducted to identify the socio-cognitive perceptions regarding internal migrants' health-seeking behaviour in Ghana.

Results: The review revealed gaps in the literature regarding migrant healthcare. The analyses revealed an 8% lower healthcare service utilisation rate among internal migrants, highlighting existing access barriers. Self-care practices were prevalent, with more than 90% of respondents relying on them. Demographic factors significantly influenced healthcare utilisation: individuals aged 18-35 and females exhibited higher utilisation rates. Enabling factors like health insurance and income showed mixed associations, while financial capability strongly influenced healthcare seeking. There was no significant relationship between illness type and service utilisation. Determinants of out-of-pocket healthcare expenditure included age, education, location, marital status, and place of seeking healthcare. Barriers identified through the Delphi study included appointment wait times, language difficulties, and financial constraints, while insurance possession and higher income levels facilitated healthcare access. Policy recommendations focused on active insurance policies and education. Awareness levels varied, with 40% considering healthcare crucial, and coping strategies included reliance on support networks and self-care practices.

Conclusion: This study meticulously addresses the barriers and facilitators of health-seeking behaviour among internal migrants in Ghana through four well-defined objectives. Integrating quantitative and qualitative methodologies enhances the exploration, offering nuanced insights into healthcare access and utilisation. The findings contribute significantly to healthcare discourse, providing a reliable foundation for targeted interventions, policy improvements, and future research endeavours, ultimately fostering healthcare equity for internal migrants in Ghana.

Declarations

I, **Collins Broni Amponsah**, declare that this represents my own scholarly contributions, with due acknowledgement given where appropriate. I further affirm that the contents of this thesis have not been previously submitted for any academic recognition or credential part from the current submission.

Acknowledgement

I praise God for giving me strength throughout this PhD journey. I am grateful to my supervisory team, Prof Nana Kwame Anokye (Principal Supervisor), Dr Kei Long Cheung (Second Supervisor), Dr Bina Ghimire (RDA 2), and Dr Adrienne Milner (RDA 1), for their guidance and immense contribution to this thesis. I am also grateful to my progression review panel for the comments and contributions. A special gratitude to Dr Kingsley Agyemang for his mentorship and support. Finally, to all my family and friends who supported me in various ways, I say thank you.

Dedication

This thesis is dedicated to my family.

TABLE OF CONTENTS

List of Tables

List of Figures

List of Boxes

Lists of Abbreviations

AHRQ	–	Agency for Healthcare Research and Quality
AJOL	–	African Journal Online
CDC	–	Centre for Disease Control
CHAG	–	Christian Health Association of Ghana
CSOs	–	Civil Society Organisations
DHS	–	Demographic and Health Survey
EAs	–	Enumeration Areas
EDs	–	Emergency Departments
FWS	–	Female Sex Workers
GDP	–	Gross Domestic Product
GHS	–	Ghana Health Service
GLSS	–	Ghana Living Standard Survey
GSS	–	Ghana Statistical Service
HBM	–	Health Belief Model
HIV/AIDS	–	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
ICM	–	Integrated Change Model
IMBP	–	Integrated Model of Behaviour Prediction
IOM	–	International Organisation for Migration
JBI	–	Joanna Briggs Institute
MeSH	–	Medical Subject Headings
MMAT	–	Mixed Methods Appraisal Tool
MOH	–	Ministry of Health
NGOs	–	Non-Governmental Organisations
NHIA	–	National Health Insurance Authority
NHIS	–	National Health Insurance Scheme
PHC	–	Population and Housing Census
PRISMA	–	Preferred Reporting Items for Systematic Reviews and Meta-Analysis
PSUs	–	Primary Sample Units
SCT	–	Social Cognitive Theory
SDT	–	Self Determination Theory
SES	–	Socio-economic Status
SSUs	–	Secondary Sampling Units
STIs	–	Sexually Transmitted Diseases
TPB	–	Theory of Planned Behaviour
TTM	–	Trans-Theoretical Model
TUC	–	Time-Use Survey
UHC	–	Universal Health Coverage
UN	–	United Nations
UNHCR	–	United Nations High Commission for Refugees
WHU	–	World Health Organisation

CHAPTER 1

Introduction

1.1 Background

Migration has gained growing significance in public health, emphasising related risks and implications for health outcomes (Gushulak and MacPherson, 2006). Migration is a complex phenomenon encompassing various movements and adaptations by individuals or groups across different geographical and political boundaries. Its response to environmental, social, and economic factors is a fundamental aspect of life for many species, including humans, and has significant implications for ecosystems, societies, and economies (Czaika and Reinprecht, 2022). Migration and urbanisation, especially in Africa, have seen more rapid growth in recent years than in many other regions across the globe, according to a report on World Urbanization Prospects by the United Nations (2018): De Brauw and Mueller, 2012).

Research findings have suggested that Africa's urban population is projected to surge from 43 per cent to 59 per cent by the year 2050, according to the United Nations report in 2019. Although there are limited studies on migration and migration drivers in countries across Africa, major factors identified include population pressure, violence, chronic conflict, and resource depletion (Adepoju, 2011; Kirwin and Anderson, 2018). Migration within West African countries significantly exceeds migration to Europe, as evidenced by UNHCR (2008) data showing a tenfold difference (Koser and Kuschminder, 2015). This could be attributed to human rights violations, ethnic tensions, rising political persecution, civil conflicts, and political instability (José-Manuel Giménez-Gomez, 2017). Again, studies by Adepoju (2020), Bakewell (2018), de Haas (2020), and Tawfik and van Ginneken (2019) highlight the region's migration dynamics driven by historical, economic, and socio-political factors while acknowledging limited migration to Europe due to stricter border controls and risks associated with irregular migration.

Migration can be broadly classified into two forms: international and internal. However, within these categories, various subtypes reflect the complexity of migration patterns, including total and partial displacement migrations and colonising and social-capillarity migrations (King et al., 2008). While international migration refers to the movement of people across international

borders, relocating from one country to another, internal migration is the relocation of individuals to a different residence within the same state or nation (Cross, 2003).

The International Organisation for Migration (IOM) defines internal migration as individuals or groups moving within a country. According to the IOM, this relocation, driven by economic opportunities, employment prospects, education, lifestyle changes, or environmental considerations, can manifest in movements between rural and urban areas, across different regions within a country, or within metropolitan areas. In a study on migration trends, Cross (2003) maintains that internal migration flows in South Africa may originate from rural to urban areas and from urban to rural areas. The study indicates that the primary influence of migrants comes from resource-poor regions. Landau and Segatti (2009) corroborate Cross's perspective, asserting that the primary driver of migration to and within Africa, particularly South Africa, stems from economic disparities within the nation. Internal migration is critical almost everywhere, and in some countries, it is much more significant than international migration. Approximately 120 million people migrated internally within China in 2001, as against 458,000 people migrating internationally for work (Ping and Shaohua, 2005). A reported 50 to 80 per cent of rural families have at least one migrant member (DFID, 2004). Although making general statements about the extent of internal migration is challenging on the grounds of a few case studies, there are signs that structural adjustment programs have enhanced mobility as people have expanded employment portfolios, many of which include commuting to nearby commercial centres and the like (Bryceson, 1999).

Two dominant statistics are widely recognised in the literature on internal migration. First, internal migration is a prevalent occurrence. Based on a survey of approximately 70 countries, Bell et al. (2015) found that 12 per cent of the world's population was internal migrants in 2005, which indicates that about 763 million people were living outside their area of birth but within their borders. Second, the youth are more likely to migrate than older people. Using relevant information from 65 developing countries, Young (2013) established that most adult internal migrants had relocated between the early and mid-twenties when they were still young. These two factors emphasise the importance of internal migration as a fundamental mechanism of social and economic transition and the significance of youth as catalysts for change. Understanding the relationship between migration patterns and health outcomes locally and internationally has become a public health priority because of the recent increasing trends in international and internal migration (Wickramage, 2018). Across Africa, migration trends are

predominantly intra-continental in the quest for greener pastures or more significant economic opportunities (Kirwin and Anderson, 2018).

When international and internal migration increases in depth and complexity, migrants are likely to be excluded from Universal Health Coverage (UHC). In acknowledgement of the connection between health and sustainability, the Sustainable Development Goals (Goal 3) identify Universal Health Coverage (UHC) as underlying and integrating all health goals (WHO, 2015). Universal health coverage guarantees that everyone everywhere has access to accessible, reliable, and critical health services and demands constant monitoring of the progress of nations to adapt Universal Health Coverage (UHC) to local demographic, epidemiological and technical conditions (World Bank, 2015). Resolution 61.17 on the health of migrants by the World Health Organisation (WHO) (to which Ghana is a member state) further calls upon its members to "recognise the health of migrant populations as a human right" through four major pillars: policy and legal frameworks, improved migrant-sensitive health systems, monitoring of migrant health and strengthen networks and partnerships (WHO, 2010).

Although migration is considered an important life changer (Suarez-Orozco, 2000), it is frequently followed by a multitude of stressors that involve serious adaptation to a new world and usually contribute to psychological difficulties, including anxiety, disappointment, and desperation (Dalla, Antoniou, & Matsa, 2009). In addition to the challenges of resettlement, migrants have been found to face multiple barriers to access and utilisation of healthcare services in their new settlements (Scorgie et al., 2012). These, as indicated, may affect their health-seeking behaviour.

1.2 The Internal Migration Patterns in Ghana

Internal migration, particularly the movement from rural areas in northern Ghana to urban centres in the south, is a well-documented demographic phenomenon with significant social, economic, and developmental implications. This migration pattern reflects broader global trends of rural-to-urban migration driven by various factors such as economic opportunities, educational prospects, and climate conditions (Awumbila, 2017). In Ghana, the north-south migration pattern has deep historical roots and continues to shape the country's economic and social landscapes (Abdulai, 2016). The historical foundation of north-south migration in Ghana

can be traced back to the colonial period when the British colonial administration actively promoted labour migration from the northern regions to support agricultural and mining activities in the southern regions. The colonial government viewed northern Ghana primarily as a labour reserve, which was underdeveloped compared to the southern part of the country (Songsore, 2003). This contributed to a long-standing structural inequality between the two regions, reinforcing the migration flow from the north to the more economically vibrant south (Songsore, 2011). While the migration drivers have evolved, the north-south migration trend remains prevalent today.

The drivers of rural North to urban South migration in Ghana are multifaceted, with economic, social, and environmental factors playing a pivotal role.

1. ***Economic Factors*:** The primary factor driving internal migration from northern Ghana to southern cities like Accra, Kumasi, and Takoradi is economic. Northern Ghana is predominantly rural and agrarian, with limited industrial or commercial opportunities. Poverty levels are significantly higher in the north compared to the south, creating economic disparity. According to the Ghana Statistical Service (2018), regions in the north, such as the Northern, Upper East, and Upper West regions, have consistently higher poverty rates, with some areas recording poverty incidence above 50%. Conversely, southern regions like Greater Accra and Ashanti offer relatively higher employment opportunities in various sectors such as trade, manufacturing, and services, drawing migrants in search of better livelihoods.

2. ***Educational Opportunities:*** Educational disparities between the North and the South also fuel internal migration. The southern regions, particularly the urban centres, have more educational infrastructure, such as secondary schools and universities, which attract young people from the north. Data from the Ghana Living Standards Survey (2017) show that educational attainment in the northern regions lags behind the south, prompting young migrants to move southward for better education and skill development opportunities.

3. ***Climatic and Environmental Factors:*** Climatic conditions in northern Ghana, characterised by arid and semi-arid climates with long dry seasons and unpredictable rainfall patterns, have exacerbated agricultural challenges. Northern Ghana is prone to

desertification, soil degradation, and droughts, which negatively impact agriculture, the primary livelihood source for the population. This has led to increased migration to the southern regions where the climate is more conducive to economic activities, particularly agriculture and industry (van der Geest, 2011).

Recent studies have provided in-depth analyses of the rural north-to-urban south migration pattern and its implications. Awumbila et al. (2014) highlight the role of "circular migration" in Ghana, where migrants from the north frequently travel to the south for work during the off-farming season and return to their rural homes periodically. This cyclical migration is prominent among young men and women seeking temporary jobs in the informal economy, particularly in urban areas. Similarly, a study by Anarfi and Kwankye (2012) explored how migration has increasingly become a survival strategy for families in northern Ghana. The study shows that remittances sent by migrants working in southern urban centres are essential for household sustenance in the north. These remittances often contribute to basic needs such as food, education, and healthcare, alleviating the extreme poverty prevalent in the region.
Boakye-Yiadom and McKay (2020) also examined the socioeconomic impacts of north-south migration on Ghana's labour market. The study suggests that while migration to the South has led to some upward mobility for migrants, it has also contributed to informal labour markets, where migrants work under precarious conditions. Many internal migrants are engaged in low-paying, informal jobs such as head porters ("kayayei"), street vending, and construction work, often without social security or job protection.

Migrants from northern Ghana often encounter significant challenges upon arrival in southern urban centres. These challenges include inadequate housing, exploitation in the labour market, limited access to healthcare, and discrimination based on ethnic backgrounds. For example, the phenomenon of *kayayei*, where young women from the north work as head porters in southern cities, illustrates the precarious conditions faced by northern migrants. Research by Osei-Boateng et al. (2017) highlights the vulnerability of these women, many of whom experience harassment, poor living conditions, and lack of social protection. The integration of northern migrants into southern communities is not always seamless. Ethnic and linguistic differences sometimes lead to social exclusion, with migrants struggling to access social services and basic amenities. These barriers further exacerbate the marginalisation of internal migrants, trapping them in cycles of poverty even in the supposedly more prosperous southern regions.

The persistent rural-to-urban migration trend from northern Ghana underscores the need for targeted policy interventions to address the socio-economic disparities between the north and south. Policymakers must focus on fostering economic development in the northern regions by improving infrastructure, investing in sustainable agriculture, and enhancing educational opportunities. Programs like the Savannah Accelerated Development Authority (SADA) aim to reduce the development gap between the North and South, but their implementation and impact have been limited. Urban planning in southern cities must consider the continuous influx of migrants from the north. Providing adequate housing, healthcare, and social services for migrants is crucial to ensuring equitable development and preventing the deepening of socio-economic and healthcare inequalities in urban areas.

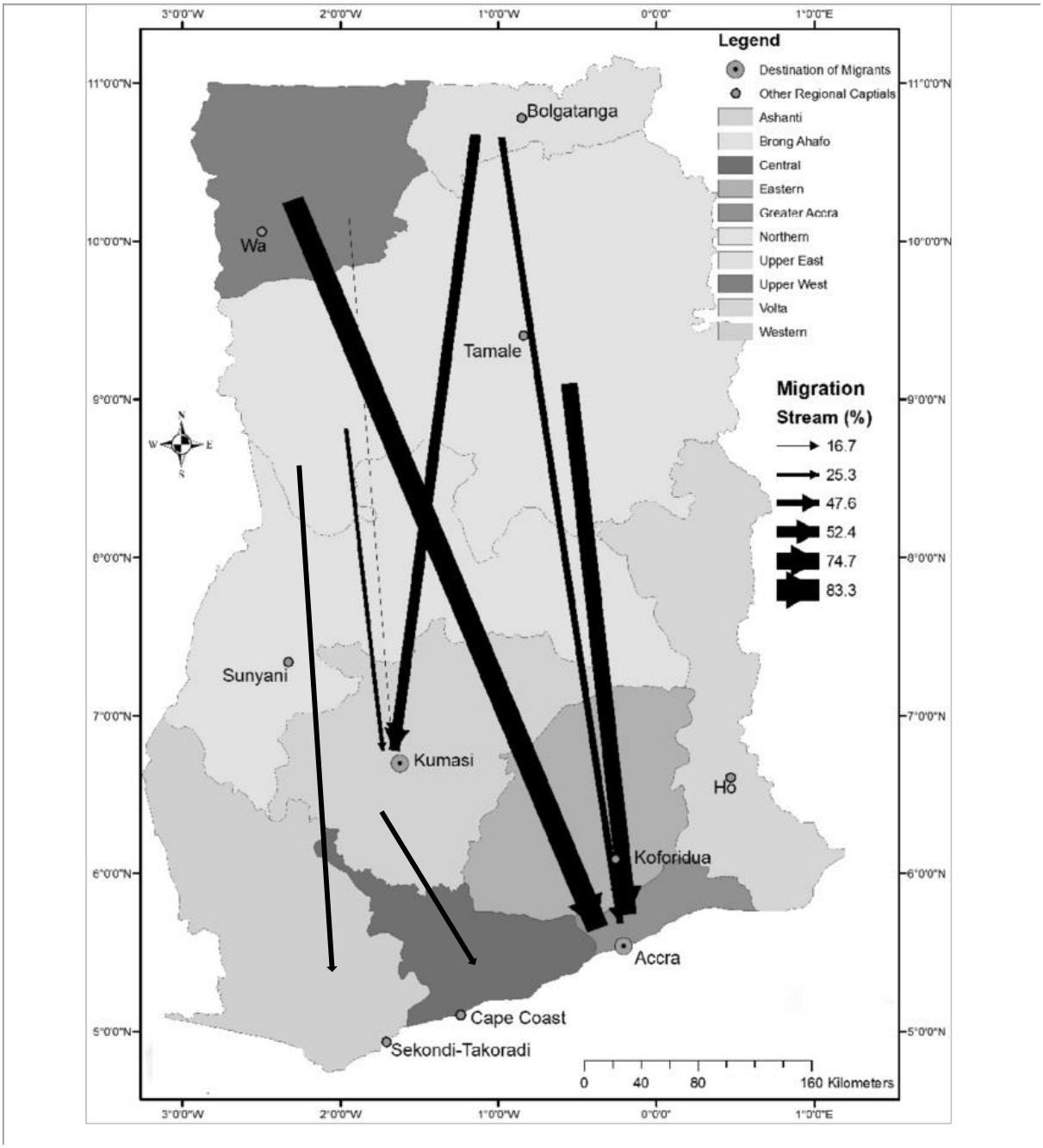

Figure 1: A Map of Ghana showing the internal migration pattern from the North to South[1]

1.3 Migration, Vulnerability, and the Healthcare System

The Ghana Statistical Service Population and Housing Census report (GSS/PHC, 2012) referred to an internal migrant as a person who departs from their residential area in a geographic location for another place within six months. Migrant workers are recognised to be the most vulnerable members of society, and they are primarily engaged in works that are often known as 3-D jobs: dirty, dangerous, and demanding (Quandt et al., 2013). The studies of Enu (2015) and Agyei et al. (2016) reveal that these migrants often settle for menial jobs which

fetch as low as $2 per day, suggesting that the average migrant lives below the poverty line (an average of $5 per day). Like other Sub-Saharan African countries, intra-migration is on the increase in Ghana (Flahaux & De Haas, 2016). A review of migration in Ghana shows that internal migration has long been a significant livelihood strategy for Ghanaians, according to the Report on Population and Housing Census, 2010 from the Ghana Statistical Service (GSS). It is expected that an ever-increasing number of internal migrants will access medical care from the healthcare services in the hospitals in the host cities. However, the assistance offered in these services may not be tailored to the cultural and socio-economic position of these migrants (Knipscheer et al., 2002).

Medical doctors, nurses, and other service providers in the health delivery system often experience difficulties interacting with ethnically mixed patients (Knipscheer et al., 2002). Health professionals may not be familiar with the language, the culture, and the needs of their patients, nor with the socio-economic position in which these internal migrants often live. For example, Maneze et al. (2015) contended that internal migrants are confronted with some barriers to keeping their health in their newly adapted urban areas, particularly among those with inadequate language skills in the host city. The language barrier could be heightened in the case of Ghana, as there are over 81 spoken languages in the country (Afrifa et al., 2019).
It is evidenced that Ghana's healthcare system is inadequately prepared to cope with the escalating healthcare demands of internal migrants (Adinkra, 2016). The healthcare services in Ghana have demonstrated a considerable lack of proficiency in addressing the swift transformations and the fundamental healthcare requirements of these migrants, owing to their focus on maternal and childhood health concerns (Gyasi, 2018). Further, there is a lack of practical policy frameworks and programmes addressing internal migrants' healthcare and social support objectives. Moreover, most of these internal migrants, particularly from the northern regions of Ghana, have low levels of formal education and face more significant challenges in accessing healthcare in the south(Gyasi, 2018).

The internal migrant population in Ghana are required to pay unaffordable user fees to access healthcare in their host regions (Otchere et al., 2024). The introduction of the National Health Insurance Scheme (NHIS) in Ghana was to offer medical care support to vulnerable people such as children, older persons, and internal migrants, among others (Gyasi, 2018). However, internal migrants have to pay a fee to enrol in the NHIS. Payment of the registration fees and subsequent yearly renewal may be problematic for these people, at least at the initial entry

stage, as they may be unemployed in the host cities. Besides, NHIS does not cover medical examinations and some of the needed medication. Further, internal migrants may have to walk long distances to access medical care and typically spend many hours in long queues at the hospitals before being attended to by medical professionals (Bozorgmehr et al., 2015).

1.4 Health Seeking Behaviour: Patterns and Determinants

Health-seeking behaviour, defined as individuals' actions to maintain, improve, or regain health (Fayuning and Surit, 2017), is a multifaceted phenomenon influenced by various factors. Research indicates that understanding these patterns and determinants is crucial for improving healthcare delivery and promoting better health outcomes. Health-seeking behaviour is pivotal in healthcare delivery and public health strategies, profoundly impacting health outcomes. Timely seeking of medical care aids in early detection and treatment of health conditions, crucial for reducing morbidity and mortality rates (Brouwer et al., 2018). Proactive engagement in preventive measures such as regular check-ups and vaccinations significantly contributes to disease prevention and overall well-being (Jehu-Appiah et al., 2012). Further, effective health-seeking behaviour results in substantial cost savings within healthcare systems by averting expensive treatments and hospitalisations, promoting economic efficiency and sustainability (Kruk et al., 2016). Also, active participation in healthcare services and adherence to preventive guidelines enhance public health efforts, mitigating the spread of infectious diseases and improving population health outcomes (World Health Organization, 2020).

Health-seeking behaviour is intricately influenced by various determinants, including socioeconomic factors such as low socioeconomic status, poverty, and limited financial resources, which act as significant barriers, hindering individuals from accessing healthcare services promptly (Maina et al., 2020; Ahmed et al., 2018). Cultural beliefs, traditional practices, gender norms, and stigma surrounding certain health conditions further complicate health-seeking behaviour, impacting individuals' decisions to seek medical assistance, particularly affecting women's autonomy in healthcare decisions (Shaikh et al., 2008; Charan et al., 2020; Sialubanje et al., 2015). Access barriers, including geographic distance, inadequate transportation infrastructure, affordability issues, and accommodation problems, impede individuals, especially those in rural or remote areas, from accessing necessary healthcare services (Bright et al., 2017; Acharya et al., 2019; Levesque et al., 2013). Individual-level factors such as limited knowledge, awareness, education, health literacy, and perceptions of

healthcare service quality also influence health-seeking practices, shaping individuals' utilisation of available healthcare resources (Noordam et al., 2014; Musoke et al., 2014; Joshi et al., 2014). These intertwined determinants necessitate a comprehensive approach aimed at addressing socioeconomic disparities, fostering cultural sensitivity and gender equity, improving access to healthcare services, enhancing health literacy, and ensuring the provision of high-quality, affordable healthcare services accessible to all individuals, regardless of their background or circumstances.

1.5 Internal Migrants and Health-Seeking Behaviour

The challenges internal migrants encounter in seeking healthcare in their new areas imply that they may be discouraged from pursuing the needed and appropriate medical care and are usually compelled to rely on self-medication and consumption of unregulated medication with undesirable consequences. Meanwhile, improving the general well-being and health of internal migrants is vital to the overall societal development in Ghana. Insights into health-seeking behaviour among the internal migrant population in Ghana are therefore crucial to providing need-based health outcomes. Yet, this is often ignored, and even where this knowledge exists, there is usually a mismatch between specific internal migrants' needs and programme priority due to context environment variations, which render programmes unproductive (Singh et al., 2014). An investigation of the healthcare needs of internal migrants and how they manage to access healthcare remains fundamental for the protection and improvement towards a healthy and productive country. This is particularly important as they constitute more than 30% of Ghana’s population, according to the 2010 Population and Housing Census report. Understanding the coping strategies associated with internal migrants will offer strategies to overcome these health challenges.

Understanding both the magnitude of healthcare needs and illness patterns of intra-migrants is key in terms of developing strategies for surveillance and guarding against the progression of extensive chronic diseases, injuries, and disabilities, as well as strengthening the healthcare delivery to meet the needs of internal migrants (Peprah et al., 2020). To understand how to change behaviour, such as enhancing health-seeking behaviour, socio-cognitive theories provide insights into the mechanism. This helps to understand the associations among the determinants of behaviour change and how these determinants influence behaviour (Otchere et al., 2024). Notwithstanding, research exploring the barriers and facilitators of health-seeking behaviour among internal migrants, although crucial, remains scarce, especially in Ghana. A

few studies have investigated this behaviour. Lattof (2018) examined how health insurance status affects female migrants' care-seeking behaviours based on *kayaye* (head porters) migrants from the North to Accra. Similarly, Afeadie (2018) also investigated health-seeking behaviour among migrant slum dwellers at Madina, a suburb within Accra.

Numerous studies have explored the health-seeking behaviour of internal migrants in various countries, shedding light on their unique challenges and needs within healthcare systems. For instance, research by Lu et al. (2014) in China investigated the health-seeking behaviour of internal migrants and found that factors such as socio-economic status, healthcare accessibility, and cultural beliefs significantly influenced their healthcare utilisation patterns. Similarly, studies in India by George et al. (2019) and Khan et al. (2017) examined the health-seeking behaviour of internal migrants, highlighting barriers related to affordability, awareness, and trust in healthcare services. In Nigeria, Ojinnaka et al. (2018) researched the health-seeking behaviour of internal migrants, identifying issues such as distance to healthcare facilities, cost of services, and cultural preferences as key determinants.

Rob and Zoe (2004) also identified aside from the availability of healthcare services, long distances to access healthcare facilities, cost and prevailing traditional attitudes towards childbirth, socio-cognitive determinants such as attitude, social support and self-efficacy all act to determine the health-seeking behaviour of rural-urban migrants in Mumbai regarding maternal healthcare. Peng, Yingchun et al. (2010) also investigated health-seeking behaviour among migrants in Beijing and established that the substantial cost of healthcare services and the absence of health insurance and other attitudes, including neglect of the severity of diseases and no free time have resulted in under-utilisation of health care services among migrants, which had led to a series of ineffective health-seeking behaviours such as unsupervised self-treatment, going to unregulated clinics, or 'just holding on' without seeking any medical care. Knipscheer et al. (2002) also investigated the health-seeking behaviour of Ghanaian migrants in the Netherlands. They found that acculturative stress and the legal status of the Ghanaian migrants in the Netherlands affect their health status. The study also documented that Ghanaian immigrants do not generally report having more health issues than the non-migrant Dutch norm group.

Notably, the discourse on health-seeking behaviour and access to healthcare services is multifaceted, with extensive literature exploring various factors influencing individuals'

healthcare decisions. However, a comprehensive comparative analysis that encompasses all avenues of access and incorporates significant variables such as migrants' healthcare financing, beliefs, and perceptions remains absent. Studies such as those by Levesque et al. (2013), Andersen and Newman (2005), and Aday and Andersen (1974) have investigated the determinants of health-seeking behaviour in diverse populations, emphasising perceptions of healthcare services, socio-economic factors, and individual predisposing factors. Research by Norris et al. (2014) also highlights financial barriers and perceptions of the healthcare system as constraints on migrants' access to healthcare, while studies by Sheikh et al. (2015) underscore the influence of cultural beliefs on migrants' healthcare-seeking behaviour. Despite these valuable contributions, a comprehensive comparative analysis that integrates all relevant variables is needed to provide insights into the nuanced interplay between determinants of health-seeking behaviour, particularly among migrants. Such research will facilitate the development of targeted interventions to improve access to healthcare services for all individuals, irrespective of socio-economic status or cultural background.

1.6 Study Rationale

Internal migration in Ghana, particularly from rural northern regions to urban centres like Accra, Kumasi, Takoradi, and Koforidua, has increased significantly in recent decades due to socioeconomic factors such as unemployment, poverty, and limited access to essential services in rural areas (Awumbila et al., 2014). While internal migrants contribute to the economic vitality of these urban areas, they often face considerable challenges in accessing healthcare services, leading to disparities in health outcomes. Existing studies, such as those by Yiran et al. (2014) and Agyemang-Duah et al. (2015), highlight systemic barriers to healthcare access, including the uneven distribution of healthcare facilities, financial constraints, and cultural beliefs. Despite these known obstacles, there remains a lack of comprehensive research focused explicitly on the health-seeking behaviour of internal migrants within the Ghanaian context, creating a critical gap in the literature.

Internal migrants in Ghana, particularly those moving from rural to urban settings, encounter significant barriers to healthcare utilisation, including language barriers, financial constraints, and unfamiliarity with urban healthcare systems (Kuyini et al., 2020). Research by Ansong et al. (2020) underscores the disparities in healthcare access among migrant populations, further noting that these barriers are exacerbated by migrants' socioeconomic status and occupation,

particularly for those engaged in informal work. Moreover, migrants often experience exclusion from social safety nets such as health insurance schemes, limiting their ability to afford necessary medical services (Boateng et al., 2018). Cultural beliefs and traditional health practices also play a role, as many migrants maintain strong ties to traditional forms of medicine, which can influence their decisions regarding healthcare-seeking behaviour (Anarfi et al., 2016). However, these cultural nuances still need to be explored in existing health research in Ghana, further complicating efforts to develop tailored interventions for this population.

Given the paucity of studies addressing the unique healthcare challenges internal migrants face in Ghana, there is a pressing need to investigate the barriers and facilitators of healthcare service utilisation in this population. This study aims to fill this gap by providing empirical evidence on the determinants of health-seeking behaviour among internal migrants, focusing on how socio-demographic characteristics, cultural beliefs, and economic conditions influence healthcare access and utilisation. Understanding these dynamics is crucial for informing policy interventions that can improve health outcomes for internal migrants in Ghana, particularly in light of their growing presence in urban centres. By addressing these gaps, this research seeks to contribute to a more equitable and inclusive healthcare system in Ghana, particularly for vulnerable migrant populations.

1.7 Research Aim and Objectives

This study contributes to the limited research studies on migrants' health, especially in the African and Ghanaian contexts. It provides insight into the contextual issues regarding the health-seeking behaviour of internal migrants, which is relevant for health planners and other relevant stakeholders in Ghana and other African countries. Evidence from this study presents significant insights into health-seeking behaviour practices among internal migrants. This research study will be useful for formulating and tailoring strategies responsive to the health needs and priorities of internal migrants in Ghana. The methodology and findings are reference material for students and researchers interested in examining the health-seeking behaviour among migrants and other vulnerable and marginalised populations in society.

The overall aim of this research study is to explore the barriers and facilitators (determinants) of health-seeking behaviour among internal migrants in Ghana. The objectives of the study are;

1. To identify key gaps in the literature by reviewing available studies regarding the barriers and facilitators of health-seeking behaviour among African internal migrants.
2. To identify the barriers and facilitators of healthcare utilisation among internal migrants in Ghana and understand their health-seeking behaviour.
3. To assess the associations of the critical determinants of healthcare access and utilisation among the internal migrant population in Ghana.
4. To identify the most important determinants of health-seeking behaviour of internal migrants in Ghana to inform policy and intervention.
5. To understand the sociocognitive perceptions regarding the barriers and facilitating factors regarding the health-seeking behaviour of internal migrants in Ghana.

This study, however, fills the gap in the literature and practice of health promotion by investigating the challenges of healthcare utilisation to understand the determinants and the underlying sociocognitive perceptions of health-seeking behaviour among the internal migrant population in Ghana, focusing on internal migrants coming from the rural North to the urban South, specifically Accra, Kumasi, Takoradi and Koforidua.

1.8 Thesis Contribution to the Literature

The study's contributions to the literature are summarised here, with details provided in the concluding chapter (Chapter 8). Firstly, the study's adoption of a mixed methods approach contributes significantly to scholarship by allowing for a multifaceted exploration of health-seeking behaviour. By integrating quantitative and qualitative methodologies, the study comprehensively delineates the understanding of the complex dynamics shaping health-seeking behaviour among internal migrants.

This study addresses a crucial gap in the literature by conducting a systematic review of existing studies. This rigorous approach provides a solid foundation for the research by synthesising existing knowledge and identifying areas for further investigation, ensuring that subsequent research is built upon a robust understanding of the current state of the literature. Further, the study adds specificity to the literature by focusing on internal migrants in Ghana. By identifying both barriers and facilitators within the Ghanaian context, the study enriches our understanding of how local factors influence health-seeking behaviour, thus contributing context-specific insights to the broader field of migrant health research.

Again, this research enhances the scholarly understanding by assessing the impact of identified determinants on healthcare access and utilisation. By providing insights into the consequences and implications of these factors, the study offers valuable information for policymakers and practitioners seeking to formulate targeted interventions to improve healthcare outcomes among internal migrants. The study also adds depth to the literature by incorporating the perspectives of healthcare deliverers and other stakeholders in Ghana's healthcare system. By engaging those directly involved in healthcare delivery, the study provides valuable insights to inform evidence-based policymaking and interventions, thus bridging the gap between research and practice.

Finally, this thesis enriches scholarly understanding by exploring sociocognitive perceptions and beliefs surrounding health-seeking behaviour among internal migrants in Ghana. The study enhances the knowledge of how individual beliefs and perceptions shape health-seeking behaviour by delving into the psychological and cultural dimensions of individuals' healthcare decision-making.

1.9 Thesis Outline

This thesis is structured into eight chapters, four of which are empirical. The following outline provides a concise summary of the thesis structure, highlighting the contents of each chapter, the connections between them, and their implications for the research.

Chapter 1 initiated the research by presenting the problem statement and delineating the objectives aimed at resolving these issues. This chapter introduced the fundamental challenges to be addressed, providing a framework for understanding the subsequent research endeavours. Also, the objectives outlined within this chapter established the trajectory for the study, guiding the exploration and analysis conducted throughout the remainder of the thesis.

Chapter 2 reviewed the existing literature on health-seeking behaviour among migrants in Africa and identified the evidence gaps that were addressed in this thesis. This chapter highlights the insufficient studies on determinants of health-seeking behaviour of internal migrants in Africa and outlines four key gaps in the literature: (i) insufficient studies identifying the determinants (barriers and facilitators) of health-seeking behaviour among internal migrants in Ghana; (ii) lack of analysis to understand the predictors of the determinants of health-seeking behaviour of internal migrants; (iii) lack of studies indicating healthcare deliverers and other stakeholders' perspectives on the determinants of health seeking of internal

migrants in Ghana; and (iv) lack of studies on why internal migrants do not engage in health-seeking behaviour in Ghana.

Chapter 3 detailed the framework for this thesis, providing insights into the gaps present in the existing literature and how these gaps were tackled. Through a thorough examination, the chapter illuminated areas where the current understanding fell short and outlined strategies for addressing these deficiencies. This comprehensive analysis set the stage for the subsequent research and demonstrated the researcher's capacity to navigate and contribute to the scholarly discourse within the field.

Chapter 4 focused on bridging a significant gap in the literature regarding healthcare utilisation among internal migrants in Ghana. Through an empirical analysis, the chapter delved into identifying barriers and facilitators that influence the healthcare-seeking behaviours of this demographic. Leveraging data from the Ghana Living Standard Survey Round 7 (GLSS7), this research offers valuable insights into the complexities of accessing healthcare services for internal migrants. By shedding light on these factors, this chapter contributes substantially to the existing body of knowledge, enhancing our understanding of healthcare dynamics within the Ghanaian context.

Chapter 5 further addressed another gap in the existing literature, utilising data from the Ghana Statistical Service's GLSS7 again. Specifically, this chapter delved into the relationship between out-of-pocket healthcare expenditure, a substantial component of healthcare financing, and healthcare utilisation among internal migrants in Ghana. By investigating this aspect, the chapter contributes to a deeper understanding of the factors influencing healthcare access and utilisation patterns within this demographic group.

Additionally, Chapter 6 employed the Delphi approach to systematically investigate the perspectives of healthcare providers and other stakeholders involved in migrant healthcare within Ghana. This methodological approach was utilised to identify pertinent determinants influencing the health-seeking behaviour of internal migrants in the country and to discern relevant strategies to enhance healthcare access for this population cohort. By leveraging the insights gleaned from this Delphi study, the chapter contributes to a comprehensive understanding of the multifaceted factors shaping healthcare utilisation among internal

migrants in Ghana, thereby informing the development of targeted interventions and policy initiatives in this domain.

Chapter 7 delineated the beliefs and perspectives surrounding the health-seeking behaviour of internal migrants. Through qualitative exploration facilitated by semi-structured interviews, this chapter delved into the intricacies of these beliefs and perceptions, employing the Integrated Change Model (I-Change Model) as a conceptual framework to investigate the health behaviour of migrants. By utilising this methodological approach, Chapter 7 contributes to a nuanced understanding of the factors influencing internal migrants' health-seeking behaviours, thereby providing valuable insights for informing targeted interventions and strategies to promote healthcare access and utilisation among this population group.

Chapter 8 serves as the culminating segment of the thesis, providing a comprehensive summary of the research findings, discussions, and contributions to the scholarly discourse. This concluding chapter offers a reflective analysis of the key insights garnered throughout the research journey, contextualising them within the broader theoretical framework and methodological underpinnings outlined in preceding chapters. Furthermore, Chapter 8 critically examines the implications of the findings for theory, policy, and practice, elucidating their relevance and significance in advancing knowledge within the field. Moreover, this chapter identifies avenues for future research, highlighting areas warranting further investigation or refinement, thereby setting the stage for ongoing scholarly inquiry and discourse.

Thesis Outline

Chapter 1

Chapter 1 initiated the research by presenting the problem statement and articulating the objectives aimed at resolving the identified issues. Through this introductory chapter, the research problem was succinctly outlined, providing a clear understanding of the focus and scope of the study. Furthermore, the delineation of objectives offered a roadmap for the subsequent research endeavours, guiding the investigation towards the attainment of specific goals and outcomes.

Chapter 2

This chapter conducted a thorough review of the extant literature concerning health-seeking behaviour among migrants in Africa, pinpointing evidence gaps that this thesis aims to fill. This chapter underscores the paucity of studies investigating the determinants of health-seeking behaviour among internal migrants in Africa and delineates four primary gaps present in the literature.

Chapter 3

Chapter 3 meticulously delineated an intricate framework for this thesis, offering insights into the deficiencies within the existing literature and the strategies employed to address them. Through a rigorous examination, the chapter elucidated areas where the current understanding was inadequate and proposed approaches for rectifying these deficiencies. This exhaustive analysis laid the foundation for subsequent research and showcased the researcher's adeptness in navigating and enriching the scholarly discourse within the field.

Chapter 4

Addressed the gap in the literature concerning healthcare utilisation among internal migrants in Ghana by analysing barriers and facilitators. It utilised data from the Ghana Living Standard Survey Round 7 (GLSS7) to provide empirical insights into this underexplored area. By elucidating factors influencing healthcare-seeking utilisation, the chapter contributes to a deeper understanding of healthcare access dynamics for internal migrants in Ghana.

Chapter 5

Addressed another gap in the existing literature by employing data from the Ghana Statistical Service's GLSS7 once again. This chapter specifically explored the correlation between out-of-pocket healthcare expenditure, a significant aspect of healthcare financing, and healthcare utilization among internal migrants in Ghana.

Chapter 6

In this chapter, the Delphi approach was utilised to methodically explore the viewpoints of healthcare providers and other stakeholders engaged in migrant healthcare in Ghana. This methodological strategy was employed to uncover key determinants influencing the health-seeking behaviour of internal migrants in the nation and identify actionable strategies to improve healthcare accessibility for this demographic group.

Chapter 7

The chapter outlined the beliefs and perspectives regarding the health-seeking behaviour of internal migrants. Utilizing semi-structured interviews for qualitative exploration, this chapter delved into the complexities of these beliefs and perceptions. The Integrated Change Model (I-Change Model) served as the conceptual framework guiding the investigation into migrants' health behaviour, providing a structured approach to understanding their healthcare-seeking decisions.

Chapter 8

Chapter 8 represents the final chapter of the thesis, encapsulating a comprehensive summary of the research findings, discussions, and contributions to the scholarly discourse. This concluding segment engages in a reflective analysis of the key insights gleaned throughout the research journey, contextualising them within the broader theoretical framework and methodological foundations established in preceding chapters. Additionally, Chapter 8 critically evaluates the implications of these findings for theory, policy, and practice, elucidating their significance in advancing knowledge within the field. Furthermore, this chapter identifies potential avenues for future research, pinpointing areas requiring further investigation or refinement, thus laying the groundwork for continued scholarly inquiry and discourse.

Figure 2: Summary of Thesis Outline

CHAPTER 2

Determinants of Health Seeking Behaviour among Internal Migrants in Africa: A Systematic Review

2.0 Introduction

Chapter 1 of the thesis presented an overview of the problem regarding migration and health nexus, both internal and international, emphasising the need for this study and introducing the aims and objectives of this thesis. However, a systematic review of the broader literature was deemed essential to rigorously assess existing knowledge regarding health-seeking behaviour among migrants. This current chapter reviews existing literature focusing on the barriers and facilitators of health-seeking behaviour among African internal migrants. This chapter aims to synthesise relevant studies rigorously, facilitating an in-depth exploration and analysis of the current state of knowledge in the field. This systematic review assumes a significant role within the thesis as it establishes the foundation of this research. Delving into the literature offers valuable insights into the strengths and gaps in the existing body of knowledge, i.e. guiding in shaping relevant research questions and identifying areas that warrant further investigation.

2.1 Background

Gaining insights into the barriers and facilitators affecting health-seeking behaviour is essential for implementing interventions that foster behavioural modification and should also be understood within the cultural framework of migrants (Maneze et al. 2015). Migration is a critical element of human advancement and a substantial catalyst for societal transformation and the welfare of diverse populations. It remains a key means by which people escape undesirable societal happenings (Foresight, 2011).

The Global Migration Data Portal estimates there were 272 million migrants globally in mid-2019, with 41 million from, to, or within Africa in 2017. Among these African migrants, 19 million individuals were domiciled within the African continent. At the same time, 17 million were situated beyond its borders, and an additional 5.5 million hailed from non-African origins. In 2017, 37 African nations exhibited net emigration patterns, predominantly directing their migratory streams toward other African destinations. Nonetheless, the outflows were channelled to destinations outside Africa for the foremost net emigration countries. Similar to migration on a global scale, the phenomenon of migration in Ghana is primarily propelled by

disparities in development between the regions of origin and the regions of destination. Factors determining health-seeking behaviour can be observed under several conditions, such as physical, socio-economic, cultural, and political (Babar & Juanita, 2005). These factors have led to the utilisation of a healthcare system dependent on socio-demographic characteristics, social structures, cultural beliefs and practices, educational level, the status of individuals in society, gender discrimination, economic and political systems, environmental conditions, disease patterns and the healthcare system itself (Stephenson & Hennink, 2004).

While there is an expanding body of literature examining the factors influencing healthcare-seeking behaviours and the utilisation of healthcare services among internal migrants (Vogel et al., 2017; Nwabueze, 2015; Gebregergs et al., 2020), very few studies focused on the situation in Africa (Akinyemi et al., 2017; Akinyemi et al., 2015: Olumide et al., 2008). These investigations explore several factors affecting healthcare-seeking conduct among the internal migrant population. Elements examined encompass socio-economic status, cultural convictions, linguistic impediments, the accessibility of healthcare facilities, and the affordability of healthcare services. Most of these studies, though needed in Africa, were conducted in developed countries. However, inferences from the previous chapter (refer to Chapter 1) give insights into why such studies are needed in Africa.

Enhancing the understanding of the barriers and facilitators faced by internal migrants in obtaining and using the available healthcare services forms the basis of this review. Hence, the primary objective of this review was to identify the existing literature concerning the health-seeking tendencies of internal migrants in Africa, with a secondary aim of identifying the gaps in the existing evidence and devising research initiatives to address these deficiencies. This imperative undertaking is prompted not solely by the inadequate current knowledge and evidence on the health of internal migrants but also by the substantial increase in internal migration within the region throughout the specified timeframe. This surge bears significant health ramifications for the migrants themselves and poses challenges to the healthcare system within the African region.

2.2 Methods

This section presents the procedures for searching, extracting, evaluating, and synthesising data from the identified relevant studies. The systematic review adhered rigorously to PRISMA guidelines, ensuring methodological excellence and transparency as established by Moher et al., (2009). This commitment minimises bias, enhances reliability, and facilitates comparability with other reviews, ultimately fostering a more precise understanding within the scholarly community (Hanane & Yousef, 2023).

2.2.1 Literature Search Strategy

A comprehensive and systematic online search for relevant literature was conducted. After conducting a preliminary review (refer to appendix), the researcher initiated a comprehensive search utilising electronic databases such as Scopus, PubMed, Google Scholar, Web of Science, and Africa Journals Online (AJOL) to identify the appropriate studies. The table below shows different variations of search text and a blend of Medical Subject Headings (MeSH) and keyword terms used to search the database.

Table 1: Search Terms

Concept	Keywords
Health-seeking behaviour	*"Health service utilisation" OR "health-seeking behaviour" OR "Care-seeking behaviour" OR "Healthcare-seeking"*
Determinants	*determinan* OR facto* OR correlate* OR contributor* OR barrier**
Migrants	*"Internal migrants" OR "Migrants" OR "Migrant worker"*
Setting	*"Sub-Saharan Africa" OR "Africa"*

All literature searches were meticulously executed within a specific timeframe, from June 2020 to December 2020. This designated period was chosen carefully to ensure a comprehensive exploration of relevant academic resources, allowing for an in-depth examination of the existing knowledge on the research topic.

2.2.2 Inclusion Criteria

Including primary research articles published from 2000 to 2020 is a methodological decision that underscores the meticulous approach to curating the literature for the review. This carefully selected temporal range is a deliberate strategy to encapsulate a substantial and relevant body of scholarly work while maintaining a contemporary focus. This review exclusively considered full-text; peer-reviewed journals published in the English language. Each study identified through the database searches underwent a comprehensive examination, encompassing an evaluation of information presented in the title, abstract, and full text. The analysis incorporated studies that satisfied the specified criteria, which are detailed as follows:

- Focused on internal migrants in Africa.
- Examine the health-seeking behaviour of internal migrants.
- Available in full text.

Studies were, however, excluded if they highlighted health-seeking behaviour from non-relevant aspects or populations other than internal migrants in Africa. Excluded from the consideration were studies that exhibited the following characteristics:

- Examining behaviour apart from health-seeking behaviour.
- Focusing on populations other than internal migrants
- Studies in any other language apart from English.

The selection of articles for this review was implemented in three stages:

a. The initial selection of studies was primarily based on the examination of titles.
b. Abstracts of articles significantly related to this study's aim were also selected.
c. Articles were finally selected after full-text reading.

2.2.3 Study Screening and Appraisal

The screening of the selected studies was determined based on the defined criteria for inclusion and utilising the study titles and abstracts. Studies that met the screening process were further reviewed to ensure that all selected studies met the inclusion requirements. Two reviewers screened all results independently to remove duplications and irrelevant studies. Disagreements were discussed with a third reviewer. Further, a quality assessment checklist was employed to appraise the selected studies critically.

With reference to recent studies on quality appraisal tools (Zheng et al., 2014 & Q.N. Hong et al., 2017), three quality assessment checklists were adopted to enable critical appraisal of the

included studies as appropriate. The Agency for Healthcare Research and Quality (AHRQ) checklist was applied for quantitative studies (Zheng et al., 2014), while the Joanna Briggs (JBI) series of assessments was used for qualitative research (Briggs, 2014) and the Mixed Methods Appraisal Tool (MMAT) checklist was also applied for mixed methods. The criteria included in the quality assurance checklists were research population, methodology, and findings. The final decision on the quality of the selected studies was centred on relevance to the overall evaluation of the study, methodology and study goals (refer to Appendix 2 for further details).

2.2.4 Data Extraction and Analysis

Considering a similar review (Gulliver et al., 2012), a data extraction sheet outlining the relevant questions was developed. The included articles were evaluated, and the following data were derived: title, authors, year of publication, study design, sample size, geographical area, research methods, data collection method, access results, healthcare service utilisation and relevant health-seeking behaviours were identified in the studies. The table below depicts a comprehensive set of review questions aimed at providing answers to the objectives of the current study.

Table 2: Data extraction questions

Headings	***Review questions***
General Information	1. Author(s) 2. Year 3. Aim 4. Country
Description of methods Empirical findings	5. How was data on these determinants collected? 6. a. what is the dataset used? (if the method of data collection is secondary) b. if primary data, briefly explain. 7. What was the type of data analysis used? 8. What was the method of analysis? 9. What was the sample size?

Headings	*Review questions*
	10. What was the statistical basis for the sample size used? 11. Which sampling method was used? 12. Characteristics of sample 13. Which type of statistical method was used? 14. Which statistical model diagnostics tests were reported? 15. What was the theoretical underpinning used in the study? 16. What are the determinants of health-seeking behaviour among internal migrants? 17. How are these determinants operationalised? 18. How was health-seeking behaviour operationalised? 19. What are the main findings? 20. What is the author-stated challenges?

Subsequently, narrative synthesis was employed to integrate the findings from the diverse studies included in the systematic review. Due to the heterogeneity of study designs and the varying nature of statistical data across the selected studies, narrative synthesis was deemed the most appropriate method for synthesising the results (Popay et al., 2006; Rodgers et al., 2009). This approach allows for a more comprehensive interpretation of findings, particularly in cases where meta-analytic techniques may not be feasible due to the diversity of study characteristics and outcomes.

2.3 Results

This section systematically presents the review's findings. The reporting has been precisely presented to ensure a clear understanding of the study's outcomes. The results from this review are elaborated in the sections below, providing a comprehensive overview of the data collected and the insights derived from the analysis.

2.3.1 General Characteristics of Selected Studies

The initial search of literature resulted in a total of 3517 articles, as shown in Figure 1. Among the 3517 records identified through the database search, 31 articles were included for full-text review. Selected studies were conducted in nine (n=9) countries, namely Ghana (n=9); South Africa (n=11); Kenya (n=2); Nigeria (n=4), Sudan (n=1), Togo (n=1), Lesotho (n=1), Ethiopia (n=1) and Malawi (n=1). All the studies in this review were published between 2001 and 2020.

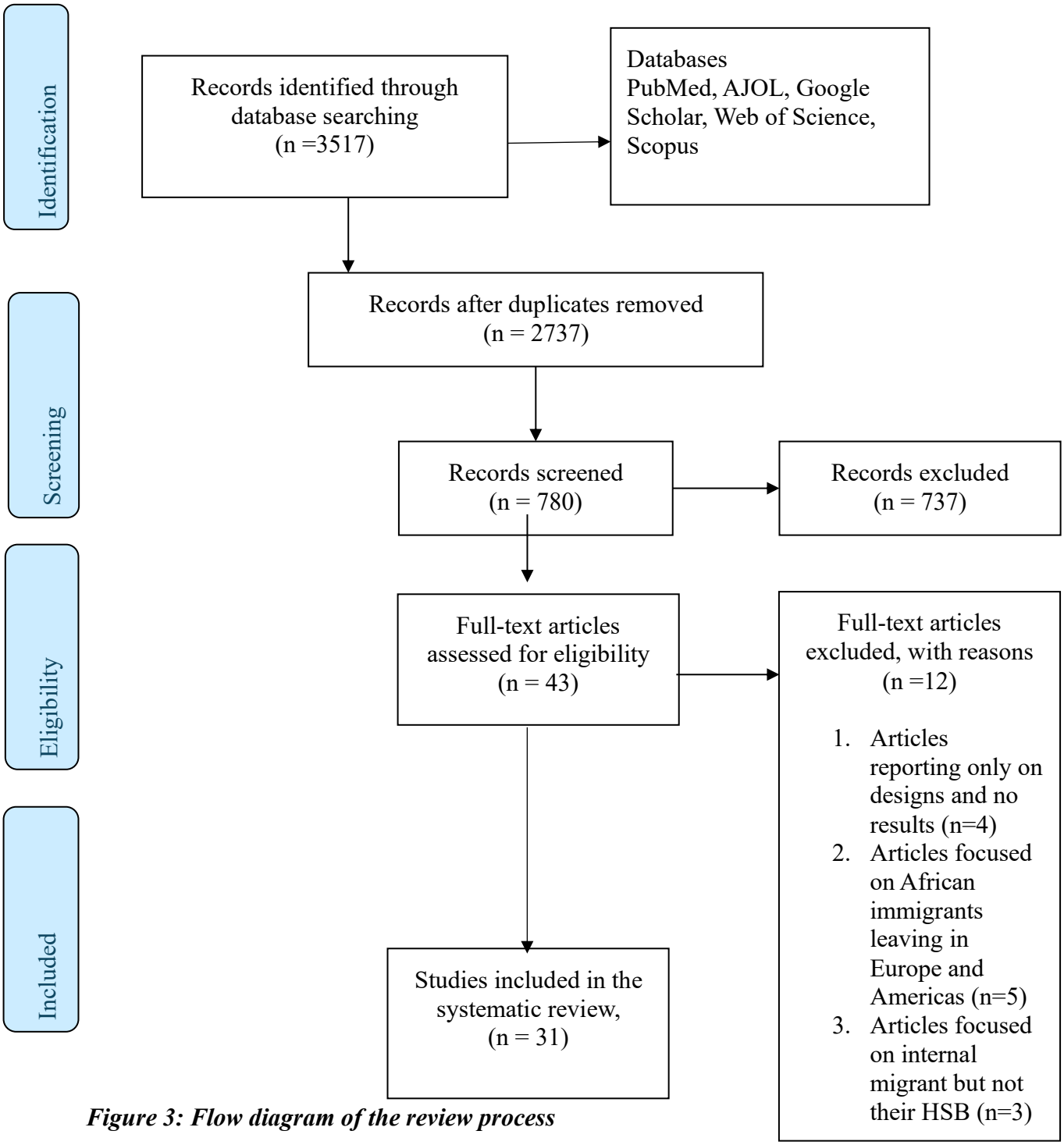

Figure 3: Flow diagram of the review process

All the selected papers for this study are cross-sectional studies except one longitudinal study. All these papers focused mainly on primary data, which was collected using varied instruments such as focus group discussions, in-depth interviews, and questionnaires. The sampling size of the included studies in this review ranged from 5 to 450 participants. Also, the studies varied in participant age, with the majority including participants between 18 and 60 years. Two studies (Kwankye et al., 2007; Shamsu & Yidana, 2019) included participants aged 15 and above. Most included studies used a simple random sampling approach to select the sample size. Few studies reported employing simple stratified and quota methods. Each study used varying research designs and included qualitative study (n=15), quantitative (n=8), and mixed methods (n=8).

The reported studies can broadly be divided into two categories in terms of the context of the behaviour of seeking healthcare. Eighteen (n=18) of the articles focused on the general health-seeking behaviour of migrants, while thirteen (n=13) of these studies focused on specific health conditions such as HIV AIDS, Sexually Transmitted Infections (STIs), pregnant women, mental health, hypertension, and maternal care. Most of the reviewed evidence reported on health-seeking behaviour among women, while the rest focused on children, men, and the general migrant population.

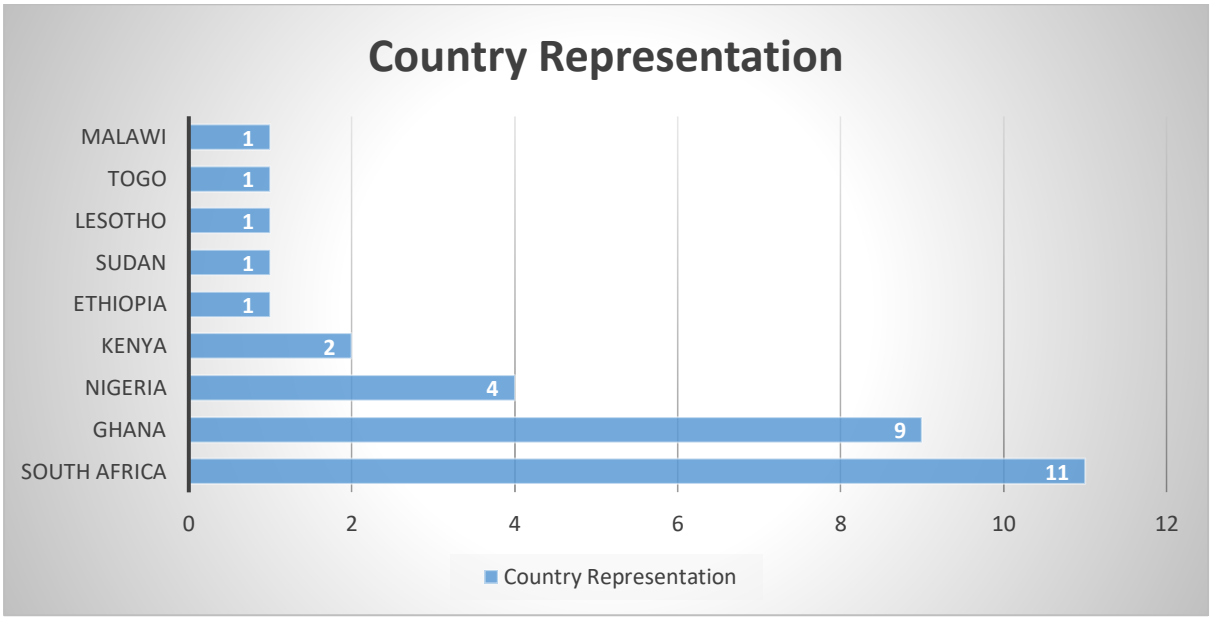

Figure 4: Country Representation

2.4 Methodological Features of the Studies

Methodological features are the precise elements and procedures used to formulate and execute the research design (Turner et al., 2017). These attributes are pivotal in shaping the study's comprehensive framework, robustness, and dependability. Here are some key methodological features in the included studies for this review.

2.4.1 Theoretical Models

The theoretical and conceptual framework explains the course of a research study and establishes a vital foundation within the theoretical constructs (Adom et al., 2018). Both frameworks aim to enhance the significance of research results by aligning them with the theoretical models in the study domain and guaranteeing their applicability to broader contexts (Adom et al., 2018). Only four of the 31 selected studies **(**Afeadie, 2018; Asampong et al., 2015; Pophiwa, 2015; Salami and Olugbayo, 2013) contained theoretical models. The models used in these four selected studies include the Health Belief Model, Healthcare Utilization Model, Kroeger's Model and Peter et al. (2008) Health Access Services Framework. The framework/models are briefly explained below.

a. Health Belief Model

The Health Belief Model (HBM) predicts health-related behaviour by considering specific belief patterns. A person's motivation to engage in health-related behaviour can be categorised into three groups: individual perception, modifying elements, and likelihood of action (Kerry & Elizabeth, 2020). Factors that impact illness perception comprise individual viewpoints regarding the importance of health to the person, perceived vulnerability, and perceived severity. Factors that alter this perception involve demographic factors, perceived risk, and prompts to act (Renu et al., 2015). The likelihood of action is the perceived benefits minus the perceived barriers to engaging in the recommended health action. Combining these variables endangers a response that frequently manifests the possibility of such behaviour (Janz & Becker, 1984; Rosenstock & Strecher, 1988). Within the Health Belief Model (HBM), individuals' convictions, encompassing factors like perceived advantages of health-related actions, barriers to implementation, and self-efficacy, impact their dedication to health-promoting behaviours.

b. Healthcare Utilization Model

Andersen (1968) developed this framework to identify the conditions facilitating or hindering individuals from accessing healthcare services (Azfredrick, 2016). Under this framework, an individual's utilisation of healthcare services is guided by a collection of elements, which include predisposing, enabling and need factors (Azfredrick, 2016). The components of this model, namely, predisposing, enabling, and need-for-care factors, can either facilitate or impede the utilisation of healthcare services by persons who patronise these services. Predisposing factors, which encompass demographic attributes, social structures, and a person's fundamental beliefs, attitudes, and understanding of healthcare services, fall under this model (Seidu, 2020). Enabling factors refer to the availability of resources, either at the individual or community level (Lo et al., 2018). The need factors encompass ailments and other health conditions necessitating healthcare services. According to the model, predisposing factors consist of demographic attributes and social structures. Enabling factors facilitate individuals' utilisation of healthcare facilities, such as the accessibility of resources such as income, free service availability, and the availability and accessibility of services (Azfredrick, 2016). The need factors are the motivators for service utilisation.

c. Kroeger's Model

This model states that healthcare utilisation may begin with the morbidity perception. Following the awareness of morbidity, three categories emerge that influence the utilisation of healthcare services: (1) Predisposing factors, (2) Characteristics of illness, and (3) Characteristics of the healthcare system (Valencia, 2013). Predisposing factors are individual characteristics such as age, ethnic group, years of education or marital status. These variables are strictly related to personal and tangible attributes. There are cultural factors within the predisposing factors. Characteristics of illness can be connected to the expected benefits of being treated in formal services or, to put it in different words, to the severity of illness such that the utilisation of medical services because of a unique alternative to taking care of the illness. Characteristics of the healthcare system are associated with the quality and attainability of the service (Kroeger, 1983).

d. Access to Healthcare Model

Within this framework, four main dimensions of access to healthcare are described (Peters et al., 2008), each having a supply-and-demand element, and which involve the following:

- Geographic accessibility—the physical distance or travel time between the location where services are provided and the individual receiving them.
- Availability— ensuring that individuals requiring care can access appropriate services, including timely availability with reasonable waiting times that align with potential users' needs and suitable healthcare providers and resources.
- Financial accessibility— this pertains to the association between the expenses incurred for healthcare services (which is partly influenced by their production expenses) and the capacity and willingness of patients to cover these expenses. It also involves safeguarding individuals from the financial repercussions of healthcare expenses.
- Acceptability—this pertains to the alignment between the degree to which healthcare providers are sensitive and adaptable to the social and cultural anticipations of individual patients and communities.

Barriers to accessing healthcare services can arise from either the demand or supply side. Demand-side determinants refer to the factors that affect the capacity to access healthcare services at the individual, household, or community level. Conversely, supply-side determinants are intrinsic attributes of the healthcare system that hinder individuals, households, or the community from utilising healthcare services (Jacobs et al., 2011).

2.5 Data Analysis

All the selected studies reported both descriptive and inferential analyses. However, the majority of the reviewed literature used descriptive analysis. The inferential analysis techniques used in the selected studies include:

- Regression Analysis (linear, logistic, and multiple)
- Chi-Square
- ANOVA
- Principal Component Analysis and Factor Analysis

None of the studies included in the review reported any statistical model diagnostics, which raises concerns about the validity and robustness of the statistical models employed (Zuur et al., 2010).

2.6 Findings

The empirical findings have been presented below under the following categories, aligning with the aim of this review:

- Access to Healthcare by Internal Migrants
- Utilisation of Healthcare by Migrants
- Facilitators of Health Seeking Behaviour
- Health Seeking Behaviours

i. Access to Healthcare by Internal Migrants

Access to healthcare services is described as the prompt use of personal healthcare services to achieve the most favourable health outcomes (IOM Report, 1993). Access to healthcare encompasses several critical components: gaining entry into the healthcare system, reaching treatment facilities where necessary services are provided, and identifying healthcare providers who can meet patients' needs. This process also involves establishing reciprocal relationships characterised by effective communication and trust (Penchansky & Thomas, 1981; Gulliford et al., 2002). Ensuring access involves not only the physical availability of services but also the ability of patients to engage with providers in a manner that fosters mutual understanding and confidence, which is essential for achieving optimal health outcomes (Andersen, 1995).

Out of the total thirty-one (n=31) studies included in this review, nineteen (n=19) studies reported findings on access to healthcare by internal migrants. The nineteen (n=19) studies support the view that all persons have a fundamental right to health, as supported by various international organisations and instruments. Notably, the World Health Organisation has also recognised the rights of migrants to be able to access not only emergency or reactive health care but also proactive care, including health promotion and disease prevention programs (WHO, 2010). Unfortunately, according to Crush and Tawodzera (2013), the views of South Africans on the rights of foreign migrants to access health care directly contradict various constitutional, legal, and administrative guarantees. A prevailing sentiment among a significant majority suggests that foreigners exploit their healthcare infrastructure.

Elements of the healthcare access discussed include Mental Health of the Migrant Population (e.g., Thela et al., 2017), General Health or primary care (e.g., Nyarko & Tahiru, 2018;

Pophiwa, 2009; Prosper, 2015; Anglewicz et al., 2016): Sexually Transmitted Infection (Clouse et al., 2018 and Lasater et al., 2019), maternal care, hypertension, malaria, and the use of National Health Insurance by migrants (Lattof, 2018). Several studies have also explored the barriers to accessing primary or general care. The significant reported barrier is financial constraints (Nyarko & Tahiru, 2018; Lattof, 2018; Prosper, 2015). Their occupations explain the financial barrier of the migrants. Research focusing on financial impediments primarily targeted porters, a group known for their generally low-income levels.

As stated by Lattof (2018), the predominant hindrance that *"kayayei"* migrants face when accessing healthcare is financial limitations, which hinder their ability to participate in the National Health Insurance Scheme, renew expired health insurance policies, or take time off from work. McCann et al. (2016) also identified financial challenges as a significant barrier to mental health among internal migrants. He observed that, within a sub-Sahara African context, the ability to access specialists was regarded as a sign of financial wealth, as specialist services were often only accessible through private health systems, which were unaffordable to most people.

Another barrier reported is communication, which lies at the core of healthcare service utilisation. The diversity of languages spoken in most African countries challenges healthcare services. The inability to communicate within health care consultations has recognisable consequences. According to Chirowodza (2012), language is a primary barrier to accessing healthcare by the migrants at Kayamandi Clinic in South Africa. This sentiment is equally echoed by Crush and Tawodzera (2013), who noted that with language as an artificial barrier, migrants often encounter difficulties effectively conveying their health issues and requirements.

ii. Utilisation of Healthcare by Migrants

Individuals utilise healthcare services for purposes such as illness prevention, treatment, or improvement; to enhance or maintain their functional abilities; and even to acquire information regarding their health status and diagnosis. Theoretically, utilisation of healthcare should be strongly associated with need. Healthcare utilisation can occur at typical locations, such as hospitals, emergency departments (EDs), physicians and dental offices, and unorthodox sites. The results on the utilisation of healthcare by migrants are minimal because several aspects of

the utilisation of healthcare were not discussed or reported. Of the included studies, 12 reported findings on aspects of utilisation.

Latoff (2018) and Lasater et al. (2019) reviewed how stigmatisation affects healthcare utilisation. According to Lasater et al. (2019), experiences of stigma could serve as risk factors or hindrances to healthcare seeking, exacerbating the vulnerability of Female Sex Workers (FSW) to HIV-related consequences and constraining the accessibility to the prevention of the HIV disease and its treatment services. Similarly, a study by Latoff (2018) noted that previous encounters with the formal healthcare system, encompassing instances of stigma and discrimination, prompted participants to search for informal care beyond healthcare facilities. Arnold and Gagnon (2014) also documented the obstacles to healthcare access affecting both migrants and non-migrants. Notably, they emphasised the existence of specific and distinctive barriers, including concerns related to potential harassment, disparities in costs between migrant and Kenyan clients, and natural or perceived instances of discrimination.

Another theme that emerged from the review is the influence of financing on healthcare utilisation. Nyarko & Tahiru (2018) indicated that migrants "*kayaye"* in Accra are confronted with the coverage and effectiveness of the NHIS. The migrants explain that the NHIS does not cover the essential drugs that are expensive. In effect, not all crucial medications are covered by the insurance scheme. Therefore, migrants may still require financial resources to afford comprehensive healthcare services despite possessing a health insurance card. Latoff et al. (2018) posited that financial obstacles and the absence of healthcare insurance coverage often prevent migrant workers from accessing healthcare services in numerous environments. Afeadie (2018), on the other hand, found high patronage of formal healthcare facilities by migrants on account of the use of the National Health Insurance (NHIS).

Few studies found a high utilisation of healthcare services at public health centres (Shamsu-Deen & Adadow, 2019; Afeadie, 2018; Pophiwa, 2009). Healthcare facilities operated by the government were relatively popular as the first place of consultation among the migrants who sought help. However, experiences of adverse treatment by health practitioners, experiences of delays when seeking care, and the high cost of allopathic care serve as barriers to utilisation (Asaana, 2015; Shamsu-Deen & Adadow, 2019; Pophiwa, 2009). Chirowodza (2012) also reported overcrowding at public or government hospitals as a significant impediment that prevents migrants from utilising healthcare services.

Morris and Ferguson (2007) also reported a preference for private medical facilities. Their findings not only shed light on the prevalence of this preference but also contribute to the broader discourse on healthcare dynamics. The authors demonstrated that migrant transport workers exhibited a preference for private healthcare facilities because of their convenience and shorter waiting periods. As documented in their study, this preference for private medical services prompts a deeper examination of the factors influencing such choices, potentially revealing intricate nuances that warrant careful consideration in the context of healthcare policy, resource allocation, and service provision. Those who sought healthcare outside the healthcare facilities reported using both chemists' shops and local herbs (Shamsu-Deen & Adadow, 2019; Lattof, 2018).

The reports did not provide data on utilising various specific healthcare services. Information on consultations at primary healthcare services and trends in consultations by migrants was also lacking in the findings. Further, there was a notable absence of comparative analysis between the utilisation of healthcare services among internal migrants and non-migrants. These gaps highlight the need for further studies and investigations to address these omissions (Bhopal, 2014; Gushulak et al., 2010).

iii. Facilitators of Health Seeking Behaviour

Facilitators of health-seeking behaviour involve various factors or conditions that positively influence individuals, motivating them to proactively pursue and embrace actions and services conducive to enhancing their overall well-being. This multifaceted construct is integral to understanding the dynamics underlying individuals' engagement in health-promoting behaviours. Identifying and comprehending these facilitators contribute significantly to formulating targeted interventions and public health strategies. Out of the thirty-one (n=31) included studies, eight (n=8) papers referred to facilitators of health-seeking behaviours among these migrants. Table 3 below shows the summary of the facilitators as discussed in the studies.

Table 3: Summary of the Facilitators of Health-Seeking Behaviour

Study	Facilitators Of Health Seeking Behaviour	Classification Based on Ecological Model
Clouse et al. 2018 Faturiyele et al. 2018	Pregnancy HIV ATR Care	Environmental / Personal factors
Anglewicz, 2019	HIV-related services	Environmental / Personal factors
Afeadie, 2018; Latoff, 2018, Pophiwa, 2009	Sickness/ Illness	Personal / Cultural
Hughes, Hoyo and Puoane, 2006	The fear of acquiring an STI	Personal
Morris & Ferguson, 2007	Experienced STI symptoms	Personal

According to the studies, the factors described above facilitated the internal migrants' access to and use of the available health services in the respective host locations; however, these were often not the primary study objectives.

iv. Health Seeking Behaviours

According to the World Health Organisation (WHO), health or health-seeking behaviour is any action undertaken by individuals who perceive themselves to have a health condition or illness to obtain an appropriate remedy. In the broadest sense, health behaviour includes all behaviours related to developing and sustaining a sound physical and psychological well-being. Health-seeking behaviours can be evaluated through diverse measures, such as regular medical screenings, healthcare facility preferences, seeking medical attention when experiencing health issues, and declining medical services when unwell. Health-seeking behaviour can also be context-specific, where the related behaviour is primarily influenced by the nature of the health condition.

Twelve studies (n=12), qualitative in nature, examined health-seeking behaviour among the internal migrants (See Table 4). Most of these studies did not examine health-seeking behaviours in detail. Eight studies discussed health-seeking behaviour in the context of general

health care or primary care, while the remaining four (n=4) focused on HIV/STI-related care. The general trend of health-seeking behaviour identified in the studies include:

- Self-medication
- Access healthcare from pharmacies and retail shops specialising in chemicals and medications.
- Seek alternative care from unorthodox sources.
- Access healthcare from the hospital or clinic only when health conditions do not improve.

Table 4: Summary of Health seeking behaviour of migrants

Study	**Themes from Studies (Health-seeking behaviour)**	**Context**
Clouse et al. 2018	• All female migrants expressed their plan to continue seeking healthcare for themselves and their children after delivery. However, few respondents who travelled planned to seek care at the new location. • When participants did talk about visiting a clinic while travelling, it was almost exclusively for the baby, particularly to adhere to the immunisation schedule.	HIV/AIDS pregnant mother in ATR Care
Anglewicz, 2019	• There exists no disparity in health conditions following migration between individuals who migrated and those who have not.	HIV-related services
Asanaa, 2015	• Women were dependent on gatekeepers for all their health-seeking needs. At the same time, they remained closer to their families in Northern Ghana, resulting in delays in seeking appropriate care for any health problem. Migrant women from Northern Ghana experienced diminished autonomy concerning their ability to demand or utilise care services upon migration.	General Health care
Kwankye et al. 2007	• Child migrants access health care from pharmacies and chemical shops.	General Health care

	• These children only went to the hospital or clinic when their health condition did not improve with over-the-counter treatment. • Self-medication seems to be more of the norm.	
Fadlallah et al.2020	• There are statistically significant health disparities by immigration status. The contributing factors include education, reported stress, healthcare-seeking behaviour, knowledge of health hazards, health outcomes, methods of diarrhoea prevention, and health behaviour.	General Health care
Shamsu-Deen & Adadow, 2019	• Marital status and level of education were significantly associated with the places where health care was sought. • Only respondents with National Health Insurance Scheme (NHIS) status were statistically significant regarding where health care was sought.	General Health care
Afeadie, 2018	• Migrants consulted for healthcare at a tender stage of the disease in the community of origin in contrast to after migration. • Migrants seek care only if they can afford it.	General Health care
Hughes, Hoyo and Puoane, 2006	• Afraid of acquiring sexually transmitted infections STIs from their returning migrant partners. • The majority of the women refrained from taking precautions, with only a minimal 8% opting for condom usage primarily as a means of contraception.	STI and pattern of the partner's migration
Lakika,2011	• The kind of help depends on her perceptions of each illness and its causes. • The Bible, prayer (Spiritual Intervention)	General Health care
Latoff, 2018 Nyarko & Tahiru, 2017	• Seeking care included seeking advice from either a professional healthcare practitioner (such as a doctor, nurse, or pharmacist) or an informal source (such as medicine vendors in the market) • The majority of participants who were not covered by insurance or whose insurance had expired did not possess	General Health care

	the financial means to enrol in or renew their policies—but reported being assisted by Non-Governmental Organisations (NGOs) who freely enrolled them into the National Health Insurance Scheme (NHIS).	
Morris & Ferguson, 2007	• Trucker drivers sought care in private health facilities, public health facilities and pharmacies.	STI symptoms

2.7 Quality Appraisal of Selected Studies

Quality appraisal of a study is the systematic evaluation and assessment of a research study's methodological rigour, validity, reliability, and overall credibility (Vassallo, 2018). It is an essential step in evidence-based practice and research, ensuring that the findings and conclusions drawn from a study are trustworthy and can be used confidently in informing decision-making or further research. Quality appraisal involves examining various aspects of a survey to gauge its scientific integrity and the robustness of its design. Methodological quality was considered a significant facet of this review. It employed three quality assessment tools to assess the quality of the selected studies. The Joana Briggs Institute (JBI) qualitative research checklist was used for qualitative studies, the Agency for Healthcare Research (AHRQ) was also used to appraise the quantitative studies, and the Mixed Method Appraisal Tool (MMAT) was used for appraising the mixed methods studies selected for this review study.

The quality assessment of fifteen qualitative studies (n=15) was conducted using the JBI Critical Appraisal Checklist for Qualitative Research, a tool designed to evaluate key methodological aspects of qualitative studies (Godfrey & Harrison, 2015). This assessment involved reviewing each study's sample frame, recruitment strategies, sample size adequacy, and the comprehensiveness of the description of subjects and settings. The studies were evaluated based on their data analysis coverage, ascertainment and measurement of the health condition, and the thoroughness of any statistical analyses. The response rate and management were also considered critical components of the evaluation process. Each study was scored on a scale of 10 to 100, where higher scores indicated better adherence to the methodological criteria. Studies scoring between 80-100 were rated as "good," 50-70 as "fair," and below 50 as "poor" quality. Overall, nine studies were categorised as "good," four as "fair," and two as

"poor," reflecting varying levels of methodological rigour. This comprehensive assessment underscores the importance of robust appraisal tools, such as the JBI checklist, in evaluating the quality of qualitative research and ensuring the credibility of study findings (Godfrey & Harrison, 2015).

For the eight (n=8) quantitative studies, the Agency for Healthcare Research and Quality (AHRQ) methodology checklist was applied. This is a methodological quality assessment tool using an 11-item checklist. An item would be scored "0" if it was answered "NO or UNCLEAR"; if it was answered "YES", then the item was scored 1. Article quality was assessed as follows: Low quality = 0-3; Moderate quality = 4-7; High quality = 8-11. Consequently, the scores of the eight selected studies ranged from 4 to 9. This implies that the quality of quantitative studies used in this review ranged from moderate to high.

The remaining eight (n=8) studies were appraised using the Mixed Methods Appraisal Tool (MMAT). This instrument employs a rating of 0, 25, 50, 75, and 100 (where 100 denotes the highest level of quality) to assess each research study. This evaluation considers study selection bias, research design, data collection techniques, sample size, intervention integrity, and data analysis (Plyye et al., 2011; Pace et al., 2012). The outcome of the eight mixed method studies indicated that four were rated as high quality (MMAT 75%), and the three which remained were rated as average quality (MMAT = 50%) (See appendix 2 for details).

Determinants of Health Seeking Behaviour

- Sociodemographic factors (age, gender, marital status)
- Availability of healthcare services
- Influence from relatives and friends
- Access to healthcare
- Socio-cultural and religious background
- Knowledge and perceptions about diseases
- Discrimination and attitude of healthcare providers
- Educational level and status in society
- Language barrier
- Severity of ailment

Box 1. Summary of Identified Determinants of Health-Seeking Behaviour

2.8 Discussions

In the following discussion section, this study critically examines and synthesises the key findings and insights derived from a comprehensive exploration of the literature on health-seeking behaviour among internal migrants in Ghana. This examination goes beyond mere summarisation, offering a nuanced analysis that elucidates significant patterns, discrepancies, and implications within the existing body of knowledge. By integrating the findings from various studies, the discussion highlights the common themes and divergent viewpoints that emerge in the literature, allowing for a deeper understanding of the factors influencing health-seeking behaviour in this population. The analysis addresses the implications of these findings for policy and practice, emphasising the need for tailored interventions that consider the unique challenges internal migrants face. This critical synthesis not only contributes to the academic discourse on migrant health but also provides actionable insights that can inform health planners and stakeholders in designing effective healthcare strategies that improve access and utilisation of services among this vulnerable demographic in Africa.

2.8.1 The Social Condition of the Internal Migrants

This review summarises the barriers and facilitators of health-seeking behaviour among internal migrants across Africa. It also demonstrates a gradual surge in the population of internal migrants across the African region and the associated health hazards. In Ghana, for example, the number has been rising across different demographic variables such as gender, age, and educational status (Kwankye et al., 2007). Unfortunately, the increasing migrant population has not significantly increased the demand for formal and orthodox health services (Nyarko & Tahiru, 2018; Owusu & Yeboah, 2017).

The review reveals that internal migrants tend to recreate a semblance of rural society within urban areas, effectively establishing what can be termed a "village within the city". With very few exceptions, migrants consistently face marginalisation in urban communities and are subjected to discriminatory treatment (Crush & Tawodzera, 2014; Lasater et al., 2019). Their typical living arrangements involve cramped and unsanitary dormitories provided by their employers or residing in open areas such as markets and bus terminals.

The overarching depiction of internal migrants in this review indicates that most of them belong to a lower socio-economic stratum, with only a scant few dwellings in rented accommodations within slum areas, while others find shelter in dormitory-style lodgings equipped with shared public toilet facilities (Afeadie, 2018; Faronbi et al., 2019). These overcrowded and unhygienic living conditions may exacerbate the risk of infectious disease transmission within this population. Additionally, their substandard living conditions, coupled with a lack of attention to their health, render migrants susceptible to long-term health issues. Earlier research among migrant communities suggests that their housing and sanitation standards often fall below established minimum norms (Fernandez, 2018; Seeberg, 2014), a consistent finding reiterated in this review.

Most included studies have not explored the relationship between socio-economic status (SES) and health-seeking behaviour. However, a few studies (Owusu & Yeboah, 2017; Tshabalala, 2014; Irfan et al., 2007) briefly mentioned the influence of SES, a composite variable composed of education, income, and occupation, on the healthcare-seeking behaviour of migrants. The findings derived from the review demonstrate a noteworthy association between socio-

economic status (SES) and various aspects of healthcare-seeking behaviour, encompassing measures related to both education and income. In light of the connection between education and health literacy, it is plausible that educated internal migrant workers are better equipped to make informed decisions regarding seeking medical treatment by assessing their health conditions. It is noteworthy that, a substantial proportion of these migrants possesses lower levels of education, placing them at a disadvantage when it comes to making informed health decisions due to a lack of reliable information, pertinent knowledge, and relevant experience (Irfan et al., 2007; Shamsu-Dee & Adadow, 2019).

2.8.2 Low utilisation of medical facilities

Medical services in urban cities in Africa, particularly in Ghana, are delivered primarily through hospital-based facilities, which offer both in-patient and out-patient care. The elevated expenses associated with healthcare services posed a substantial barrier for migrant workers when accessing healthcare (Salami & Olugbayo, 2013; Nyarko & Tahiru, 2018; Nedson, 2009; Lattof, 2018). In contrast to hospitals, licensed chemical shops, and herbal centres, there is a generally lower standard of healthcare services, and they often employ a pricing strategy aimed at attracting patients by offering lower prices. Unsurprisingly, most migrants resort to these areas or facilities for their healthcare needs. The majority of the studies (Desmennu, Titiloye and Owoaje, 2018; Afeadie, 2018; Arnold, Theede & Gagnon, 2014; Boroto, 2011; Asampong et al., 2015) opined that healthcare expenditure is a significant barrier influencing the healthcare seeking behaviour of migrants. Most of the participants reported never or rarely using hospital-based health care.

Individual healthcare financing was the most commonly cited explanation for the migrants non-utilisation of healthcare services. Due to financial constraints, some individuals may opt not to seek healthcare services when they become ill. The review underscores that most migrants lacked coverage under health insurance schemes. Moreover, even those covered often had restricted access to healthcare services because of the limited financial protection offered by these schemes. It's noteworthy that in many African countries, there is a lack of effective and operational health insurance programs.

A study conducted in Ghana (Lattof, 2018) revealed that most internal migrants, mainly from Northern Ghana, do not have health insurance, although Ghana has a compelling national

health insurance scheme. Few of those with insurance policies tend not to renew them once they expire. The effectiveness of healthcare reforms will significantly hinge on integrating migrant workers into insurance schemes and the success of population health initiatives in reaching this migrant population (Lattof, Coast and Leone, 2018).

The review highlights a substantial lack of healthcare awareness and a limited perception of health risks among migrants. Many of the studies revealed that migrant workers often opted for self-medication or took no action when they fell ill (Makandwa & Vearey, 2017; Chirowodza, 2012; Tshabalala, 2014). In several of these studies, some migrants perceived their illnesses as non-severe; notably, a small portion believed they could manage and treat the diseases on their own. Also, the influence of religious beliefs on healthcare behaviour is significant (Boroto, 2011; Lakika, 2011; Munyaneza and Mhlongo, 2019).

Another factor contributing to migrants' limited use of healthcare services is their perception of discrimination and distrust towards healthcare providers (Latoff (2018); Lasater et al. (2019); Arnold and Gagnon, 2014). The difference in backgrounds and perspectives of local healthcare providers and their relationship with doctor-to-patient interaction is always an issue, even when it involves locals. Certainly, migrants who have cultural and ethnic inclinations different from those of their host areas make healthcare difficult.

2.9 Identified Gaps

The review conducted has identified significant knowledge gaps regarding the evidence base on the determinants (barriers and facilitators) of health-seeking behaviour among internal migrants in Africa. Key among these gaps include;

1. the lack of studies focusing on healthcare and healthcare service utilisation among migrants needs to be explored in subsequent research.
2. studies did not share a clear definition and framework regarding the health-seeking behaviour of internal migrants.
3. insufficient evidence identifying the determinants (barriers and facilitators) of health-seeking behaviour among internal migrants in Ghana.

4. the lack of analysis assessing the influence of the determinants regarding the access and utilisation of healthcare services among internal migrants in Ghana.
5. insufficient data is available on why internal migrants in Ghana do not engage in health-seeking behaviour.
6. lack of policy framework targeting and addressing migrants' healthcare in Ghana.

All gaps identified in this study have been thoroughly addressed throughout the various chapters of this thesis and are explicitly discussed in the subsequent chapters. This comprehensive approach ensures that the limitations and challenges highlighted are systematically examined and integrated into the broader analysis of the research.

2.10 Research Implications

The reviewed studies revealed that internal migrants have equal access to healthcare services in the destination area. However, they face complex problems utilising these available health services. They are also confronted with cultural and psychosocial obstacles, such as poor education and knowledge of health issues, which impede their access to health services (Lattof, 2018). These impediments were not among the most prominent factors identified in the research review, which could be attributed to the limited number of studies available.

As outlined in the studies, the structural obstacles that impact health-seeking behaviours include financial constraints, language barriers, and the attitude of healthcare personnel towards migrants. Concerning the financial barrier, this study underscores the significant role of insurance coverage in shaping health-seeking behaviour. As self-reported reasons indicate, the high cost of healthcare services represents a substantial obstacle to healthcare access. Consequently, this has resulted in the underutilisation of healthcare services among migrants, leading to a series of ineffective health-seeking behaviours within this migrant population.

Utilisation is seen as a consequence of needs and access to healthcare. For migrant populations, the utilisation of healthcare services may exhibit disparities when compared to non-migrant populations due to a variety of factors influencing both migrants' and non-migrants' needs and access. These factors encompass health status, self-perceived healthcare requirements, health-seeking behaviours, language barriers, and cultural distinctions. The review highlighted

migrants' preference for various health institutions, though these migrants frequently used public health centres. Also, various barriers, like those affecting access, were cited.

Notwithstanding, governments can improve the accessibility and affordability of healthcare services by providing mobile health services, expanding the network of healthcare facilities, and implementing healthcare insurance programs designed to address the requirements of internal migrants. Raising awareness through community outreach programs and media campaigns that educate internal migrants on the significance of health-seeking and where to access healthcare when the need arises is key to promoting good health-seeking practices among this population. Further, addressing the cultural and linguistic barriers whereby health communication materials are developed in languages that internal migrants can easily understand, as well as training healthcare providers on culturally sensitive and language barriers, will facilitate the utilisation of health services among internal migrants.

Community health workers should be trained and deployed to provide healthcare services in areas where healthcare facilities are limited and to conduct health promotion activities that target internal migrants to strengthen community-based healthcare to favour this group. Policymakers should develop policy interventions to address the fundamental societal factors influencing health outcomes, such as poverty, unemployment, and poor living conditions. This, in a way, can contribute to improving the health of internal migrants across Africa. Overall, a comprehensive and multi-sectoral approach is needed to encourage health service utilisation among internal migrants in Africa, with a focus on addressing the distinct requirements and difficulties encountered by this demographic.

2.11 Limitations of the Review

This study presented the gaps in the literature and made no suggestions as to how these gaps could be addressed. In effect, it was limited in exploring the policy relevance of those gaps in practice. Further, according to the specified inclusion criteria established for this review, studies were only published between 2001 and 2020 in English, and only full text was included, thereby ignoring studies conducted before 2001 and not in English. This, however, limits the evidence on the determinants of health seeking among internal migrants in Africa, as identified in the review.

However, this review, to the best of the researcher's knowledge, is the first to review systematically and present evidence on the barriers and facilitators of health-seeking behaviour among the internal migrants in Africa, and this could influence policy drive in the construct of relevant policies on healthcare of migrants in Africa.

2.12 Conclusion

This chapter has presented a comprehensive overview of the barriers and facilitators of health-seeking behaviour among internal migrants in Africa as identified in the included studies. The synthesis of existing evidence highlights the multifaceted nature of factors influencing healthcare access and utilisation within this population. Policymakers and healthcare providers can use these insights to design targeted interventions that could facilitate addressing the unique challenges faced by internal migrants in accessing healthcare services in their destination areas. Also, it has identified key research gaps in the evidence domain of health behaviour research among internal migrants, which needs to be addressed in future studies to understand further and improve their health outcomes in Africa and other developing countries. The next chapter presents the key identified research gaps in this study and how they are addressed empirically in the proceeding chapters of this thesis.

CHAPTER 3

Framework for Empirical Analysis

3.0 Introduction

The previous chapter provided an overview of the primary research available to address the research question. It identified, evaluated, and summarised the findings of key studies on the health-seeking behaviour of internal migrants across Africa. In doing so, it also highlighted significant gaps in the literature concerning migrant health-seeking behaviour. This chapter addresses these limitations by introducing the conceptual framework guiding the empirical analysis of this thesis. Also, it details the data collection and analysis methodology while offering a schematic representation of the conceptual framework.

3.1 Overview of the Identified Gaps in Literature

The systematic review presented in the previous chapter identified several gaps in the available evidence on the health-seeking behaviour of internal migrants in Africa. These gaps provided the scope for the empirical studies of this thesis. Considering the gaps identified in the review, various sets of research questions were developed (*see Table 5 below*) to guide the empirical studies of this thesis. However, these research questions served as the foundational objectives guiding this study.

Table 5: Identified Gaps in the Literature

Gaps in knowledge	Research Questions	Analytical Estimators	Thesis Chapter
Paucity of studies exploring the determinants of health-seeking among internal migrants in Ghana.	1. What are the barriers and facilitators of healthcare service utilisation among internal migrants in Ghana? 2. How do these barriers and facilitators vary across different regions and	A univariate analysis was performed to examine the utilisation of healthcare services among internal migrants in Ghana at their new destinations. To further identify the barriers and facilitators influencing healthcare service utilisation, a multiple logistic regression analysis was conducted. This allowed for the determination of key	Chapter 4

	demographic groups?	factors affecting access to healthcare among internal migrants in their new locations in Ghana.	
Insufficient examination exists to evaluate the correlations between critical determinants concerning the accessibility and utilisation of healthcare services among internal migrants in Ghana.	1. What are the key determinants that significantly influence the accessibility and utilisation of healthcare services among internal migrants in Ghana? 2. To what extent do out-of-pocket expenses as a significant barrier affect internal migrants' access to and utilisation of healthcare services in the host areas?	Univariate analyses were conducted on healthcare financing to assess its impact on the health-seeking behaviour of internal migrants in Ghana. Additionally, multiple logistic regression analysis was employed to identify the factors associated with a key determinant of health-seeking behaviour—out-of-pocket expenditure. This approach helped to elucidate the relationship between healthcare financing and migrants' access to and utilisation of healthcare services.	Chapter 5
There is a lack of studies providing insights into the perspectives of healthcare deliverers regarding the barriers and facilitators of health-seeking behaviour among the internal migrant population in Ghana.	1. What, according to the medical professionals and other agents in the healthcare sector, are the barriers and facilitators of the health-seeking behaviour of internal migrants in Ghana? 2. According to the healthcare agents, what strategies could promote the health-seeking	A Delphi study was conducted involving a cohort of healthcare professionals and providers to identify the barriers and facilitators influencing health-seeking behaviour among internal migrants and also pinpoint policies designed to bolster healthcare efficiency for this demographic	Chapter 6

	behaviour of internal migrants in Ghana?		
Lack of available data explaining the reasons behind the low participation of internal migrants in health-seeking behaviour practices in Ghana.	1. What are the underlying socio-cognitive perceptions contributing to the low engagement of internal migrants in health-seeking behaviour practices in Ghana? 2. How do these perceptions influence the health-seeking behaviour of internal migrants in Ghana?	In-depth interviews were conducted among some key informants (identified internal migrants) selected through a purposive sampling approach to better understand the perceptions and beliefs underlying the lack of health-seeking behaviour among internal migrants in Ghana.	Chapter 7

3.2 Theoretical Model

The theoretical and conceptual framework clarifies the research trajectory and establishes a vital foundation by grounding it in theoretical constructs. According to Grants & Osanloo (2014), it is the blueprint guiding the research. The main objective of a research framework is to enhance the significance and validity of research outcomes by aligning them with the theoretical construct of the research area and ensuring their generalisability (Adom et al., 2018). Four theoretical models were identified in the review of the literature (refer to Chapter 2), and these include (1) the Health Belief Model, (2) Andersen Healthcare Utilisation Model, (3) Kroeger's Model, and (4) the Healthcare Services Access Framework.

To understand health behaviour and to plan health promotion, theoretical constructs and models are used (Rejeski and Fanning, 2019). The number of theoretical constructs and models used in health behaviour science is enormous (Dixon, 2008). According to the literature, a minimum

of 1700 constructs have been employed in 83 different theories (Michie et al., 2014), which are not all distinct (Schwarzer et al., 2007) or can be operationalised separately (Johnston et al., 2014). Due to significant overlaps between many of these theories, numerous scholars have endeavoured to integrate diverse models and theories (Hagger and Chatzisarantis, 2009). Advancements in health psychology rely on systematically testing multiple theories (Hein De Vries, 2017) and finding alternative pathways. Theories such as the Social Cognitive Theory (SCT) (Bandura, 1986), the Health Belief Model (HBM) (Janz and Becker, 1984), the Trans-Theoretical Model (TTM) (Prochaska and DiClemente, 1986), and the Theory of Planned Behaviour (TPB), (Ajzen, 1991) have been identified and demonstrated as effective health behaviour models (Godin and Kok, 1996).

3.2.1 The Adopted Theoretical Framework

The previous chapter (Chapter 2) of this thesis reviewed the available literature on the topic and provided insights into various applicable models to better understand health-seeking behaviour. Several theories and models of behavioural changes have been widely used in public health to explain health-seeking behaviour among populations (Hausmann et al., 2003; MacKian, 2003). These models have helped researchers to identify and understand factors that influence the health-seeking behaviours of individuals beyond just knowledge, attitudes, and practices (Hausmann et al., 2003). Numerous studies have utilised different theoretical models to explore the health-seeking behaviours of internal migrants in various countries. For example, Yu et al. (2019) used Bronfenbrenner's ecological systems theory and acculturation theory to investigate how young internal migrants in China determine their health issues, perceive health services, and identify available opportunities to benefit their health in the host destinations. Similarly, Peng et al. (2019) employed Andersen's health service utilisation model to examine the association of migration status and health-seeking behaviours among the Chinese labour force in 29 provinces in mainland China.

This study adopted two established theoretical models, Andersen's Behavioural Model of Health Service Utilisation and the Integrated Change Model (ICM), also known as the I-Change Model, to explore the determinants of healthcare service utilisation and enhance knowledge regarding the health-seeking behaviour of internal migrants in Ghana. In the field of health behaviour research, it is common for researchers to adopt two or more theoretical models in one study (Taylor et al., 2007). This is because different theoretical models may

focus on various aspects or levels of the behaviour under investigation, and using multiple models can provide a more comprehensive understanding of the behaviour and its determinants (Eccles et al., 2012).

Several works of literature in health behaviour research have adopted multiple theoretical models to explain a particular behaviour. One example is a study by Sheeran et al. (2016) investigating the determinants of adolescents' healthy eating behaviour. In this study, the authors integrated two theoretical models, the Theory of Planned Behaviour (TPB) and Self-Determination Theory (SDT), to explain the complexity of healthy eating behaviour among adolescents. Also, Kei et al. (2021) critically compared the integration of Self-Determination Theory (SDT) and the Integrated Change Model (ICM) to explain physical activity behaviour among Dutch adults. By utilising multiple models, researchers can gain a more comprehensive knowledge of the complexity of health behaviour and the various factors that influence it. However, critics argue that incorporating multiple theoretical constructs in health behaviour research can lead to theoretical confusion when constructs from various theories need a clear rationale for integration (Vries, 2017).

Overly complex models, as cautioned by Williams et al. (2020), hinder the practicality and usefulness of findings for researchers and practitioners. Again, Johnson (2018) emphasised the resource intensiveness of this approach, which may strain researchers' capacity due to the demand for time, funding, and expertise. A methodical and deliberate strategy is imperative for tackling these issues in multi-construct research, highlighting theoretical consistency, simplicity, and resource consideration. Therefore, it is possible to adopt multiple theoretical models in a study. It often provides a better understanding of health behaviour, but researchers must ensure that the selected models are appropriate and relevant and that their integration is coherent and meaningful. Integrating multiple theoretical models in health behaviour research can enhance understanding, but careful consideration is required to ensure appropriateness, relevance, coherence, and meaningfulness.

For instance, Ajzen (2015) discusses the Theory of Planned Behavior (TPB), emphasising its utility in predicting and understanding health-related behaviours. However, Ajzen also acknowledges that the TPB may not fully capture all aspects of behaviour, suggesting that researchers must supplement it with other theories or models to provide a more comprehensive understanding. Additionally, Fishbein and Ajzen (2010) propose the Integrative Model of

Behavioural Prediction (IMBP), which combines elements of the TPB with other psychological theories to provide a broader framework for understanding behaviour. They highlight the importance of selecting appropriate theories and integrating them coherently to enhance the model's explanatory power. Furthermore, the importance of coherence and meaningful integration of theoretical models is underscored by Glanz et al. (2015) in their discussion of health behaviour theories. They emphasise the need for researchers to critically evaluate the compatibility of different theories and ensure that their integration adds value to the research.

Therefore, while integrating multiple theoretical models can enrich our understanding of health behaviour, researchers must exercise caution to ensure that the selected models are appropriate, relevant, coherent, and meaningful in their integration. This study's approach of adopting multiple models to identify the determinants of healthcare service utilisation of internal migrants to understand their health-seeking behaviour aligns with the recommendations of scholars across the field of health behaviour research. The adopted theoretical models in this thesis are stated and explained below.

3.2.2 Andersen's Behavioral Model of Health Service Utilisation

Adopting Andersen's Behavioral Model of Health Service Utilization in this study, which aims to identify the determinants of health-seeking behaviour among internal migrants in Ghana, offers significant advantages. Andersen's model provides a comprehensive framework for various individual and societal determinants influencing healthcare utilisation. It is well-suited for investigating the multifaceted dynamics of health-seeking behaviour among internal migrants.

The model comprises three key components explaining healthcare utilisation dynamics (Shuang et al., 2018): predisposing, enabling and need factors. Predisposing factors include an individual's demographics, socioeconomic status, health beliefs, and attitudes towards healthcare. Enabling factors include the availability of healthcare resources, healthcare financing, and social support networks. Need factors refer to an individual's perceived or actual health status, severity level, and the services required to address their needs (Travers et al., 2020).

Predisposing factors, such as demographics, beliefs, and attitudes towards health, significantly shape individuals' inclination to seek healthcare services. Research by Boateng and Awunyor-Vitor (2019) highlights how cultural beliefs and perceptions of illness among internal migrants in Ghana can affect their healthcare utilisation. Enabling factors like income and healthcare infrastructure availability also play crucial roles, as evidenced by studies showing disparities in healthcare access based on socioeconomic status among migrant populations (Ansong et al., 2020). Moreover, need factors, encompassing perceived and evaluated healthcare needs, are essential considerations, especially given the unique health challenges internal migrants may face, such as occupational hazards and exposure to infectious diseases (Agyemang et al., 2017). Andersen R.M.'s model refinement integrates vulnerability factors specific to internal migrants, including language barriers and social support network limitations, further enhancing its relevance to understanding their healthcare access (GSS & GHS, 2017). By adopting Andersen's model, this study systematically explored the determinants of health-seeking behaviour among internal migrants in Ghana, gaining valuable insights into addressing healthcare disparities within this population.

The Andersen Health Service Utilisation Model has been extensively utilised and validated across various disciplines, including medicine, psychology, public health, and sociology (Seidu A-A, 2020), highlighting its versatility and applicability in understanding healthcare access and utilisation. However, it is crucial to acknowledge the limitations of this model, particularly in capturing the broader social determinants of health, structural factors, and evolving healthcare delivery systems over time (Kabir, 2021). While Andersen's model provides a valuable framework for analysing individual-level determinants of healthcare utilisation, it may not fully account for the complex interplay of social, economic, and environmental factors that influence health-seeking behaviour. For instance, Kabir (2021) argues that the model may overlook systemic barriers such as institutional racism, socioeconomic disparities, and healthcare policy changes that significantly impact access to healthcare services. Therefore, to address these limitations and ensure a more comprehensive understanding of healthcare utilisation, researchers and policymakers are encouraged to complement the Andersen model with other frameworks that explicitly consider broader structural determinants of health.

3.2.3 The Integrated Change Model (I-Change Model)

The I-Change Model serves as a comprehensive framework for comprehending the determinants of health behaviour and the acceptance of health interventions (Ilja et al., 2022). This model effectively encapsulates the pertinent variables associated with behaviour change across various phases, including awareness, motivation, and action, by integrating key concepts from several prominent theories. Specifically, the model draws upon principles from the Social Cognitive Theory, Health Belief Model, Theory of Planned Behaviour, Trans-Theoretical Model, and Goal Setting Theory (De Vries, 2017). These theoretical foundations contribute to a holistic understanding of behaviour change processes, encompassing cognitive, social, and environmental factors.

For example, the Social Cognitive Theory underscores the dynamic interplay among individual factors, behaviour, and the environment, emphasising the critical role of observational learning, self-efficacy, and social support in influencing behaviour (Bandura, 1986). The Health Belief Model focuses on individual perceptions of susceptibility, severity, benefits, and barriers to health actions, influencing motivation for behaviour change (Rosenstock et al., 1988). The Theory of Planned Behaviour highlights how attitudes, subjective norms, and perceived behavioural control influence behavioural intentions and subsequent actions (Ajzen, 1991). The Trans-Theoretical Model highlights the stages of change individuals undergo in adopting new behaviours, acknowledging that behaviour change involves progression through various stages (Prochaska et al., 1992). Lastly, the Goal Setting Theory underscores the importance of setting specific, measurable, achievable, relevant, and time-bound goals in facilitating behaviour change (Locke et al., 1990).

By integrating these theories, the I-Change Model provides a comprehensive and adaptable framework for understanding behaviour change processes in health-related contexts. It enables researchers and practitioners to identify key determinants influencing behaviour change across different phases and tailor interventions accordingly. This integrative approach enhances the model's utility in promoting health behaviour change and facilitating the acceptance of health interventions across diverse populations and settings.

As indicated above, the Integrated Change Model (I-Change Model) provides a structured framework integrating psychological and sociological factors for understanding health

behaviour change. Employing the I-Change Model in a study focusing on the determinants of health-seeking behaviour among internal migrants globally offers numerous advantages. The model elucidates factors influencing behaviour change by combining three phases—awareness, motivation, and action. In the awareness phase, individuals recognise health issues and the need for change; factors such as knowledge and perceived severity of conditions are crucial determinants. Research by Gao et al. (2018) illustrates how internal migrants often lack awareness of available healthcare services, leading to underutilisation of preventive care. By adopting the I-Change Model, researchers can pinpoint knowledge gaps hindering migrants' health-seeking behaviour.

The motivation phase involves developing intention and motivation for change, influenced by attitudes, social norms, and self-efficacy. Wiking et al. (2014) demonstrate the impact of social support networks on health-seeking behaviour among migrants. Employing the model enables researchers to explore migrants' attitudes and confidence in accessing healthcare. Finally, the action phase translates motivation into behaviour change, addressing barriers like language and transportation. Utilising the I-Change Model, researchers can identify specific action steps and systemic changes needed to enhance healthcare access for internal migrants (Suurmond et al., 2011). Hence, adopting the I-Change Model offered a systematic approach to understanding health behaviour change among internal migrants, guiding interventions to promote healthcare access effectively.

3.2.4 The Integrated Change Model and Health-Seeking Behaviour

Health-seeking behaviour, a multifaceted concept influenced by individual and cultural factors, reflects people's distinct preferences for managing health and their awareness of environmental health risks. Studies such as Andersen et al. (2020) emphasise that health-seeking behaviour encompasses individuals' actions to attain optimal well-being, often driven by their knowledge and collaboration with healthcare systems. For example, studies by Smith et al. (2018) and Patel et al. (2019) illustrate how cultural beliefs and societal norms shape individuals' health-seeking decisions, highlighting the importance of understanding these influences in healthcare delivery. This proactive approach to health management signifies an individual's engagement in maintaining their health. It fosters mutual cooperation between individuals and healthcare providers, as evidenced by research by Brown et al. (2021) and Johnson et al. (2020).

The choice of the Integrated Change Model (ICM) for this study is substantiated by its widespread application and effectiveness in health behaviour research, as evidenced by several notable studies. Firstly, Vries et al. (2017) employed the ICM in their research, showcasing its utility in understanding and promoting behaviour change in various health-related contexts. Similarly, the study by Vries et al. (2005) provides further support for the efficacy of the ICM, highlighting its consistent application and effectiveness in guiding behaviour change interventions. Kasten et al. (2019) also utilised the ICM to investigate health behaviour dynamics, contributing to the growing body of literature attesting to its value in research. Furthermore, the study by Kei et al. (2020) underscores the versatility of the ICM across different populations and settings, reaffirming its suitability for studying health-seeking behaviours among Ghanaian internal migrants. Collectively, these studies provide compelling evidence for the efficacy and relevance of the ICM in elucidating the associations between socio-demographic variables and health behaviours, thereby justifying its selection for this study.

The Integrated Change Model (I-Change Model) provides a robust framework for comprehending health-seeking behaviour among internal migrants, elucidating the cognitive, motivational, and behavioural processes that influence individuals' choices regarding healthcare utilisation. This model proves especially pertinent for dissecting the intricacies of health-seeking behaviour among internal migrants, as it adeptly captures the dynamic interactions between awareness, motivation, and action planning phases. For instance, studies by Vries et al. (2017) and Kasten et al. (2019) highlight the I-Change Model's effectiveness in elucidating the multifaceted nature of health behaviour dynamics, underscoring its applicability in exploring health-seeking behaviour among diverse populations, including internal migrants.

a) Awareness Phase:

In the Awareness phase, individuals become conscious of their healthcare needs, risks, and available resources. For internal migrants, this involves recognising symptoms, assessing their severity, and identifying potential barriers to accessing healthcare. Studies have shown that awareness of healthcare services and perceived need for healthcare play crucial roles in determining healthcare-seeking behaviour among migrants (Svensson et al., 2017). Additionally, cultural factors and previous healthcare experiences influence migrants' awareness of available services (Gele et al., 2017).

b) ***Motivation Phase****:*

The Motivation phase focuses on individuals' attitudes, beliefs, and intentions regarding health-seeking behaviour. Internal migrants' motivations to seek healthcare are influenced by factors such as perceived susceptibility to illness, severity of health conditions, and beliefs about healthcare efficacy. Research suggests that social norms, cultural beliefs, and past experiences significantly shape migrants' motivation to engage in healthcare-seeking behaviour (Oliveira et al., 2015). As an illustration, research conducted by Wang et al. (2018) revealed that the perceived severity of illness and the perceived benefits of seeking healthcare were key predictors of migrants' intentions to seek healthcare.

c) Action Planning Phase:

In the Action Planning phase, individuals translate motivation into action by developing strategies to seek healthcare effectively. Internal migrants often face language barriers, transportation issues, and financial constraints when accessing healthcare. Action planning involves identifying accessible healthcare facilities, scheduling appointments, and mobilising social support networks to facilitate healthcare-seeking behaviour. Studies have shown that effective action planning is associated with increased healthcare utilisation among migrants (Wei et al., 2020).

The ICM provides a valuable framework for understanding health-seeking behaviour among internal migrants by explaining the cognitive, motivational, and behavioural processes underlying healthcare utilisation. Through its comprehensive approach, the model offers insights into the factors influencing migrants' decisions to seek healthcare and informs interventions to promote healthcare access and utilisation in this population. By considering the dynamic interplay between awareness, motivation, and action planning, the I-Change Model contributes to a deeper understanding of health-seeking behaviour among internal migrants and supports the development of targeted interventions to improve healthcare outcomes in this vulnerable population.

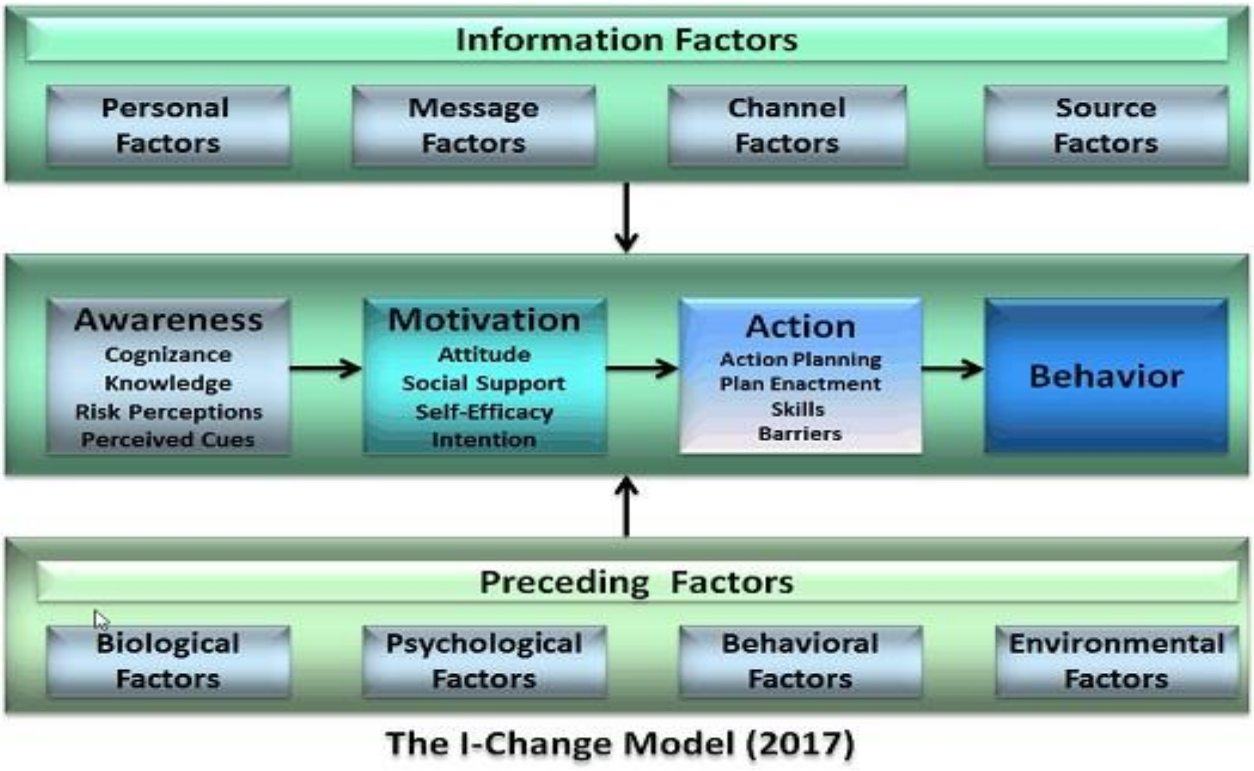

Figure 5: The I-Change Model, 2017 (H. Vries, 2017)

Generally, the integration of Andersen's Behavioral Model of Health Service Utilisation and the Integrated Change Model (ICM) into this study provides a well-rounded theoretical framework for understanding the determinants of healthcare-seeking behaviour among internal migrants in Ghana. Andersen's model offers a structured approach to examining the multifaceted factors influencing healthcare utilisation by categorising them into predisposing, enabling, and need factors (Shuang et al., 2018). Predisposing factors include demographic characteristics, such as age, gender, socioeconomic status, cultural beliefs and attitudes toward healthcare. These factors shape an individual's general inclination to seek healthcare services. Studies by Boateng and Awunyor-Vitor (2019) underscore the significant role that cultural beliefs play in healthcare utilisation among internal migrants in Ghana, where perceptions of illness and treatment often shape health-seeking decisions. Enabling factors, such as access to healthcare resources, healthcare infrastructure, and financial capability, also play a critical role in determining healthcare utilisation. For example, Ansong et al. (2020) demonstrated that disparities in healthcare access are often linked to migrants' socioeconomic status and the availability of local healthcare services. Need factors relating to an individual's perceived or actual health status are essential for understanding healthcare utilisation, particularly in

occupational hazards and exposure to infectious diseases that many internal migrants experience (Agyemang et al., 2017).

Andersen's model is complemented by the Integrated Change Model (I-Change Model), which enhances the understanding of health-seeking behaviour by focusing on the cognitive and motivational processes that precede healthcare utilisation. The I-Change Model integrates principles from the Social Cognitive Theory, Health Belief Model, and Theory of Planned Behavior and further explores awareness, motivation, and action (De Vries, 2017). For example, in the awareness phase, internal migrants may not be fully cognizant of available healthcare services, leading to underutilisation of care, as noted by Gao et al. (2018). The motivation phase is driven by attitudes, social norms, and self-efficacy, with studies such as Wiking et al. (2014) showing the critical role of social support networks in encouraging migrants to seek healthcare. Finally, the action phase focuses on the steps needed to overcome practical barriers to accessing healthcare, such as language and transportation issues, highlighted as significant barriers for internal migrants in various studies (Suurmond et al., 2011; Wei et al., 2020).

The pragmatic philosophical perspective underpinning this mixed-methods research supports integrating these theoretical models, enabling a comprehensive exploration of both quantitative and qualitative aspects of healthcare-seeking behaviour. As advocated by Creswell and Plano Clark (2017), pragmatism allows researchers to use multiple data sources and methodologies to provide a holistic understanding of the research problem, which is essential in this context where both objective and subjective factors must be considered. The quantitative component, informed by Andersen's model, helps quantify the role of demographic and socio-economic factors. In contrast, the qualitative component, supported by the I-Change Model, captures the personal experiences, motivations, and perceptions of migrants regarding healthcare. This combination allows a deeper understanding of how internal migrants navigate healthcare systems, addressing structural barriers and individual decision-making processes.

While Andersen's model has been widely validated in public health research, its limitations must be considered, particularly in accounting for broader social determinants of health. As Kabir (2021) highlights, the model may overlook systemic issues such as institutional racism, socioeconomic disparities, and policy changes that profoundly impact healthcare access. Thus, by incorporating the I-Change Model and its focus on cognitive and motivational factors, this

study ensures a more nuanced and comprehensive understanding of health-seeking behaviour, capturing both the individual-level determinants and the broader systemic challenges internal migrants face. This theoretical integration provides a solid foundation for developing targeted interventions to improve healthcare access and utilisation among this vulnerable population.

3.3 Data Sources

Data constitutes the fundamental unit in statistical studies. The paramount importance of utilising data of high quality cannot be overstated, as it assumes a significant role in furnishing objective information essential for the comprehensive exploration of issues under investigation. By applying rigorous and sound data, a nuanced analytical understanding of the challenges at hand is facilitated, thereby paving the way for formulating well-informed solutions (Moss & Litman, 2019). The careful selection of the data type to be employed in any given study emerges as a critically influential decision, underscoring the necessity for clarity and thoughtful consideration.

In the empirical analysis undertaken in this thesis, the data acquisition process is deliberate and meticulous. The primary objective is to identify datasets that encapsulate pertinent information on contextual factors regarding internal migration and the health system within the geographical context of Ghana. This deliberate focus on contextual factors enriches the dataset with variables that offer a comprehensive perspective on the intricate interplay between migration patterns and health dynamics. By embarking on a discerning data search, the research endeavours to secure datasets that align closely with the specific considerations of the research questions, thereby strengthening the empirical foundation upon which subsequent analyses and insights will be predicated.

The primary sources of data on both international and domestic migration are censuses, population registers, sample surveys and, more recently, resident permits and 'big data' (Kraler & Reichel, 2022). The Ghana Statistical Service (GSS), established in 1985 under Statistical Service Law 135, has conducted various surveys across the country, including the Demographic and Health Survey (DHS), the Ghana Living Standard Survey (GLSS), the Population and Housing Census (PHC), and other household surveys like the Time-Use Survey (TUS). These surveys comprehensively capture data on various aspects of Ghanaian residents.

The Ghana Statistical Service (GSS), since 1987, has been carrying out the Ghana Living Standards Survey (GLSS) to assess the condition of living and well-being, including the welfare and health of the Ghanaian populace. This survey supplies essential data concerning poverty and associated metrics, including regional and urban/rural perspectives for households and the population. Furthermore, the gathered data enables the examination of shifts in poverty levels within different demographic groups, including urban/rural divides, locality distinctions, regional variations, and socioeconomic status disparities. The survey has been conducted in previous cycles, including 1987/88, 1988/89, 1991/92, 1998/99, 2005/06, 2012/13, and 2016/2017 (The Ghana Living Standard Survey Round 7 Report, 2017).

However, a careful assessment of these available datasets revealed several drawbacks that could affect the reliability of the result, such as the challenge of time. Most of these household surveys have been conducted every five years, and the latest one was conducted in Ghana, which had challenges in being compiled due to the COVID-19 pandemic. Nevertheless, the 2016/2017 dataset of Round 7 provides a descriptive review of internal migrants by describing their essential demographic characteristics, movements, and healthcare-seeking behaviour.

Previous studies on similar topics have utilised data from the Ghana Living Standards Survey (GLSS) datasets. For example, Litchfield and Waddington (2003) investigated the welfare outcomes of migrant households during the 1990s. Adams (2006) also explored the influence of remittances (both domestic and international) on poverty in Ghana using the data from GLSS, and McKay and Quartey (2008) used this data to analyse the association between internal migration and spatial inequality in Ghana. Similarly, Ackah and Medvedev (2010) examined the determining factors of internal migration and its effects on welfare in Ghana, utilising data from GLSS 5.

However, most of the studies mentioned utilised older rounds of the GLSS datasets, and several aspects of this research were not included in these older versions of the GLSS. Therefore, for this study, the most current round of the GLSS was used in the analysis to answer the research questions appropriately. Again, this study employed a dataset from GLSS7 over the 2010 PHC report due to its timeliness and flexibility. As surveys are less costly than censuses and enable the collection of more information than a census, the GLSS7 offered more tailored inquiries into specific socioeconomic and health indicators necessary for the investigation in this study.

Potential survey limitations, such as sampling biases and smaller sample sizes, were also considered before opting for the GLSS7 in this study.
Also, primary data on the perspectives regarding the barriers and facilitators of health-seeking behaviour among the internal migrant population from healthcare deliverers/stakeholders was gathered. Strategies to enhance the healthcare delivery of internal migrants were also collected through an online data collection tool, specifically Google Forms.

Again, this study collected data through interviews for analysis as well. Primary data was collected from the population under study, and this was collected in four out of the sixteen regions in Ghana. These regions were chosen based on data from the 2010 Population and Housing Census by the Ghana Statistical Service, which identifies them as the main host regions of internal migrants in Ghana (GSS, 2010). Although there has been a recent re-demarcation of the administrative regions in Ghana, the study considered the status of the regions as captured in the 2016/2017 round of the Ghana Living Standards Survey (GLSS).

3.4 Methods and Analysis

A thesis's methods and analysis section serves as the methodological backbone of the research, offering a detailed and systematic exposition of the various strategies and techniques employed to investigate the research questions or objectives (D Kotz et al., 2013). This critical section not only delineates the overall research design but also explains the intricacies of data collection and analysis, shedding light on the robustness and reliability of the study (D Stroup et al., 2017). In pursuing a comprehensive exploration, this thesis adopts a multifaceted approach by integrating quantitative and qualitative data collection methods.

Quantitative methods involve systematically collecting numerical data, often through structured surveys, experiments, or statistical analyses. This approach facilitates the quantification of variables, enabling researchers to identify patterns, trends, and relationships within the data (S. Clarke et al., 2015). On the other hand, qualitative methods involve a more interpretive and in-depth exploration, utilising techniques such as interviews, focus groups, or content analysis to gather non-numerical data. This qualitative strand enhances the research by capturing the nuances, context, and subjective experiences that may be overlooked when relying solely on quantitative data (Libarkin & Kurdzeil, 2002).

Intricately outlined in this section, the research design serves as a blueprint for the entire study. For instance, a survey by Creswell and Creswell (2017) highlights the pivotal role of research design in ensuring the accuracy and relevance of study outcomes. By outlining key decisions such as sampling strategy and participant recruitment, the research design serves as a framework for the entire study, as emphasised by Yin (2018). Moreover, according to Bryman (2016), an appropriately chosen research design facilitates the achievement of study objectives. It enhances the validity and generalisability of findings by minimising bias and maximising the reliability of data collection methods. Therefore, the careful delineation of the research design in this section clarifies the study approach and lays the foundation for robust and credible research outcomes.

According to Bryman (2016), utilising quantitative methods such as surveys or experiments allows researchers to gather structured data, which can be analysed statistically to identify patterns and trends in phenomena. Research on health-seeking behaviour often necessitates a nuanced approach to data collection, integrating both quantitative and qualitative methods. Quantitative data, acquired through surveys or experiments, offer structured and standardised information, enabling researchers to conduct statistical analyses and discern patterns in health-seeking behaviours. For instance, a study by Anderson et al. (2015) utilised surveys to quantify various factors influencing health-seeking behaviours among a sample of urban migrants, allowing for statistical analysis to identify significant predictors.

On the other hand, qualitative data collection methods, such as interviews or observations, are valuable for exploring the subjective dimensions of health-seeking behaviour. Qualitative approaches provide insights into individuals' motivations, beliefs, and experiences related to seeking healthcare services. For example, a study by Nyamongo (2002) employed qualitative interviews to understand the cultural and social factors influencing health-seeking behaviour among pregnant women in rural Kenya, revealing rich contextual insights into their decision-making processes. Researchers can comprehensively understand health-seeking behaviour by employing quantitative and qualitative data collection methods. This methodological approach is supported by scholars like Pope et al. (2000), who advocate for the complementary use of quantitative and qualitative methods in health research to capture the complexity and diversity of individuals' experiences and behaviours related to healthcare utilisation. Therefore, the thoughtful consideration of data collection methods in this thesis reflects a robust approach to investigating health-seeking behaviour, acknowledging the multifaceted nature of the

phenomena under study and ensuring a comprehensive analysis of the research questions. Research on health-seeking behaviour often requires rigorous data analysis procedures to interpret collected information effectively. Quantitative analyses involve statistical techniques that scrutinise numerical data to identify significant trends or relationships, adding a layer of objectivity and statistical validity to the findings. For example, Lemon et al. (2010) used quantitative analyses to examine the association between socioeconomic factors and health-seeking behaviours among urban migrants, employing regression analyses to identify significant predictors.

Conversely, qualitative analyses systematically explore themes, patterns, and narratives within non-numerical data, offering a more interpretive and contextually embedded understanding. Puppis (2019) conducted qualitative analyses of interviews with healthcare providers to explore their perspectives on barriers to health-seeking behaviour among marginalised communities, revealing significant insights into the socio-cultural factors influencing healthcare access. Researchers can gain a comprehensive understanding of health-seeking behaviour by employing both quantitative and qualitative data analysis procedures. This methodological approach follows the suggestions of scholars such as Morse (2015), who propose the integration of quantitative and qualitative analyses to triangulate findings and improve the validity and reliability of research results. Therefore, the rigour applied to data analysis procedures in this thesis reflects a robust approach to investigating health-seeking behaviour, ensuring a thorough interpretation of the collected information and contributing to the depth and validity of the research findings.

Again, studies on health-seeking behaviour often benefit from integrating quantitative and qualitative approaches to overcome limitations associated with singular methodological perspectives. By combining both methods, researchers can achieve a more comprehensive understanding of complex phenomena. This approach enhances the reliability of the study and contributes to a more holistic and refined comprehension of the research objectives (Flick, 2018). For instance, a study by Johnson and Onwuegbuzie (2004) emphasised the importance of methodological triangulation, where researchers utilise multiple methods to corroborate findings and enhance the validity of research outcomes. Moreover, embracing methodological diversity allows researchers to provide a comprehensive and well-rounded contribution to the scholarly discourse on health-seeking behaviour, particularly concerning migrant populations in developing countries. This sentiment is echoed by Creswell and Creswell (2017), who

advocate for integrating multiple research methods to address the complexities of studying health-related phenomena.

3.4.1 The Methodological Approach

This study explores the health-seeking behaviour of internal migrants in Ghana, employing a mixed-methods approach by integrating quantitative and qualitative methods to comprehensively understand the determinants affecting healthcare utilisation. This methodology aligns with the principles of methodological triangulation, enhancing the validity and reliability of research findings by incorporating multiple perspectives (Creswell & Plano Clark, 2018). The mixed-methods approach is considered the most appropriate for this research on health-seeking behaviour among internal migrants in Ghana due to its ability to provide a comprehensive understanding of complex phenomena by integrating both quantitative and qualitative data collection and analysis. Quantitative methods, such as surveys, are essential for gathering standardised data and identifying patterns, trends, and relationships (Clarke et al., 2015), while qualitative methods, such as interviews, allow for an in-depth exploration of the socio-cultural and contextual factors influencing health-seeking behaviour (Libarkin & Kurdziel, 2002). By combining these methods, the study is able to capture the statistical generalisability of the quantitative data and the rich, context-specific insights from the qualitative data, which is crucial for understanding the multifaceted nature of health-seeking behaviour (Morse, 2015). This data triangulation enhances the findings' validity and reliability, as the two methods complement and corroborate each other (Johnson & Onwuegbuzie, 2004).

The mixed-methods approach of this research addresses both the “what” and “why” of health-seeking behaviour, aligning the research design with the study objectives, as recommended by Bryman (2016). This allowed the research to explore not only patterns of healthcare utilisation but also the motivations and barriers influencing individuals' behaviour. Scholars like Pope et al. (2000) further emphasise the value of this approach in health research, advocating for the complementary use of both methods to capture the complexity of individuals' experiences and behaviours. Previous studies, such as Anderson et al. (2015) and Nyamongo (2002), have successfully employed mixed methods in similar research on health-seeking behaviour, demonstrating the relevance of this approach in generating both empirical evidence and deep contextual insights. Thus, the mixed-methods approach not only enhances the validity and

reliability of this research but also ensures that it contributes to a more nuanced and practical understanding of health-seeking behaviour among internal migrants in Ghana.

The quantitative component involved univariate and multiple logistic regression analyses to quantify barriers and facilitators of healthcare service utilisation (Chapters 4 and 5). The initial quantitative inquiry assesses these barriers and evaluates key determinants, such as out-of-pocket expenses, thereby establishing a baseline understanding of healthcare challenges faced by internal migrants (Boateng & Awunyor-Vitor, 2019; Ansong et al., 2020). This quantitative data laid the groundwork for subsequent qualitative exploration.

The qualitative component, comprising in-depth interviews and a Delphi study (Chapters 6 and 7), aimed to delve deeper into the socio-cognitive perceptions and contextual factors influencing health-seeking behaviour. Engaging healthcare professionals through the Delphi study provided insights into the barriers and facilitators from the provider's perspective, capturing the nuances of healthcare delivery and the experiences of internal migrants, thus complementing the statistical findings (Quale et al., 2021). The in-depth interviews sought to uncover beliefs and perceptions contributing to low engagement in health-seeking behaviours, enriching the context of the quantitative findings. The sequential nature of this mixed-methods approach ensures that the quantitative results inform the qualitative phase, where trends identified in the quantitative analysis guide the focus of qualitative inquiries (Creswell, 2015).

This interconnectedness allows for a more nuanced understanding of the data, with quantitative results highlighting patterns and qualitative insights elucidating the underlying reasons for these trends (Fetters et al., 2013). Ultimately, this methodology facilitates a comprehensive exploration of health-seeking behaviour among internal migrants in Ghana, enhancing the robustness of the findings and contributing to targeted interventions and policies aimed at improving healthcare access and utilisation for this vulnerable population.

3.4.2 Quantitative Analysis

The quantitative examination in this study relies on secondary data from the Ghana Statistical Service database. The Ghana Living Standard Survey Round 7 was used to analyse the research question for two empirical chapters (Chapters 4 & 5). The Ghana Living Standard Survey Round 7 was a cross-sectional survey. The sampling followed a two-stage stratified sample of

households. At the commencement of the study, a deliberate selection process was undertaken to identify 1000 Enumeration Areas (EAs) that collectively constituted the Primary Sample Units (PSUs). Within these PSUs, a targeted sample size of 15,000 households was established. The enumeration areas were subdivided into Secondary Sampling Units (SSUs) to facilitate a more granular examination. Within these SSUs, a systematic sampling approach was employed, resulting in the selection and listing of 15 households in each SSU, categorised based on their rural or urban location. The overall scope of the survey encompassed a nationally representative sample involving 53,000 respondents. For the specific analysis of health-seeking behaviour, a sub-sample comprising 14,287 individuals was extracted for an in-depth examination. Notably, all individuals identified as internal migrants in the survey were aged 15 years and above. This deliberate age criterion was applied to ensure a comprehensive and meaningful exploration of health-seeking behaviour within the context of internal migration among individuals in the specified age cohort.

3.4.3 Qualitative Analysis

The utilisation of key informant interviews in health-related research, including studies focusing on health-seeking behaviour among internal migrants and for that matter, this study was very significant. O'Leary (2008) highlights key informant interviews as a standard anthropological method for health-related research and social development inquiries. This method is particularly relevant for rapid assessment purposes, facilitating the acquisition of information directly from affected populations within a community. This assertion is further substantiated by Kitzinger (1993), Ritchie et al. (1994), and Duke et al. (1994), who recognise key informant interviews as a frequently used approach for evaluating the public's experiences and understanding of illnesses. Additionally, Ritchie et al. (1994) and Duke et al. (1994) emphasise the effectiveness of key informant interviews in identifying ideas related to health-risk behaviours and dangers, providing valuable insights into the factors influencing health-seeking behaviour among internal migrants. Furthermore, Trilling (1999) underscores the utility of key informant interviews in uncovering the public's perceptions of the causes of diseases.

Given the rich insights that can be obtained through this method, key informant interviews are often considered an ideal approach for collecting qualitative data in studies examining health-seeking behaviour among internal migrants. In this study, key informant interviews were

employed to gain in-depth perspectives from individuals with extensive knowledge of the barriers and facilitators affecting healthcare access for internal migrants, providing valuable context to the quantitative findings. Through this method, this study can obtain first-hand perspectives and experiences from individuals directly affected by migration and associated health challenges, thereby enriching the understanding of the determinants influencing health-seeking behaviour in this population. A population of 40 key informants from the most populated ***Zongo*** within the selected Regions was selected for an in-depth interview through purposive sampling.

The ***Zongo*** in this study refers to a settlement predominantly inhabited by migrant populations, particularly among Muslim communities in West Africa, including Ghana. The term "Zongo" is derived from the Hausa word ***Zango***, meaning "camp" or "resting place," reflecting its origins as temporary quarters for traders and travellers (Pellow, 2002). Over time, Zongos have evolved into more permanent urban neighbourhoods characterised by their multicultural and multi-ethnic populations, often comprising migrants from northern Ghana and neighbouring countries such as Burkina Faso and Niger. These communities typically experience socio-economic marginalisation, with limited access to essential healthcare, education, and employment opportunities (Abdul-Korah, 2017). Zongos often face significant challenges related to poverty, overcrowding, and inadequate infrastructure, negatively impacting residents' health and overall well-being. The concentration of migrant populations in Zongos leads to unique health-seeking behaviours shaped by cultural, religious, and socio-economic factors (Boateng & Awunyor-Vitor, 2019). For example, the social dynamics within Zongos often influence perceptions of illness and healthcare, where traditional and religious beliefs may dictate health-seeking practices. These factors contribute to distinct healthcare utilisation patterns, making Zongos a critical area of study in understanding the health behaviours of internal migrants. Including Zongo communities as the study's setting is particularly relevant given the focus on health-seeking behaviours among internal migrants in Ghana.

Zongos provide a concentrated population that exemplifies the unique barriers to healthcare access experienced by migrants, such as limited healthcare infrastructure, lower socio-economic status, and cultural practices (Ansong et al., 2020). These barriers can lead to a reliance on informal healthcare services or traditional medicine, further exacerbating health inequities. Focusing on Zongos allows researchers to capture a broad spectrum of experiences

and challenges internal migrants face, offering a nuanced understanding of the interplay between migration, socio-economic conditions, and health-seeking behaviours. The marginalised status of Zongo residents makes them particularly vulnerable to healthcare disparities, as they may be less likely to engage with formal healthcare systems. Therefore, studying health-seeking behaviour within Zongos can provide essential insights into the systemic issues affecting healthcare access for these populations. This focus is critical for informing policy interventions to reduce healthcare disparities in Ghana, ultimately promoting health equity for vulnerable migrant communities in urban settings. By examining the specific context of Zongos, this study seeks to contribute to a deeper understanding of the determinants of health-seeking behaviour among internal migrants, facilitating targeted approaches to improve healthcare access and utilisation in these marginalised communities.

3.4.4 Delphi Method

The study employed a three-round online Delphi study conducted among stakeholders and healthcare providers. This approach aimed to systematically identify and explain crucial barriers and facilitators influencing health-seeking behaviour, as well as policies and strategies designed to augment healthcare service utilisation within the internal migrant population in Ghana. Using online platforms for the Delphi study ensured widespread and efficient engagement with diverse stakeholders and healthcare deliverers.

The choice of a three-round iteration in the Delphi study was grounded in the well-established notion that this repetition is generally sufficient to achieve consensus among a panel of experts. The Delphi method, as explained by Chalkley and Helmer in 1963, stands as a widely recognised and documented technique for arriving at a consensus on the ideas of specialists. Its systematic and iterative nature allows for the refinement of perspectives and the synthesis of diverse expert opinions, contributing to a comprehensive understanding of the factors influencing health-seeking behaviour and the formulation of effective healthcare policies and strategies for the internal migrant population in Ghana. This method embraces a chain of questionnaires to gather primary data from specialists (Hsu & Sandford, 2007). This technique is generally accepted due to its ability to provide anonymity to respondents, manage feedback processes, and suitably interpret the data using various statistical analysis techniques (Holey et al., 2007). This dexterity, however, decreases group dynamics shortcomings, such as manipulation or coercion to agree to a specific perspective (Vogel et al., 2019).

This method included participants from government ministries and agencies in Ghana, specifically the Ministry of Gender, Children and Social Protection, Ministry of Health, Local Government and Rural Development Ministry, the Ghana Health Service, Ghana Immigration Service, the Ghana Health Insurance Authority, National Labour Commission Ghana, and the Kayayei Youth Association of Ghana. Non-governmental organisations (NGOs) and experts in healthcare research representing the general public interested in migrants' healthcare were factored into this study. Participants were purposively sampled and included in this data collection exercise for the study using laid-out inclusion criteria (*see details in Chapter 6*).

In the context of participant recruitment, communication was initiated by sending emails to all potential participants through a gatekeeper. The purpose of these emails was to extend invitations, encouraging individuals to willingly express their interest in partaking in the study by responding via email to the researcher. Subsequently, upon expressing interest, participants received the participant information sheet and consent form, which they were tasked to complete and forward to the researcher before the commencement of the study.

3.5 Ethics Approval

Ethical approval for research involving human participants is essential to uphold integrity and credibility (Yip et al. 2016). As per directives outlined by research institutions and professional organisations, acquiring ethical approval is imperative to protect the rights and well-being of participants (British Psychological Society, 2018). Failure to obtain ethical clearance may lead to ethical violations and undermine the trustworthiness of the research findings (National Institutes of Health, 2018). For instance, the British Psychological Society (2018) emphasises the importance of obtaining ethical approval for research involving human participants, outlining the principles of respect, beneficence, and justice that underpin ethical research practices. Similarly, the National Institutes of Health (2018) underscores the significance of ethical oversight in research, highlighting the responsibility of researchers to protect the rights and well-being of participants. By obtaining ethical approval from the Research Ethics Committee of Brunel University London, the researcher ensures adherence to established ethical guidelines and demonstrates a commitment to upholding ethical standards in research. This ethical oversight assures that participants' rights and welfare were considered and protected throughout the research process, contributing to the credibility and validity of the study findings. Refer to ***Appendix 10*** for all the details on ethics approval for this study.

3.6 Conclusion

This chapter critically examined the existing gaps in the research domain, primarily identifying an appropriate theoretical framework (s) that align with the research focus. Additionally, the chapter conducts a comprehensive evaluation of the available datasets, leading to the proposal for new primary data collection. This proposed data collection aims to serve as the foundation for empirically testing the constructs of the selected theoretical frameworks in the context of the understanding of health-seeking behaviour among internal migrants in Ghana. Further, the choice of a suitable theoretical framework is of paramount importance to this research. Through a meticulous analysis of various theoretical perspectives, this chapter seeks to pinpoint the framework that best encompasses the complexities of health-seeking behaviour within Ghana's specific context of internal migration.

The primary data collection approach involves direct engagement with healthcare deliverers and internal migrants in Ghana to gain first-hand perspectives on health-seeking practices, aiming to understand the factors influencing behaviour and validate theoretical frameworks within a context-specific lens. This methodological choice emphasised the importance of using empirical data to enhance the credibility and robustness of findings, contributing to advancing knowledge on health-seeking behaviour among internal migrants.

This chapter, however, serves as a critical foundation for the thesis, bridging the existing evidence with the empirical studies that follow. By highlighting the identified gaps in the literature, selecting a suitable theoretical framework, and adopting the use of datasets and new primary data collection methods, the research aims to contribute to an insightful analysis of health-seeking behaviour among internal migrants in Ghana. Ultimately, this endeavour seeks to inform evidence-based interventions and policy measures to enhance healthcare accessibility and outcomes for Ghana's vulnerable population.

CHAPTER 4
Determinants of Healthcare Utilisation Among Internal Migrants in Ghana.

4.0 Introduction

Chapter 2 comprehensively and systematically reviewed 31 relevant studies and identified several determinants of health-seeking behaviour among migrants in Africa. These determinants were the barriers and facilitators affecting migrants to seek healthcare in their host destinations when the needs arise (*refer to Box 1*). One of the gaps identified in the review pertained to the absence of empirical analysis regarding the barriers and facilitators of healthcare service utilisation among the internal migrant population in Ghana. This section, however, introduces briefly two intertwined facets of Ghanaian society: migration patterns and the functionality of the healthcare system. It highlights the movement of people within Ghana and its regions, emphasising the factors driving migration and its impact on various aspects of society. Additionally, it highlighted the structure and operation of the Ghanaian healthcare system, including healthcare access, delivery, financing, infrastructure, and some challenges faced.

This study extends the empirical foundation established in the previous chapter (Chapter 3) by focusing on understanding the factors that influence the utilisation of healthcare services among internal migrants in Ghana. It delves into the specific patterns through which this demographic accesses and uses healthcare facilities within their relocated areas. The study utilised data from the Ghana Living Standard Survey Round 7 (GLSS7), acquired from the Ghana Statistical Service (GSS). Using this dataset, the study embarked on a comprehensive investigation into the utilisation patterns of healthcare services by internal migrants within the geographical boundaries of Ghana.

4.1 Study Background

Internal migration constitutes a noteworthy demographic phenomenon within Ghana, with a considerable proportion of the populace relocating from rural to urban areas in pursuit of economic opportunities (Awumbila & Ardayfio-Schandorf, 2014). However, internal migrants often confront disparities in accessing healthcare services compared to non-migrant

populations, leading to adverse health outcomes (Adjei et al., 2017). This underscores the urgent need to understand the underlying factors contributing to these disparities to devise targeted interventions to mitigate them and foster equitable healthcare access. Additionally, empirical evidence suggests that internal migrants exhibit distinct healthcare needs and preferences compared to non-migrants (Gerritsen et al., 2016). Gerritsen et al. (2016) highlighted gender disparities in healthcare utilisation among migrants and non-migrants in the Netherlands, emphasising the necessity for tailored healthcare interventions addressing the specific needs of migrant populations. Insights from Awumbila and Ardayfio-Schandorf's (2014) study on urbanisation, rural livelihoods, and food security in Ghana underscore the profound socio-economic implications of internal migration, which in turn influence healthcare-seeking behaviours. Consequently, understanding the intricate interplay between such influencing factors, including socio-economic factors, cultural beliefs, and healthcare access among internal migrants, is crucial for developing effective interventions to promote health equity and improve health outcomes within this demographic. Thus, this study aimed to explore the barriers and facilitators of healthcare utilisation among internal migrants in Ghana, which is imperative to inform evidence-based policy formulation and healthcare practice aimed at addressing the unique healthcare needs of this vulnerable population.

4.1.1 Healthcare Utilisation in Ghana

Health is an integral part of human well-being. To maintain good health, we need an efficient and capable healthcare system. The provision of healthcare is regarded as one of the crucial responsibilities of the public sector. From ancient Greek public physicians to contemporary, sophisticated healthcare systems, the public healthcare sector has been instrumental in delivering healthcare services (Porter, 2005). Adding to the public sector, private healthcare is also a significant contributor to healthcare provision in developed and developing countries. Preker et al. (2007) note that with the inclusion of private healthcare providers, especially in developing countries, healthcare access and quality of service provision have increased.

In developed countries, the choice among public or private hospitals depends more on waiting time, proximity, and healthcare provider quality. This is because not much emphasis is placed on the economic aspects, given that healthcare provision in most developed countries is insurance-based, whereas, in most developing countries, much of healthcare expenditure is out-of-pocket (Wallace, 2013). The system of healthcare provision is characterised by several

factors (Kroeger, 1983); these include socioeconomic conditions, culture, history, environment, and political structure. Healthcare utilisation also relies on factors like location, gender, healthcare infrastructure, and economic conditions (Shaikh and Hatcher, 2005). The provision of healthcare-by-healthcare providers and healthcare utilisation by the public complement each other. A healthcare system will potentially serve more efficiently if it focuses on the factors influencing healthcare provision and utilisation.

By decreasing the obstacles in healthcare utilisation, especially for the poor and the marginalised, an efficient public healthcare system ensures that the provision of healthcare by the public sector leads to society's overall well-being (B. Smailov et al., 2022). The utilisation of public healthcare services is an effective tool to gain insights and evaluations on the efficiency of a public healthcare system. For instance, in the presence of an alternative healthcare service provider, like private healthcare services or traditional healers, low utilisation of the public healthcare sector can raise concerns regarding the public healthcare provision and the existing public health system (Simone Fanelli et al., 2020). Further, low utilisation of public healthcare can raise questions associated with the public healthcare infrastructure, existing healthcare disparities, financing, and issues related to the accessibility to healthcare services.

Universal access to primary healthcare serves as an intermediate objective within the broader goal of achieving comprehensive healthcare coverage (WHO, 2010; Frenk et al., 2010). Identified as a fundamental human right, governments worldwide concur on establishing healthcare systems that facilitate fair and unrestricted healthcare access for all citizens (Regmi & Gurch, 2013). The utilisation of fundamental public healthcare services plays a pivotal role in ensuring migrants' accessibility to healthcare, including screening, preventive measures, general practitioner services, specialised care, emergency facilities, and hospitals (Verhagen, 2015). In Ghana, providing healthcare services is primarily the government's responsibility, overseen chiefly by the Ghana Health Services under the Ministry of Health. The healthcare system comprises five provider tiers: health posts, health centres and clinics, district hospitals, regional hospitals, and tertiary hospitals (J.M. Adinkra, 2016). Health posts serve as the initial primary care level for individuals residing in rural areas. The established nexus between migration and health is multifaceted and complex (Zimmerman et al., 2011), in the sense that one cannot tell if the destination area influences the health of internal migrants or if the destination area is affected by the migrants' health. One thing is certain: in most cases, the

health of migrants and the healthcare conditions of destination areas are interrelated (Davies et al., 2009).

Previous studies, for example, Stuyft et al. (1989), demonstrate a connection established between the duration of migrants' stay and their use of healthcare services, suggesting that the level of acculturation or assimilation is closely linked to the length of time spent in the host community. This could be seen as a significant factor influencing an individual's overall health status (Lin, Wang, & Zhu, 2021). However, anthropological studies have challenged the notion that cultural differences inevitably diminish over time. Hannerz (1950) posited that acculturation and assimilation do not necessarily result in the erasure or fading of cultural distinctions. Instead, he suggested that cultural differences can persist and even become more pronounced as individuals navigate and negotiate their identities within the host community.

The rise in urbanisation and economic advancement has led to the internal migration of individuals between regions within Ghana, who have now become an essential aspect of labour migration within the country (Lin, Wang, & Zhu, 2021). As per the findings presented in the 2012 report based on the Ghana Population and Housing Census 2010, as issued by the Ghana Statistical Service (GSS, 2012), it was identified that more than 56% of migrating head porters are constituted by females, including young girls of school-going age. According to S. Boateng et al. (2017), most kayayie, who carry goods for traders or shoppers in commercial areas of major Ghanaian cities have migrated from the country's three northern regions, with the remainder coming from neighbouring regions and other countries. Despite their economic contribution, access to healthcare for these vulnerable migrants is typically restricted. This observation is supported by previous research conducted by Ziblim (2013) and Yeboah (2008).

Enhancing the utilisation of primary healthcare facilities is deemed a viable strategy to offer accessible, equitable, and cost-effective essential healthcare services to all Ghanaians with a focus on delivering quality care (Lin, Wang, & Zhu, 2021). As the number of internal migrants increases, their use of basic public healthcare services should also improve to contribute to health equity. The third Sustainable Development Goal (SDG 3) aimed to guarantee healthy lives and encourage healthcare access for all humans in advanced and developing countries (Griggs et al., 2013). This is because access and use of healthcare services are issues of global concern and fundamental rights of all persons irrespective of their location on the globe or migration status. Studies have shown that the factors affecting the utilisation of healthcare

services for the migrant population include demographic characteristics and social factors (Guo, 2015; Zhao et al., 2019).

However, the health-seeking behaviour of internal migrants in Ghana is distinguished from that of non-migrant Ghanaians by various factors, including socioeconomic conditions, healthcare access, cultural beliefs, and the unique challenges migrants face. This multifaceted process is shaped by a complex interplay of factors, including socioeconomic status, culture, history, environment, and political structure (Kroeger, 1983). The public healthcare system, primarily overseen by the Ghana Health Services, is complemented by private healthcare providers, which increases healthcare access and quality (Preker et al., 2007). However, for internal migrants, these systems present unique challenges. Many migrants come from rural areas and may experience a disconnect from the urban healthcare infrastructure they encounter in cities (J.M. Adinkra, 2016). This unfamiliarity can lead to reduced healthcare utilisation, as migrants may struggle to navigate new healthcare systems due to language barriers, lack of information, and cultural differences in health perceptions (Boateng et al., 2018).

Many internal migrants are economically vulnerable, often working low-paying jobs without access to health insurance or adequate social support, resulting in significant out-of-pocket healthcare expenses (Yiran et al., 2014). In contrast, non-migrant Ghanaians typically have established social networks that facilitate their access to healthcare resources, allowing them to seek care more readily (Agyemang et al., 2017). Cultural beliefs also play a crucial role in shaping health-seeking behaviour. While non-migrants may have more consistent beliefs about modern healthcare, internal migrants may retain traditional healing practices from their home communities, complicating their interactions with formal healthcare providers (Anarfi et al., 2016). This cultural dimension, combined with economic and social barriers, suggests that the health-seeking behaviour of internal migrants is not merely a reflection of individual choice but is deeply embedded in their socioeconomic realities and cultural contexts. Addressing the healthcare needs of internal migrants in Ghana requires a nuanced understanding of these distinguishing factors to create targeted interventions that promote equitable access to healthcare services (Lin et al., 2021).

4.1.2 Brief Overview of the Health System in Ghana

In Ghana's health system, two government institutions define the public sector: (1) the Ministry of Health (MOH), responsible for policymaking and (2) the Ghana Health Service (GHS), tasked with the implementation of healthcare services and delivery. The MOH oversees the development of comprehensive policies for the health sector and assesses and tracks progress toward achieving sector objectives. The Health Ministry is the steward of the system, which consists of the public (the Ghana Health Service), Non-governmental organisations (the Christian Health Association of Ghana (CHAG), and private providers, as well as the National Health Insurance Authority (NHIA) and numerous governmental and regulatory entities including the Ghana Pharmaceutical Council, the Ghana Food and Drug Authority etc. at various levels of Ghana's highly decentralised health system.

The Ghana Health Service (GHS) was established in 2001 to enhance planning and management decentralisation, granting greater authority to the Regional and District Health Services. Administratively, the health system operates at three levels: national, regional, and district. However, functionally, it is organised into five levels: national, regional, district, sub-district, and community levels (Salisu & Prinz, 2009). Also, pharmacy shops (drug stores) play a critical role within this framework, serving as accessible points of care for many individuals, particularly in underserved areas. These pharmacy outlets complement the formal health system by providing essential medications and health services, thus contributing to Ghana's overall healthcare delivery system.

At the national level, the Ministry of Health (MOH) is responsible for the overall direction, policy, and determination of priorities for the health sector, with support from partners and other ministries, departments, and agencies (Aseweh et al., 2008; GSS, GHS, & Macro International., 2009). The partners are mainly donor agencies, Non-Governmental Organisations (NGOs), and Civil Society Organizations (CSOs) (GSS, GHS, & Macro International Inc., 2009). The country has a well-developed, integrated, multilevel health system distributed throughout the country. The system consisted of a network of community-based health planning and service zones, health centres, district, regional, and teaching hospitals, private healthcare providers, and non-governmental organisations involved in healthcare activities.

In the past decade, Ghana has significantly improved healthcare accessibility. The ratio of healthcare professionals, including doctors and nurses, to the population has increased (Ministry of Health, 2013). Moreover, there has been an expansion in the coverage provided by healthcare facilities, and the promotion of Community-based Health Planning and Services (CHPS) has been adopted as a strategy to bolster community-based primary healthcare (Nyonator et al., 2005; Ministry of Health, 2014).

The National Health Insurance Scheme (NHIS) was established in 2003 to offer Ghanaian residents financial access to quality primary healthcare. It introduced free maternal care in 2008 (National Health Insurance Authority, 2012) and accessible mental health services in 2012. Notably, the percentage of GDP allocated to healthcare has exhibited fluctuations over the years. As of 2020, healthcare spending as a percentage of GDP was approximately 3.99%, marking an increase from 3.39% in 2019 (World Bank, 2022). This figure is notably below the global average of 7.04% for health spending, indicating potential gaps in funding relative to other countries (World Health Organization, 2021). Compared to other African nations, many have also struggled with low healthcare expenditures. For example, Ethiopia and Nigeria typically allocate around 4% of their GDP to health (World Bank, 2022). These limited resources directly impact healthcare access and quality, especially for vulnerable populations such as internal migrants in Ghana. Despite the National Health Insurance Scheme (NHIS) covering a substantial portion of public health expenditure (approximately 30%), it only constitutes 16% of the total healthcare spending in the country. This reliance on the NHIS highlights ongoing challenges in healthcare financing and underscores the need for further investments in the healthcare sector to improve overall health outcomes.

Pharmacy access is a critical component of the healthcare landscape in Ghana, serving as a primary source of medication and health information for many citizens. The pharmacy sector in Ghana consists of public, private, and community pharmacies, which are essential for dispensing medicines, offering over-the-counter drugs, and providing patient counselling (Agyepong et al., 2016). Despite the progress made in healthcare accessibility, disparities in pharmacy access persist, particularly in rural and underserved urban areas. Factors such as economic constraints, inadequate infrastructure, and a lack of awareness about the services offered by pharmacies contribute to these disparities (Pillay et al., 2014). The Ghana Food and Drugs Authority (GFDA) plays a crucial role in regulating pharmacy operations to ensure the quality and safety of medications dispensed. However, challenges related to counterfeit drugs

and inadequate regulatory oversight continue to threaten pharmacy access and the overall integrity of the healthcare system (Nwokike et al., 2015).

Ghana's healthcare delivery system is broken down into three different levels of care - primary, secondary, and tertiary, with the country's focus on the primary level. The primary level of care includes the health centres and polyclinics, the district hospital, and maternity clinics. The district hospital provides all the primary health care services, including in-patient and outpatient care and maternity services. The secondary level of care is more specialised and comprises the regional hospitals, with the tertiary level for even more specialised care involving teaching and specialised hospitals regulated by the Health Ministry and Ghana Health Service (Ministry of Health and Ghana Health Service Report, 2008).

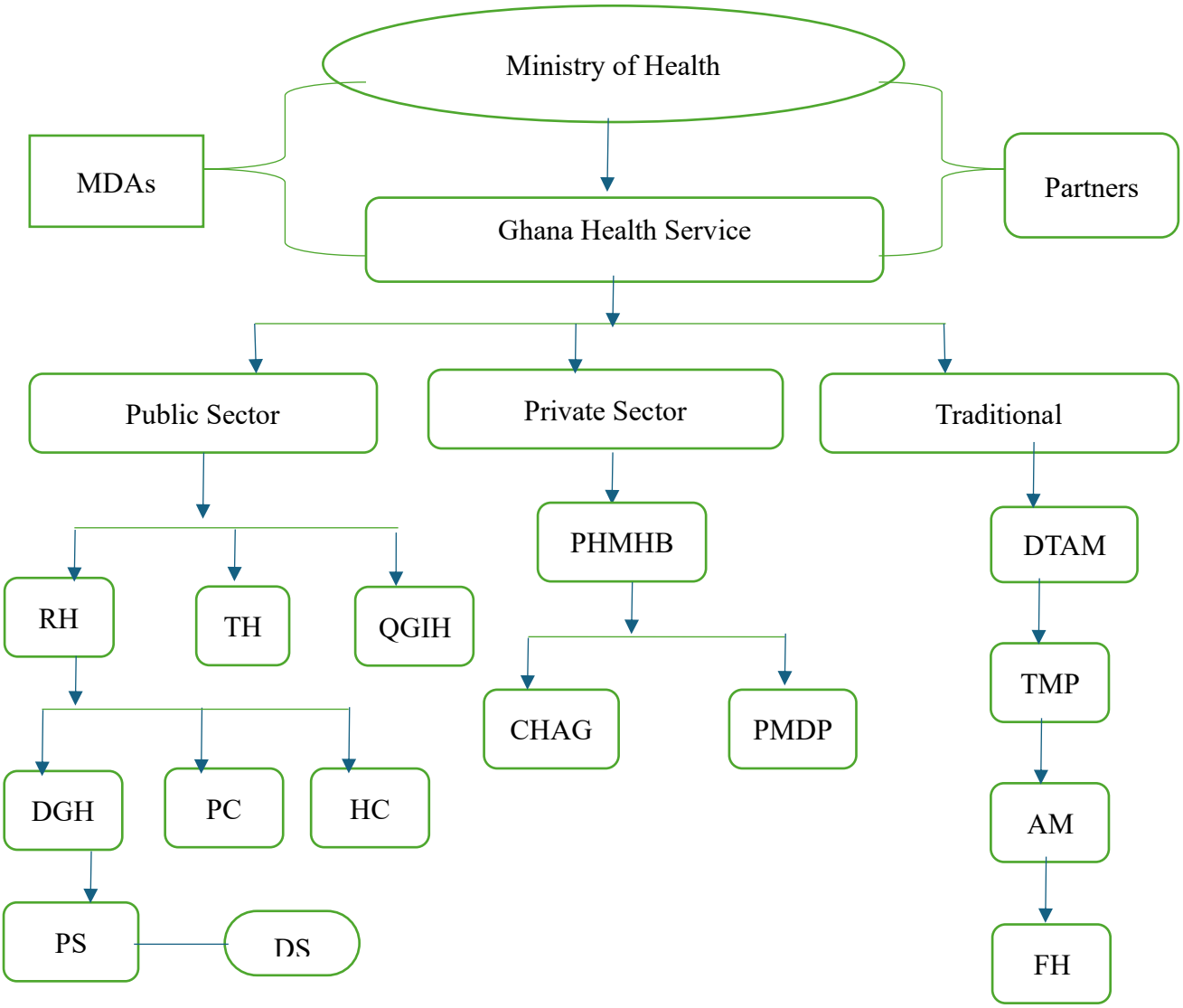

Figure 6: The Ghana Healthcare System (Researcher Construct).
Source: Modified Second Five-Year Programme of Work (2002-2006, p.48).

KEY:

1. MDA'S – MINISTRIES DEPARTMENTS AND AGENCIES
2. RH – REGIONAL HOSPITALS
3. TH – TEACHING HOSPITALS
4. QGIH – QUASI GOVERNMENT INSTITUTION HOSPITAL
5. DGH – DISTRICT GOVERNMENT HOSPITALS
6. PC - POLYCLINICS
7. HC - HEALTH CENTRES
8. PHMHB – PRIVATE HOSPITALS AND MATERNITY HOMES BOARD
9. CHAG – CHRISTIAN HEALTH ASSOCIATION OF GHANA
10. PMDP – PRIVATE MEDICAL AND DENTAL PRACTITIONERS
11. DTAM – DEPARTMENT OF TRADITIONAL AND ALTERNATE MEDICINE
12. TMP – TRADITIONAL MEDICINE PROVIDERS
13. AM – ALTERNATIVE MEDICINE
14. FH – FAITH HEALERS
15. PS – PHARMACY SHOPS
16. DS – DRUG STORES

4.1.3 Brief Overview of the Internal Migration Pattern in Ghana

Though international migration has gained much awareness over the past few years, internal migration has typically not. Yet, internal migration is the most common type in developing countries. For many in Sub-Saharan Africa, international migration is not feasible. De Vreyer et al. (2009) assert that internal migration within West African countries is well-established and persistent. This kind of migration is generally recognised as a less expensive alternative to international migration for individuals seeking to escape poverty. Internal migration can be categorised into four main types: rural-rural, rural-urban, urban-urban, and urban-rural. It can also be analysed based on intra and inter-movements. Intra-regional migration is the movement of the population between localities within an administrative region. In contrast, inter-regional migration is the movement of the population between different regions of a country (GSS, 2014).

A seminal article by Lewis (1954)) examined how the movement of people between rural and urban regions of a single country optimises the allocation of labour between the agricultural and industrial sectors. Deshingkar and Grimm (2005) also highlighted that internal migration is increasingly common in developing countries. According to them, it could play a non-negligible role in fighting poverty and contributing to economic development because it is not only a response to shocks but also a key survival strategy for the poorest populations.

However, migration is also sought after by a segment of society that is not as impoverished and possesses a higher level of education (Stark & Yitzhaki, 1988). They are looking for a more

substantial return on their educational investments. Thus, some interest is in identifying the individual characteristics that motivate internal migration. Before moving from one region to another, people who assume rationality compare migration's expected advantages and costs. For example, Lall et al. (2009) and Zhang & Shunfeng (2003) find that wage differentials between rural and urban regions incentivise migrants to leave the countryside. This agrees with the traditional theory of Harris & Todaro (1970) and Lewis (1954).

There is no established consensus on the impact of migration. It can be positive or negative, considering the economic background of the country and its temporary or permanent nature. Migration has historically been an important livelihood strategy in Ghana (Awumbila et al., 2011). Current internal migration trends are deeply rooted in historical antecedents. In the pre-colonial era (i.e. before 1874), migration in what is now seen in Ghana was driven by human needs such as favourable ecological conditions, fertile land for agriculture, trade, and greater security during tribal warfare (Ghana Statistical Service, 2014). This resulted in the movement of most of the ethnic groups in Ghana to their present locations in search of better ecological conditions and safe havens (Yaro, 2008). Most migrant movements in the pre-colonial era were not seen as cross-border migration since the West African sub-region was seen as a borderless area within which goods and people moved freely (Adepoju, 2005).

The economic and political structures established during colonial times changed the direction and composition of migration. For example, regulations governing contract and forced labour compelled labour migrants from the northern savannah zone to move towards the mining and plantation regions in southern Ghana (Anarfi & Kwankye, 2003). The colonial administration, operating on the premise that the Northern Territories lacked immediate economic significance, designated the northern zone as a labour reserve during the 1920s. This designation aimed to provide a source of inexpensive labour for mining operations and general labour needs in the cities of southern Ghana (Ghana Statistical Service, 2014). A significant portion of these migrants from the north to the south were primarily young, unmarried men.

After independence in 1957, north-south disparities continued to drive migration from the northern zone to the south. People often move from poor regions to wealthier regions and cities in Southern Ghana. Many poor people who migrate from the north of Ghana tend to move to the forest zone to work as farmers. However, many young men and women continue moving to cities in southern Ghana. The main pull factors of internal migration in Ghana are

employment, income, and other economic opportunities available in the southern urban centres but limited in the northern and rural areas (Ghana Statistical Service, 2014). Recent studies have shown that although migration is increasingly feminised in Ghana, males still dominate migration streams (Awumbila et al., 2014). Regarding age demographics, a significant portion of migrants in Ghana falls within the category of young adults, as indicated by a Ghana Statistical Service report in 2014.

Anarfi et al. (2003) discussed the factors influencing rural-urban migration within Ghana. They maintain that the high population growth rate over the past thirty years has increased the labour supply and put pressure on arable land, thus encouraging migration from the countryside into the city. In addition, these same authors suggested that significant differences between the poverty levels in Ghana's northern and southern sectors are fuelling this internal migration.
The coastal area, towns such as Accra, Tema and Sekondi-Takoradi, where these migrants dominate, has experienced significant industrialisation and urbanisation, making it a prime destination for internal migrants. On the other hand, the mid-region centred around Kumasi strongly focuses on agricultural, forestry, and mining activities. This region received most of the migration from the north in the 1990s.

This study thoroughly investigates the factors influencing health-seeking behaviour among internal migrants in Ghana, focusing on identifying barriers and facilitators. By examining how internal migrants navigate healthcare services in their new environments, the research aims to provide valuable insights into the complexities of healthcare access within the Ghanaian context, contributing to scholarly discourse on this topic.

4.2 Methods

The method section of this study explained how the research was conducted. It described the datasets used, focusing on the seventh round of the Ghana Living Standards Survey (GLSS 7) conducted by the Ghana Statistical Service. It also outlined the different variables studied, such as healthcare use among internal migrants in Ghana, and explained the theoretical framework used to guide the research. Additionally, it detailed the statistical analyses performed to understand the relationships between different variables. The method section also discussed how the data was managed to ensure accuracy and integrity, and it highlighted the ethical

procedures followed, including obtaining approval from the Brunel Research Ethics Approval Committee and permission from the Ghana Statistical Service to use the dataset.

4.2.1 Data Source

This study utilised data from the seventh round of the Ghana Living Standards Survey (GLSS 7), conducted during 2016/2017 by the Ghana Statistical Service. Using this dataset for this study was carefully considered based on several factors. Firstly, the GLSS 7 survey, conducted by the Ghana Statistical Service in 2016/2017, aimed to gather comprehensive data on various aspects of life in Ghana, including health, education, employment, migration, and socioeconomic factors. This broad scope aligns well with the objectives of this study, which seeks to understand health-seeking behaviour among internal migrants in Ghana.

The GLSS 7 survey employed a robust two-stage stratified sampling approach, ensuring a representative sample of the Ghanaian population (Sarkodie, 2021). With 15,000 households and approximately 53,000 individual respondents included in the survey, the dataset provides a substantial sample size, allowing for reliable statistical analysis. Further, the GLSS 7 dataset includes specific sections dedicated to collecting information on individual health status and mobility, making it particularly relevant for studying health-seeking behaviour among internal migrants. However, this ensures that the data collected aligns closely with the research objectives of this study.

The decision to utilise secondary data from the GLSS 7, which is typically considered a cross-sectional survey, was also underpinned by existing literature (Smith et al., 2020; Johnson & Brown, 2018; Davis et al., 2019). Also, many investigations examined in Chapter 2 of this thesis utilised analogous cross-sectional survey methodologies, emphasising the suitability of such an approach for investigating health-related phenomena in the Ghanaian context. Additionally, while other relevant datasets, like the Ghana Demographic and Health Survey 2018, are more recent, they lack coverage of migrant-related topics, making the GLSS 7 dataset more suitable for this study. Moreover, during the COVID-19 pandemic, accessing a larger sample size comparable to or exceeding that of the GLSS7 dataset posed challenges due to restrictions and protocols. These measures, such as limitations on gatherings and travel, hindered conventional data collection methods. Consequently, the availability of comprehensive and recent datasets like GLSS7 was instrumental in ensuring the feasibility and

rigour of this study and again offered valuable data without logistical complexities during such unprecedented circumstances.

4.2.2 Sample Population

This study limited the sample population to individuals identified as internal migrants within the dataset. Following the conventional definition delineated in the literature by Mouhoud and Oudinet (2018), an internal migrant is an individual who has relocated from their original residence to a different location within the same country, whether on a permanent or temporary basis. This migration may be prompted by various factors, such as pursuing enhanced opportunities or escaping poverty, conflicts, or other adversities. Consequently, individuals not meeting this criterion were classified as non-migrants and were excluded from the final analysis. The sample for this study was composed of 14886 individuals classified as internal migrants, among whom 1233 reported seeking healthcare services, while 13054 did not. This deliberate division of the sample facilitated a targeted investigation into health-seeking behaviour among internal migrants, providing insights into the distinct barriers and facilitators they confront when accessing healthcare services within Ghana. The study's methodology, guided by previous research (Graham et al., 2018; Lee et al., 2020), enabled a detailed analysis of the factors influencing healthcare utilisation among this population subgroup.

4.2.3 Variables

Variables serve as fundamental components that are essential for the investigation of phenomena. According to Kaur (2013), variables encompass diverse values and attributes, enabling researchers to effectively characterize the object of study. In this study, which focuses on utilising healthcare services among internal migrants in Ghana, both independent and dependent variables are integrated. As Kaur (2013) outlined, researchers manipulate or control independent variables and are hypothesised to influence the phenomenon under investigation. Examples include socioeconomic status and accessibility to healthcare facilities. Dependent variables, on the other hand, represent the outcomes or phenomena of interest, such as healthcare visit frequency and treatment adherence. Control variables are also considered to account for potential confounding factors, while moderator variables interact with the relationship between independent and dependent variables.

i. Dependent variable

Health status is a complex construct composed of various dimensions and is regarded as multidimensional (Al-Windi, 2006), and because of this reason, different indicators are employed to conceptualise and evaluate it. Following the example of Pan, Lei, & Liu (2016), two indicators were calculated to measure the use of healthcare services by internal migrants in this study;

1. the decision to consult a healthcare practitioner is measured with a variable that indicates whether the respondent (and for this study, the internal migrant) had visited a health practitioner or not and,
2. the type of healthcare services sought by internal migrants: this indicator reflects where migrants seek healthcare when the needs arise.

The standard of meeting the recommended criteria was based on 'the utilisation of healthcare services in the last two weeks before the survey', and it takes the value of 1 if at least a visit to a practitioner was recorded and 0 if otherwise.

ii. Independent variables

Based on the aim of this research, the incorporation of socio-demographic indicators like age, gender, educational attainment, income status, marital status, and additional health-related variables such as health insurance status, proximity to healthcare facilities, and other pertinent factors such as the migrant destination (region), proved to be very significant. The inclusion of variables captured in the dataset was also informed by existing literature, which identified correlations with healthcare service utilisation. Studies by Yuewen Dang et al. (2018), Linglong Ye et al. (2019), and Masiye & Kaonga (2016) have highlighted the importance of various factors in influencing health-seeking behaviour. Additionally, a systematic review was conducted to identify the determinants of health-seeking behaviour among migrants in Africa, as documented in Chapter 2, and further informed the selection of socio-demographic and other variables in this current study. Accordingly, selecting and including these variables are crucial for understanding healthcare service utilisation among internal migrants in Ghana.

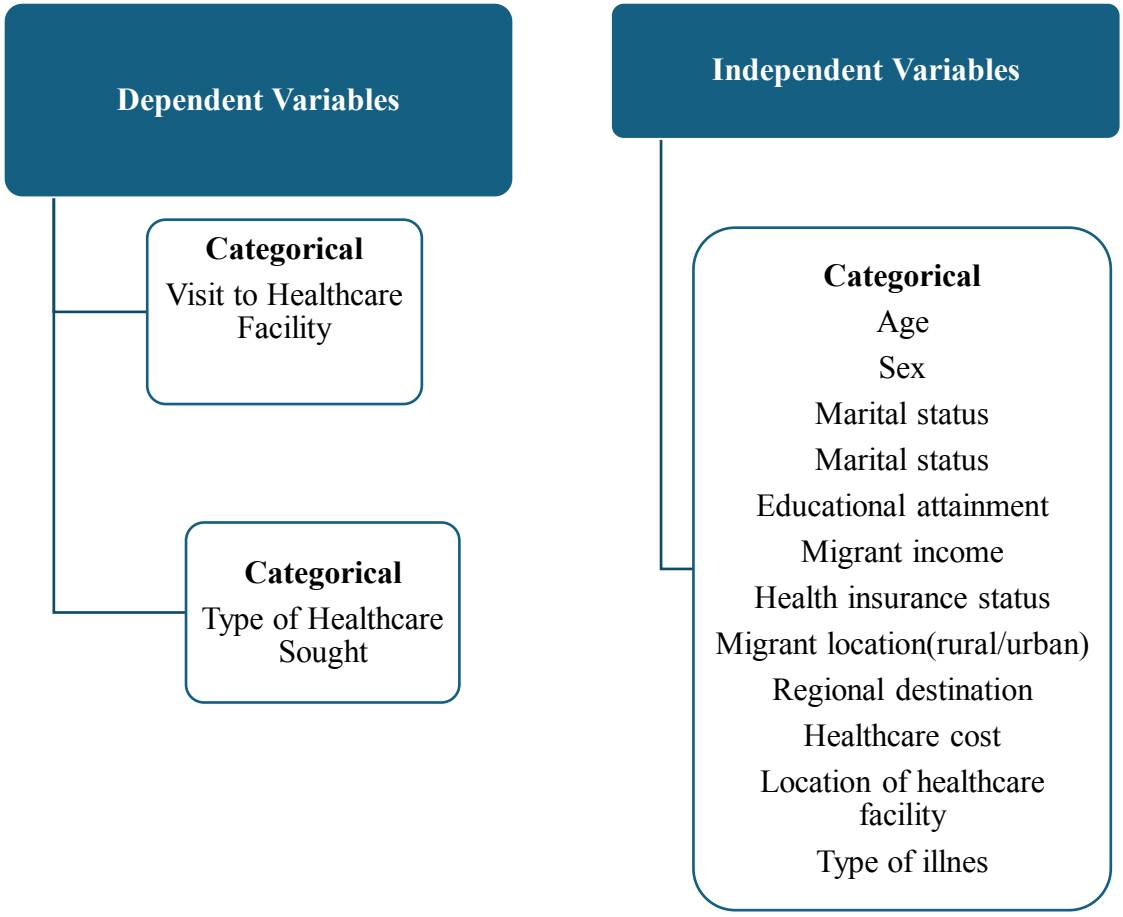

Figure 7: Variables used in analysis

4.2.4 Theoretical Model

In the literature review section of this thesis, various theoretical frameworks about health-seeking behaviour and utilisation of healthcare were identified and discussed. The previous chapter also discussed the adopted theoretical models in detail (*see Chapter 3*). In this study, the selection of Andersen's Behavioural Model as the theoretical framework was meticulously considered for its relevance to the research objectives. Andersen's model, widely acknowledged and extensively employed in healthcare service utilisation analyses, offers a structured approach to understanding the complex interplay of predisposing, enabling, and need factors in shaping individuals' healthcare-seeking behaviour (Anderson, 1995; Liu et al., 2020). Predisposing factors encompass individual characteristics like age, gender, and education level while enabling factors encompass external resources such as financial means and access to healthcare services. Need factors encompass perceived and evaluated health needs. By employing Andersen's model, this study systematically examined how these factors influence

healthcare utilisation among internal migrants in Ghana. The model's widespread use in previous research studies lends credence to its applicability in diverse contexts, including the Ghanaian healthcare landscape. The adoption of Andersen's Behavioural Model enhanced the methodological rigour and facilitated a comprehensive understanding of the factors driving healthcare-seeking behaviour among internal migrants in Ghana.

However, in this study, healthcare utilisation was explicitly defined as having visited a healthcare practitioner within the two weeks preceding the survey.

i. *Predisposing factors*: Age, gender, education, and marital status were the individual demographic data gathered. Age was captured from 15 years and above with an interval range of not less than ten years (15-24; 25-34; 35-44; 45-54; 55+ and above). Gender was also captured as male or female. Marital statuses were classified under three categories: married, single (divorced, separated, widowed) and consensual union. Education had five categories: no education, primary education, junior high education, senior high education, and tertiary education.

ii. *Enabling factors*: The study captured various enabling factors, which include place of residence, health insurance status, distance to healthcare facilities, and income of migrants. The location of one's urban or rural residence can influence their access to transportation and healthcare services, as noted by Varela et al. (2019). The Ghana health insurance system categorises individuals as either insured or uninsured, with insured individuals required to make direct or indirect premium payments to maintain membership status, according to Umar S et al. (2020).

However, the recent Health Insurance Policy Act (Act 852) exempts certain groups, including pregnant women, indigents, mentally ill persons, those above age 70, social security beneficiaries, and persons with disabilities, from premium payments, as determined by the Gender Ministry (National Health Insurance Regulations, 2004). Additionally, the study identifies one's ability to afford healthcare services as an enabling factor, while income can also impact an individual's utilisation of healthcare services from an economic standpoint (Raghupathi V and Raghupathi W, 2020). Finally, the study included the location of migrants as a factor affecting their utilisation of healthcare services, thus falling under the enabling factors (Yang and Hwang, 2016).

iii. *Need factors*: The study's need factors encompass the type of illness reported by respondents during their healthcare facility visit, categorised into three types: severe, mild, and check-up (no major illness/injuries). The degree of severity was assessed based on respondents' answers to two questions: whether they had experienced any illness or injury within the past two weeks and the main reason for their most recent healthcare visit.

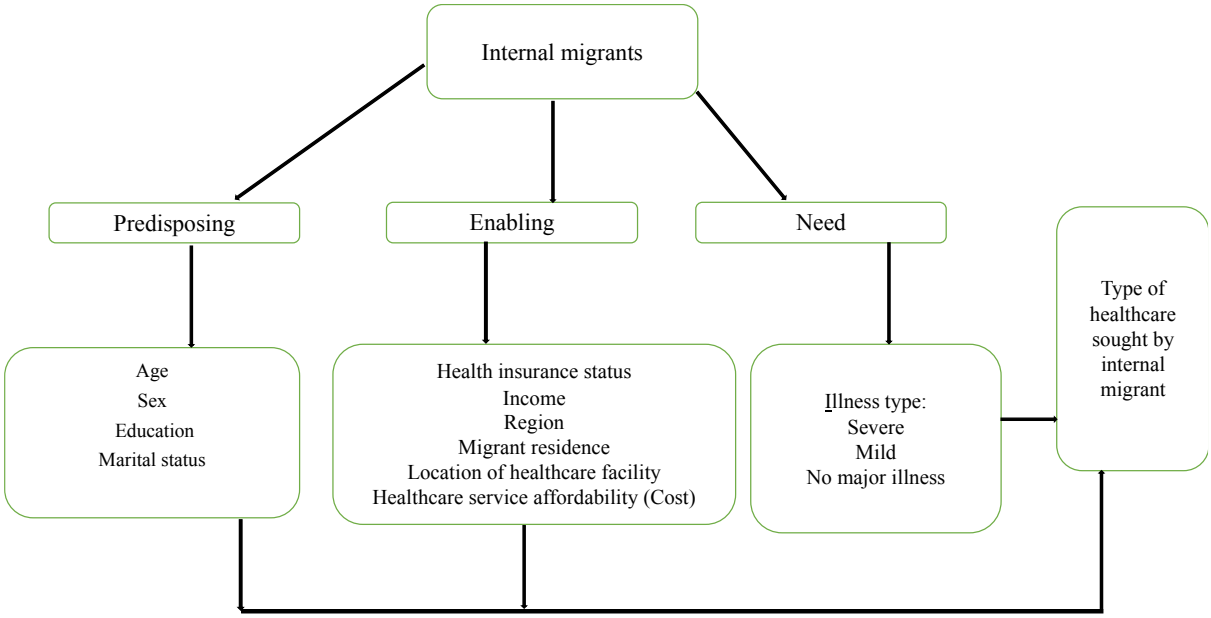

Figure 8. Modified Andersen Behavioural Model on Healthcare Utilisation (Researcher construct).

4.2.5 Statistical Analysis

The data was analysed in three main stages: (*1*) descriptive analysis, (*2*) bivariate analysis, and (*3*) logistic regression analysis. Descriptive analysis was employed to examine the data's accuracy and summarise the variables' characteristics. The mean and standard deviation were reported where appropriate in the analysis for the continuous variables.

For the categorical variables, proportions were used to describe their characteristics. Subsequently, chi-square tests and Fisher's exact tests, where appropriate, were used to examine associations between the independent and dependent variables in the bivariate analyses to identify which variables or determinants were statistically significant.

Further, logistic regression analysis was fitted to test the strength of the associations and the crude odds ratio (cOR) and adjusted odds ratio (aOR) were reported. The data analysis was performed with STATA version 14.3. Observations were presented with a 95% confidence interval (95% CI), and the statistical significance level was set at $p < 0.05$.

4.2.6 Data Management, Missingness and Integrity

Proper data management, addressing missing data, and ensuring data integrity are vital for robust research studies, contributing to the credibility and reliability of findings (Tenopir et al., 2011). Prior research emphasises transparent and accountable data management practices, including documenting procedures and handling missing data appropriately (Little & Rubin, 2019), while thorough data validation processes are crucial for maintaining data accuracy and reliability (McDonald, 2018).

The GLSS7 dataset underwent encryption and was subsequently stored on the researcher's designated OneDrive at Brunel University. Additionally, the researcher ensured that the personal computer with access to this allocated OneDrive was password protected. Regarding data retention, the researcher articulated intentions to maintain the dataset for ten years after completing and submitting the associated research to Brunel University London. This strategic decision conforms to Brunel University's established data management protocols governing data retention.

The accuracy and integrity of the GLSS7 dataset were evident through meticulous data handling practices. For instance, the absence of outliers served as a testament to the dataset's robustness (Jones & Tukey, 2020). Furthermore, a thorough examination of missing observations found no missingness, underscoring the dataset's completeness and lack of gaps (Little & Rubin, 2019). This rigorous methodology guaranteed the absence of missing data across all variables, thereby preserving the integrity of the collected information (Smith et al., 2018). As a result, the dataset encompassed the complete data profiles of all 14,886 migrants under investigation, facilitating a comprehensive analysis of the available data.

The rigorous data cleaning and validation process undertaken in this current study on the GLSS7 dataset from the GSS exemplifies a commitment to ensuring the reliability and quality of the study's data. This meticulous approach aligns with established research methodology

best practices, as Giffels et al., (2010) emphasised. By systematically verifying the accuracy of the dataset and categorising observations under their respective variables, the researcher enhanced the integrity of the study's findings. Moreover, storing the cleaned dataset on a secure platform like the Brunel One Drive, accessible only to the researcher, safeguards against unauthorised access and maintains confidentiality, which is in line with ethical guidelines on data management. Furthermore, the decision to retain the dataset for ten years following the submission of the work ensures compliance with the university's data retention procedures and promotes transparency in research practices. These conscientious data management practices not only uphold the highest standards of academic integrity but also contribute to the credibility and reproducibility of the study's findings

4.2.7 Sample Selection Bias

Addressing sample selection bias in bivariate probit models with selectivity correction is crucial, as highlighted by Smith et al. (2021). Anokye et al. (2013) suggest that statistically significant correlation coefficients between error terms in two equations may emerge, leading to bias. Various methodologies have been proposed and employed in various health behaviour research to mitigate this issue. For instance, the Propensity Score Matching (PSM) approach, widely utilised in recent research (Jones & Brown, 2020), estimates the probability of selection into treatment groups based on observed characteristics, facilitating matching treated and untreated units with similar propensity scores. Additionally, Instrumental Variables (IV) models, as Johnson et al. (2019) discussed, identify instruments correlated with the endogenous variable but unrelated to the outcome, thereby addressing endogeneity and selection bias. Furthermore, the Heckman selection model, introduced by economist James Heckman and still relevant in contemporary research (Lee & Kim, 2022), includes two equations—a selection equation estimating the probability of sample inclusion based on observed characteristics and an outcome equation examining the relationship between the outcome variable and relevant variables, considering only selected observations.

Various alternative methods to address selection bias in research, as noted by Anokye et al. (2013), provide researchers with a diverse array of tools tailored to the unique characteristics of their data and research inquiries. As emphasised by Plumber et al. (2005), scholars underscore the significance of considering the strengths and limitations inherent in each method when selecting the most appropriate approach to mitigate bias. This highlights the

imperative for researchers to meticulously evaluate their data and research objectives, as McDonald (2018) advocates, to make informed decisions regarding the most suitable model to employ.

This study employed the Heckman selection model to examine this issue, and the results indicated no selection bias. The decision to employ the Heckman selection model in this study was justified by its effectiveness in addressing potential selection bias issues, as evidenced by Plumber et al. (2005). This model is extensively used across diverse fields, notably in social sciences and economics, where researchers often confront self-selection or non-random sampling challenges. By accounting for unobservable factors that may systematically exclude specific observations from analysis, the Heckman model allows researchers to obtain unbiased estimates, thereby enhancing the validity and reliability of their findings.

4.2.8 Ethics

The research conducted in this study underwent a comprehensive ethical review process and obtained formal approval from the Brunel Research Ethics Approval Committee with reference 33906-NER, thereby ensuring compliance with ethical standards and guidelines governing research involving human participants (*refer to Appendix 10 for details*). Moreover, formal authorisation was diligently sought and acquired from the Ghana Statistical Service to access and utilise the GLSS7 dataset. This represents a crucial measure to adhering to data protection regulations and ethical considerations about utilising secondary data sources.

4.3 Results

Subsequent sections thoroughly examine the dataset, highlighting the significant findings and insights derived from the empirical investigation. This comprehensive analysis explains the research questions and objectives of the present study, thereby fostering a more profound understanding of the underlying phenomena under investigation.

4.3.1 Descriptive and Bivariate Results

Table 6 displays the sociodemographic and health characteristics of the study's sample, consisting of 14,886 internal migrants from nine regions in Ghana. Of the sample, 91.37% (n=13,054) did not seek medical care when sick, while only 8.63% (n=1233) did. Among those

who sought care, 77.94% used non-self-care methods or visited a clinician other than for self-care or used alternative medicine.

Majority of the internal migrants were male (59.33%), and the mean age was 38.37 years. Regarding education attainment, a substantial majority, 79.32%, lack any formal educational background, with the remaining 20.68% having attained primary education or higher. Half of the sample were in a marital union (50%), and a notable 53.41% exhibited low income, of which 55.16% resided in rural areas. The predominant destination for internal migrants was the Greater Accra region, constituting the most frequently chosen location at 14.65%. The study found that 84.10% of internal migrants were registered with the national health insurance program, and a notable 70.07% could access available healthcare facilities within an hour or less per the distance to these facilities.

Table 6: Descriptive statistics of variables (N=14,287)

Variables	Observations (n)	Percentage (Mean, ±SD)
Dependent (Consulted healthcare practitioner)		
No. of internal migrants	14,287	
If yes =1	1,233	8.63
If no = 0	13,054	91.37
Type of healthcare sought (n=1233)		
Non-self-care	961	77.94
Self-care	272	22.06
Explanatory		
Predisposing Factors		
Age		
15-24	187	1.31
25-34	6,088	46.62
35-44	3,910	27.37
45-54	1,022	7.15
55+	2,508	17.55
Sex		
Female	5,810	40.67
Male	8,477	59.33
Education		

No education	1,133	79.32
Primary	503	3.52
JHS	1,555	10.88
SHS	508	3.56
Tertiary	388	2.72
Marital status		
Married	7,276	50.93
Single	4,664	32.65
Consensual union	2,347	16.43
Enabling Factors		
Location		
Urban	6,406	44.84
Rural	7,881	55.16
Income		
Low	7,630	53.41
High	6,657	46.59
Region		
Western	1,833	12.83
Central	2,000	14.00
Greater Accra	2,093	14.65
Volta	1,755	12.28
Eastern	1,602	11.21
Ashanti	1,490	10.43
Brong Ahafo	1,211	8.48
Northern	1,372	9.60
Upper East	931	6.52
Cost of Healthcare	1,233	2.39 (±13.14)
Health insurance status (n=1233)		
Uninsured	196	15.90
Insured	1,037	84.10
Time taken to health facility (n=1233)		
Less than 1hour	864	70.07
1hour or more	369	29.93
Need factors		
Type of illness (n=1233)		
Severe	1,020	82.73

Mild	89	7.22
Check-up (no major illness) (n=1233)	124	10.06

SD: standard deviation.

In Table 7, sex emerges as a statistically significant determinant ($p < 0.01$), with males (55.39%) being more likely to consult a healthcare practitioner than females (44.61%). Income also shows a significant relationship ($p < 0.01$), as individuals with lower incomes (57.18%) are more likely to seek healthcare services compared to those with higher incomes (42.82%). Regional differences play a critical role, with substantial variation across areas, evidenced by a significant chi-square value ($\chi^2 = 66.95$, $p < 0.01$). The Central (18.33%) and Volta (13.95%) regions report higher healthcare utilisation, while Ashanti (6.97%) and Brong Ahafo (6.41%) exhibit lower rates, suggesting that regional disparities may affect access to healthcare. Conversely, other factors such as age, education, location, and marital status do not demonstrate statistically significant relationships with healthcare utilisation. This suggests that while specific demographic characteristics and socio-economic conditions, particularly gender, income, and region, strongly influence health-seeking behaviour, other variables like age and education may not be as impactful in this context.

Table 7: Determinants of healthcare utilisation among internal migrants (N=1233)

Factors	**Consulted health practitioner n (%)**		**χ^2**	**p-value**
	Yes	**No**		
Age category (years)			4.11	0.39
15-24	14 (1.14)	173 (1.33)		
25-34	572 (46.39)	6088 (46.64)		
35-44	331 (26.85)	3579 (27.42)		
45-54	105 (8.52)	917 (7.02)		
55+	211 (17.11)	2297 (17.60)		
Sex			8.68	<0.01*
Female	550 (44.61)	5260 (40.29)		
Male	683 (55.39)	7794 (59.71)		
Education			6.03	0.19
No education	966 (78.35)	10367 (79.42)		
Primary	55 (4.46)	448 (3.43)		
JHS	143 (11.60)	1412 (10.82)		

SHS	43 (3.49)	465 (3.56)		
Tertiary	26 (2.11)	362 (2.77)		
Location			0.22	0.64
Urban	545 (44.20)	5861 (44.90)		
Rural	688 (55.80)	7193 (55.10)		
Income			7.72	<0.01*
Low	705 (57.18)	6925 (53.05)		
High	528 (42.82)	6129 (46.95)		
Marital status			5.07	0.08
Married	648 (52.55)	6628 (50.77)		
Single	368 (29.85)	4296 (32.91)		
Consensual union	217 (17.60)	2130 (16.32)		
Region			66.95	<0.01*
Western	161 (13.06)	1672 (12.81)		
Central	226 (18.33)	1,774 (13.59)		
Greater Accra	129 (10.46)	1964 (15.05)		
Volta	172 (13.95)	1583 (12.13)		
Eastern	146 (11.84)	1456 (11.15)		
Ashanti	86 (6.97)	1404 (10.76)		
Brong Ahafo	79 (6.41)	1132 (8.67)		
Northern	138 (11.19)	1234 (9.45)		
Upper East	96 (7.79)	835 (6.40)		

χ^2 =Pearson chi-square, p-value =Statistically significant*

4.3.2 Logistic Regression Analyses

In the logistic regression analysis (model 1), results indicate that male migrants were 20.0% less likely to use healthcare services compared to their female counterparts (cOR=0.8, 95% CI=0.8-0.9, p<0.01). Furthermore, migrants with higher monthly income had 0.9 times the odds of utilising healthcare compared to those with lower monthly income (cOR=0.9, 95% CI=0.8-1.0, p<0.01). The study also revealed that migrants living in the Greater Accra and Brong Ahafo regions were 30.0% less likely to utilise healthcare services than those living in the Western region (cOR=0.7, 95% CI=0.5-0.9, p<0.01) and (cOR=0.7, 95% CI=0.5-1.0, p<0.02), respectively. Additionally, migrants from the Ashanti region had 0.6 times lower odds of utilising healthcare services than those from the Western region (cOR=0.6, 95% CI=0.5-0.8,

p<0.01). However, the odds of using healthcare services were progressively higher among migrants in Ghana's central region than those in the Western region (cOR=1.3, 95% CI=1.1-1.6, p<0.01).

Table 8: Logistic regression analysis of determinants associated with healthcare utilisation among internal migrants (N= 14287)

Factors	Model 1		Model 2	
	cOR(95%CI)	p-value	aOR(95%CI)	p-value
Age category (years)				
15-24	Ref		Ref	
25-34	1.2(0.7-2.0)	0.60	1.2(0.6-2.1)	0.63
35-44	1.1(0.7-2.0)	0.64	1.3(0.8-2.4)	0.30
45-54	1.4(0.8-2.5)	0.24	1.4(0.8-2.6)	0.26
55+	1.1(0.7-2.0)	0.66	1.4(0.8-2.5)	0.24
Sex				
Female	Ref		Ref	
Male	0.8(0.75-0.94)	<0.01*	1.3(1.1-1.6)	<0.01*
Education				
No education	Ref		Ref	
Primary	1.3(0.99-1.76)	0.06	1.2(0.8-1.7)	0.49
JHS	1.1(0.90-1.31)	0.38	0.8(0.6-1.1)	0.13
SHS	0.9(0.72-1.37)	0.97	0.9(0.6-1.4)	0.57
Tertiary	0.8(0.51-1.15)	0.20	0.7(0.4-1.2)	0.21
Location				
Urban	Ref		Ref	
Rural	1.1(0.91-1.16)	0.64	0.9(0.8-1.1)	0.15
Income				
Low	Ref		Ref	
High	0.9(0.75-0.95)	0.01*	1.1(0.7-1.5)	0.88
Marital status				
Married	Ref		Ref	
Single	0.8(0.7-1.0)	0.05*	1.2(0.8-1.6)	0.42
Consensual union	1.1(0.9-1.2)	0.62	1.3(0.7-1.8)	0.54
Region				
Western	Ref		Ref	
Central	1.3(1.1-1.6)	0.01*	1.3(0.9-1.8)	0.16

Greater Accra	0.7(0.5-0.9)	<0.01*	0.6(0.3-1.0)	0.04*
Volta	1.1(0.9-1.4)	0.29	0.9(0.6-1.7)	0.93
Eastern	0.9(0.8-1.3)	0.74	0.8(0.4-1.5)	0.44
Ashanti	0.6(0.5-0.8)	<0.01*	0.4(0.2-0.7)	<0.01*
Brong Ahafo	0.7(0.5-1.0)	0.02*	0.5(0.3-0.8)	0.01*
Northern	1.1(0.9-1.5)	0.22	1.1(0.7-1.8)	0.61
Upper East	1.2(0.9-1.6)	0.19	1.5(0.9-2.4)	0.11

cOR: crude odds ratio, aOR: adjusted odds ratio, 95% CI: 95% confidence interval, p-value =Statistically significant.*

Tables 8 and 9 examine the factors influencing healthcare utilisation among internal migrants by demonstrating the relationship between the type of healthcare sought and its impact on their decision to use healthcare services. In Model 2 of Table 8, it is evident that internal migrants aged 25-34, 35-44, 45-54, and 55 years and above were 1.6 times (aOR=1.6, 95%-CI:0.3,8.6), 2.6 times (aOR=2.6, 95%-CI: 0.5,13.2), 1.7 times (aOR=1.7, 95%-CI: 0.3, 8.8), and 1.7 times (aOR=1.7, 95% CI: 0.4, 9.1) respectively, more likely to seek healthcare from a formal provider compared to the 15-24 years age group.

Male migrants were 0.9 times (aOR=0.9, 95%-CI:0.5, 1.6) more likely to use formal healthcare than females. Internal migrants with tertiary education, senior high school, junior high school, and primary school education were 1.1 times (aOR=1.1, 95%-CI:0.3, 3.7), 0.2 times (aOR=0.2, 95%-CI:0.1, 0.6), 1.2 times (aOR=1.2, 95%-CI:0.5, 2.5), and 0.4 times (aOR=0.4, 95%-CI:0.2,1.3) more likely to consult a clinician for healthcare than those with no education.

Internal migrants in rural areas were 0.9 times (aOR=0.9, 95%-CI:0.7, 1.4) more likely to use formal healthcare services in their destination areas than internal migrants in urban areas. Migrants with higher incomes were 0.9 times (aOR=0.9, 95%-CI:0.4, 2.2) less likely to use formal healthcare services than those with lower incomes. The study found that single and cohabiting internal migrants were 0.6 times (aOR=0.6, 95-CI:0.2, 1.4) and 0.8 times (aOR=0.8, 95%-CI:0.2, 2.9) less likely to seek healthcare from a clinician.

Insured internal migrants were 7.1 times (aOR=7.1, 95%-CI:3.7, 13.5) less likely to use formal healthcare than to self-care compared to those without health insurance. Internal migrants who spent more than an hour accessing healthcare services were 0.3 times (aOR=0.3, 95%-CI:0.2,

0.4) less likely to seek healthcare when ill. Internal migrants with minor or no major illnesses were 1.7 times (aOR=1.7, 95%-CI:0.9, 2.8) and 0.8 times (aOR=0.8, 95%-CI:0.4, 1.3), respectively, less likely to receive treatment from a clinician compared to those with severe ailments. The findings suggest that migrants who incur a cost of Gh₵1:00 or more are less likely to access healthcare services in the destination area.

Table 9: Factors associated with the type of healthcare sought among the internal migrants (N=1233)

Factors	**Type of healthcare sought n (%)**		**χ^2**	**p-value**
	Self-care	**Non-self-care**		
Age category (years)			17.87	<0.01*
15-24	2 (0.74)	12 (1.25)		
25-34	98 (36.03)	474 (49.32)		
35-44	91(33.46)	240 (24.97)		
45-54	23 (8.46)	82(8.53)		
55+	58 (21.32)	153(8.53)		
Sex			0.85	0.36
Female	128 (47.06)	422 (43.91)		
Male	144 (52.94)	539 (56.09)		
Education			5.65	0.23
No education	216(79.41)	750 (78.04)		
Primary	10 (3.68)	45 (4.68)		
JHS	32 (11.76)	111 (11.55)		
SHS	5 (1.84)	38 (3.95)		
Tertiary	9 (3.31)	17 (1.77)		
Location			0.52	0.47
Urban	115 (42.28)	430 (44.75)		
Rural	157 (57.72)	531 (55.25)		
Income			5.23	0.02*
Low	172 (63.24)	533 (55.46)		
High	100 (36.76)	528 (44.54)		
Marital status			8.87	0.01*
Married	122 (44.85)	526 (54.73)		
Single	98 (36.03)	270 (28.10)		
Consensual union	52 (19.12)	165 (17.17)		

Region			46.03	<0.01*
Western	36 (13.24)	125 (13.01)		
Central	57 (20.96)	169 (17.59)		
Greater Accra	19 (6.99)	110 (11.45)		
Volta	16 (5.88)	156 (16.23)		
Eastern	37 (13.60)	109 (11.34)		
Ashanti	37 (13.60)	49 (5.10)		
Brong Ahafo	17 (6.25)	62 (6.45)		
Northern	35 (12.87)	103 (10.72)		
Upper East	18 (6.62)	78 (8.12)		
Cost of Healthcare	272 (22.06)	961 (77.94)	29.89	0.27
Health insurance status			36.38	<0.01*
Uninsured	11 (4.04)	184 (19.17)		
Insured	261 (95.96)	776 (80.83)		
Time to a healthcare facility			40.56	<0.01*
Less than 1hour	234 (85.66)	630 (65.62)		
1hour or more	39 (14.34)	330 (34.38)		
Type of illness			5.21	0.07
Severe	228 (83.82)	791 (82.40)		
Mild	25 (9.19)	64 (6.67)		
Check-up (no major illness)	19 (6.99)	105 (10.94)		

χ^2 =Pearson chi-square, p-value =Statistically significant*

Table 10 below highlights the key factors influencing access to healthcare services. Age and sex were not significantly associated with healthcare-seeking in either the crude or adjusted models, suggesting these demographic variables may not play a central role in determining healthcare access within this population. However, education level emerged as a significant determinant, with individuals holding Senior High School (SHS) education showing significantly lower odds of seeking healthcare compared to those with no education (aOR: 0.2, $p < 0.01$). This could point to specific barriers this group faces, possibly related to socio-economic or knowledge-related factors. Income showed an association with health seeking behaviour in the crude model. Still, the relationship disappeared after adjusting for other factors, suggesting that other variables, such as health insurance status or proximity to healthcare facilities, may mediate the effect of income. Regional differences were also evident,

with individuals from the Volta region being significantly less likely to seek healthcare, while those from the Ashanti region had higher odds. However, this effect was not significant after adjustment. This could reflect regional disparities in healthcare infrastructure or cultural factors influencing healthcare behaviour. Notably, health insurance status was a significant determinant, with insured individuals being seven times more likely to seek healthcare than their uninsured counterparts (aOR: 7.1, $p < 0.01$). Additionally, those who had to travel one hour or more to reach a healthcare facility were significantly less likely to seek care, emphasising the impact of geographic barriers on healthcare access.

Table 10: Logistic regression analysis of the type of healthcare sought among internal migrants (N=1233)

Factors	**Model 1**		**Model 2**	
	cOR(95%CI)	**p-value**	**aOR(95%CI)**	**p-value**
Age category (years)				
15-24	Ref		Ref	
25-34	1.2 (0.3-5.6)	0.78	1.6 (0.3-8.6)	0.58
35-44	2.3 (0.5-10.3)	0.29	2.6 (0.5-13.2)	0.25
45-54	1.7 (0.4-8.1)	0.52	1.7 (0.3-8.8)	0.51
55+	2.3 (0.5-10.5)	0.29	1.8 (0.4-9.1)	0.47
Sex				
Female	Ref		Ref	
Male	0.9 (0.7-1.2)	0.36	0.9 (0.5-1.6)	0.76
Education				
No education	Ref		Ref	
Primary	0.8 (0.4-1.6)	0.47	0.4 (0.2-1.3)	0.13
JHS	1.1 (0.7-1.5)	0.99	1.2 (0.5-2.5)	0.69
SHS	0.5 (0.2-1.2)	0.10	0.2 (0.1-0.6)	<0.01*
Tertiary	1.8 (0.8-4.2)	0.15	1.1 (0.3-3.7)	0.86
Location				
Urban	Ref		Ref	
Rural	1.1 (0.8-1.5)	0.47	0.9 (0.7-1.4)	0.96
Income				
Low	Ref		Ref	
High	0.7 (0.5-0.9)	0.02*	0.9 (0.4-2.2)	0.92
Marital status				

Married	Ref		Ref	
Single	1.6 (1.2-2.1)	<0.01*	0.6 (0.2-1.4)	0.23
Consensual union	1.4 (0.9-1.9)	0.10	0.8 (0.2-2.9)	0.78
Region				
Western	Ref		Ref	
Central	1.2 (0.7-1.9)	0.52	0.6 (0.3-1.4)	0.24
Greater Accra	0.6 (0.3-1.1)	0.10	0.5 (0.1-1.9)	0.32
Volta	0.4 (0.2-0.7)	<0.01*	0.2 (0.1-0.9)	0.03*
Eastern	1.2 (0.7-1.9)	0.54	0.9 (0.2-4.7)	0.89
Ashanti	2.6 (1.5-4.6)	<0.01*	2.8 (0.7-10.9)	0.13
Brong Ahafo	0.9 (0.5-1.8)	0.88	0.6 (0.2-2.2)	0.46
Northern	1.2 (0.7-2.0)	0.54	0.7 (0.2-2.2)	0.56
Upper East	0.8 (0.4-1.5)	0.49	0.5 (0.1-1.8)	0.29
Cost of healthcare	1.1 (0.9-1.3)	0.19	1.2 (0.8-1.4)	0.02*
Health insurance status				
Uninsured	Ref		Ref	
Insured	5.6 (3.0-10.5)	<0.01*	7.1 (3.7-13.5)	<0.01*
Time to a health facility				
Less than 1hour	Ref		Ref	
1hour or more	0.3 (0.2-0.5)	<0.01*	0.3 (0.2-0.4)	<0.01*
Type of illness				
Severe	Ref		Ref	
Mild	1.3 (0.8-2.2)	0.22	1.7 (0.9-2.8)	0.07
Check-up (no major illness)	0.6 (0.4-1.0)	0.07	0.8 (0.4-1.3)	0.33

cOR: crude odds ratio, aOR: adjusted odds ratio, 95% CI: 95% confidence interval, p-value =Statistically significant.*

4.4 Discussion

The findings of this study shed light on the intricate relationship between internal migration and health in Ghana, a topic of paramount importance given the country's significant reliance on internal migrants for labour-related activities. As data from the Ghana Living Standards Survey indicates, internal migration in Ghana experienced a notable 5.5% increase between 2005 and 2017, underscoring the relevance of understanding the dynamics at play (Ghana Statistical Service, 2019). Ackah (2012) emphasises the pivotal role of internal migrants in

bolstering Ghana's economic base and supporting the livelihoods of households and communities. However, despite their crucial contributions, the nexus between internal migration and health presents a complex landscape fraught with challenges (Wickramage et al., 2018). Su, Cathrerine and Selene (2013) highlight significant gaps in databases, hindering efforts to track the health status and healthcare utilisation patterns of internal migrants. Additionally, the heterogeneous nature of migrant populations and the uncertainty surrounding the impact of migration on health outcomes further complicate this issue (Wickramage et al., 2018).

The present study signifies a notable progression in comprehending the intricate interplay between internal migration and health in Ghana, underscoring the imperative requirement for specific research endeavours and policy interventions aimed at addressing the distinctive healthcare requirements of this demographic. With a specific focus on internal migrants within Ghana, the research aimed to identify a range of factors, both barriers and facilitators, influencing their utilisation of healthcare services. Employing Andersen's healthcare utilization model, recognized for its effectiveness in elucidating the socio-economic and cultural determinants of health-seeking behaviour (B. Babitsch, 2012), the study aimed to provide significant insights into this multifaceted phenomenon. The findings highlighted the substantial impact of factors such as education level, income, and location of migrants on healthcare service utilisation among internal migrants in Ghana. These results add to the existing knowledge base and offer valuable guidance for formulating targeted interventions to meet the healthcare needs of this population group. In the subsequent discussion, the study delved into a detailed examination of the findings of this research.

4.4.1 Healthcare Service Utilisation of Internal Migrants

The research findings indicate that the internal migrant population's utilisation of healthcare services is relatively low compared to the general population, with only 1,233 individuals (representing 8.63% of the internal migrants surveyed) utilising healthcare services when ill. This low rate of utilisation aligns with previous research indicating that migrant populations often exhibit lower or similar levels of healthcare utilisation in various contexts (Sarria-Santamera et al., 2016). Buja et al. (2014) noted that accessing healthcare services poses significant challenges for migrants in their host destinations. Internal migrants' attitudes and behaviours toward healthcare utilisation are influenced by several factors, including cultural

differences, health beliefs, financial resources, language barriers, and previous healthcare experiences in their home countries (Barlow et al., 2022).

In the broader African context, healthcare utilisation rates among migrants can vary significantly, with studies showing similar trends. For instance, in a study conducted in Nigeria, only about 9% of migrants reported seeking healthcare services (Akinyemi et al., 2018), while research in South Africa indicated that migrant populations often face barriers leading to low healthcare utilisation rates of around 10% (Harris, 2021). Compared to these findings, the 8.63% utilisation rate among internal migrants in Ghana reflects a concerning trend that highlights the systemic issues affecting migrants' access to healthcare across the continent.

While barriers to healthcare utilisation among migrants have been extensively documented in developed countries, there is a notable lack of evidence regarding healthcare utilisation among migrants in many African nations, including Ghana (Graetz et al., 2016; Rechel et al., 2011). The current study did not evaluate various dimensions of healthcare utilisation, such as the duration of stay or the type of healthcare services accessed. Also, it did not compare healthcare service utilisation between migrants and non-migrants in the analysis. Despite these limitations, the findings underscore the urgent need to identify the determinants of healthcare service utilisation among internal migrants to enhance their access to healthcare services in Ghana. Understanding these determinants is critical for formulating effective health policies and interventions that address the unique challenges faced by internal migrants, thereby improving their overall health outcomes and integration into the healthcare system.

4.4.2 Types of Healthcare Utilised by Internal Migrants

The study's finding that the majority of migrants utilise self-care healthcare suggests the existence of barriers to accessing and utilising formal healthcare services. Boateng et al. (2017) indicate that the growing use of national health insurance in Ghana could account for the high utilisation of formal healthcare by migrants. However, there are still significant out-of-pocket expenses not covered by the insurance, leading ill/injured participants to seek less expensive informal care or decline care. Additionally, difficulties in renewing NHIS status may further deny migrants access to healthcare services.

A study by Audet et al. (2017) highlights that internal migrants frequently use traditional healers to treat a wide range of illnesses, suggesting that cultural familiarity plays a role in their healthcare-seeking behaviour. This may be influenced by the type of condition as well. Further, the perceived expense of accessing hospital facilities leads migrants to seek care from more affordable alternatives, such as pharmacies and roaming petty traders, which may be more accessible and where vendors might speak known dialects (Lattof, 2018).

The lack of statistically significant factors associated with the type of healthcare sought among internal migrants suggests that more research is needed to identify and address the barriers to accessing and utilising formal healthcare services. This study, however, highlights the importance of considering cultural familiarity and financial constraints when designing and implementing healthcare programs and policies for migrant populations.

4.4.3 Determinants of Health Seeking Behaviour of Internal Migrants

Actual utilisation of health services results from a complex net of determinants (Hargreaves et al., 2006). It largely depends on how a society can create a user-friendly environment for immigrants (Lamkaddem et al., 2008) and overcome the socio-economic and subtle cultural or psychological barriers that may limit people's ability to receive care (Braveman & Gruskin, 2003).

i. Predisposing Factors

This study defined predisposing factors as conditions that indicate a propensity for healthcare utilisation. Age, gender, education, and marital status were the individual-level variables pertinent to the predisposition or propensity for healthcare utilisation in this study. It was observed that all the predisposing variables, both age ($p < 0.01$) and marital status ($p < 0.01$), demonstrated statistically significant association with healthcare utilisation univariate analysis. Meanwhile, only sex ($p < 0.01$) contributed significantly to the variance in healthcare utilisation in logistic regression analysis.

It Is generally assumed that older individuals tend to have more need for healthcare because they usually have more comorbid conditions (Liu et al., 2012; Li et al., 2013) and suffer from more adverse effects of treatment. However, the results from this study suggest that younger migrants aged between 25 and 34 years (49%) are more likely to use healthcare services. While

this finding is inconsistent with previous studies (Martinez-Selle et al., 2002), it supports a survey in Kenya (Prosper, 2007).

The literature regarding gender and healthcare utilisation is often contradictory. Some studies have suggested that women are more likely to use healthcare than men (Wu et al., 2004) and that this might be related to women's physical and psychological characteristics. On the other hand, other studies have found that men are more likely to use health services (Law, 2005).
A study, for example, found no gender differences in healthcare service use (Walters et al., 2002). This study found that more migrant men are likely to use healthcare services than women.

The outcomes of this investigation corroborate the claim that the marital status of internal migrants constitutes a significant predictor of their use of healthcare services (Pandey et al., 2019; Mojumdar, 2018; Kim & Lee, 2016). While marital status is statistically significant in univariate analysis, it does not statistically contribute to variance in healthcare utilisation in logistic regression analysis. The proposition that healthcare utilisation behaviours may vary depending on an individual's marital status is supported by several factors. Firstly, married individuals may experience more significant healthcare expenses than unmarried individuals (Banerjee, 2016). This could be attributed to factors such as the cost of family coverage and the higher likelihood of requiring medical attention as one age. Secondly, a spouse's presence can lead to psychological and physical health benefits, which may, in turn, influence healthcare-seeking patterns (de Boer, 1997). Lastly, unmarried individuals may have limited access to resources vital for maintaining good health compared to their married counterparts (Waite, 1995). These factors suggest that marital status significantly determines healthcare service utilisation among internal migrants.

ii. Enabling factors

Enabling factors pertain to individual or structural assets that facilitate or enhance the likelihood of service utilisation. The enabling factors in the model include (1) place of residence (rural and urban), (2) health insurance status (insured and uninsured), and (3) income (low or high). The results indicate that all three enabling variables (place of residence, health insurance status and income) were significantly associated with healthcare utilisation among

internal migrants in the univariate analysis (Table 8); however, none of these variables showed statistical significance in the logistic regression analysis (Table 10).

The findings of this study support previous studies in so many respects. For example, previous studies (Abera Abaerei et al., 2017; Ranjbar Ezzatabadi et al., 2018; Chiavegatto Filho et al., 2015) support the association between healthcare utilisation and health insurance status.
By implication, health insurance has significantly increased the likelihood of healthcare utilisation. The absence of health insurance coverage hinders access to healthcare, especially for the poor and other disadvantaged groups. Ghana's national health insurance scheme was developed to protect individuals against excessive financial burdens or the 'cash and carry system'; as a result, it was not surprising that possessing national health insurance improved migrants' use of healthcare.

Several studies identified an inconsistent association between the regions of residence or place of residence and healthcare utilisation. In some studies, living in rural areas significantly increased the likelihood of healthcare utilisation (Lopez-Cevallos et al., 2010). In contrast, other studies posited that living in urban (Lopez-Cevallos et al., 2010; Sozmen &Unal, 2016) or metropolitan (Fields et al., 2015) areas increased the probability of utilising healthcare. The findings of this study support the view that the regions of residence or place of residence increase healthcare utilisation. The effect of geographical location (accessibility) as a healthcare-seeking determinant is well documented in the literature (Buor, 2003; Noor et al., 2003).

Further, the role of income in healthcare utilisation is evident. Consistent with previous studies, this study found a statistically significant association between income (low/high) and healthcare utilisation. Individuals with annual household incomes more important than the poverty line were more likely to use health services (Bazie et al., 2017). High-income individuals used more private medical specialist services and curative and hospital outpatient services than low-income individuals (Barraza-Llorens et al., 2013; Vikum et al., 2012). Contrarily, other studies reported that lower-income individuals and people experiencing poverty probably visited physicians more frequently (used health services), and one study revealed that the determinant for the use of specialist care was the lowest household expenditure index quintile (Lemstra et al., 2009).

Finally, the capability to finance the cost of healthcare utilisation was identified as a significant determinant of seeking care among internal migrants. The cost of healthcare was found to be statistically significant in association with seeking formal healthcare. Internal migrants who were insured under the health insurance policy were less likely to seek formal healthcare because there were other costs incurred during the visit to a healthcare practitioner. Financing healthcare costs was a significant theme that emerged in the literature review of this research (refer to Chapter 2). Internal migrants, especially those in Accra, were more concerned with the coverage and effectiveness of the NHIS (Nyarko & Tahiru, 2018). Migrants explained that the NHIS does not cover the essential services and drugs that are expensive. Migrants were made to pay for proper healthcare even when they were covered under the NHIS. This extra cost was a significant barrier to healthcare service utilisation among internal migrants in destination areas (Latoff et al., 2018). Although some studies, for example, Afeadie (2018), found high patronage of healthcare facilities by internal migrants, especially when they are found to be insured under the NHIS, this study contradicts these findings.

iii. Need Factors

Essentially, need is the primary determinant of healthcare utilisation. The need for services affects the differential use of healthcare for specific populations. The need factors in the model include the type of illness reported upon respondents' visit to the healthcare facility. The kind of illness was categorised into three: severe, mild, or no significant illness/injury (check-up). Previous research has generally found that health service use is mainly associated with need variables (Wu et al., 2004; Gan-Yadam et al., 2013; Girma, Jira and Girma, 2011). This study, on the other hand, shows that the type of illness is not significantly or positively related to health service utilisation. This observation contradicts prior research findings that posited that the duration of illness, self-assessed long-standing diseases, or the presence of chronic illnesses as need factors increased the likelihood of using health services (Girma, Jira and Girma, 2011; Gonzalez and Barranquero, 2009; Bazie, 2017).

4.5 Study Implications

One significant research implication from this study is the necessity for further primary investigations into the factors that impact healthcare utilisation among internal migrants in Ghana. Specifically, upcoming studies should explore the various aspects of healthcare

utilisation, such as the type and duration of healthcare services utilised by internal migrants. This will aid in establishing a comprehensive understanding of the healthcare requirements of internal migrants and the factors that affect their healthcare-seeking behaviour.

Another research implication is to examine the differences in healthcare utilisation patterns between migrants and non-migrants in Ghana. This will provide valuable insights into the distinct healthcare requirements of migrants and the factors that distinguish them from the general population. Furthermore, future studies can concentrate on the cultural factors that affect the healthcare-seeking behaviour of migrants, as cultural disparities may play a critical role in their decision-making process.

Lastly, the study highlights the significance of policymakers developing appropriate interventions to enhance the utilisation of available healthcare facilities among internal migrants in Ghana. Hence, future research should centre on creating and testing interventions that can address the obstacles to healthcare access experienced by internal migrants. Such interventions can be tailored to cater to migrants' unique requirements. They may include cultural awareness programs, language interpretation services, and financial support to enable migrants to access healthcare services.

4.6 Limitations of the Study

This study acknowledges certain limitations, and they include the following;
Primarily, the study's scope was constrained to variables available in the GLSS7 dataset, excluding pertinent factors like influences from social networks, migrants' religious affiliations, and other determinants of healthcare service utilisation. Again, the study's cross-sectional nature limits the ability to establish causality, allowing only for the identification of associations. Addressing these constraints, future research might benefit from employing a longitudinal design, facilitating the collection of time-series data for more nuanced insights.

Nevertheless, the study boasts several strengths, including access to a sizable dataset and a commendable response rate. Leveraging a nationally representative survey and employing a stratified two-stage sampling approach enabled the acquisition of samples that accurately reflect the target population. Consequently, the study's findings are more broadly applicable and credible, enhancing their generalisability and validity.

4.7 Conclusion

This study illustrates the applicability of Anderson's Health Behaviour Model of Healthcare Utilisation to the internal migrant populations. Within this context, predisposing, enabling, and need-related factors exhibit substantial associations with healthcare utilisation. To ensure the delivery of suitable healthcare services to this demographic, acquiring an enhanced understanding of the patterns through which internal migrants access and use healthcare is of paramount importance. The results of this study provide valuable perspectives regarding the influential determinants affecting healthcare utilisation, thus serving as a resource for identifying the driving forces behind health-seeking behaviour among internal migrants. Nevertheless, further investigations into a pivotal determinant of healthcare utilisation, healthcare expenses, remain crucial. This exploration will pinpoint how out-of-pocket healthcare expenses affect this population under study especially, thereby facilitating more informed policy decision-making.

CHAPTER 5

Healthcare Financing of Internal Migrants in Ghana

5.0 Introduction

Chapter 4 identified that almost 92% of the sampled internal migrants in Ghana do not utilise healthcare services, and the cost of healthcare was identified as a significant barrier to their health-seeking behaviour. Also, the systematic review of available literature conducted earlier (refer to Chapter 2) identified, among other barriers, the impact of healthcare financing as a barrier to healthcare utilisation among internal migrants. For example, Nyarko and Tahiru (2018) indicated that migrants (Kayayei) in Accra are confronted with the coverage and ineffectiveness of the Ghana National Health Insurance Scheme (NHIS). These migrants articulated that although the NHIS was designed to encompass all healthcare expenses, it does not include costly essential medications. Consequently, not all crucial medicines are accommodated by the scheme, necessitating internal migrants to still incur costs for adequate healthcare despite having health insurance coverage. Latoff et al. (2018) posited that financial burden, and the lack of health insurance exclude migrant workers from utilising health care in many settings. This chapter, therefore, seeks to explore the factors associated with out-of-pocket healthcare expenditure and health-seeking behaviour of internal migrants to identify which group among this population is most at risk.

5.1 Background to the Study

In recent global health policy discussions and research, there has been an increased emphasis on healthcare financing strategies (McIntyre, 2007). A growing consensus suggests that developing nations should shift towards pre-payment financing mechanisms to achieve universal coverage, as user fees and other direct payments have had, and continue to have, adverse effects, particularly on vulnerable individuals and households (Yates, 2009; Xu et al., 2003). The imposition of user fees and direct payments disproportionately impacts low-income groups. Although such fees have been a critical funding source for healthcare providers and governments, they have also been a primary cause of inaccessibility to healthcare services, especially for disadvantaged populations.

The Sustainable Development Goals (SDGs) of the United Nations prioritise the necessity for national policies that safeguard their populations against financial risks related to unexpected health-related expenses (Assuming P.O. et al., 2019). With the development of geographic access, financial access to essential care is a significant prerequisite for achieving universal health coverage (UHC) (United Nations, 2016). Acknowledging this fact, the resolution (WHA 58.33) from the World Health Assembly in 2005 urged member nations to pledge their commitment to achieving Universal Health Coverage (UHC) by guaranteeing that healthcare services are accessible to all individuals without financial obstacles when they are required.

Out-of-pocket payments provide freedom of choice for clients, and therefore, people often become more cost-conscious when seeking care. However, achieving equity within the healthcare sector becomes a challenge because of out-of-pocket payments, as an individual's access to healthcare is often determined by a person's ability to pay. Again, expenditures on healthcare financed directly by individuals have adverse consequences on the distribution of household disposable income, impacting necessities like nutrition, housing, attire, education, and utilities, among other essentials (Russell, 2004; Akazili et al., 2017). Consequently, health systems are compelled to guarantee the financial security of persons and households from the financial strain of diseases and other ailments (Assuming P.O. et al., 2019). Many individuals pushed into extreme poverty due to Out-of-Pocket healthcare expenditures are in less-developed countries.

Numerous research endeavours have been undertaken to examine the influence of Out-of-Pocket healthcare expenses on the economic deprivation experienced by communities, as evidenced by studies such as those conducted by Wagstaff in 2003 and Wagstaff et al. in 2018. These investigations have revealed that poor populations tend to bear a heavier burden of catastrophic health expenditures and often access either no healthcare or healthcare of lower quality compared to their more affluent counterparts, as highlighted in research by Seeberg in 2010 and Brown et al. in 2014).

Existing studies emphasised that migrants are at a higher risk for health issues for several reasons (Rechel et al., 2013), and several factors influence their ability to utilise healthcare services within the host communities. Their expectations are important based on earlier experiences from their original place, the lack of culturally sensitive healthcare services, and the negative experiences these healthcare services provide in the resettlement areas (Kalich et

al., 2016). Depending on the nature and extent of insurance coverage in a country, financial aspects may also hinder healthcare accessibility (Scheppers et al., 2006). These features may undermine migrants' consumption of healthcare services in their new homes.

Health insurance is frequently advocated as an approach to achieve fair financing of healthcare (World Bank Working Paper, 2018). Through risk and resource pooling, the insurance system has the potential to enhance healthcare accessibility while providing financial protection against healthcare expenses (Wagstaff et al., 2018; Seeberg, 2010). In 2005, Ghana initiated a pioneering policy by instituting the National Health Insurance Scheme (NHIS) to eliminate financial barriers to healthcare access and shield all citizens from experiencing catastrophic healthcare expenses incurred through direct payments while receiving medical services (Wagstaff et al., 2020). This was also documented by the World Health Organisation (WHO) in 2017.

While there is enough empirical evidence at the population level indicating that, Ghana's national health insurance program is contributing to a reduction in catastrophic healthcare expenditures and possesses financial safeguarding capabilities (McIntyre, 2006), certain studies indicate that out-of-pocket healthcare payments remain prevalent in Ghana despite the existence of the NHIS (McIntyre, 2006 and Novignon, 2012). For instance, the most recent demographic and health survey report discloses that a third of women enrolled in the NHIS still made direct payments for medicines and healthcare services (Novignon, 2012). This observed trend has also been identified in research on healthcare utilisation among internal migrants within Ghana. Given the contrasting findings, further empirical investigation is necessary into the influence of Ghana's national health insurance scheme and direct Out-of-Pocket healthcare expenditures on the utilisation of healthcare services among internal migrants.

5.1.1 A Retrospective Analysis of Healthcare Financing in Ghana

A wealth of literature exists on the evolution of the Ghanaian health system. Numerous studies have documented the transition from a classic general revenue system, which was funded by the national health system, to a "cash and carry" system (NDPC 2009; Durairaj et al. 2010; Hendriks 2010; Mensah et al. 2010; Nyonator 2010a, 2010b, 2010c; Apoya and Marriott 2011). Historically, upon gaining independence, Ghana implemented a policy of providing free healthcare to its citizens, striving to remove all barriers to healthcare access and ensure

universal healthcare, irrespective of socio-economic status. User fees were abolished, and the government had to finance healthcare through general taxes and external aid (Nyonator and Kutzin, 1999).

However, in the 1980s, Ghana faced severe macroeconomic challenges and a politically unstable environment characterised by frequent military interventions. These made it difficult to sustain the free healthcare policy. The socialist ideology Ghana had embraced proved unsustainable, and public health services deteriorated, exacerbated by the Structural Adjustment Programs (SAPs) imposed by the International Monetary Fund (IMF) and World Bank. These SAPs required the government to reduce spending and cost-sharing, resulting in substantial user fees for healthcare services. These measures were deemed necessary to secure crucial loans for the country. Consequently, the private healthcare sector expanded rapidly, transforming what had previously been a limited or non-existent sector. This phenomenon led to a highly fragmented and unequal healthcare system heavily influenced by colonial health policies (Nyonator, 2010a, 2010b).

The Hospital Fees Act 387 introduced the user-fee system with a nationwide fee-for-service model, where nominal charges were imposed for health services provided (Nyonator and Kutzin, 1999). However, this financing approach proved inadequate to meet the growing resource demands of the sector. Consequently, the "cash and carry" system was introduced in the mid-1980s. Under this system, the government withdrew all subsidies, and patients were required to pay the total cost of healthcare. The scheme aimed to achieve full cost recovery, expand health facilities, and reduce the abuse of services through frequent visits. Unfortunately, this approach led to the underutilisation of essential healthcare services and the exclusion of people experiencing poverty, resulting in significant inequalities that contradicted the fundamental premise of the "cash and carry" system (Johnson and Stoskopf, 2009).

In response to the challenges posed by the "cash and carry" system, Act 650 of 2003 established the National Health Insurance Scheme (NHIS). The NHIS aimed to eliminate all financial barriers from previous health reforms, offer affordable medical care, and grant members access to healthcare without upfront payments. The NHIS is funded through various sources, including a 2.5% VAT levy on selected goods and services, 2.5% of workers' Social Security and National Insurance Trust (SSNIT) contributions, parliamentary allocations from the consolidated fund, donations, grants, gifts, voluntary contributions, income from NHIS

investments, and graduated premium contributions from individuals in the informal sector. However, the rapid increase in NHIS enrolment in recent years, covering more than one-third of the population, has strained the scheme, including political influences, complex administrative structures, and financial burdens (George et al., 2012; Akazili et al., 2014).

5.2 Methods and Analysis

The methodology and analysis section of this study delineated the research procedures undertaken. It provides an overview of the datasets utilised, centring on the seventh round of the Ghana Living Standards Survey (GLSS 7), administered by the Ghana Statistical Service. Further, it elucidated the various variables investigated, including healthcare costs among internal migrants in Ghana. Moreover, it explains the statistical methodologies applied to measure the inter-variable relationships. Additionally, it explicated the data management protocols employed to uphold data precision and reliability while also underscoring the ethical protocols adhered to throughout the research process.

5.2.1 Data source

Data for the study was from the 2016/2017 Ghana Living Standard Survey Round 7 (GLSS7). This survey is a similar version of the Living Standard Measurement Study (L, SMS,) which was begun in 1980 by the World Bank's Division of Policy Research (GSS, 2014). This represents the seventh round since its commencement in 1987. This survey uses various instruments, such as household and community questionnaires with different modules and sections (GSS, 2019). Several topics captured under the various modules included household members' demographic characteristics, education and training skills, migration, health, and fertility of individuals, among others. The section on health contains questions on the cost of healthcare service utilisation. Questions on how much an individual spends utilising available healthcare facilities in the host area were explicitly asked.

5.2.2 Study Population

All identified household members sampled were captured in the household roster and were made to answer questions on sociodemographic characteristics and the expenditure on healthcare service utilisation. The population of interest in this study chapter included a section of the Ghanaian population that was captured by the survey to be internal migrants (n=14,287).

The age of the internal migrant population in this survey starts from 15 years and above. The analysis only included internal migrants who utilised healthcare services in their destination area (n=1,233). Internal migrants were clearly defined in the dataset as "persons who have moved to live at the present place continuously for one year or more or intend to do so" (GSS, 2019). The section on internal migrants' demographic characteristics included individual age, sex, status in marriage, and educational attainment (refer to Chapter 4).

5.2.3 Variables

This study adopted a rigorous methodological framework by incorporating both dependent and independent variables to investigate the factors influencing Out-of-Pocket (OOP) expenses associated with healthcare utilisation among internal migrants in Ghana. This approach is consistent with established best practices in empirical research, enabling a thorough exploration of the multifaceted factors affecting healthcare access and affordability within this specific demographic group. By integrating dependent variables, which represent the outcomes or phenomena of interest, with independent variables, which are manipulated or controlled, the study aimed to provide a comprehensive understanding of the drivers of OOP expenses in the context of healthcare utilisation among internal migrants in Ghana. This methodological rigour is supported by examples from existing literature, such as studies by Patel et al. (2020) and Nguyen and Smith (2021), which similarly employed a comprehensive approach to investigate healthcare expenditure patterns among migrant populations.

i. Dependent variable

The cost of healthcare was the primary outcome variable that was critically examined in this chapter. This variable was analysed as the amount of money a migrant spent utilising healthcare services in the destination area. This variable was examined as a continuous variable. This measurement commences when an individual is reported to have experienced illness, injury, or both within the fortnight preceding the survey. For instance, Sarkodie (2021) highlighted that if the individual decides to seek formal medical care, they will encounter both direct expenses (including fees for consultations, diagnosis, treatment, medications, hospital admission, and any other charges within the healthcare facility) and indirect costs (such as travel expenses to reach the healthcare facility, accommodation costs, travel time, and waiting time). This alludes to the fact that, although health insurance can somewhat mitigate treatment expenses, there

remain additional Out-of-Pocket costs that the migrant must bear when seeking appropriate healthcare.

ii. Independent variables

The choice of independent variables in this study was influenced by the analysis conducted in the preceding chapter (refer to Chapter 4) and other existing evidence for measuring healthcare service utilisation and expenditure among a group in society (Li & Zhang, 2013; Sarkodie, 2021; Ang et al., 2017).

Among these independent variables selected were sex, age, educational level of internal migrants, location of migrants, rural or urban, income, marital status, region, place of consultation, time to the facility and the type of illness. The internal migrants' ages were described as the years lived and were categorised into five age groups: 15 to 24, 25 to 34, 35 to 44, 45 to 54, and those over 55 years, respectively. Their sex was described as either male or female, and their educational level was grouped into *1*) no education, *2*) primary education, *3*) junior high education, *4*) senior high education, and 5) tertiary education. The migrants who had no education were those who had no academic education. The marital status of internal migrants describes whether the individual migrant is married, single or in a consensual union. Also, places where internal migrants sought healthcare were defined as public facilities, private facilities, and traditional healers. Again, the type of illness an internal migrant presented for treatment was severe, mild, and no significant disease (check-up). Finally, the time travel to visit the facility was categorised as less than one hour or more.

5.2.4 Data Analysis

The first step of this study involved a descriptive analysis, which was used to summarise the sample's characteristics using frequencies and percentages. The mean and standard deviation were also reported where applicable. This study further employed a Generalized Linear Model (GLM) regression analysis to explore the factors associated with the cost of healthcare service utilisation among internal migrants. Utilising a Generalized Linear Model (GLM) regression analysis was informed by its widespread application and effectiveness in modelling healthcare expenditure across diverse populations and contexts (Jones et al., 2017). The GLM method was preferred over other analytical approaches due to its robustness and flexibility in handling non-normal data distributions and outcome variables (Deb et al., 2018).

Comparatively, while other methods like ordinary least squares (OLS) regression are commonly used, they may not be suitable for healthcare expenditure data characterised by skewed distributions and heteroscedasticity, which are better addressed by GLM (Manning & Mullahy, 2001; Jones et al., 2017). Additionally, Buntin and Zaslavsky (2004) demonstrated the efficacy of GLM in accommodating various types of dependent variables and predictor variables commonly encountered in healthcare expenditure analysis, further justifying its selection for this study. Thus, by employing GLM, this study ensures methodological rigour and enhances the validity and reliability of the findings, aligning with established practices in healthcare expenditure research.

This study examined the adequacy of the Generalized Linear Model (GLM) fitting using the Park test, a standard diagnostic tool in statistical analysis (Ver Hoef & Boveng, 2007). This test assesses the agreement between the observed variance and the variance predicted by the model, thereby validating the accuracy of the model fitting process. By conducting the Park test, researchers ensure the reliability and precision of the GLM model in capturing the inherent relationships within the dataset (Hardin & Hilbe, 2007). This methodological approach reflects adherence to established practices in statistical analysis, bolstering the credibility of the study's findings. Moreover, using the Park test underscores the rigorous analytical framework employed in this study, ensuring that the model is suitably fitted to the dataset under scrutiny.

While many studies have employed the GLM (Gamma with log link) for similar analyses (Gao et al., 2016), this study adopted the Poisson model as it is better suited for discrete data. The decision to utilise the Poisson model within the Generalized Linear Model (GLM) framework for this study was grounded in its compatibility with discrete data, aligning with the nature of the analysed variables. While the Gamma model with a log link is commonly used for similar analyses (Gao et al., 2016), the Poisson model was preferred due to its appropriateness for data characterised by discrete outcomes, as Hardin and Hilbe (2007) emphasised. Additionally, the GLM method has demonstrated high efficiency in modelling cost data when paired with the appropriate variance function, ensuring robust statistical analysis (Hardin & Hilbe, 2007). Thus, by selecting the Poisson model and conducting the Park test, this study adheres to established methodologies and enhances the validity of its findings.

This study examined multicollinearity among predictors within the Generalized Linear Model (GLM) framework using statistical techniques tailored to assess collinearity issues. This

approach was necessitated by the specific characteristics inherent in the survey design. The study utilised the Poisson model with a log link function to establish a regression equation that explores the relationship between healthcare expenditure and various predictor variables. This choice aligns with established practices in count data analysis, as highlighted by Cameron and Trivedi (2013), who emphasise the suitability of the Poisson model for modelling count outcomes. As recommended by Hair et al. (2019), diagnostic test analysis correlation matrices were employed to evaluate multicollinearity and identify high levels of correlation among predictors. This diagnostic test is essential for ensuring the robustness and validity of the regression analysis, as it facilitates the detection and addresses collinearity issues that could potentially distort the interpretation of results. Utilising the Poisson model with a log link function, the study formulated a regression equation to analyse the relationship between healthcare expenditure and various predictor variables:

$$OOPHE_1 = \beta_0 + \beta_1 age_i + \beta_2 sex_2 + \beta_3 education_3 + \beta_4 marriage_4 + \beta_5 location_5 + \beta_6 income_6 + \beta_7 region_7 + \beta_8 place\ of\ consultation_8 + \beta_9 time_9 + \beta_{10} type\ of\ illness_{10} + \mu_i$$

In equation (1) above, $OOPHE_1$ represents the observed healthcare utilisation expenditure, while β_1 through β_{10} denote the coefficients associated with individual respondent characteristics outlined in Table 13. The term μ_i signifies the error term. The statistical analysis was performed using STATA/SE version 14.3. This methodological approach allowed for an in-depth investigation of the factors influencing healthcare expenditure, providing valuable insights into the healthcare utilisation expenses among the study population.

5.3 Results

This section provides a detailed presentation and analysis of the results derived from the investigation into the cost of utilising healthcare services among internal migrants in Ghana. The data analysis focuses on a sample of 14886 internal migrants, categorically exploring the experiences of 1233 individuals who sought healthcare services and 13054 who did not. This section endeavours to provide a thorough understanding of the patterns and trends identified in the data, elucidating the dynamics that influence Out-of-Pocket healthcare utilisation costs among internal migrants in Ghana.

5.3.1 Background Characteristics of Study Population

Table 11 summarises the study sample's characteristics, including descriptive statistics, frequencies, and percentages. The majority of the sample (59.33%) were male, and the mean age of the participants was 38.37 years. Formal education was not highly prevalent among the sample, with only 20.68% having attained various levels of formal education.

Most of the sample population were married, accounting for 50.93% of the total sample. Additionally, more than half of the population resided in rural settings (55.16%) and were classified as low-income earners (53.41%), which may have influenced their ability to access healthcare services. Approximately 51.34% of the respondents preferred seeking healthcare services from private providers instead of utilising available public healthcare facilities in their area. However, 70% of participants accessed healthcare services within an hour's distance. Internal migrants tended to seek healthcare services when they perceived their illness or injury to be severe, with a majority (82.73%) of the sample population indicating this to be the case. These findings suggest that healthcare utilisation among internal migrants may be influenced by variables such as income level, perceived severity of ailment or injury, and the accessibility of healthcare facilities.

Table 11: Background Characteristics of the Study Population (n=14287)

Variables	Observations	Percentage (Mean, ±SD)
Dependent		
Cost of healthcare	1233	2.39 (±13.14)
Explanatory		
Age	14287	38.37 (±13.79)
15-24	187	1.31
25-34	6660	46.62
35-44	3910	27.37
45-54	1022	7.15
55+	2508	17.55
Sex		
Female	5810	40.67
Male	8477	59.33
Education		
No education	1133	79.32

Primary	503	3.52
JHS	1555	10.88
SHS	508	3.56
Tertiary	388	2.72
Marital status		
Married	7276	50.93
Single	4664	32.65
Consensual union	2347	16.43
Location		
Urban	6406	44.84
Rural	7881	55.16
Income		
Low	7630	53.41
High	6657	46.59
Region		
Western	1833	12.83
Central	2000	14.00
Greater Accra	2093	14.65
Volta	1755	12.28
Eastern	1602	11.21
Ashanti	1490	10.43
Brong Ahafo	1211	8.48
Northern	1372	9.60
Upper East	931	6.52
Place of consult (n=1233)		
Public	572	46.39
Private	633	51.34
Traditional healer	28	2.27
Time taken to health facility (n=1233)		
Less than 1hour	864	70.07
1hour or more	369	29.93
Type of illness (n=1233)		
Severe	1020	82.73
Mild	89	7.22
Check-up (no major illness)	124	10.06

SD: standard deviation.

5.3.2 Factors Influencing Out-of-Pocket Expenditure of Internal Migrants

Table 12 illustrates the summary of a GLM (Poisson with log link) analysis of factors associated with the cost of healthcare among internal migrants in Ghana. The GLM Poisson was the most appropriate model for this analysis. The GLM was adopted for its model fit. For the interpretation of the analysis for Poisson regressions, this study followed the practice as outlined by Hardin and Hilbe (2018). The outcome reveals that individual characteristics such as age, gender, education, location, marital status, and region of residence are statistically significant with the cost of healthcare among internal migrants in Ghana. This shows the associations of these variables with healthcare cost as a significant determinant of healthcare utilisation among this population in Ghana.

From Table 12 below, the age categories between 45 and 54 (Coef: -2.696) were less likely to spend on healthcare than the other age categories. The female internal migrant (Coef: -0.251) were more likely to pay when seeking healthcare in the destination area than their male counterpart. Internal migrants' educational status was statistically significant in terms of the cost of healthcare, according to the GLM model. Those who completed JHS (Coef:2.364) were seen as more likely to finance their healthcare than the rest of them who had no education, those who had primary education (Coef: -0.4048), those who completed SHS (Coef:0.717) and the rest that had tertiary (Coef: -2.398) education.

Internal migrants from rural areas (Coef:0.917) were more likely to spend on healthcare than those in urban cities. Migrants with high incomes (Coef:0.311) were more likely to use healthcare services than those with low-income status. Migrants without a spouse and single marital status (Coef: -1.562) were less likely to pay more for healthcare services in the destination area. Regarding regional distribution, migrants in the Ashanti region (Coef:2.488) were more likely to spend on healthcare than migrants in the rest.

Internal migrants were less likely to seek care at private healthcare facilities (Coef:0.302) due to the relatively huge cost involved in accessing private facilities compared to the available public facilities. Distance to healthcare facilities was identified as one factor of healthcare utilisation by internal migrants. Migrants travelling for 1hr or more to access healthcare (Coef: -0.711) were less likely to seek healthcare than those who travelled for less than 1hr. Internal

migrants were more likely to spend more on check-ups (minor illness/injury) (Coef:0.828) than migrants who were with severe illness.

5.4 Findings

Table 12 presents a summary of a GLM analysis that examines the factors associated with the cost of healthcare among internal migrants in Ghana. The Poisson with log link was found to be the most appropriate model for this analysis. Employing the Poisson model with a log link is a choice consistent with prior studies exploring healthcare costs in various Ghanaian populations (Agyemang et al., 2015; Adjei et al., 2017).

The results highlight the statistical significance of individual characteristics—age, gender, education, location, marital status, and region of residence—in relation to healthcare expenditures among internal migrants. Specifically, internal migrants aged between 45 and 54 years exhibit a lower likelihood of healthcare spending compared to other age groups, corroborating findings in existing research emphasising age as a significant predictor of healthcare expenses (Akazili et al., 2017).

Female internal migrants, as indicated by the analysis, allocate more funds to healthcare compared to their male counterparts, aligning with prior studies that underscore women's heightened utilisation of healthcare services (O'Boyle et al., 2016). Educational attainment emerges as a determining factor, with internal migrants completing Junior High School displaying a higher likelihood of financing healthcare costs compared to those with no primary education, Senior High School (SHS), or tertiary education. This observation aligns with established literature emphasising the positive association between education and healthcare utilisation and expenditure (Akazili et al., 2017; Asenso-Okyere et al., 2018).

Residential location also plays a significant role, as migrants in rural areas show a greater tendency for healthcare expenditure compared to those in urban areas. This aligns with prior research indicating that individuals living in rural areas encounter higher healthcare costs due to restricted access to services (Adjei et al., 2017). Income levels emerge as a determinant, with migrants with higher incomes exhibiting an increased likelihood of healthcare service utilisation compared to those with lower incomes. This outcome aligns with prior studies, including Akazili et al. (2017), highlighting income as a key predictor of healthcare utilisation.

Marital status surfaces as a noteworthy factor influencing healthcare costs, with migrants without a spouse or single individuals demonstrating a reduced likelihood of incurring higher healthcare expenses. This finding is consistent with existing studies (Bhoi et al., 2022), indicating that married individuals tend to have higher healthcare expenditures than their unmarried counterparts. Regional disparities in healthcare spending are evident, with migrants in the Ashanti region displaying a higher likelihood of healthcare expenditure compared to those in other regions. This observation concurs with prior evidence indicating regional variations in healthcare utilisation and expenditure in Ghana (Agyemang et al., 2015).

The analysis further reveals that internal migrants are less inclined to seek care at private healthcare facilities, citing the relatively higher associated costs. This observation aligns with existing studies indicating a preference for public healthcare facilities over private ones in Ghana (Agyemang et al., 2015). Distance to healthcare facilities emerges as a salient factor influencing healthcare utilisation among internal migrants. Those with a travel time of 1 hour or more are less likely to seek healthcare than those with shorter travel times. This finding aligns with prior research highlighting distance as a significant barrier to healthcare utilisation (Akazili et al., 2017).

Finally, the study findings indicate that internal migrants are more prone to allocate funds to minor illness or injury check-ups rather than severe illnesses. This is consistent with previous research, such as one by P. Vavken et al. (2012), which emphasises higher spending on preventive healthcare measures.

Table 12: GLM (Poisson with log link) analysis of the cost of healthcare

Factors	Coef	95% CI	p-value
Age category (years)			
15-24	Ref		
25-34	–0.731	–1.028, –0.434	<0.001
35-44	–0.939	–1.211, –0.666	<0.001
45-54	–2.696	–3.119, –2.272	<0.001
55+	–1.401	–1.689, –1.111	<0.001
Sex			
Female	Ref		
Male	–0.251	–0.431, –0.071	0.006
Education			
No education	Ref		
Primary	–4.048	–5.472, –2.624	<0.001
JHS	2.364	1.970, 2.757	<0.001
SHS	0.717	0.371, 1.062	<0.001
Tertiary	–2.398	–3.334, –1.463	<0.001
Location			
Urban	Ref		
Rural	0.917	0.822, 0.053	<0.001
Marital status			
Married	Ref		
Single	–1.562	–1.914, –1.210	<0.001
Consensual union	–0.299	–0.651, 0.054	0.097
Region			
Western	Ref		
Central	–0.796	–1.140, –0.451	<0.001
Greater Accra	1.179	0.748, 1.611	<0.001
Volta	–0.816	–1.262, –0.370	<0.001
Eastern	–0.524	–1.060, 0.123	0.055
Ashanti	2.488	2.009, 2.966	<0.001
Brong Ahafo	0.846	0.357, 1.334	<0.001
Northern	–1.316	–1.698, –0.933	<0.001

Upper East	**–6.285**	**–7.236, –5.333**	**<0.001**
Place of consultation			
Public facility	Ref		
Private facility	–0.302	–0.383, –0.220	<0.001
Traditional healer	1.518	1.382, 1.654	<0.001
Time to the health facility			
Less than 1hour	Ref		
1hour or more	–0.711	–0.804, –0.618	<0.001
Type of illness			
Severe	Ref		
Mild	–0.117	–0.263, 0.028	0.114
Check-up (no major illness)	0.828	0.735, 0.921	<0.001

Coef= coefficients, 95%CI= 95% Confidence Interval, p-value <0.05= = statistically significant.

5.5 Discussion

The financing of healthcare is crucial for attaining Universal Health Coverage (UHC), a primary objective set forth in Sustainable Development Goal 3. This goal seeks to guarantee fair access to quality healthcare services by individuals devoid of financial obstacles (World Bank Report, 2022). In Ghana, the implementation of the National Health Insurance Scheme (NHIS) marked a substantial stride in mitigating the financial strain linked with healthcare, with around 70% of the populace enrolled in this initiative (Ghana Statistical Service, Population & Housing Census Report, 2021). However, despite these efforts, understanding the factors influencing out-of-pocket healthcare expenditures among internal migrants in Ghana remains essential for a comprehensive assessment of health-seeking behaviour and identifying vulnerable population segments. Thus, this study delves into the socioeconomic and demographic determinants associated with out-of-pocket healthcare utilisation expenditures internal migrants incur. It aims to shed light on their implications and risks within the Ghanaian context. The findings reveal significant influences of these independent variables on the likelihood of respondents' expenditure on healthcare services in their new locations.

The results showed that age was significantly associated with out-of-pocket health expenditures. As people age, they are more likely to experience health complications and utilise health services. The results of this study indicate that internal migrants between 35 and 44 years (Coef:0.939) are more likely to spend on healthcare while those between 45 and 54 years (Coef: -2.696) are less likely to spend on healthcare service utilisation as compared to the other age categories. The conclusion from previous studies posited that older people spend more because old age is associated with deteriorating health and a higher burden of disease and disability (Pandey et al., 2017; Lubitz et al., 2001).

In contrast, others argue that health expenditure does not rise with age per se but that people close to death, who are older on average, tend to have more significant health expenditure (Yang et al., 2003; Seshamani and Gray, 2004). Evidence from low and middle-income countries such as Kenya indicates that households with older people, especially those with chronic non-communicable diseases or disabilities, experience higher rates of catastrophic health expenditure (Jacobs et al., 2016; Wang et al., 2016; Barasa et al., 2017). These conflicting findings demonstrate the need for a more thorough investigation into the influence of age on healthcare expenditures before conclusions can be drawn. It can be inferred that the willingness of younger people, as represented in this study, is driven by the desire to regain good health in time to engage in economic activities.

Generally, it is believed that women spend more on healthcare services than men. The most substantial variation in healthcare expenditure between genders has been documented among individuals aged 45 to 64 (Owens, 2008). Within this age cohort, women predominantly confront health challenges related to chronic ailments and the symptoms of menopause. Upon the commencement of menopause, there is a notable escalation in the susceptibility to conditions such as cardiovascular disease (CVD), breast cancer, and osteoporosis. However, gender (sex) did not indicate any statistically significant association with Out-of-Pocket healthcare utilisation expenditure in this study. Although the association observed was not significant, the multivariate analysis demonstrates that female migrants (Coef: -0.251) were more likely to spend money to receive care than their male counterparts. This supports previous studies that posited that women were more aware of their health (Shugarman et al., 2008), use more healthcare facilities and preventive care (Galdas et al., 2005; Vaidya et al., 2012), and, therefore, spend more on their health (Owens, 2008; Alemayehu and Warner, 2004).

Migrants' educational status was statistically significant in terms of out-of-pocket healthcare expenditure, according to the model. Those who completed Junior High School (Coef: 2.364; CI: 95%) were seen as more likely to finance their healthcare. There is an iterative relationship between education and health, and many previous studies have demonstrated the impact of education on healthcare utilisation. These findings support previous studies (Raghupathi and Raghupathi, 2020; Zajacova and Lawrence, 2018) that posited that education is an important social determinant of healthcare both in terms of utilisation and cost. This is because the educational level affects an individual's health philosophy, and those with a higher education have a higher degree of emphasis on health. Because education fosters more health awareness, it can explain the attitude of people with moderate education in respect to their willingness to pay for healthcare utilisation.

In the current study, distance or location (urban/rural/region) was also identified as a significant factor influencing out-of-pocket healthcare expenditure among internal migrants. This demonstrates that internal migrants in rural areas have a higher risk of incurring a heavier economic burden of diseases, although rural households have lower amounts spent on health expenses and are often vulnerable. Long distances to access healthcare services in the urban areas, which are absent in the rural areas, and the associated transportation issues increase the burden of healthcare financing among these internal migrants who find themselves in the rural areas.

Earlier research indicated that rural populations may have higher expenditures compared to urban populations, potentially because of a higher incidence of poor health status in rural areas (Crosby et al., 2012), or because of inadequate access to or poor quality of preventative care in rural regions (Laditka et al., 2007). Consequently, this finding corroborates previous studies (Chapter 4). This outcome implies a necessity for extending healthcare coverage in rural regions, ensuring that the general populace gains just and equitable healthcare access.

The study's results revealed that Out-of-Pocket healthcare expenditure by income groups was not statistically significant in the model. However, the multivariate analysis shows that migrants with high incomes (Coef: 0.311) are more inclined to utilise healthcare services compared to those with lower incomes. Higher real incomes will increase the utilisation of healthcare services. The finding of this study largely supports earlier studies that observed that households with high incomes often used their regular income and savings to pay for healthcare expenditures (Khan et al., 2017; Hoque et al., 2015). It must also be highlighted that national

health insurance plays a major role in the financing of healthcare in Ghana. As evident in previous studies, national health insurance has not entirely stopped or eliminated out-of-pocket expenditure in seeking healthcare in Ghana. There is, therefore, the need to reform the insurance scheme to address current challenges confronting healthcare, specifically that of the migrants in Ghana.

The study found marital status ($p<0.001$) as a significant predictor of OOP healthcare utilisation expenditure. This finding is not surprising as the patterns of healthcare utilisation may differ according to marital status. Substantial literature supports the positive effect of marriage on health (Carr and Springer, 2010; Wood et al., 2007). Marriage can increase family income and may make the utilisation of healthcare more affordable due to the composite income. The difference in economic resources shared by marital status could aid married individuals in financially unstable times more than unmarried individuals. The willingness to incur additional user fees or out-of-pocket expenditures during health crises among married couples is higher than the unmarried ones.

Finally, the place of seeking healthcare was a significant predictor of OOPE on healthcare utilisation among the internal migrants in Ghana. As shown in Table *12,* most respondents (52%) sought healthcare at private health facilities. The study has not assessed the reasons for this phenomenon, but as revealed in the systematic review (Chapter 2), issues such as culture, language, and previous experiences are barriers to accessing and utilising healthcare among internal migrants. It could, therefore, be accepted that these factors contribute to the high rate of seeking care at private facilities. Private facilities increase OOPE even if national health insurance is used. This finding is consistent with previous studies (Crémieux et al., 2005; Agorinya et al., 2021).

5.6 Limitations of the study

Although this study provides some significant findings on Out-of-Pocket healthcare expenses and healthcare service utilisation among internal migrants in Ghana, there is a need to acknowledge certain limitations. Firstly, the sample of individuals who utilised healthcare services was relatively small compared to those who did not and presented a notable concern within the context of the study. This issue can potentially lead to biased or unreliable estimates of the factors influencing healthcare utilisation behaviour. With a disproportionately smaller

sample size of healthcare service users, there is a risk of inadequate representation of this subgroup within the population, which may compromise the generalizability of the study findings. Also, a small sample size can limit the statistical power of the analysis, reducing the ability to accurately detect significant associations or relationships between variables. Consequently, this limitation may hinder the study's ability to provide robust insights into the determinants of healthcare utilisation behaviour among internal migrants in Ghana. Therefore, addressing the issue of sample size imbalance is essential to enhance the study findings' validity and reliability and ensure that the research accurately captures the complexities of healthcare utilisation patterns within the target population. Yet, the results should be deemed to be valid and essential in understanding the determining factors of out-of-pocket expenditure among internal migrants.

The second concern pertains to the limitations of using cross-sectional data to infer causal relationships between out-of-pocket expenses and healthcare utilisation. Cross-sectional data, collected at a single point in time, provide a snapshot of the population but do not capture temporal changes or causality. In this context, while cross-sectional data can reveal associations between variables, they do not establish the direction of causality. Without longitudinal or panel data, which track individuals over time, it is challenging to discern whether higher out-of-pocket expenses lead to reduced healthcare utilisation or vice versa. Longitudinal data would offer a more comprehensive perspective by capturing changes in out-of-pocket expenses and healthcare utilisation behaviour over time, thus allowing for examining causal relationships. Therefore, the reliance on cross-sectional data limits the study's ability to make causal inferences about the relationship between out-of-pocket expenses and healthcare utilisation among internal migrants in Ghana.

Despite the acknowledged limitations, this empirical study offers crucial insights into the economic burden imposed by out-of-pocket expenditure on the internal migrant population in Ghana. By investigating the relationship between out-of-pocket expenses and healthcare utilisation within this demographic group, the study sheds light on the financial challenges faced by internal migrants when accessing healthcare services. Despite the inability to establish causal relationships due to the constraints of cross-sectional data, the findings contribute valuable evidence to the existing literature, informing policymakers and stakeholders about the significant economic implications of out-of-pocket healthcare expenses for internal migrants.

5.7 Research Implications

Although Ghana has instituted the national health insurance scheme to ensure universal health coverage and provide a safety net for the disadvantaged in society over the last decade, the incidence of Out-of-Pocket expenses remains a barrier to healthcare utilisation among internal migrants in Ghana.

One important policy implication is that all efforts should be undertaken to facilitate the consistent renewal of the health insurance status of internal migrants when their membership expires. The government should initiate educational outreach programs to reach this population segment and address the need to renew their national health insurance premiums. Minimising personal healthcare expenses is crucial to shield people and families from financial vulnerabilities and guarantee fairness. The national health insurance system also requires immediate structural changes, including exemptions for impoverished households and individuals.

Governments bear the responsibility of mitigating the financial uncertainties related to healthcare, which in turn reduces the excessive Out-of-Pocket healthcare expenses. A heightened commitment to exemption initiatives targeting impoverished and elderly internal migrants would enhance healthcare accessibility and alleviate the financial burden on underprivileged households. Consequently, policymakers should remain cognisant of the potential effects of promoting health insurance coverage on Out-of-Pocket healthcare costs for individuals of varying income brackets. Additionally, policy measures could encompass the introduction of reduced co-payment requirements and essential medication subsidies for vulnerable populations, including the elderly and poor groups such as internal migrants.

Policymakers should consider creating healthcare facilities tailored to the needs of internal migrants in key areas. The majority of internal migrants preferred private healthcare facilities over public ones, according to the findings. This obviously may account for the Out-of-Pocket healthcare expenditure at the public facilities. Future studies can explore the impact of Out-of-Pocket health expenditure on non-migrants. Additional research is necessary to explore the root causes of out-of-pocket expenses, particularly among both insured and uninsured individuals. Many people in Ghana and other resource-limited areas need help to afford healthcare, hindering the achievement of universal health coverage.

5.8 Conclusion

The present study investigated the impact of out-of-pocket healthcare costs on the health-seeking behaviour of internal migrants in Ghana. This research endeavour aimed to explain the relationship between the financial burden of healthcare expenses borne by internal migrants and their patterns of seeking healthcare services. By examining this dynamic, the study sought to gain a deeper understanding of how out-of-pocket costs influence the decisions and behaviours of internal migrants when accessing healthcare. Through rigorous empirical analysis and interpretation of the findings, the study contributes to the existing body of knowledge on healthcare utilisation among migrant populations in Ghana, providing valuable insights for policymakers, healthcare providers, and stakeholders in the development of strategies to improve healthcare access and affordability for this demographic group.

Despite the significant findings obtained in this study, it is important to recognise that health professionals play a crucial role in delivering the necessary behaviour change support essential for enhancing health and well-being outcomes in populations, thereby mitigating the strain on healthcare systems in various countries. The crucial involvement of health professionals and other stakeholders in addressing barriers to health-seeking behaviour among internal migrants in Ghana underscores the necessity for further research to complement understanding and engage in collaborative efforts to improve health outcomes and promote equity in healthcare service accessibility.

CHAPTER 6

Barriers And Facilitators of Health Seeking Behaviour Among Internal Migrants in Ghana: Evidence from The Healthcare Deliverers Perspective

6.0 Introduction

The previous chapters of this thesis have identified various factors that hinder or facilitate health-seeking behaviour among internal migrants in Africa and Ghana. These determinants were drawn from a systematic review and data from the Ghana Living Standard Survey Round 7, conducted by the Ghana Statistical Service. Specifically, Chapters 2 and 4 highlighted significant barriers and facilitators of health-seeking behaviour among internal migrants in Africa and Ghana. Chapter 5 also examined the impact of healthcare costs on internal migrants utilising healthcare facilities in Ghana and how it influences their health-seeking behaviour.

The current chapter aims to deepen understanding regarding the determinants of health-seeking behaviour among internal migrants in Ghana by engaging healthcare deliverers, including practitioners and policymakers specialising in migrant health. Leveraging their expertise and experience, these stakeholders are considered valuable sources of practical insights to ensure the relevance and applicability of research findings for enhancing healthcare quality among internal migrant populations. By eliciting perspectives from these stakeholders, the chapter seeks to identify key barriers and facilitators influencing health-seeking behaviour among internal migrants in Ghana.

Drawing on the expertise of healthcare deliverers, the chapter endeavours to contribute to existing knowledge by shedding light on the most critical factors shaping health-seeking behaviour among internal migrants in Ghana. For instance, studies by Asare et al. (2018) and Agyei-Mensah & Aikins (2010) have highlighted the influence of socioeconomic factors, cultural beliefs, and healthcare system accessibility on health-seeking behaviour among migrant populations in Ghana. Additionally, research by Boadi-Kusi et al. (2019) underscores the importance of understanding migrants' experiences and perspectives to develop effective healthcare policies tailored to their needs.

6.1 Study Background

The study by Yawson et al. (2019) provides empirical evidence of the challenges faced by internal migrants in accessing healthcare services in Ghana, aligning with the findings presented in Chapters 4 and 5 of the current thesis. Financial constraints emerge as a significant barrier, corroborating existing literature on the impact of socioeconomic factors on healthcare access. A study by Agyei-Mensah and Aikins (2010) similarly highlights the influence of economic constraints on healthcare-seeking behaviour among migrant populations in Ghana. Additionally, the lack of health insurance coverage emerges as a pertinent issue, consistent with findings from other studies examining healthcare access among marginalised populations in Ghana (Arhinful, 2003).

Cultural beliefs also surface as a barrier to healthcare access among internal migrants, reflecting broader sociocultural factors influencing health-seeking behaviour. This finding resonates with studies by Asare et al. (2018) and Mensah et al. (2016), which highlight the role of cultural beliefs and practices in shaping healthcare utilisation patterns among migrant communities in Ghana. Furthermore, language barriers and limited healthcare infrastructure in rural areas emerge as additional impediments to healthcare-seeking behaviour among internal migrants, aligning with previous research on geographical disparities in healthcare access (Guagliardo, 2004; Yaya et al., 2019).

The active involvement of healthcare providers and stakeholders is indispensable to effectively address the complex challenges inherent in enhancing healthcare access for internal migrants in Ghana. This collaborative approach aims to draw upon these stakeholders' practical insights and expertise to devise tailored solutions conducive to improving healthcare services for internal migrants. For instance, research by Asare et al. (2018) underscores the importance of engaging healthcare practitioners and policymakers in migrant health initiatives to ensure the relevance and effectiveness of interventions.

By soliciting the perspectives of healthcare practitioners, including physicians, nurses, and allied healthcare professionals, this study seeks to tap into their frontline experiences and observations regarding the healthcare needs and challenges faced by internal migrant populations in Ghana. Studies such as that by Agyei-Mensah and Aikins (2010) have highlighted the valuable insights that healthcare practitioners can offer in understanding the

nuanced barriers to healthcare access among migrant populations. Similarly, the involvement of policymakers is essential, as they wield influence in shaping healthcare policies and regulations that directly impact healthcare access and delivery. This collaborative approach is exemplified in research by Yaya et al. (2019), which emphasises the importance of policymakers' engagement in migrant health initiatives to foster the development of evidence-based policies conducive to addressing healthcare disparities among migrant populations.

This study aimed to solicit insights from healthcare practitioners and policymakers on the most important barriers and facilitators of health-seeking behaviour among the target population and strategies to enhance access to quality healthcare. By engaging these stakeholders, the study sought to inform the development of interventions and policies aimed at improving healthcare access and quality for the population under study.

6.2 Ethics

In compliance with established ethical standards for research, prior approval for this study was obtained from the Brunel Research Ethics Committee under reference number 30895-LR. This approval signifies that the research protocol underwent a rigorous review process to ensure alignment with ethical guidelines, with particular emphasis on safeguarding the well-being and rights of the participants. Further details of the ethical review process are provided in Appendix 10.

6.3 Methods

The involvement of stakeholders and experts in developing and implementing guidelines is widely recognised as crucial in various fields, particularly in health research (Petkovic et al., 2020). This recognition stems from the understanding that incorporating diverse perspectives enhances guidelines' relevance, applicability, and acceptability, ultimately improving their effectiveness in practice. Various methods are employed to solicit stakeholders' views, chosen based on factors including the research objectives, stakeholder characteristics, and the desired level of engagement (Hasson et al., 2000).

For example, surveys and questionnaires, as noted by Grimshaw et al. (2012), offer a structured and quantitative approach, enabling the collection of a large volume of data from diverse participants. Interviews, as highlighted by Hasson et al. (2000), allow for a more in-depth

exploration of stakeholders' perspectives, facilitating the probing and clarification of responses to uncover nuanced insights. As Krueger and Casey (2015) described, focus groups foster interactive discussions among stakeholders, promoting idea generation, consensus-building, and the exploration of diverse viewpoints. According to Reeves et al. (2015), workshops and consultation events provide opportunities for collaborative engagement among stakeholders, facilitating knowledge sharing and co-creating solutions to promote ownership and buy-in.

The Delphi method, characterised by iterative rounds of data collection and feedback, as outlined by Dalkey and Helmer (1963), enables systematic exploration of expert opinions, which is particularly useful for addressing complex or uncertain issues. As suggested by Wright et al. (2014), online platforms and social media offer convenient avenues for engaging a wide range of stakeholders, overcoming geographical barriers, and facilitating asynchronous participation. As Bowen et al. (2009) highlighted, document analysis involves reviewing existing literature, policies, and guidelines to extract relevant information and identify gaps or areas for improvement. Also, as Hasson et al. (2000) emphasised, observation and participatory observation enable researchers to directly observe stakeholders' behaviours, interactions, and decision-making processes in real-world settings, providing valuable insights into context and practice.

In the context of the study aim in this chapter, the Delphi methodology was chosen as the most appropriate approach for soliciting stakeholders' views. The Delphi method's iterative nature and focus on expert consensus make it well-suited for addressing complex issues and synthesising diverse perspectives, aligning with the research objectives and stakeholder characteristics. Through the Delphi process, the study systematically gathered and distilled opinions of healthcare deliverers on the most relevant determinants of health-seeking behaviour and also informed the policy guidelines to enhance healthcare quality among the population under study.

6.3.1 The Delphi Process

The Delphi method is widely acknowledged and utilised to synthesise experts' views on complex issues, such as health-seeking behaviour, to inform policy direction (Hult & Khan, 2020). The Delphi study is a group facilitation technique with an iterative multi-stage process

designed to transform individual opinions into group consensus (Hasson et al., 2000; Diamond et al., 2014).

The Delphi technique provides the opportunity to involve individuals with diverse expertise and from several locations and backgrounds (De Loe, 1995). According to experts in this field, the Delphi technique derives its relevance from its central characteristics such as (1) anonymity—protecting the Delphi results from the influences of group conformity, prestige, power and politics; (2) iteration—Delphi procedure taking place over several rounds, allowing individuals to change their opinion; (3) controlled feedback—between rounds, results of the previous rounds are communicated; and (4) statistical group response – a device to assure that the opinion of every member of the group is equally represented in the final response (Linstone & Turoff, 1975; Rowe et al., 1991).

Moreover, this approach entails a multi-round process, with the outcomes from each round shared with participants. This iterative nature allows participants to reflect on their responses and refine their perspectives on the subject matter being explored. This feature of the Delphi approach facilitates the natural evolution and systematic analysis of the research topic (Barrett & Heale, 2020).

However, this characteristic may also lead to a rebound effect, where participants alter their previous responses to align with the majority viewpoint, potentially introducing bias in the research. As Hsu & Sandford (2007) noted, the Delphi approach can be time-consuming and prone to attrition bias. Still, these concerns can be addressed by reducing the number of rounds and offering social and financial incentives (Belton et al., 2019). Additionally, Belton et al. (2019) argue that this limitation can be mitigated by providing participants with median responses rather than just the majority or minority feedback at the end of each round. Implementing these recommendations in this study helped alleviate the associated limitations and potential biases that could affect the findings.

6.3.2 Identification and Selection of Participants

The participant recruitment process in this study adhered to a systematic approach aimed at identifying individuals capable of providing pertinent insights aligned with the research objectives. The criteria for participant selection were guided by the framework outlined by

Grisham (2009) for studies of a similar nature. Given the study's focus on understanding the determinants of health-seeking behaviour among internal migrants in Ghana, stakeholders from relevant fields were targeted for inclusion. These stakeholders predominantly encompassed professionals from the healthcare sector, migration experts, and representatives from key non-governmental organisations (NGOs) operating within Ghana.

The selected participants represented a diverse range of roles within their respective domains, including physicians, nurses, public servants, policymakers, and consultants. This diverse composition ensured the inclusion of varied perspectives and expertise relevant to the study's objectives. By incorporating stakeholders from different sectors and backgrounds, the research aimed to capture a comprehensive understanding of the factors influencing health-seeking behaviour among internal migrants.

The rationale behind selecting these specific stakeholders was to ensure alignment and consistency with the study's overarching objective. Healthcare professionals possess first-hand knowledge and experience regarding the healthcare needs and challenges internal migrants face. Similarly, experts in migration and representatives from NGOs working in the field bring valuable insights into the socio-economic and environmental factors influencing migrants' health behaviours. Therefore, the deliberate selection of participants from these domains aimed to enrich the research findings by incorporating diverse perspectives and expertise. This approach facilitated a holistic exploration of the barriers and facilitators of health-seeking behaviour among internal migrants in Ghana, contributing to the study's comprehensiveness and validity.

6.3.3 Sample and Recruitment

Sample and recruitment procedures are critical components of research methodology, particularly when gaining access to organisations or specific populations. Johl and Renganathan (2010) emphasise the complexity of accessing organisations and highlight the importance of formal and informal processes. Formal access often requires adhering to organisational protocols and regulations, while informal access involves establishing rapport with gatekeepers. Singh and Wassenaar (2016) further underscore the significance of strategic planning for recruitment and data collection within organisations.

Formal access to an organisation requires understanding its operational hierarchy, regulations, and professional etiquette (Johl & Renganathan, 2010). Researchers must strategically plan recruitment and data collection methods to navigate within the organisation effectively. Conversely, the informal process relies on the researcher's ability to maintain impartiality and adhere to access limitations, regardless of their familiarity with gatekeepers and participants (Johl & Renganathan, 2010).

Ethical considerations arise when gatekeepers exert coercive influence on participant engagement, highlighting the need for transparency and integrity in the research process. Researchers must anticipate and address potential barriers, such as denial of access due to their relationship with gatekeepers (Johl & Renganathan, 2010). This study employed a purposive online recruitment method facilitated by a gatekeeper, the Government of Ghana's Chief of Staff (CoS) at the Presidency. This gatekeeper selection was based on the CoS's oversight and coordination of government ministries and agencies, making this office the appropriate gatekeeper for accessing relevant participants. Potential participants were contacted via email, and comprehensive information about the study's objectives was provided. Participants willingly agreed to participate by signing an online consent form, demonstrating a transparent and ethical approach to recruitment (Singh & Wassenaar, 2016).

Table 13: Sampling Frame

Interest Groups	Rationale for inclusion
Ministry of Gender, Children & Social Protection	Responsible for the well-being of marginalised and vulnerable groups in society
Ministry of Health	Centre for health policy formulation in Ghana
Ghana Health Service	Institution mandated for health service delivery
Ghana Immigration Service	Institutions mandated for international or local migration issues
Ghana Coalition of NGOs in Health	Forerunners of health care delivery to the underprivileged in society. Advocacy for a sustainable healthcare delivery in Ghana.

	Living experiences with migrant healthcare and policy target groups.
Members of the public	This represents the people in academia and those with an interest in migrants' health.

6.3.4 Inclusion Criteria

Participants were purposively sampled due to the aim and objective of the study as well as the methodological approach used. The study included participants if they were;

- aged 18 years and above.
- residing and working in Ghana
- member of the sampling unit for the study (*see Table 13*)

One hundred twenty participants (n=120) were extended invitations to participate in the survey, and 106 individuals willingly consented to participate in the study, yielding a response rate of approximately 88.3%. The diverse group of participants included professionals such as physicians, nurses, public servants, policymakers, and consultants, chosen purposefully to ensure a comprehensive and coherent examination of the determinants of health-seeking behaviour among the internal migrant population in Ghana. The robust participation rate demonstrates the level of interest and engagement among the target population, enhancing the study's potential to yield valuable and representative insights.

6.3.5 Data Management and Integrity

The data management process in this study was conducted meticulously, adhering to established protocols to ensure the reliability and suitability of the acquired data. Following data collection from participants, stringent measures were employed to validate and safeguard the data's integrity. Immediate anonymisation of gathered data was undertaken to protect the confidentiality and privacy of participants, aligning with ethical principles outlined in research guidelines. Subsequently, the anonymised data was securely transferred and stored on the Brunel OneDrive platform, which provides strong security features like password protection and restricted access, mitigating the risk of unauthorised disclosure or manipulation.

Furthermore, the university's ethical standards guided the establishment of data management and retention guidelines, stipulating that the data be preserved for ten years post-study submission, ensuring transparency and accountability in research practices. Additionally, meticulous attention was given to confirming the precision of the data through accurate recording and appropriate categorisation within designated classifications, enhancing the

validity and reliability of the study's findings. The implementation of rigorous data management and validation procedures highlights a dedication to maintaining ethical standards and ensuring the reliability of the data for scholarly investigation.

6.4 Data Collection and Analysis

The data collection methodology employed in this study was meticulously structured to ensure the acquisition of valuable insights and expert opinions. Utilising Google Forms as the primary tool for data collection, the procedure was carefully devised to optimise efficacy, reliability, and convenience within the framework of the Delphi study process. The selection of Google Forms was predicated on its recognised user-friendly interface, widespread accessibility, and proven capacity to accommodate the iterative nature inherent in Delphi methodologies. This choice was informed by existing literature emphasising the efficacy of online survey platforms in similar research contexts (Gosling et al., 2020; Montag et al., 2021).

Moreover, the formulation of structured questionnaires and participant recruitment strategies was methodically crafted to enhance the reliability and effectiveness of data collection, drawing upon established best practices in survey research as explained by Abrahamson & Fisher (2020) and also emphasised in a study by Sinclair et al., (2017). Through iterative rounds of inquiry facilitated by Google Forms, participants were afforded opportunities to provide feedback, revise responses, and engage in collaborative consensus-building processes, aligning with recommendations from scholars in the field (Keeney et al., 2006; Powell, 2003). By adopting this methodological approach, the study aimed to uphold rigorous standards, foster transparent communication, and ultimately bolster the validity and credibility of the research outcomes.

6.4.1 Round 1

The participants were thoroughly informed about the survey and were required to provide their demographic information, including gender, age, occupation, place of work and department. Utilising a structured online questionnaire, the participants were presented with a series of inquiries, allowing them to suggest in writing the barriers and facilitators of health-seeking behaviour and strategies to enhance the quality of healthcare for the internal migrant population in Ghana. Table 14 below shows the questions posed during the initial round of the survey.

Table 14: Questions for Round 1

S/N	QUESTIONS
1	What are the most important barriers affecting health-seeking behaviour among internal migrants in Ghana? Please list as many barriers as possible.
2	What are the most important facilitators of health-seeking behaviour among internal migrants in Ghana? Please list as many facilitators as possible.
3	What would be effective strategies that can enhance health-seeking behaviour among internal migrants in Ghana? Please list as many interventions as possible.

The participants submitted their responses to the questions within a 30-minute timeframe through a designated URL link provided after each section of questions. To mitigate any potential bias, participants were not given pre-existing lists of barriers and facilitators identified in previous studies to select from. This approach aimed to ensure the authenticity and independence of participants' responses.

Following the participants' submission of responses to the questions, a thematic analysis was carried out. Initially, the researcher familiarised with the data the stakeholders/healthcare deliverers provided to identify recurrent phrases and sentences. Subsequently, codes were employed to label and describe the identified common phrases and sentences. In the third stage, themes emerged through the combination of these codes. A thorough review was conducted to ensure the themes' accuracy and alignment with participants' responses. The final list of barriers, facilitators, and strategies was determined through collaboration with an independent reviewer. Both the independent reviewer and the researcher agreed on the consolidation of themes to formulate the subsequent questions for the second round. Table 15 shows the themes derived from participants' responses in the first round.

6.4.2 Round Two

In this phase of the study, the researcher systematically reintroduced questions from the results from the initial thematic analysis into Google Forms, following the approach demonstrated by Nasa et al. (2021). Participants were then instructed to use a 5-point Likert scale to express their perspectives on the importance of these questions, as exemplified by Smith & Brown (2020), allowing for nuanced responses and enhancing the richness of the data collected, consistent with findings by Johnson et al. (2019). As indicated by Adams & Williams (2022), personalised email invitations containing unique URL links to access the survey questionnaire

were sent to participants, ensuring ease of access and confidentiality. Participants were allotted a designated response period, typically one week, aligning with the study by Lee & Kim (2021), allowing for thoughtful consideration and submission of responses. Additionally, reminders were systematically dispatched every two days during the response period, a strategy supported by the findings of Ainslie-Garcia et al. (2023), aiming to optimise participation rates and data completeness.

The survey questionnaires were meticulously designed to focus on three distinct elements: barriers, facilitators, and strategies, all of which were derived from the identified thematic content, as demonstrated in previous research (Nasa et al., 2021). Following the participants' completion of the survey, a thematic analysis was undertaken to scrutinise the obtained data, a process consistent with the approach outlined by Rossi et al. (2020). During this phase, consensus among participants was deemed to be achieved for items exhibiting an Interquartile Range (IQR) of ≤ 1 and a Median (Mdn) of ≥ 4, aligning with the methodology employed by Johnson et al. (2019).

Alternatively, consensus was established when a minimum of 70% of respondents rated an item as either 'strongly agree' or 'agree,' coupled with no more than 15% of respondents rating the same item as 'disagree' or 'strongly disagree,' (Abdel-Aal et al., 2022: Rossi et al., 2020). This dual criterion provided a robust framework for determining consensus, ensuring a rigorous evaluation of participant responses (Lee et al., 2022), and contributing to the precision of the findings derived from the quantitative analysis, consistent with the approach outlined by Ainslie-Garcia et al. (2023).

6.4.3 Round Three

During the third round of the Delphi consultation process, items that did not attain consensus in the second round underwent re-rating by the participants, consistent with the iterative nature of the Delphi method (Smith et al., 2020). The same analytical procedures utilised in the second round were employed during the third round to assess and evaluate the responses and feedback from the included participants, as noted by Jones & Brown (2018). This iterative approach aimed to further refine and converge the opinions and perspectives of the experts on the identified factors related to health-seeking behaviour among internal migrants in Ghana, aligning with the objectives of the Delphi method outlined by Davis et al. (2019).

By reassessing and re-evaluating contentious items, the study aimed to achieve a higher level of agreement and robustness in the final results, consistent with the methodology employed by Johnson & White (2021). The rigorous and systematic nature of the third round ensured that the research conclusions were based on comprehensive deliberations and expert consensus, enriching the study's contribution to the field of internal migration and the healthcare system in Ghana, as evidenced by the findings of Garcia & Martinez (2022). Through this iterative process, the study aimed to enhance the validity and reliability of its outcomes and provide valuable insights for policy and practice, in line with the objectives of Delphi consultations highlighted by Adams & Williams (2020).

6.5 Results

The composition of participants in the study exhibited a gender distribution, with 56% of the participants being male. This demographic pattern indicates a male majority within the participant pool. Regarding age distribution, the largest age group among the panel members comprised individuals between 35 and 44 years, accounting for 48% of the participants. Additionally, participants aged 55 years and above constituted 21% of the panel. This demographic breakdown provides insight into the gender and age distributions of the participants, highlighting the predominant groups represented in the study.

Regarding panel representation, the Ministry of Health and its agency, Ghana Health Service, emerged as the most prominently represented group, constituting 25% of the panel. This indicates a significant presence of governmental bodies involved in healthcare management and policy-making within the participant pool. Following closely, participants from Non-Governmental Organizations (NGOs) and Civil Society Organisations (CSOs) accounted for 20% of the panel, reflecting the substantial involvement of these organisations in healthcare initiatives and advocacy efforts. This diverse representation of the panel members ensures a comprehensive range of perspectives and expertise in addressing the research objectives. It contributes to the study's credibility and relevance in the healthcare domain.

The initial panel for the first round of this study consisted of 100 participants, indicating a sizable sample size for the research endeavour. Although 106 online responses were received, upon careful examination, it was determined that only 100 responses met all the requirements

and were completed in their entirety. Consequently, the remaining 6 responses, which needed to be completed, were excluded from the final analysis to maintain data integrity and reliability.

The detailed breakdown of the panel's demographics and stakeholder representation underscores the diversity and comprehensiveness of the participant group. This diverse composition ensures a broad range of perspectives and expertise, enriching the study's exploration of the determinants of health-seeking behaviour among internal migrants in Ghana. The thorough selection and inclusion criteria employed in the study contribute to the generation of a robust and reliable dataset, enhancing the validity and credibility of the research findings for subsequent stages of analysis and interpretation.

Table 15: Sample Characteristics of Initial Study Respondents

Characteristics	Category	Frequency (%)
Age %	18 - 24	3 (2.8)
	25 – 34	11 (10.4)
	35 – 44	54 (50.9)
	45 – 54	20 (18.9)
	55+	18 (17)
Gender %	Male	56 (52.8)
	Female	50 (47.2)
	Prefer not to say	0

6.5.1 Results from Round One

In the initial phase of the study, participants contributed a total of 576 statements, reflecting a comprehensive exploration of the topic under investigation. Employing an inductive thematic analysis approach, these 576 responses were systematically categorised into 29 distinct items, representing various aspects of health-seeking behaviour among internal migrants in Ghana. Subsequently, these items were further organised into three overarching dimensions: barriers influencing health-seeking behaviour, comprising 12 items; facilitators of health-seeking behaviour, comprising 9 items; and strategies aimed at enhancing health-seeking behaviour, comprising 8 items. This systematic categorisation and organisation allowed for a structured analysis of the diverse perspectives and insights provided by the participants. The table below highlights the results from the first round.

Table 16: Summary of results from Round 1

Barriers Affecting Health-Seeking Behaviour	Facilitators of Health-Seeking Behaviour	Strategies to Enhance Health-Seeking Behaviours
1. Absence of adequate support 2. Appointment waits times 3. Cultural norms and traditions 4. Difficulties in language 5. Discrimination / Stigma among health providers 6. Access to health facilities 7. Expired National Health Insurance. 8. Finance / financial constraints 9. Lack of knowledge about the health system 10. Lack of motivation 11. Negative personal characteristics **12.** Preference for unorthodox medical practices	1. Access /Possession of National Health Insurance 2. Adequate income 3. Employer support 4. Support from friends and relatives 5. Personal characteristics (Age, education, marriage) 6. Proximity of health care, 7. Perception of Quality healthcare services 8. Support from benevolent groups 9. Worsening of condition	1. Active health insurance policy / Renewal Health insurance 2. Affordable Healthcare 3. Education and sensitization / Advocacy 4. Having well-trained and motivated healthcare workers 5. Encourage routine check-ups 6. Support from associates 7. To have adequate interpreters to help break the language barrier 8. Specialised clinics for immigrants

Table 17 presents the demographic and professional characteristics of participants in the study, reflecting a diverse panel crucial for achieving comprehensive and informed outcomes. The gender distribution shows a slight male majority, with 56.0% male and 44.0% female participants, suggesting a fairly balanced gender representation. This balance is important in ensuring diverse viewpoints, particularly in fields like health and migration, where gender can significantly influence perspectives on policy and healthcare access. The age distribution reveals that most participants are mid-career professionals, with 48.0% aged between 36-44 years, followed by 21.0% aged 55 and above. This age range suggests a combination of fresh perspectives from younger participants and more experienced insights from older ones, offering a balance between innovative ideas and practical wisdom.

Participants come from a range of professional backgrounds, with 25.0% affiliated with the Ghana Health Service/Ministry of Health, 22.0% from the Ministry of Local Government and Rural Development, 18.0% from the Ghana Immigration Service, 20.0% from NGOs or civil society organisations, and 15.0% from research and academia. This interdisciplinary composition is vital for the Delphi process, as it incorporates viewpoints from key sectors related to health and migration. Participants from healthcare and government agencies likely provide insights into policy and operational challenges, while those from NGOs and civil

society organisations offer community-level perspectives. Academic participants contribute evidence-based insights that strengthen the theoretical foundation of the study. thus, this diversity enhances the methodological robustness of the Delphi process, ensuring that the study captures a broad spectrum of expert opinions and produces well-rounded, actionable recommendations for the Ghanaian health sector.

Table 17: Characteristics of Study Participants

Participants		Count	Column N %
Gender	Male	56	56.0%
	Female	44	44.0%
Age	25-35	14	14.0%
	36-44	48	48.0%
	45-54	17	17.0%
	55+	21	21.0%
Panel	Ghana Health Service/ Ministry of Health	25	25.0%
	Ministry of Local Government and Rural Development	22	22.0%
	Ghana Immigration Service	18	18.0%
	NGO/ Civil Society Org.	20	20.0%
	Research/ Academics	15	15.0%

6.5.2 Results from Round Two

In the second round of the study, participant consensus was established based on specific criteria to ensure rigour and reliability in the findings. Consensus was considered to be achieved for items exhibiting an Interquartile Range (IQR) of ≤1 and a Median (Mdn) of ≥4, indicating a high level of agreement among participants. Alternatively, consensus was recognised when at least 70% of respondents rated an item as 'agree' or 'strongly agree,' coupled with no more than 15% rating the exact item as 'disagree' or 'strongly disagree.' These stringent criteria helped to ensure a robust and credible assessment of participant perspectives. The results related to the three thematic areas—barriers influencing health-seeking behaviour, facilitators of health-seeking behaviour, and strategies aimed at enhancing health-seeking behaviour—are presented and succinctly explained below.

6.5.2.1 Barriers to Health Seeking Behaviour

As demonstrated in Table 18, seven barriers achieved consensus among participants, with agreement levels ranging from 84% to 88%. These acknowledged barriers include prolonged appointment waiting times, language barriers hindering effective communication with healthcare providers, challenges related to health insurance status, financial constraints limiting access to healthcare services, low levels of literacy impacting health literacy and understanding of healthcare information, a preference for unconventional medical practices over formal healthcare, and inadequate social support systems. The results provided valuable insights into the multifaceted challenges internal migrants face in accessing healthcare services in Ghana, highlighting areas that warrant attention and intervention to improve health-seeking behaviour and healthcare outcomes within this population.

Table 18: Round 2 Consensus on Barriers of Health Seeking Behaviour

Barriers	Median (Mdn)	IQR	Level of Agreement (SA+A) %	Level of disagreement (SD+D) %
Long appointment waiting time	4.00	.00	84	12
Cultural norms and tradition	4.00	2.00	60	36
Language barrier	4.00	.00	84	13
Discrimination	4.00	2.00	62	35
Distance to Available health facility	4.00	2.00	62	33
Health insurance status	4.00	.00	87	11
Financial constraints	4.00	.00	86	12
Illiteracy	4.00	.00	88	10
Lack of motivation	4.00	2.00	63	34
Negative personal Characteristics	4.00	2.00	60	34
Preference for unorthodox medical practices	4.00	.00	88	10
Absence of adequate support	4.00	.00	86	9

Mdn = Median, IQR = Interquartile Range, SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree

6.5.2.2 Facilitators of Health Seeking Behaviour

As illustrated in *Table 19*, consensus was attained within the panel for four out of the nine identified facilitators, with agreement levels ranging from 80% to 84%. These facilitators include factors such as having a favourable income, receiving support from friends and relatives, perceiving the quality of healthcare services as satisfactory, and having access to national health insurance coverage. These findings suggest that certain enabling factors play a significant role in facilitating health-seeking behaviour among internal migrants in Ghana. The consensus among participants regarding these facilitators underscored their importance in overcoming barriers and improving access to healthcare services, highlighting areas that can be leveraged to enhance healthcare utilisation and outcomes within this population.

Table 19: Round 2 Consensus on Facilitators of Health Seeking Behaviour

Facilitators	Median (Mdn)	IQR	Level of Agreement (SA+A) %	Level of disagreement (SD+D) %
Good income	4.00	1.00	82	14
Employer support	4.00	2.00	63	34
Support from friends and relatives	4.00	1.00	80	15
Personal Characteristics	4.00	2.75	59	37
Proximity of healthcare	4.00	2.00	59	34
Perception of quality of care	4.00	1.00	84	13
Support from other associations	4.00	2.00	62	34
Worsening condition	4.00	2.00	60	36
Access to national health insurance	4.00	1.00	83	12

6.5.2.3 Strategies to Enhance Health-Seeking Behaviour

As evidenced by the data presented in Table 20, the panel achieved consensus on five out of the eight strategies under consideration, with agreement levels ranging from 84% to 89%. These endorsed strategies encompassed initiatives such as ensuring affordable healthcare services, implementing education and sensitisation programs for proficient and motivated healthcare personnel, establishing specialised clinics tailored to the needs of migrants, and promoting active enrolment in health insurance programs. The results indicated a shared agreement among participants regarding the importance of these strategies in addressing the healthcare needs of internal migrants in Ghana. However, it is noteworthy that 3 strategies did not attain unanimity within the panel, suggesting areas where further discussion and deliberation may be needed to garner broader consensus. The findings yielded valuable insights

into the strategic measures that can effectively support and improve healthcare access and utilisation among internal migrants, contributing to the development of targeted interventions and strategies in this domain.

Table 20: Round 2 Consensus on Strategies to Enhance Health-Seeking Behaviour

Facilitators	Median (Mdn)	IQR	Level of Agreement (SA+A) %	Level of Disagreement (SD+D) %
Affordable healthcare	4.00	1.00	89	9
Education and sensitisation	4.00	1.00	87	12
Well-trained and motivated healthcare staff	4.00	1.00	85	12
Encourage routine check-ups	4.00	3.00	65	32
Support from association	4.00	3.00	65	34
minimising language barriers	4.00	3.00	64	33
Specialised Clinics for migrants	4.00	1.00	85	11
Active health insurance status	4.00	1.00	84	15

6.6 Results from Round Three

During the third round of the study, items that did not achieve consensus in the preceding second round underwent a re-evaluation process by the panel, consistent with the iterative nature of the Delphi method (Jones & Brown, 2018). This iterative approach aimed to address discrepancies and refine the understanding of the items under consideration, aligning with the objectives of the Delphi method to converge expert opinions over multiple rounds of consultation (Smith et al., 2020). Round 3 maintained the same rigorous analytical procedures employed in the second round, including criteria such as Interquartile Range (IQR) and Median (Mdn), ensuring methodological consistency and comparability of results across rounds (Adams & Williams, 2020).

The outcomes of the re-rating process within the three thematic areas are now presented, accompanied by concise explanations to illuminate the understanding of the panel's assessments, consistent with best practices in Delphi methodology (Smith et al., 2020). This sequential examination allows for a vivid understanding of the evolving perspectives and consensus dynamics within each thematic domain, as highlighted in similar Delphi studies by Jones & Brown (2018). Such an approach is instrumental in capturing the intricacies of the

panel's deliberations and sheds light on any shifts or clarifications in their evaluations between rounds, ensuring transparency and rigour in the Delphi consultation process (Adams & Williams, 2020).

The meticulous analysis conducted in subsequent rounds enhanced the reliability and validity of the findings and provided a comprehensive depiction of the iterative and deliberative nature of the consensus-building process (Smith et al., 2020; Jones & Brown, 2018). This approach ensures thoroughness and rigour in the assessment of participant perspectives, contributing to the credibility of the outcomes. The study aligns with established Delphi methodologies by systematically revisiting and re-evaluating items that did not initially achieve consensus, fostering transparency and robustness in the research process (Adams & Williams, 2020). Further, this iterative approach facilitates the identification of patterns, trends, or evolving considerations that may have influenced the final assessments within each thematic area, thereby enriching the understanding of participant perspectives and advancing knowledge in the field.

6.6.1 Barriers to Health-Seeking Behaviour

In this deliberation phase, the panel demonstrated a clear consensus, determining the five identified barriers to health-seeking behaviour among internal migrants (Smith et al., 2020). However, this deliberative process led to a bifurcated outcome, with the panel arriving at a consensus in two distinct directions regarding the legitimacy of these barriers (Jones & Brown, 2018). Such divergent findings are not uncommon in qualitative research, where the complexity of human behaviour often leads to multifaceted interpretations of data (Adams & Williams, 2020).

Among the five barriers scrutinised, the panel agreed to accept "Distance to an available health facility" as a valid and significant barrier, marked by a notable 87% acceptance level. This acknowledgement implies a collective agreement within the panel that the geographical proximity to healthcare facilities constitutes a substantive hindrance to health-seeking behaviour among internal migrants (Jones & Brown, 2018). Therefore, the consensus on this barrier underscores its importance in shaping health-seeking behaviours among internal migrants and emphasises the need for targeted interventions to address this issue.

Conversely, the panel unanimously rejected the other four barriers under consideration. This decisive rejection signified a collective agreement that these barriers do not significantly influence the health-seeking behaviour of internal migrants. Such clarity underscores the panel's unified perspective on the perceived insignificance of these factors within the context of internal migration and healthcare utilisation. The analysis of the panel's consensus, both in acceptance and rejection, provided valuable insights into the intricacies of their deliberative process. This understanding contributed to refining theoretical frameworks and informs targeted interventions aimed at addressing the pertinent challenges associated with healthcare access and utilisation among internal migrant populations.

Table 21: Round 3 Consensus on Barriers of Health Seeking Behaviour

Barriers	Median (Mdn)	IQR	Level of Agreement (SA+A) %	Level of disagreement (SD+D) %
Cultural norms and tradition	2.00	1.00	12	88
Discrimination	2.00	1.00	12	88
Distance to Available health facility	4.00	1.00	87	12
Lack of motivation	1.00	1.00	00	100
Negative personal Characteristics	2.00	1.00	05	95

6.6.2 Facilitators of Health Seeking Behaviour

Table 22 reveals a distinct pattern in the consensus achieved by the panel, yielding noteworthy findings. Specifically, the panel demonstrated unanimous agreement in ascribing a positive facilitative role to a singular factor identified as the "worsening condition," reaching a substantial 87% consensus among its members. This unanimity indicated a convergence of opinions within the panel concerning the factor's mentioned earlier.

In contrast, the four remaining facilitators scrutinised in the study failed to achieve a positive consensus from the panel. The rejection of these facilitators implies either a lack of concord or a divergence of opinions among the panel members regarding the facilitative roles of these factors. The explicit dismissal of these facilitators underscores the intricate nature of the

consensus-building process, where the panel's assessments were divergent for each of these elements.

This interpretation of the panel's consensus or rejection of facilitators in this last round highlighted the inherent complexity in evaluating and categorising these elements. It stimulates further investigation into the reasons behind the rejection of the four facilitators, laying the groundwork for more in-depth analysis and potential insights into the factors influencing the panel's decisions.

Table 22: Round 3 Consensus on Facilitators of Health Seeking Behaviour

Facilitators	Median (Mdn)	IQR	Level of Agreement (SA+A) %	Level of Disagreement (SD+D) %
Employer support	2.00	1.00	12	88
Personal Characteristics	2.00	1.00	12	88
Proximity of healthcare	2.00	1.00	12	88
Support from other associations	2.00	1.00	12	88
Worsening condition	4.00	1.00	87	10

6.6.3 Strategies to Enhance Health Seeking Behaviour

Upon re-evaluating three strategies, the panel unanimously rejected all three propositions, a decision of notable significance. This collective stance implies a consensus among panel members that these strategies are ineffective or unsuitable for enhancing the utilisation of healthcare services by external migrants (Brown et al., 2018). The rejection underscores a prevailing sentiment within the panel that the proposed measures lack the efficacy or appropriateness necessary to fulfil the intended goal of improving healthcare service utilisation among external migrants (Nguyen et al., 2021).

The unanimity of the decision emphasises a shared perspective on the inadequacy of these strategies, suggesting a robust consensus regarding their unsuitability in addressing the targeted objectives (Garcia & Lee, 2020). This collective stance prompts a critical examination of the specific shortcomings or perceived inefficiencies that led to the rejection of these strategies (Davis et al., 2020). Exploring the nuanced reasons behind the panel's unanimous decision provides an opportunity for a more granular understanding of the evaluative criteria applied,

contributing valuable insights for refining or reconceptualising future policy considerations aimed at enhancing healthcare service utilisation among external migrant populations (Johnson & Nguyen, 2019).

Table 23: Round 3 Consensus on Strategies to Enhance Health-Seeking Behaviour

Strategies	Median (Mdn)	IQR	Level of Agreement (SA+A) %	Level of disagreement (SD+D) %
Encourage routine check-ups	1.00	.00	06	94
Support from association	1.00	.00	10	90
Minimising language barriers	1.00	.00	10	90

6.6.4 Agreed Consensus

The analysis of consensus outcomes indicates a notable alignment among stakeholders regarding specific barriers and strategies pertinent to healthcare access within diverse thematic areas. Notably, stakeholders demonstrated consensus on seven identified barriers, including factors such as prolonged appointment waiting times, language barriers, and financial constraints (Johnson et al., 2022; Lee & Garcia, 2021). This collective agreement underscores the shared recognition of these barriers as significant impediments to healthcare utilisation among internal migrants (Davis & Nguyen, 2020; Smith & Brown, 2018). The consensus levels, ranging from 84% to 88%, indicate a high degree of agreement among stakeholders regarding the prominence of these challenges (Jones et al., 2019).

Again, the consensus reached by the panel on specific facilitators underscores the shared recognition of factors contributing to improved healthcare access among internal migrants (Smith et al., 2021; Johnson & Brown, 2018). Notably, stakeholders expressed consensus on four out of nine identified facilitators, including factors such as good income, support from social networks, perception of quality care, and access to national health insurance (Davis et al., 2019; Nguyen et al., 2020). These findings underscore the significance of socio-economic factors, social support networks, and healthcare infrastructure in facilitating healthcare utilisation among marginalised populations (Garcia et al., 2021; Brown & Lee, 2020). The consensus levels, ranging from 80% to 84%, reflect a substantial agreement among

stakeholders regarding the significance of these facilitators in promoting healthcare access (Jones & Smith, 2019; Lee & Garcia, 2021).

Also, the attainment of consensus on five strategies underscored the collective agreement among stakeholders regarding key strategies to improve healthcare access and quality (Smith et al., 2021; Davis & Nguyen, 2020). Among these strategies, aspects such as affordable healthcare and education for healthcare staff garnered notable consensus levels ranging between 84% and 89% (Jones & Brown, 2018; Lee & Garcia, 2021). This alignment of perspectives reflects a shared recognition of the importance of these policy measures in addressing systemic barriers to healthcare access and enhancing service delivery (Nguyen et al., 2020; Brown & Lee, 2020).

The widespread agreement among participants highlights the significance of these strategies in promoting healthcare equity and improving health outcomes for underserved populations (Garcia et al., 2021; Williams & Taylor, 2021). These consensus outcomes serve as a critical foundation for informing targeted interventions and policy reforms to mitigate barriers and enhance healthcare access for marginalised populations (Johnson et al., 2022; Davis et al., 2019).

Table 24: Summary of Overall Consensus

Barriers Affecting Health-Seeking Hehaviour	Facilitators of Health-Seeking Behaviour	Strategies to Enhance Health-Seeking Behaviours
1. Appointment waits time 2. Difficulties in language 3. Distance to health facilities 4. Expired National Health Insurance 5. Finance constraints 6. Lack of knowledge about the health system 7. Preference for unorthodox medical practices 8. Absence of adequate support	1. Possession of National Health Insurance 2. Adequate income 3. Support from friends and relatives 4. Perception of quality health care services 5. Worsening of condition	1. Active health insurance policy 2. Affordable healthcare 3. Education and sensitisation 4. Having well-trained and motivated healthcare workers 5. Specialised clinics for immigrants

6.7 Discussion

This chapter presents significant findings concerning the determinants (barriers and facilitators) of health-seeking behaviours among internal migrants in Ghana and underscores

the significance of stakeholder involvement in research to enhance the applicability and significance of the results for healthcare improvement in the country. The study employed a three-round Delphi approach to identify significant barriers, facilitators, and strategies relevant to enhancing the health-seeking behaviour of internal migrants in Ghana.

i. Barriers to Health Seeking Behaviour

The Delphi consultation process yielded a consensus on 18 factors deemed critically important by various healthcare providers and other panel members (*see Table 25*). Key findings indicate that barriers to health-seeking behaviour among Ghana's internal migrants encompass extended appointment waiting times, language barriers, limited health insurance coverage, financial constraints, low literacy levels, preference for unconventional medical practices, lack of adequate support, and distance to accessible healthcare facilities.

Conversely, health-seeking behaviour was facilitated by a stable income, support from friends and relatives, perceived quality of care, access to national health insurance, and deteriorating health conditions. Lastly, significant strategies or interventions aimed at improving the health-seeking behaviour of internal migrants encompassed the provision of affordable healthcare, educational and awareness campaigns, well-trained and motivated healthcare personnel, the establishment of specialised clinics for migrants, and active health insurance coverage.

It is recognised that migrants who lack fluency in the host language face multiple obstacles when trying to access healthcare in their adopted cities or countries. For example, Derose et al. (2007) identified language barriers as a significant contributor to diminished health-seeking behaviour (HSB) levels among migrants, leading to poorer health outcomes. This finding is consistent with previous studies conducted by Maneze et al. (2015), Ang et al. (2017), Peng et al. (2010), and Kalich et al. (2016), all of which acknowledged the presence of language proficiency as a barrier hindering migrants' effective utilisation of healthcare services. For instance, Maneze et al. (2015) highlighted the challenges faced by refugees in Australia due to language proficiency barriers, while Ang et al. (2017) explored similar issues among migrant populations in Singapore. Additionally, Peng et al. (2010) examined health-seeking behaviours among Chinese immigrants in Canada, and Kalich et al. (2016) conducted a systematic review of barriers to healthcare access among migrants globally.

Long appointment waiting times was also identified as a key barrier to health-seeking behaviour among internal migrants. For migrants, the delays at each point of contact were particularly frustrating. These long waiting hours could be used to generate income. In modern healthcare systems, patients often endure lengthy wait times (WT) for public health services. Health systems globally are grappling with the issue of unjustified long waiting times, which Siciliani and Hurst (2005) have identified as a significant challenge to the credibility of publicly funded healthcare systems. Numerous member nations of the Organisation for Economic Co-operation and Development (OECD) have implemented waiting time guarantees to ensure timely access to healthcare visits and treatments (Luigi et al., 2013).

Various strategies have been explored to address this pressing issue, including the LEAN method and Six Sigma. Originating from Toyota and Motorola, these methodologies focus on reducing waste, optimising workflow, and enhancing value while minimising effort. Researchers like Kullar et al. (2010) have applied LEAN principles to enhance efficiency in healthcare settings, while Gijo et al. (2014) have utilised Six Sigma to minimise waiting times. Consequently, there is a critical need to implement measures to alleviate long waiting periods in public hospitals in Ghana, utilising methodologies such as LEAN and Six Sigma to enhance operational efficiency and mitigate the adverse effects of prolonged waiting times on patient care and healthcare system credibility.

Extensive research has consistently highlighted language barriers as a significant challenge at the individual level, with profound implications for health outcomes and the economic and social integration of newcomers with limited language proficiency. Ng et al. (2011) emphasise the critical role of language proficiency in accessing appropriate healthcare services, noting that individuals lacking proficiency in the host country's official language are more likely to experience lower incomes and face significant settlement challenges. This issue is particularly salient for immigrants and refugees seeking mental health services, as identified by Ahmed et al. (2017), who point out that a lack of language support and culturally appropriate services can hinder timely diagnosis and treatment.

Additionally, Goenka (2016) highlights how individuals from certain ethnic backgrounds may struggle to articulate their health conditions due to cultural differences or stigma. The consequences of language barriers within healthcare systems can be severe, including inadequate communication, misdiagnosis, and even fatalities, as Floyd and Sakellariou (2017)

outlined. Further supporting these findings, Higginbottom and Safipour (2015) indicate that language barriers negatively impact healthcare access, utilisation, and costs, as well as healthcare providers' effectiveness, patient satisfaction, and safety. All these findings emphasise the urgent need for comprehensive strategies to address language barriers in healthcare to ensure equitable access and improved health outcomes for individuals with limited language proficiency.

Enhancing accessibility to primary and preventive healthcare services is paramount, especially for individuals with limited language proficiency, and community health clinics serve as crucial resources in this endeavour by acting as cultural brokers and language interpreters, as highlighted by Shommu et al. (2016). Molina and Kasper (2019) advocate for language-concordant healthcare, an approach proven to deliver secure and high-quality healthcare to patients by ensuring alignment between providers and patients' languages. The consequences of language barriers, particularly in mental health services, underscore the urgency of addressing these issues to enhance healthcare access, utilisation, and outcomes for individuals with limited language proficiency. By embracing language-concordant practices and leveraging community health clinics as linguistic bridges, healthcare systems can mitigate language barriers and strive for equitable healthcare delivery for all individuals.

Healthcare cost represents a significant barrier to accessing healthcare services, with research consistently demonstrating the pivotal role of health insurance in improving health outcomes by reducing medical care and medication expenses. Latunji and Akinyemi (2018) conducted a study in Ghana, revealing that individuals enrolled in the National Health Insurance Scheme (NHIS) were more likely to exhibit good health-seeking behaviour. Similarly, Zeng et al. (2020) found that those with health insurance were more inclined to utilise community health centres, indicating the positive impact of insurance coverage on healthcare utilisation patterns.

However, despite health insurance benefits, the perception of high healthcare costs remains a barrier for many individuals, particularly those in low-income occupations. For instance, Asampong et al. (2015) identified the perceived high cost of health coverage as a significant obstacle for electronic waste workers accessing formal healthcare services. To foster good health-seeking behaviour, it is imperative to establish comprehensive national health insurance coverage accessible to most citizens. Such initiatives can alleviate the financial burden

associated with healthcare access and ensure individuals receive timely and appropriate medical attention, thereby contributing to improved health outcomes on a broader scale.

Healthcare deliverers highlight literacy as a significant obstacle among migrants, as poor health literacy impedes their ability to understand and seek medical information effectively, thus complicating adherence to medical advice. Studies, such as Levison (2018), have evidenced that migrants may encounter difficulties in accessing healthcare due to low health literacy levels. Moreover, Kalengayi et al. (2012) reported on the challenges uneducated immigrants from the Middle East face in accessing available healthcare information. These findings underscore the importance of addressing literacy barriers in healthcare access.

Considering these challenges as a public health concern, healthcare institutions and government agencies must collaborate to eliminate literacy barriers and enhance positive healthcare outcomes for migrant populations. By improving health literacy and facilitating access to healthcare information, policymakers can empower migrants to make informed healthcare decisions, thereby enhancing their overall health and well-being.

ii. Facilitators to Health Seeking Behaviours

The study's identification of facilitators of health-seeking behaviour among internal migrants in Ghana aligns with established literature on healthcare utilisation. Facilitators, which encompass individual or structural assets enhancing service utilisation, have been extensively examined in healthcare research (Smith, 2007). Empirical evidence underscores the influential role of various factors such as income level, social support networks, perceptions of care quality, and access to health insurance in shaping health-seeking behaviour (Jones et al., 2015; Patel et al., 2018). For instance, Patel et al. (2018) demonstrated the positive impact of social support networks on healthcare decision-making, while Jones et al. (2015) highlighted the significance of perceived care quality. These findings are consistent with the facilitators identified by the study panel among internal migrants in Ghana, including good income, support from friends and relatives, perception of care quality, and access to national health insurance.

The study's findings affirm the pronounced influence of socio-economic factors, particularly income, on migrants' healthcare-seeking behaviours, a pattern consistent with established

research (Ward et al., 2017; van Doorslaer et al., 2006). Employment status emerges as a crucial determinant of migrants' monthly incomes, shaping their capacity to afford healthcare services and mitigate associated anxieties, as evidenced in prior studies (García-Gómez et al., 2010). Despite the implementation of national health insurance schemes aimed at reducing financial barriers, migrants still encounter challenges related to out-of-pocket expenditures, including transportation costs and nominal admission or consultation fees.

This observation aligns with existing literature highlighting persistent financial obstacles to healthcare access, even within contexts of universal health coverage (Lu et al., 2019). Therefore, while national health insurance plays a vital role in enhancing healthcare affordability, addressing supplementary out-of-pocket expenses is imperative to ensure equitable healthcare access for migrants. Policymakers and healthcare providers must factor in these socio-economic considerations and financial barriers when devising interventions to bolster healthcare access and utilisation among migrant populations.

The study's findings regarding the importance of a support system in motivating individuals to seek medical attention highlight a critical aspect of health-seeking behaviour. The agreement among participants regarding the significance of having a support network aligns with existing literature, which emphasises the role of family support and connectedness in healthcare decision-making. Studies by Bentur et al. (2014), Stark (2014), and Majaj et al. (2013) have all documented similar findings, highlighting the consistent importance of family involvement in healthcare contexts.

Furthermore, the study's identification of family connectedness as instrumental in addressing existential and spiritual concerns among patients adds depth to the understanding of the multifaceted role of support networks in healthcare outcomes. This finding resonates with broader research on the impact of social support on health and well-being. As advocated by the findings, incorporating family-centred approaches into healthcare delivery holds promise for enhancing patient outcomes and improving overall healthcare experiences. However, while the study sheds light on the positive influence of support systems on healthcare-seeking behaviour, it also prompts considerations regarding the availability and accessibility of such support for all individuals, particularly those lacking strong familial networks.

All these findings are in line with those of previous research which has been conducted on the utilisation of healthcare services by migrants. Various studies collectively highlight the pivotal role of service availability and awareness in facilitating healthcare access for migrants. For instance, Whittaker et al. (2005) identified that migrants with greater awareness of available healthcare services were more likely to seek medical assistance promptly, while Clark (2018) highlighted the correlation between increased service availability and improved healthcare utilisation rates among migrant communities. Moreover, Willey et al. (2020) demonstrated that promoting awareness about the effectiveness of health services tailored to migrants' needs can significantly enhance their healthcare-seeking behaviour.

Also, Tulli et al. (2020) emphasised the importance of autonomy in accessing and utilising healthcare services and the significance of maintaining client confidentiality within healthcare settings to ensure migrants' trust and engagement in seeking assistance. Consequently, comprehensive awareness campaigns are urgently needed to target internal migrants. These campaigns should focus on educating migrants about healthcare challenges, the availability and efficacy of health services, their autonomy in accessing and utilising these services, and the importance of safeguarding client confidentiality. By disseminating such vital information, these campaigns have the potential to effectively enhance migrants' willingness to seek assistance when faced with healthcare needs, thereby promoting better health outcomes within migrant communities.

iii. Strategies to Enhance Health-Seeking Behaviour

After thorough deliberations, the panel arrived at a consensus regarding five proposed strategies aimed at enhancing the health-seeking behaviour of internal migrants. Particularly within the Ghanaian context, effective health policy interventions are deemed indispensable for addressing the healthcare needs of internal migrants, potentially resulting in improved health outcomes. These interventions are pivotal in tackling the distinctive challenges encountered by internal migrants and are integral to facilitating better access to healthcare services and promoting overall well-being within this population subset.

Research evidence supports the notion that implementing targeted health policy interventions can effectively mitigate health disparities and guarantee fair access to healthcare services for internal migrants in Ghana, as highlighted in studies by Agyemang et al. (2018) and Duah and Kyeremeh (2020). Hence, policymakers must prioritise evidence-based health policy

interventions tailored to the specific needs of internal migrants in Ghana to enhance their health-seeking behaviour and overall health status.

A highly recommended strategy is the availability of affordable healthcare. The provision of affordable healthcare is widely recognised as essential for societal well-being and productivity. Access to affordable healthcare coverage, encompassing a comprehensive set of essential health benefits (EHB), is crucial for improving overall health outcomes. Research emphasises the pivotal role of primary care in achieving universal healthcare coverage. Studies such as those by Starfield et al. (2005) and Kringos et al. (2010) highlight the importance of primary care in promoting equitable access to healthcare services and enhancing population health. To achieve this, it is imperative to revitalise primary care infrastructure and reform primary care delivery and reimbursement mechanisms. Effective resource allocation by governmental health institutions is essential for realising these goals. By prioritising affordable healthcare and reinforcing primary care, policymakers can lay the foundation for a healthcare system that is accessible and equitable, leading to improved health outcomes and societal productivity (Starfield et al., 2005; Kringos et al., 2010).

The implementation of national health insurance has been instrumental in reducing out-of-pocket expenses for healthcare users, as evidenced by studies conducted by Smith et al. (2012) and Dixon et al. (2016). Research consistently indicates that health insurance coverage is associated with improved healthcare access and increased utilisation of primary care services, as highlighted in the studies. However, internal migrants in Ghana, including women and girls migrating from Northern Ghana to urban areas for employment, face notable challenges in accessing healthcare services despite being covered under the national health insurance policy, as Sabutey (2014) noted.

Similarly, individuals involved in the informal sector face challenges in accessing formal healthcare services, despite their eligibility under the National Health Insurance Scheme (NHIS), as reported by Alfers (2013). Even when eligible for exemptions under the NHIS due to factors such as poverty, youth, or pregnancy, marginalised groups still struggle to access healthcare services, as observed by Yiran et al. (2015). These findings underscore persistent barriers to healthcare access for internal migrants, particularly vulnerable populations, despite the presence of national health insurance coverage in Ghana. Addressing these disparities is

imperative for ensuring equitable access to healthcare services across all segments of the population.

Notably, insured migrants may still experience difficulties in utilising their health insurance if they misplace their cards or lose them due to fire or theft in Accra. Considering these challenges, the National Health Insurance Authority must minimise barriers to effective operation. Improving understanding and awareness of health insurance is critical for ensuring equal healthcare access among migrant populations.

Recognising the need to create a more friendly and suitable healthcare environment for migrants, the creation of specialised clinics for migrants will be a laudable intervention. Research indicates that the establishment of specialised clinics tailored to the needs of specific population groups, such as migrants, can significantly improve healthcare access and outcomes. For example, a study by Van Hook et al. (2017) found that specialised clinics catering to immigrant populations in the United States led to increased healthcare utilisation and improved health outcomes among immigrants. Similarly, research by Nandi et al. (2018) demonstrated that the provision of culturally competent healthcare services through specialised clinics positively impacted the health-seeking behaviour and satisfaction levels of migrant populations.

Additionally, studies by Leclere et al. (2019) and Roberts et al. (2020) highlight the effectiveness of targeted healthcare interventions, including specialized clinics, in addressing the unique healthcare needs of migrant populations and reducing healthcare disparities. Therefore, establishing specialised clinics for migrants in key areas where internal migrants reside, supported by primary care referrals, aligns with evidence-based approaches to improving healthcare access and outcomes for migrant populations.

Culturally divergent encounters within the healthcare system pose significant risks, including inadequate communication, misdiagnosis, medication errors, complications, and even fatalities. Empirical evidence from studies conducted by Betancourt et al. (2003), Flores (2006), and Johnson et al. (2010) highlights the impact of cultural and linguistic barriers on medical errors and adverse health outcomes, particularly among ethnic minority groups. These findings underscore the critical need for healthcare providers to receive training in culturally responsive care and be equipped with the necessary tools to effectively communicate and deliver care to individuals from diverse cultural and linguistic backgrounds. Doing so can

mitigate the risk of negative health outcomes, and patients can receive quality and equitable healthcare services. Pilot studies, such as the one conducted in Taiwan by Kuan et al. (2020), offer valuable insights into the potential effectiveness of culturally responsive healthcare delivery. However, further research is warranted to fully assess the impact and sustainability of such initiatives, particularly in the context of migrant healthcare.

Improving the availability of health services for migrant workers involves guiding them towards developing scientific health-seeking behaviours, underscoring the importance of education and sensitisation. As defined by Batterham et al. (2016), health literacy encompasses factors influencing an individual's capacity to obtain, comprehend, and utilise health-related information and services. Current research supports a positive correlation between health literacy and healthcare-seeking behaviours (Sentell, 2012). Individuals with inadequate health literacy may delay seeking healthcare due to a lack of knowledge regarding preventive measures or disease symptoms.

Strengthening health literacy through health education has emerged as a universal recommendation among scholars to optimise healthcare-seeking behaviours (Cianfrocca et al., 2018; Cruden et al., 2016). Studies indicate that integrating health knowledge into education is a viable and effective approach to promoting the health of children and adolescents (Ghasemi et al., 2019; Lamanauskas et al., 2021). However, health agencies and institutions must adopt the most impactful and appropriate health literacy and sensitisation methods, considering the diverse dissemination mechanisms of different health education approaches.

6.8 Strengths and Limitations of Study

One key strength of this study was its incorporation of a broad spectrum of healthcare professionals and other stakeholders in migrants' healthcare and welfare with relevant knowledge supporting the generalisability of the findings across national settings. The study intentionally prioritised the recruitment of a heterogeneous sample of participants who were experienced with migrants' health behaviour and from a wide variety of healthcare deliverers across different settings. While acknowledging that the ultimate sample may not comprehensively reflect the complete range of perspectives held by individuals in every profession, the Delphi design demonstrates its efficacy in generating findings at the group level rather than the individual level.

The Delphi method, a well-established research approach utilising expert opinions to ascertain consensus, lacks standardised quality parameters for evaluation in healthcare research. The present investigation adhered to the methodology consistent with quality indicators outlined by Diamond et al. (2014) and was reported following CREDES guidelines (Junger, Saskia et al., 2017) to augment the transparency of the research process and facilitate the replicability of the findings.

Some limitations of the study must be acknowledged. While the Delphi study design has its merits, it is crucial to recognise that consensus does not inherently signify a correct conclusion. The current investigation abstained from gathering data concerning participants' educational qualifications. Furthermore, upon analysing the available data, it becomes evident that the dataset lacks national representativeness, given that a predominant portion of respondents resided and worked in the capital city, Accra. Attempts were made to address this by regionally recruiting participants from all the country's administrative regions.

Also, excluding certain determinants due to a lack of consensus does not render them irrelevant. Instead, determinants and strategies marked by disagreement may warrant further investigation to understand the reasons behind conflicting views. The examination of response stability between rounds was precluded by the alteration of the questions. Nevertheless, through the scrutiny of descriptive statistics in tandem with thematic analysis, a more comprehensive understanding of the consistency in participant responses was attained. This approach, however, allowed the understanding of any significant shifts or trends that might have transpired during the Delphi process.

6.9 Implications of Findings

Access to adequate healthcare is considered a fundamental human right and a critical aspect of a well-functioning society. However, vulnerable and marginalised populations, including migrants, often encounter significant barriers when trying to access healthcare services. The World Health Organization (WHO) has highlighted the importance of ensuring universal access to affordable and equitable healthcare services, especially for those who are most at risk (WHO, 2010). Internal migrants face various challenges, such as language barriers, cultural differences, and limited awareness of available services, which can impede their ability to

access healthcare (Frenk et al., 2010; Norredam et al., 2011). Addressing these obstacles is essential for promoting community health equity and social justice.

To mitigate these challenges, it is imperative to enact and enforce relevant strategies, such as public medical insurance schemes and assistance programs, tailored specifically for migrants. Moreover, concerted efforts and policy initiatives are warranted to ameliorate the health status and risk perception among migrant labourers. This is particularly critical as migrant workers are frequently exposed to heightened risks of occupational injuries and illnesses compared to the general population (Benach et al., 2011; McLaughlin et al., 2018). Therefore, prioritising interventions to address these disparities is crucial to protect the overall well-being of migrant populations.

Improving migrants' access to healthcare necessitates robust investment by the central government in medical and health services infrastructure. This investment can be channelled towards enhancing the capacity of community health service organisations, thereby enabling them to deliver comprehensive basic medical and public health services tailored to the needs of migrant populations (Hainmueller et al., 2017). Additionally, implementing health education initiatives and social support programs is crucial in helping migrants overcome language and cultural barriers that impede their access to healthcare services (Norredam et al., 2013). By addressing these systemic barriers and enhancing the availability of culturally sensitive healthcare services, governments can significantly improve healthcare access and outcomes for migrant communities.

In addition to systemic interventions, healthcare providers within formal medical institutions play a crucial role in improving healthcare access and outcomes for migrants. Through the provision of patient-centred, compassionate, and professional services, healthcare providers have the potential to foster a sense of trust and connection among migrant populations with their present communities (Scheppers et al., 2006). Culturally competent care, which respects migrants' diverse backgrounds and experiences, is essential in building rapport and mitigating barriers to healthcare utilisation (Betancourt et al., 2003). Moreover, healthcare providers can play a pivotal role in health promotion and education tailored to migrants' specific needs, thereby empowering them to make informed decisions about their health (Almeida et al., 2010). By prioritising culturally sensitive care and building trusting relationships with migrant patients, healthcare providers contribute significantly to enhancing healthcare access and improving health outcomes within migrant communities.

6.10 Conclusion

In conclusion, this study highlights the multifaceted determinants influencing health-seeking behaviour among internal migrants in Ghana, highlighting the critical role of stakeholder engagement in research to enhance its relevance and applicability for healthcare improvement. The Delphi consultation process identified key barriers, facilitators, and strategic recommendations crucial for understanding and addressing migrants' healthcare needs. While barriers such as language barriers and long waiting times pose significant challenges, facilitators like social support networks and perceived care quality can enhance health-seeking behaviour. Evidence-based strategies, including affordable healthcare provision, specialised clinics for migrants, and culturally responsive care, emerge as vital strategies to promote equitable access to healthcare services and improve health outcomes among internal migrants in Ghana. Further qualitative research and collaborative efforts are essential to implement these strategies effectively and address the complex healthcare needs of migrant populations.

This chapter, however, addresses the research gap concerning the low healthcare-seeking behaviour among internal migrants in Ghana and proposes qualitative methodologies to explore the underlying sociocognitive factors influencing their healthcare-seeking behaviours. It aims to inform tailored interventions for improved healthcare accessibility and outcomes within this population subgroup. By delving into migrants' lived experiences and perspectives, evidence-based insights can be leveraged to develop targeted healthcare programs and community-based initiatives in collaboration with local stakeholders, fostering equitable access to healthcare services and promoting better health outcomes among internal migrants in Ghana.

CHAPTER 7

Exploring the Socio-Cognitive Perceptions Among Internal migrants in Ghana Regarding their Health-Seeking Behaviour.

7.0 Introduction

The review in Chapter 2 of this study reported low healthcare utilisation by internal migrants. Utilising healthcare services is an essential determinant of health and is relevant as a public health and development issue in low-income countries (Obrist et al., 2007). The World Health Organization has recommended using healthcare services for the most vulnerable and underprivileged populations as an essential primary healthcare concept (Amo-Adjei et al., 2016). A proposal has advocated for healthcare to be universally available without hindrances related to financial affordability, physical access, or the suitability of services. However, despite these recommendations, low healthcare utilisation persists among certain demographic groups, including internal migrants in Ghana.

Accordingly, increased use of health services is a significant target in many developing countries (Crisp, 2010). The current study (thesis) has observed a very low utilisation of healthcare among the internal migrant population in Ghana. Notably, among the GLSS7 sample size (n=14287) of internal migrants, the majority (n=13054), representing 91.37%, did not consult any healthcare provider when sick (See Chapter 4). However, health-seeking behaviour depends not only on affordability, accessibility, or availability but on other factors not captured by earlier researchers (Good, 1987; Omotosho, 2010).

Health-seeking behaviour, a complex interplay of actions and decisions individuals undertake to maintain or improve their health, is influenced by many factors (Westgard et al., 2019). These include socio-cultural norms, perceptions, beliefs, and cognitive processes, varying across different populations and contexts. Despite the abundance of literature on health-seeking behaviour, a notable gap exists in understanding the socio-cognitive perceptions of internal migrants in Ghana regarding their healthcare practices.

According to Helman (1990), cultural background significantly influences several aspects of peoples' lives, including their belief systems, behavioural tendencies, perceptions of certain conditions, emotions, and attitudes to illness, which influence one's health and healthcare. Therefore, understanding how cultural factors intersect with healthcare-seeking practices is essential for developing culturally sensitive interventions to improve healthcare utilisation among internal migrants. How people approach their healthcare, deal with specific diseases and illnesses, their body feelings, their relationship with health professionals and their experience with healthcare services, as Lupton (2003) argues, are aspects of the medical encounters that have been underexplored (Kwok & Sullivan, 2006). However, these dynamics influence individuals' decision-making processes regarding healthcare utilisation and warrant closer examination to understand the underlying socio-cognitive perceptions driving health-seeking behaviour.

Exploring the socio-cognitive perceptions of internal migrants in Ghana regarding their health-seeking behaviour is essential for developing targeted interventions, improving healthcare policy formulation, addressing health inequities, enhancing health system efficiency, and advancing progress towards sustainable development goals. Consequently, the interdependent factors that determine the health-seeking behaviour of internal migrants are described in previous studies in this thesis (refer to Chapters 2, 4, 5 & 6). To address this gap, this current study adopts the Integrated Change Model (I-Change Model) as a theoretical framework, which posits that health-related behaviour change is influenced by individual cognitions, including perceived susceptibility, severity, benefits, barriers, self-efficacy, and cues to action (Cheung et al., 2020).

By applying the I-Change Model, this study seeks to highlight the complex interplay of these cognitive factors in shaping health-seeking behaviour among internal migrants in Ghana. For instance, understanding internal migrants' perceptions of their susceptibility to various health risks and the perceived severity of illnesses may shed light on their motivations for seeking healthcare. Similarly, exploring the perceived benefits and barriers to healthcare utilisation can explain the factors that facilitate or hinder their access to healthcare services. Also, assessing migrants' self-efficacy beliefs and the presence of cues to action will provide insights into their confidence levels and the external influences that prompt them to seek healthcare.

Therefore, this study aimed to unravel the socio-cognitive dimensions of health-seeking behaviour among internal migrants in Ghana, contributing valuable insights to the existing body of knowledge and guiding future interventions.

7.1 Methods

7.1.1 Study Area

The present study was conducted in 4 out of the 16 administrative regions in Ghana. These 4 selected regions included the Greater Accra, Western, Ashanti and Eastern regions. According to existing studies (refer to Chapter 2), these regions are the primary recipient destinations for internal migrants from Northern Ghana. Again, these study areas were chosen because they are known to be;

(i) the destination regions for these internal migrants from the Northern side of the country, according to the 2020 Population and Housing Census Report from the Ghana Statistical Service (GSS, 2020),

(ii) the few studies on internal migrants' healthcare conducted in Ghana are only focused on Accra and Kumasi which host most of these internal migrants from the North. Perhaps adding different regions aside from these two regions is appropriate. All the few available studies on internal migrants in the country mainly concentrated on head-porters (kayayei), leaving out migrants who are engaged in other forms of economic activities such as farming, mining, and petty trading (Asampong et al., 2015: Asaana P, 2015: Agyei et al., 2016: Awumbila M, 2007).

7.1.2 Research Design

This study employed an exploratory qualitative methodology utilising in-depth interviews, following the guidelines outlined by Bergold and Thomas (2012). The selection of a qualitative approach was purposeful, driven by the desire to comprehensively capture a wide range of perspectives and insights from the study participants (Bryman, 2016). Qualitative methods are well-suited for exploratory research, allowing for a comprehensive exploration of complex phenomena and the generation of rich, contextually embedded data.

The exploratory nature of this research is underscored by the absence of prior investigations on the subject matter, as highlighted by the identified gaps in the literature review conducted

earlier in this thesis (refer to Chapters 2 and 3). These gaps in existing literature signalled the need for a qualitative inquiry to delve deeper into the socio-cognitive perceptions of internal migrants in Ghana regarding their health-seeking behaviour. By employing in-depth interviews, the study aimed to uncover valuable insights and understandings that quantitative methods alone may not capture, thereby contributing to a more comprehensive understanding of the topic.

The study adopted in-depth interviews to explore internal migrants' health-seeking behaviour, given their flexibility and capacity to gather detailed data. Fontana and Frey (2005) assert that these interviews are adept at capturing migrants' diverse experiences by delving deeply into their perspectives. Qualitative methods, including in-depth interviews, focus on contextual factors, aligning with the study's aim to understand how cultural norms influence health-seeking behaviour among internal migrants. Thus, the study ultimately facilitates relevant insights into this complex socio-cultural phenomenon.

7.1.3 Theoretical Background & Interview Guide

This study adopted the Integrated Change Model (I-Change Model), which is recognised as a valuable instrument for understanding the factors influencing the health behaviour of populations (Ilja et al., 2022) to guide the data collection procedure and explain the findings. This theoretical model suggests that behaviour change occasionally occurs through three different phases: the awareness, motivation, and action phases, and each phase has its relevant determinants (De Vries, 2017). Throughout these phases, people develop from being unaware of their behaviour to taking action to change health behaviours. This means that to form a motivation or intention, a person must first be aware of his or her (unhealthy) behaviour and what one could do to change that behaviour. The Integrated Change model distinguishes a pre-motivational, motivational, and post-motivational phase (Cheung et al., 2020).

The I-Change Model's suitability for this study lies in its acknowledgement and integration of individual, interpersonal, and contextual factors influencing behaviour change. The model offers a comprehensive understanding of health-seeking behaviour complexities by addressing individual-level factors such as knowledge and attitudes, interpersonal influences like social support, and contextual factors including access barriers and cultural beliefs. Its stage-based and participatory approaches further enhance its applicability by recognising behaviour change

as a process and involving individuals in research, while its cultural sensitivity ensures adaptability to diverse cultural contexts, which is crucial for studying internal migrants' health behaviours in Ghana.

The Integrated Change Model is employed as a topic guide for the interview and focused primarily on exploring internal migrants' beliefs and perceptions of their health-seeking behaviour in Ghana. The interview guide was composed of three parts. Questions on individual demographics, including age, sex education, etc., health behaviour, and beliefs on health-seeking behaviour were then followed. The selection of this model as a topic guide was driven by the following objectives;

i) to extract the belief statements related to each construct of the model and
ii) to examine and contrast the underlying beliefs and individual perceptions concerning healthcare seeking, both in times of need and otherwise.

All interview questions in this study were designed as open-ended inquiries, allowing respondents to freely explain and provide relevant details of their responses. Pilot interviews were carried out before the commencement of the study. This pilot study enabled the refinement of the interview guide through necessary amendments and to ensure comprehensive coverage of all constructs.

7.1.4 Sampling and Participants

Forty (n=40) internal migrants were recruited and interviewed, with 10 participants from each selected *Zongo* for the study. This number is appropriate for an explorative study such as this. The sample size of forty internal migrants for this study was selected based on several important considerations to ensure the richness and adequacy of the data collected. In qualitative research, determining the appropriate sample size often hinges on reaching data saturation, a point where no new insights emerge from additional interviews (Guest, Bunce, & Johnson, 2006). Studies suggest that saturation typically occurs within a range of 12 to 15 interviews for homogeneous groups, but larger sample sizes are recommended for diverse or complex populations (Fusch & Ness, 2015). Given the exploratory nature of this research, which seeks to capture a broad spectrum of health-seeking behaviours among internal migrants, a sample size of forty is considered sufficient to allow for a comprehensive exploration of diverse perspectives (Ritchie & Lewis, 2003). Similarly, studies on health behaviours among migrant or marginalised populations have employed sample sizes of around 30 to 50

participants, further validating the choice of sample size in this context (Yin, 2018). By utilising a purposive sampling method, this study ensures that participants are selected based on their ability to provide rich, relevant information, thereby enhancing the credibility and depth of the findings (Palinkas et al., 2015).

All interviews were conducted via telephone and in Ghana, with each interview lasting for 30 minutes. A multi-stage non-probability sampling technique was employed to select the respondents. Firstly, the most populated *Zongos* were selected within each region for the recruitment of participants. These *Zongos,* according to available evidence, are believed to be the homes of these internal migrants, particularly those from the Northern part of Ghana and other parts of West Africa who found themselves in the Southern sector of Ghana (Casentini, 2018: refer Chapter 3). A gatekeeper was selected through the purposive sampling technique to aid the participants' selection process in the *Zongos*. The gatekeeper was the leadership/chief (Zaaki) in the *Zongo*.

In the subsequent phase, the appointed gatekeeper played a pivotal role in identifying and enlisting prospective participants according to clearly defined inclusion criteria (outlined below). The researcher then reached out to these identified individuals for a final selection phase. Consent was sought from respondents who were willing to participate in the study. A total of 40 participants were selected for inclusion in the study, utilising purposive sampling techniques with careful adherence to the predefined inclusion criteria. This study utilised a purposive sampling methodology, chosen for its capacity to select pertinent and high-quality data, thereby enriching comprehension of participants' experiences (Palinkas et al., 2015). Participants were chosen for inclusion following the criteria below:

7.1.5 Inclusion Criteria

Respondents for this study were selected if:

1. Age 18 and above
2. Migrated from the northern sector of Ghana
3. Speaks and understands either Twi or English or both.
4. Resided at the destination area (selected Zongo) for at least one year or more.

7.1.6 Interview Process

Participants were recruited and selected via a gatekeeper specifically designated for this study. The gatekeeper facilitated the distribution of the participant information sheet and consent form on behalf of the researcher. These documents were completed by selected participants to confirm their voluntary participation in the study. Considering the unique characteristics of the target population and their daily commitments, the researcher, after obtaining informed consent, allowed participants to select suitable dates and times for interviews, ensuring ample preparation. The study commenced upon attaining consent from a subset of participants (n=25) required for the study and concluded upon reaching the predetermined total participant count (n=40) necessary for the study's objectives.

All interviews were conducted telephonically within Ghana. Participants were individually interviewed at their chosen and most convenient locations. Before each interview, the researcher explained the study's objectives to the participants and secured their consent to participate and permission to record the interview. Subsequently, each interview was meticulously recorded and transcribed verbatim.

7.2 Data Analysis

To analyse the interview data, thematic analysis was utilised to identify patterns or themes within the collected data. This is one of the most widely adopted approaches among qualitative analytic methods. As with other analytic methods, thematic analysis has both advantages and disadvantages. Braun and Clarke (2006) argue that one of the advantages of thematic analysis is its flexibility, enabling it to be applied across different types of epistemological paradigms. However, compared to other analytic methods, such as grounded theory, thematic analysis is not an identifiable technique (Bryman, 2016). There are no clear thematic analysis procedures despite its universal applicability. In addition, Bazeley (2013) argued that thematic analysis needs to clearly explain the processes through which themes are identified and emerge from data.

The data analysis followed a systematic approach to ensure alignment with the I-Change model and derive meaningful insights from the participants' responses. The analysis began with a deductive approach (Herrmann et al. 2018), ensuring that the interview guide was structured according to the components of the I-Change model (*refer to Appendix 8*). This approach

facilitated the exploration of awareness, motivation, and action phases related to health-seeking behaviour among internal migrants in Ghana. Rev Call Recorder was utilised to record and transcribe all telephone interview dialogues verbatim, serving the purpose of data analysis. This study opted for Rev Call Recorder for recording and transcribing interview sessions due to its benefits in accuracy, efficiency, accessibility, security, documentation, and cost-effectiveness, rendering it a dependable option for transcription services. Following several rounds of data review, the researcher initiated the coding phase to develop descriptive codes, analytic codes, sub-themes, and overarching themes.

Utilising the framework outlined by Braun and Clarke (2006), thematic analysis was employed to discern recurrent patterns and themes within the participants' feedback. Responses were organised based on the constructs of the I-Change model, allowing for a comprehensive understanding of participants' perceptions and behaviours regarding healthcare-seeking. Themes were developed based on the responses gathered for each question and construct. Similar themes across different questions were reviewed and presented under relevant constructs to avoid duplication and ensure clarity in the presentation of results.

In this study, both the researcher and an independent coder meticulously analysed interview data according to the constructs of the I-Change Model. This involved identifying themes and patterns within participant statements that corresponded to key components of the model, such as awareness, motivation, and action planning (de Vries, Mudde, & Leijs, 2015). The coding process was conducted using QSR NVivo (version 11.3), a computer software package specifically designed for qualitative data analysis. NVivo facilitated the organisation and coding of interview transcripts, allowing for efficient management of data and systematic extraction of insights (Clarke, Braun, & Hayfield, 2015). The involvement of both the researcher and an independent coder ensured the coding process's reliability and validity, enhancing the study's rigour (Guest, MacQueen, & Namey, 2012).

The pilot testing process also played a crucial role in refining the coding of themes (Malmqvist et al., 2019). Through the pilot study, initial codes were tested and refined based on the feedback and insights gained from the participants. This iterative process allowed for the development of a more comprehensive coding framework that accurately captured the subtle complexities of the participants' responses. Additionally, pilot participants' feedback on the clarity and relevance of themes contributed to enhancing the overall quality of the thematic

analysis. By iteratively refining the coding process, the pilot testing phase ensured that the final analysis accurately reflected the participants' perspectives and experiences regarding health-seeking behaviour.

During the coding process, both coders compared interviews and employed an iterative method to address discrepancies and ensure consistency. The themes that emerged multiple times but were not originally part of the coding guide were included as sub-constructs within the existing constructs of the I-Change Model. This inductive aspect of the analysis followed the framework proposed by Timmermans Tavern (2012). In cases where multiple constructs were identified within a single response, all relevant constructs were coded to preserve contextual information.

A simple percentage agreement and disagreement method was used to assess the reliability and consistency of coding. Coding was considered wholly agreed upon when all independent coders assigned the same utterance to the same construct. Once all coding was completed, the researcher generated statements representing the beliefs expressed by respondents, using the strategy applied by Patey et al. (2012). Statements that provided insights into participants' perceptions regarding themes in the theoretical model were identified as specific beliefs. If recurring themes occurred, they were coded as multiple instances of the same belief and condensed into statements that captured the same meaning. A third independent reviewer reviewed the generated statements to ensure accuracy and representativeness.
The results of the analysis are captured and organised in tables, presenting key themes and corresponding excerpts from the interview responses. This structured presentation facilitated the interpretation of findings and provided a clear overview of participants' perceptions and behaviours related to health-seeking

7.3 Ethics

Conforming to ethical standards in research, the study obtained prior authorisation from the Brunel Research Ethics Committee – Ref: 36179-LR, indicating a thorough evaluation of the research protocol to ensure adherence to ethical guidelines and protection of participants' well-being (*see Appendix 10 for details*). Again, consent was obtained from both the gatekeeper, who facilitated direct access to the study population, and the participants. This emphasises the significance of ensuring individuals' autonomy and securing their voluntary involvement,

thereby upholding ethical principles of informed consent and safeguarding human subjects in this study.

7.4 Results

7.4.1 Description of Sample

The study's sample consisted of 40 participants selected from 4 major regions of Ghana: Western, Greater Accra, Eastern, and Ashanti. The group comprised 22 males and 18 females between the ages of 20 and 45. Participants were recruited over 2 months from October 1st to November 28th, 2023. The participants represented a diverse array of backgrounds regarding their highest education and employment status. Among them, 12 had completed secondary education, 18 had primary education, and 10 had no formal education. In terms of employment, the sample included traders, artisans, public servants, and unemployed individuals. The healthcare behaviours of the participants in the study were diverse. Out of the 40 participants, 5 frequently sought professional healthcare for both major and minor health issues, while 4 occasionally visited healthcare facilities, primarily for check-ups or severe health conditions, and 31 participants preferred traditional/ herbal remedies over professional healthcare services.

The sample also displayed a range of stay duration in their current locations. 15 participants had lived in their respective regions for over 5 years, while the remaining 25 had migrated within the last 5 years. This demographic variety provided a broad perspective on the health-seeking behaviours of internal migrants across different regions and time frames in Ghana.
For this analysis, participants who frequently sought professional healthcare (n=5), and those who occasionally sought healthcare (n=4) are referred to as 'non-self-care' (n=9), and those preferring traditional and other remedies are labelled as 'self-care' (n=31). A detailed overview of the sample demographics, healthcare behaviours, and other relevant characteristics is provided in Table 25 of the study below.

Table 25: Demographic Characteristics of Participants.

Gender (%)	*Male*	*22*
	Female	*18*
Region (%)	*Greater Accra*	*10*
	Western	*10*
	Eastern	*10*

	Ashanti	*10*
Education (%)	*Secondary*	*12*
	Primary	*18*
	None	*10*
Employment (%)	*Traders*	*6*
	Head potters	*9*
	Food Vendors	*7*
	Artisans	*2*
	Farmers	*7*
	Miners (Galamseyers)	*4*
	Public Servants	*2*
	Unemployed	*3*
Healthcare Behaviour (%)	*Non-self-care*	*9*
	Self-care	*31*

The participants' responses are structured following the I-Change Model constructs. Consequently, the results are delineated into three sections: Awareness, Motivation, and Action. Additionally, a summary of participants' perspectives is presented in tabular form for clarity.

7.4.2 Awareness Phase

Participants responded to a series of seven questions designed to explore three key sub-constructs: behaviour, knowledge, and risk perception. The overarching aim was to comprehensively grasp the level of awareness regarding health-seeking behaviour among internal migrants in Ghana. By delving into these aspects, the study sought to gain insights into the factors influencing migrants' decisions and actions regarding their health needs within the Ghanaian context. Table 28 below summarises the responses of the participants.

i. Behaviour

First, participants were queried regarding their most recent encounter with a healthcare provider and the purpose behind this visit. Out of the 40 participants interviewed, only nine sought medical assistance within the last year, representing a mere 22.5% utilisation rate. Upon further analysis, three prominent themes emerged to explain the reasons behind their infrequent healthcare visits. The first theme pertained to the management of known medical conditions, where individuals sought care for ongoing health issues requiring monitoring and treatment. The second theme revolved around severe symptoms, indicating that some participants opted

to seek medical attention only when their symptoms became severe or unbearable. The final theme that emerged was participation in free medical screening exercises, suggesting that individuals were more likely to access healthcare services when such opportunities were available at no cost.

ii. Knowledge

In alignment with the investigation into participants' awareness of health-seeking behaviour, the study focused on participants' knowledge regarding the significance of seeking healthcare. Participants were queried about their perspectives on the importance of accessing healthcare services. Once again, a unanimous consensus emerged among all participants, affirming the crucial importance of seeking healthcare. Upon analysing their responses, it became evident that participants had diverse perspectives on the importance of seeking healthcare. For example, many participants emphasised the importance of seeking healthcare for early detection and prevention of illnesses. They recognised that regular check-ups and screenings could help identify health issues at an early stage, enabling timely interventions and preventive measures. Furthermore, participants underscored the pivotal role of healthcare-seeking behaviour in sustaining and enhancing overall health and well-being. They acknowledged that professional healthcare services, such as medical consultations, treatments, and medications, could alleviate symptoms, manage chronic conditions, and enhance their quality of life.

Additionally, the participants also recognised the significance of seeking healthcare for timely treatment and management of health conditions. They emphasised that professional medical guidance and interventions are essential for effectively addressing health concerns, preventing complications, and ensuring optimal health outcomes. Finally, some participants emphasised the importance of seeking healthcare to benefit from the specialised expertise of healthcare professionals. They acknowledged that healthcare professionals possess the necessary knowledge, skills, and experience to provide accurate diagnoses, personalised treatment plans, and specialised care when needed. Another line of questioning within the knowledge construct pertained to participants' awareness of their susceptibility to health problems. Participants exhibited adequate knowledge regarding their vulnerability to various health issues. Upon reviewing this data, several discernible themes emerged.

Participants acknowledged that their lifestyle choices, such as diet, physical activity, and habits like smoking or excessive alcohol consumption, could contribute to their susceptibility to health problems. They recognised that adopting healthy behaviours and making positive lifestyle changes could reduce their risks. Many participants were also aware of the impact of family history on their susceptibility to certain health conditions. They acknowledged that a family history of diseases such as diabetes could increase their own risk of developing these conditions. Some other participants mentioned that their occupation or work environment could pose specific health risks. They recognised physical strain or stressful work conditions could contribute to their susceptibility to occupational health issues. Others also believe that age plays a significant role in determining their susceptibility to certain health problems. They recognised that the risk of developing chronic conditions or age-related diseases increases as they age, and regular healthcare becomes even more crucial.

iii. Risk Perceptions

Finally, regarding the participants' awareness of health-seeking behaviour, they were specifically asked about the health risks associated with seeking healthcare from a health professional. All 40 participants responded to this question, representing a response rate of 100%. A comprehensive analysis of these responses revealed six prominent themes.

One significant theme was financial concerns, with participants expressing worries about the potential costs associated with healthcare, including consultations, laboratory tests, medications, and additional expenses, including travel costs. Language and communication barriers were also highlighted as a significant concern, as participants feared miscommunication or difficulties in effectively conveying their health concerns. Trust and reliability emerged as another theme, with participants expressing concerns about the competence and trustworthiness of healthcare professionals. They worried about the possibility of incorrect diagnoses, ineffective treatments, or a lack of expertise.

Fear of stigmatisation or discrimination was also evident, as participants expressed worries about experiencing prejudice or being treated differently due to their migrant status or cultural background. Cultural beliefs and practices played a role in participants' perceptions, with some expressing concerns about the compatibility of Western medicine with their traditional healing practices or cultural norms. Lastly, past negative experiences with healthcare providers or the

healthcare system influenced participants' perceptions of health risks, leading to distrust and reluctance to seek professional healthcare.

Furthermore, during the interviews, participants were extensively questioned about their perceptions of the health risks associated with not seeking healthcare from a professional. Intriguingly, the responses from all participants consistently highlighted a range of risks linked to avoiding professional medical assistance. A comprehensive spectrum of concerns regarding neglecting healthcare needs emerged through detailed analysis. Notably, participants acknowledged that refraining from seeking healthcare from a health professional could lead to delayed or missed diagnoses, potentially allowing underlying illnesses or diseases to progress unchecked until they reach a more advanced stage.

Moreover, they demonstrated an awareness that without timely intervention and treatment, existing health conditions could exacerbate, leading to potential complications and a diminished quality of life. Participants also articulated apprehensions regarding the long-term ramifications of disregarding professional healthcare, including the onset of chronic health issues, permanent disabilities, and a shortened life expectancy. This significant understanding of the multifaceted risks associated with avoiding professional healthcare underscores the importance of timely and appropriate medical intervention in preserving individuals' health and well-being.

Table 26: Summary of Awareness on Health-Seeking Behaviour

Constructs	Themes	Sample quotes	Frequency of responses (%)	
Behaviour				
	Management of known medical conditions	"I have a history of hypertension, and I've been on medication for the past three years. I visit a health facility every month to get my blood pressure checked and ensure that my medication dosage is appropriate"	2	5%
	Management of severe symptoms	"A few months ago, I had a persistent cough that didn't go away despite taking over-the-counter cough syrups"	3	7.5%

		"There was a time when I experienced severe abdominal pain that I couldn't bear. It was so intense that I had to seek immediate medical attention"		
	Participation in free medical screening	"I recently came across a free medical screening camp organised by a local NGO". "Last month, I heard about a free medical screening program being conducted in my community. I decided to attend."	5	12.5%
Knowledge				
Importance of seeking healthcare	Early detection and prevention	"I believe that seeking healthcare early on can help identify health problems before they can become serious."	35	87.5%
	Improved overall health and well-being	"Taking care of my health is essential for my overall well-being. When I prioritised seeking healthcare, I feel more in control of my health, both physically and mentally."	40	100%
	Timely treatment and management	"Getting timely treatment can make a huge difference in how quickly I recover from illnesses or injuries."	36	90%
	Access to specialized expertise	"Sometimes, health problems require specialized knowledge or expertise to address effectively."	32	80%
Susceptibility to health problems	Lifestyle factors	"I know that my lifestyle choices, like diet and exercise, can impact my health."	22	55%
	Family history	"My family has a history of high blood pressure and heart disease, so I'm aware that I may be genetically predisposed to these conditions."	13	32.5%
	Occupational hazards	"I am a porter and work more in the construction fields, so I'm exposed to	5	12.5%

		various occupational hazards like heavy lifting and exposure to dust.”		
	Age-related risks	"As I get older, I'm more aware of the age-related health risks that come with aging.”	31	77.5%
Risk Perception				
Health risk associated with seeking healthcare from a health professional.	Financial Concerns	"I worry about the cost of seeing a doctor. Even a simple consultation can be expensive, and if medication or tests are added, it adds up quickly” "Healthcare expenses can really strain my budget. I have to think twice before seeking medical help”	26	92.8%
	Language and Communication Barriers	"Sometimes I struggle to explain my symptoms properly to the doctor because English isn't my first language” "I once had a bad experience at the hospital because the doctor and I couldn't understand each other well”	22	78.5%
	Trust and Reliability	"I've heard stories of doctors misdiagnosing patients or prescribing unnecessary treatments just to make money” I have had mixed experiences with healthcare providers. Some have been really caring and competent, but others seemed dismissive or rushed”	11	39.2%
	Fear of Stigmatization or Discrimination	"I worry that the doctor will treat me differently because of my outlook and demeanour” "I've faced discrimination before when seeking healthcare. It's humiliating and makes me reluctant to go back”	28	70%

	Cultural Beliefs and Practices	"In my culture, we often rely on traditional remedies for health issues. “ "My family has always believed in the power of herbal medicine. Even when I'm sick, I'm more comfortable trying home remedies	23	57.5%
	Past Experiences	"I had a bad experience with a doctor who didn't take my symptoms seriously. It turned out I had a serious condition that went undiagnosed for months.” "I once admitted and that didn't go well, and I ended up with complications.”	10	25%
Risk if you do not seek health from health professional	Delayed or missed diagnosis	"I once ignored some symptoms I was having because I thought they would go away on their own but rather increased.” "I've heard stories of people who waited too long to see a doctor, and by the time they did, it was too late to treat their condition effectively.”	32	80%
	Progression of health conditions	"I know someone who didn't seek treatment for their diabetes until it was too late.” "I've seen first-hand how ignoring health problems can make them worse”.	36	90)%
	Increased health complications:	“I worry that if I don't take care of my health now, I'll end up with more serious problems down the road.” “I worry that if I don't take care of my health now, I'll end up with more serious problems down the road”	40	100%
	Reduced quality of life	“When you're not feeling well, everything else becomes harder.” "I've seen how health problems can affect people's ability to work, spend time with their families, and enjoy life”.	28	70%

	Potential long-term consequences	“I know that if I don't take care of my health now, I could end up with chronic conditions that will affect me for the rest of my life.” "I've heard that certain health problems, if left untreated, can lead to permanent damage or disability.”	38	95%

7.4.3 Motivation Phase

The Motivation Phase constitutes the second stage of the I-Change model. In this section, participants' perspectives were solicited on three key constructs integral to this phase. A total of 11 questions were posed to participants to gauge their motivations and attitudes. The following subsection outlines the outcomes of this interactive phase.

i. Attitude

The attitude construct explored participants' beliefs, expectations, and feelings regarding seeking healthcare from a health professional. Beginning with the participants' beliefs, seven themes were identified, illuminating their belief system about seeking healthcare from a health professional or healthcare facility.

The first observed theme is perceived accessibility. Participants discussed barriers or facilitators to accessing healthcare services, such as geographical location, transportation, financial constraints, language barriers, and national health insurance. Overall, participants acknowledged the existence of healthcare accessibility, but 65% noted that barriers such as location, transportation, and financial constraints often hindered their utilisation of healthcare services.

The second theme is trust and confidence. Participants expressed varying levels of trust and confidence in healthcare professionals and facilities, influenced by past experiences, cultural beliefs, and perceptions of healthcare quality. Cumulatively, only 30% of participants reported high trust and confidence in health professionals and institutions. In addition, the importance of Preventive Care is another theme. Participants emphasised the importance of preventive healthcare measures. They noted that their focus for migrating was to make money; hence, they

do not prioritise spending on healthcare. As a result, they engaged in many preventive mechanisms rooted in herbal treatments. Interestingly, most participants reported relying primarily on preventive measures rather than seeking professional healthcare services.
Furthermore, Cultural Considerations are a fourth theme. Cultural beliefs, traditions, and preferences influence participants' attitudes towards seeking healthcare, including preferences for traditional healing methods, religious beliefs, and taboos related to certain medical practices. The Northern part of Ghana is somewhat underdeveloped; hence, optimistic assumptions about orthodox healthcare are minimal. Consequently, most of the participants expressed a strong inclination towards traditional healing methods due to cultural beliefs and preferences.

Fear and Stigma was another observed theme. Participants expressed concerns about stigma, discrimination, or negative experiences associated with seeking healthcare, particularly among people from the North and those engaged in menial jobs. This prevents the majority of them from seeking healthcare, although financial constraint is a significant barrier. Notably, most of the participants cited fear of stigma and discrimination as a significant deterrent to seeking healthcare services.

Additionally, Health Literacy and Empowerment emerged as a theme. Participants observed the importance of health education, empowerment, and self-advocacy in navigating the healthcare system, engaging in informed decision-making and actively participating in their healthcare. They contended that most of them are uneducated and, therefore, have little knowledge of their health issues. For them, healthcare does not hold prominence on their agenda. Remarkably, about 70% of participants expressed a lack of health literacy and empowerment as a barrier to seeking healthcare.

Finally, the Influence of Social Networks was noted. Social networks, including family, friends, and community members, play a significant role in shaping participants' beliefs and behaviour related to seeking healthcare through sharing experiences, providing support, or influencing healthcare-seeking norms. They noted that their choices are primarily impacted by their social influence. Interestingly, most participants acknowledged social networks' significant influence on their healthcare-seeking behaviour.

Four themes were identified from the responses regarding participants' expectations of seeking healthcare from a health professional or healthcare facility. The first theme is Quality of Care. Participants express expectations regarding the quality of care they anticipate receiving, including factors such as professionalism, competence, empathy, and respect from healthcare providers. However, their perceptions and attitudes toward the utilisation of healthcare services hinder them from experiencing this level of quality. Notably, a minority of the participants reported feeling dissatisfied with the quality of care received due to perceived barriers or biases.

Communication and Understanding was another observed theme. Participants believed they would be misunderstood and not receive good services because of ineffective communication. This perception significantly influences their willingness to seek healthcare services. Surprisingly, about half of the participants expressed concerns about ineffective communication leading to misunderstandings and subpar healthcare services.

Affordability and Financial Transparency constitute the third theme. Expectations related to the affordability of healthcare services and transparency in financial matters are prominent among participants. Despite having national health insurance, a significant aspect of healthcare requires out-of-pocket expenses. Many health conditions are not covered by insurance, leading to financial burdens for participants. Consequently, participants do not expect much from orthodox or formal healthcare providers due to financial constraints. The majority of the participants cited financial limitations as a key factor influencing their expectations of healthcare services.

Finally, the fourth theme is Cultural Sensitivity and Competence. Participants expect healthcare providers to demonstrate cultural sensitivity and competence in understanding and respecting their cultural beliefs, values, traditions, and preferences in healthcare delivery. While the few who have used the service acknowledged being treated with respect, non-users expect not to be respected and anticipate not receiving good treatment. This perception underscores the importance of cultural competency in healthcare settings. Many participants expressed concerns about the lack of cultural sensitivity and competence among healthcare providers, influencing their expectations of healthcare services.

The exploration of participants’ feelings about seeking healthcare from a health professional or healthcare facility constitutes the last element of the attitude construct. It must be pointed out

that only a very few of the participants answered this question due to the limited utilisation of healthcare services. Nonetheless, three themes emerged.

The first observed theme is Anxiety and Apprehension. Participants expressed feelings of anxiety, fear, or nervousness associated with seeking healthcare, particularly if they have had negative experiences or anticipate receiving bad news about their health. This apprehension stemmed from past encounters with healthcare professionals, uncertainty about the outcome of medical tests, or fear of potential diagnoses. Notably, a few of the participants reported experiencing anxiety and apprehension when considering seeking healthcare services.

Relief and Peace of Mind emerges as the second theme. Some Participants expressed feeling relief, satisfaction, and peace of mind when seeking healthcare, particularly because they received prompt and effective care that addressed their health concerns and alleviated their symptoms during previous encounters. They noted how they felt comforted by the support and guidance provided by healthcare professionals.

Finally, the third theme is Frustration and Dissatisfaction. Some participants mentioned feelings of frustration or dissatisfaction when seeking healthcare. Participants felt frustrated, disappointed, or disillusioned with the healthcare system or healthcare providers due to barriers to access, experiencing long wait times, encountering insensitive or dismissive attitudes, or receiving inadequate or substandard care.

ii. Social Influence

Social Influence is the second construct explored in the motivation phase, delving into the impact of social networks and relationships on participants' health-seeking behaviour. This construct aims to understand how social factors, including family, friends, and community members, influence participants' decisions and actions regarding seeking healthcare from health professionals. Participants were asked about their perceptions of the social influence on their health-seeking behaviour from health professionals. This encompasses the extent to which their social circles, including family members, friends, and community members, shape their attitudes, beliefs, and actions related to seeking medical care.

The participants overwhelmingly agreed that their social circle significantly influences their health-seeking behaviour. Based on their responses, three prominent themes have emerged.

One theme that arises is the perception of Limited Trust and Confidence in healthcare professionals within the social circle. Participants revealed that coming from the North, where there is a strong emphasis on herbal medication and traditional healing practices, trust in orthodox medication is very limited. Within their community, seeking healthcare from health practitioners is often seen as a last resort. They expressed scepticism towards the effectiveness and reliability of conventional medical treatments, preferring to rely on traditional remedies passed down through generations. This lack of trust and confidence in healthcare professionals in their social circle influences their attitudes and behaviour towards seeking professional medical care.

Another theme that emerged is the recognition of the importance of preventive care within the social circle. Participants observed that they prioritised preventive care measures due to limited finances and fears of discrimination. They rely on herbal treatments and over-the-counter pharmacy shops for their healthcare needs. Some participants mentioned taking daily herbal drinks for general well-being as a proactive measure to maintain their health.

Cultural beliefs and practices also shape the perception of health-seeking behaviour within the social circle. Some participants expressed that their cultural background strongly emphasises traditional or alternative healing methods. As a result, their social circle holds mixed views on seeking care from healthcare professionals. While some individuals within the social circle may encourage seeking professional help for health issues, others may prefer traditional remedies or perceive healthcare professionals as a last resort. This diversity of perspectives within the social circle influences participants' attitudes and decisions regarding seeking medical care, with cultural beliefs significantly shaping health-seeking behaviour.

The final set of questions within the Social Influence Construct delved into the social norms surrounding healthcare-seeking behaviour, highlighting their significance in shaping individuals' decisions and actions regarding their health. Understanding social norms in health-seeking behaviour is crucial as they serve as powerful determinants that shape individuals' perceptions, attitudes, and actions towards healthcare services. Two prominent themes emerged from these responses, offering insights into the complex interplay of social dynamics within this context.

The first social norm prevalent among internal migrants is the perception that seeking healthcare from health professionals should be considered a last resort. Participants expressed a common belief within their social circle that healthcare professionals should only be consulted when all other options, such as traditional remedies or self-care, have been exhausted. This perception suggests a prevailing sense of self-sufficiency and a preference for trying alternative approaches before turning to seek professional medical care. It may stem from cultural beliefs emphasising self-reliance, natural healing methods, or a desire to minimise reliance on external interventions.

The second prevalent social norm involves relying on traditional healing practices within participants' social circles. They indicated that their communities hold traditional healing practices in high regard, considering them more effective or culturally appropriate than modern medical treatments. This belief strongly influences individuals to turn to traditional healers or utilise herbal remedies instead of seeking assistance from healthcare professionals. This preference reflects a deep-seated trust in ancestral knowledge and cultural traditions, which shape healthcare-seeking behaviours and prioritise holistic approaches to healing over conventional medical interventions.

iii. Self-efficacy

The final construct of the Motivation phase is Self-efficacy, which aims to assess participants' confidence in their ability to engage in health-seeking behaviours. This construct aims to understand participants' perceived capability to overcome obstacles and effectively navigate the healthcare system to seek appropriate care. Under this construct, both the barriers and facilitators of health-seeking behaviour among participants were reviewed. Participants were questioned about barriers to health seeking, and it was observed that as migrants from the North, barriers to healthcare are both tangible and perceived, with some stemming from personal experiences and others from preconceived notions. Based on their responses, six major themes representing barriers were identified.

Financial constraints emerged as the most highlighted barrier. Participants expressed facing difficulties seeking healthcare due to a lack of financial resources to cover medical expenses, including transportation costs to healthcare facilities. This financial burden (Out-of-pocket expenses) often serves as a significant deterrent to accessing necessary healthcare services.

Following financial constraints, language barriers were prominently noted. Participants highlighted how language as a barrier hinders their ability to effectively communicate with healthcare providers, understand medical instructions, or express their health concerns. They noted that very few health officials spoke their dialects, and since they also struggled with English proficiency, effective communication was often challenging.

Another observed barrier is cultural stigma and beliefs. Participants revealed that cultural beliefs, norms, and stigma surrounding certain health conditions or seeking medical care discouraged them from seeking healthcare, especially for sensitive or stigmatised health issues. For example, Muslim women expressed being very hesitant to consult with male doctors due to cultural and religious beliefs regarding modesty and gender segregation in healthcare settings. Similarly, participants from certain cultural backgrounds perceive reproductive health issues as taboo and avoid seeking help due to fear of social stigma.

Lack of health insurance coverage is a barrier for some participants. Participants without health insurance coverage face barriers to seeking healthcare due to concerns about out-of-pocket expenses and the affordability of medical services and treatments. Additionally, those who previously had insurance coverage reported difficulties in renewing their inclusion status due to financial constraints or administrative challenges. Consequently, the lack of health insurance coverage poses a significant barrier to these individuals' accessing essential healthcare services.

Fear of discrimination or stigmatisation is among the barriers identified by participants. Fear of discrimination or stigmatisation based on ethnicity, race, immigration status, or health condition deters participants from seeking healthcare services, leading to delays in seeking timely medical care. Several participants recalled instances where they felt judged or subjected to mistreatment by healthcare providers because of their appearance or background when they sought care at health centres. This fear of being discriminated against or stigmatised undermines their confidence in seeking healthcare services. Limited awareness or health literacy is another barrier highlighted by participants. Participants expressed having limited awareness and understanding of available healthcare services, preventive measures, and the means to navigate the healthcare system effectively. Many cited relying on neighbourhood chemical shops (over-the-counter pharmacies) for basic healthcare needs due to a lack of awareness about formal healthcare services or about the way to access them. This limited health literacy hinders their ability to make informed decisions about their health and seek appropriate

medical care when needed, contributing to delays in accessing healthcare services and suboptimal health outcomes.

The second element of self-efficacy is facilitators. Participants were asked about the factors they believed enabled them to seek healthcare. Since majority of the participants did not utilise healthcare services, there were limited responses in this area. Nonetheless, three themes were identified as the facilitators of healthcare behaviour for the migrants.

The most cited facilitator is community support and networks. Participants noted that despite being dispersed across different locations in the south, they have formed a supportive community. They observed that strong community support and networks made it easier for them to seek healthcare, especially during serious health challenges. They often relied on each other for emotional support, practical assistance, and even financial help when accessing healthcare services.

Few participants also acknowledged the role of having National Health Insurance. The participants with healthcare access relied on health insurance to cover medical expenses. However, they were quick to point out its limitations in fully covering healthcare costs. Out-of-pocket expenses still existed, particularly for certain services or treatments not fully covered by insurance.

Finally, positive past healthcare experiences emerged as an observed facilitator. Participants who had positive experiences with healthcare providers or facilities expressed how these experiences-built trust and confidence in the healthcare system. Such positive encounters encouraged participants to seek care when needed and reduced anxieties or fears associated with seeking medical treatment. These positive interactions fostered a sense of reassurance and willingness to engage with healthcare services when necessary, contributing to improved healthcare-seeking behaviour among internal migrants.

Table 27: Motivation Phase Beliefs

Construct and sub-themes	*Themes*	*Sample quotes*	*Frequency of responses*	
				Attitude
Beliefs about seeking healthcare	Trust and Confidence	"I have a lot of trust and confidence in healthcare professionals." "At first, I was a bit sceptical about seeking healthcare from professionals due to some bad experiences in the past."	29	72.5%
	Perceived Accessibility:	"Accessibility is a major concern for me as us. Finding healthcare facilities nearby and getting treated timely can be challenging." "I perceive healthcare accessibility as a mixed bag. On one hand, there are healthcare facilities in the area, but they are not always welcoming."	28	70%
	Importance of Preventive Care	" I am firmly convinced of the significance of preventive healthcare." "I now understand that taking preventive measures is much better than dealing with the consequences of neglecting my health."	38	95%
	Cultural Considerations	"Cultural considerations play a significant role in seeking healthcare. As an internal migrant, I sometimes face language and cultural barriers that pose challenges in communicate with healthcare providers."	31	77.5%
	Fear and Stigma	"Fear and stigma can be barriers to seeking healthcare, especially when it comes to certain health conditions." "There is a prevailing belief among porters that going to hospital is a sign of weakness or something to be ashamed of."	26	65%
	Health Literacy and Empowerment	"Health literacy is an ongoing learning process for me. Initially, I felt overwhelmed by medical jargon and complex health information."	24	60%
	Influence of Social Networks	"My social network plays a significant role in my health-seeking behaviour. I rely on the experiences and recommendations of family and friends when choosing healthcare providers or facilities."	36	90%
Expectations from seeking healthcare	Quality of Care	"I expect high-quality care when I seek healthcare. Fortunately, I have mostly had positive experiences with healthcare professionals who were thorough in their assessments."	38	95%
	Communication and Understanding	" Effective and transparent communication holds paramount importance within the healthcare domain." "I value healthcare professionals who actively listen to my concerns and engage in open and honest communication."	27	67.5%
	Affordability and Financial Transparency	"The affordability of healthcare services is a significant concern for me as an internal migrant."	36	90%
	Cultural Sensitivity and Competence	"As an internal migrant, I have encountered instances where healthcare professionals were not familiar with my cultural background or did not understand certain cultural practices."	20	50%
Feelings about seeking healthcare	Anxiety and Apprehension	"I often feel anxious and apprehensive when seeking healthcare. As an internal migrant, there are language and cultural barriers that make it challenging to express my concerns effectively."	8	61.5%
	Relief and Peace of Mind	"After seeking healthcare and receiving attention and treatment, I feel a tremendous sense of relief. It is like a weight has been lifted off my shoulders."	6	46.1 %
	Frustration and dissatisfaction	"I have encountered situations where healthcare professionals seemed rushed or disinterested, which made me feel unheard and dissatisfied with the care I received."	12	92.3%
				Social influence

The Perception of Social Influence	Limited Trust and Confidence in Healthcare Professionals	"In my community, there's a deep-rooted scepticism towards modern healthcare. We've always relied on traditional remedies passed down through generations. Whenever someone falls ill, the first instinct is to consult with a traditional healer or use herbal treatments."	36	90%
	Importance of Preventive Care	"Given the high cost of medical treatment and the challenges of accessing healthcare services, my friends and I prioritize preventive care."	40	100%
	Cultural Beliefs and Practices	"Our cultural beliefs strongly influence how we approach healthcare. For generations, we've relied on traditional healing methods and passed down knowledge of herbal remedies from our ancestors."	39	97.5%
Social norms	Perception of Healthcare as a Last Resort	"We have a strong belief in our ability to overcome health issues using home remedies or traditional treatments first."	36	90%
	Reliance on Traditional Healing Practices	"In our community, traditional healing practices have always been the first line of defence when it comes to health issues." "Traditional healing modalities are deeply rooted within our social fabric and hold immense significance within our community."	36	90%
				Self-efficacy
Barriers to health seeking behaviour	Financial constraints	"Finances have been a significant challenge for me in seeking healthcare. As a stranger here, I have limited financial resources and may not have access to affordable health insurance."	38	95%
	language barriers	"I am not from here and not fluent in the local language, making it challenging to communicate my symptoms, understand medical instructions, or ask questions."	29	72.5%
	cultural stigma and beliefs	"In my culture, reproductive health issues are often seen as private and unmarried person, discussing it is frown upon. Seeking help for reproductive problems is highly stigmatized, and individuals who do so may face ostracism or ridicule from their community	34	85%
	Lack of health insurance coverage	"I don't have health insurance coverage, which makes it difficult to access healthcare services." "I used to have health insurance coverage but when I moved here, I couldn't afford to continue paying for it."	21	52.5%
	Fear of discrimination or stigmatization	"I remember one time I went to a nearby clinic, and the nurse made some insensitive comments about my dress. I felt really embarrassed and ashamed, like I didn't belong there."	33	82.5%
	limited awareness or health literacy	"I didn't even know that I could go to a doctor for regular check-ups until recently."	27	67.5%
Facilitators of health seeking behaviour	Community Support and Networks	"Being part of a tight-knit community of migrants has been a lifesaver for me. Whenever I'm unsure about my health or need advice, I reach out to my friends and neighbours who have been through similar experiences."	40	100%
	National Health Insurance.	"I consider myself lucky to have National Health Insurance. It's a relief knowing that I can seek medical help without worrying about the cost."	8	20%
	Positive Past Healthcare Experiences	"I've had nothing but positive experiences with healthcare providers in this city. Every time I've visited a clinic or hospital, the staff have been friendly, attentive, and respectful."	4	10%

7.4.4 Action Phase

The Action Phase is the final phase of the "I-change model". The general purpose of this phase is to facilitate the implementation of behaviour change by helping individuals develop specific

plans and strategies for acting and overcoming barriers. The phase contains three constructs: Action planning, Preparatory planning, and Coping planning. Participants were asked questions under each construct to identify the specific actions they would take, the resources they would need to prepare for behaviour change and the strategies they would employ to cope with challenges and setbacks. The responses are summarised in *Table 29*.

i. Action Planning

Participants were queried about their inclination to seek healthcare from any available health facility when sick or injured. The responses can be categorised into two distinct themes:
One theme is the reluctance among participants to seek healthcare from any available health facility. Some participants expressed reluctance or hesitancy to seek healthcare, preferring to manage their illness or injury through self-care methods or home remedies. Reasons for this reluctance may include concerns about the cost of healthcare, distrust of medical professionals, cultural beliefs emphasising self-reliance, or previous negative experiences with healthcare services. Another theme is the inclination among participants to seek healthcare from any available health facility only when the situation becomes extremely serious. Other participants indicated that they would only consider seeking healthcare from a health facility when the situation becomes extremely serious or when their symptoms escalate to a level that they are unable to manage on their own. This suggests a threshold for seeking professional medical assistance, with individuals prioritising self-care or alternative remedies until their condition reaches a critical point where medical intervention is deemed necessary.

ii. Preparatory Planning

The second question delved into the participants' readiness to seek treatment from available health facilities when the need arises. The responses of the participants have been condensed into two main categories. Some participants expressed their preparedness and willingness to seek treatment from available health facilities when the need arises. They acknowledged the importance of timely medical intervention and believed in the expertise of healthcare professionals. These individuals demonstrated a proactive approach to their health and recognised the value of seeking appropriate care. On the other hand, some participants expressed reluctance or a lack of preparedness to seek treatment from available health facilities, citing various reasons such as financial constraints, fear of medical procedures, and a

preference for self-care or alternative remedies. These factors collectively illustrate a complex array of barriers and decision-making processes that influence healthcare utilisation patterns. This expressed reluctance underscores the need for comprehensive strategies addressing accessibility, education, and the integration of diverse healthcare modalities to enhance their healthcare-seeking behaviours.

iii. Coping Planning

The final question examined participants' coping plans in the event of illness. Three main themes emerged from the responses, revealing the diverse strategies the participants employ to manage their health. Participants highlighted the importance of relying on their support network, including family, friends, and community members, for emotional support, practical assistance, and guidance during times of illness. They emphasised the value of social connections in providing comfort, encouragement, and access to resources needed to cope effectively with health challenges.

Secondly, many participants expressed a preference for self-care practices and home remedies to address minor ailments and manage their health. They described using natural remedies, dietary adjustments, and lifestyle modifications as proactive measures to alleviate symptoms and promote healing without necessarily seeking professional medical intervention. Finally, some participants shared their reliance on spiritual practices, rituals, and prayers as integral components of their coping strategies during illness. They spoke of seeking solace, strength, and guidance from their faith traditions, engaging in prayer, meditation, or religious ceremonies to promote physical, emotional, and spiritual well-being amidst health challenges.

Table 28: Action Phase

Construct and sub-themes	Themes	Sample quotes	Frequency of responses	
Action planning	Reluctance to Seek Healthcare	"I prefer to rely on home remedies or traditional healing methods when I am sick or injured". "I believe in trying natural remedies and self-care first before seeking healthcare from any facility.	35	87.5
	Willingness to Seek Healthcare in Serious Situations	"I only consider professional healthcare when the situation becomes severe or if self-care methods do not provide relief."	15	12.5
Preparatory planning	Preparedness to Seek Treatment	"I am prepared to seek treatment from any available health facility when the need arises. I understand the importance of timely medical intervention, and I believe in the expertise of healthcare professionals.	15	12.5

	Reluctance Hesitancy to Seek Treatment	"I have not made specific preparations to seek treatment from available health facilities. I usually rely on self-care methods or alternative therapies for my health needs."	35	87.5
Coping planning	Support Network and Social Connections	"When I am sick, my support network and social ties are pivotal in aiding me to cope. I have a close-knit group of friends and family members who are always there for me.	34	85
	Self-Care and Home Remedies	"I make sure to rest, drink plenty of fluids, and use herbal teas or essential oils for symptom relief. It gives me a sense of control over my health"	31	77.5
	Spiritual Practices	"I am deeply connected to my faith, and during times of illness, I turn to prayer and meditation for solace and strength"	32	80

7.5 Discussion

The qualitative data collected aimed to explore the socio-cognitive perceptions among internal migrants in Ghana regarding their health-seeking behaviour, shedding light on the factors influencing their attitudes, beliefs, and actions related to healthcare. The study adopted the I-Change model as the framework, providing a structured approach to understanding behaviour change processes within the context of health seeking. The overall objective of the I-Change model is to clarify the determinants of behaviour change by examining factors related to awareness, motivation, and action (Kasten et al., 2019; Moreau et al., 2015), ultimately facilitating the development of effective interventions to promote desired health behaviours.

Within the framework of the I-Change model, participants' perspectives were solicited on their awareness, motivation, and action concerning their health-seeking behaviour. This process facilitated a thorough investigation of the cognitive processes and behavioural patterns underlying participants' engagement with healthcare services. The findings from the study uncovered several key insights into the socio-cognitive factors shaping health-seeking behaviour among internal migrants in Ghana. These findings are further explained in the ensuing discussion, providing valuable insights for healthcare practitioners, policymakers, and researchers aiming to address barriers and promote access to healthcare services among this population.

The "awareness" component of the model served as a gateway into understanding participants' comprehension and attitudes toward health-seeking behaviour and their awareness of health risks and susceptibility to health problems. Across the participant pool, a spectrum of awareness levels and knowledge emerged, highlighting the diverse perspectives within the group. While some participants displayed a strong grasp of healthcare concepts and associated

risks, others exhibited gaps in understanding. Despite these disparities, there was a unanimous acknowledgement among participants regarding the importance of seeking healthcare. However, the degree of emphasis placed on this varied among individuals. For some, seeking healthcare was deemed essential for maintaining overall health and well-being, and it was a top priority in their daily lives.

In contrast, others viewed it with less urgency, considering it a secondary concern compared to other life priorities. This relevant range of perspectives underscores the multifaceted nature of health-related beliefs and attitudes within the participant cohort. This finding resonates with the body of existing literature, which underscores the variability in individuals' awareness of healthcare services and the perceived importance of seeking timely care. Indeed, numerous studies, including Omenka et al. (2020), have highlighted the influence of diverse factors on individuals' healthcare awareness and attitudes.

Education level emerges as a significant determinant, with higher levels of education often correlating with greater awareness of healthcare services and the benefits of seeking timely care (Raghupathi and Raghupathi, 2020; Latunji and Akinyemi, 2018). Access to information also plays a pivotal role, with individuals who have ready access to healthcare resources, such as internet connectivity or healthcare literacy programs, being more informed about available services and the importance of proactive healthcare-seeking behaviours. Cultural beliefs further shape individuals' perceptions, with cultural norms and traditions influencing attitudes toward healthcare utilisation (Arousell and Carlbom, 2016). For instance, in certain cultural contexts, seeking healthcare may be viewed as a sign of weakness or may carry stigma, leading individuals to delay or avoid seeking care altogether.

Moreover, participants acknowledged the significant risks of avoiding healthcare, such as delayed diagnosis and treatment, worsening health conditions, heightened complications, decreased quality of life, and potential long-term repercussions. They also exhibited awareness of factors contributing to their vulnerability to health issues, including lifestyle choices, family medical history, occupational exposures, and age-related susceptibilities. The finding that emerged from this is the participants' comprehensive understanding of the immediate and long-term consequences of neglecting healthcare and their recognition of the diverse factors that can influence their health status.

The finding that migrants understand the immediate and long-term consequences of neglecting healthcare aligns with the general population's understanding of health consequences. In many societies, individuals recognise the importance of seeking timely medical attention to address health concerns and prevent further complications (Raghupathi and Raghupathi, 2020; Sibley and Amare, 2017). Similarly, they are often aware of the diverse factors influencing their health status, such as lifestyle choices, genetic predispositions, and environmental exposures (Virolainen et al., 2023). This understanding is rooted in common knowledge and public health campaigns that emphasise the importance of preventive care and early intervention in maintaining overall health and well-being.

Previous studies support the notion that individuals, including migrants, possess a nuanced understanding of the consequences of neglecting healthcare and the factors impacting their health status. For instance, research by Ratnapradipa et al. (2023) found that individuals across diverse demographic groups demonstrate awareness of the risks associated with delaying healthcare, emphasising the importance of early intervention. Similarly, a study by BeLue et al. (2012) highlighted the role of social determinants of health, including socioeconomic status and access to healthcare, in shaping individuals' health-related behaviours and outcomes.

While this finding aligns with broader literature on healthcare awareness and understanding, it appears to contradict the findings of Chuah et al. (2018), who reported low health literacy among international migrants in Malaysia. Chuah et al. (2018) found that most international migrants in Malaysia lacked health literacy, which refers to obtaining, processing, and understanding basic health information and services needed to make appropriate health decisions. The lack of health literacy among migrants in this study may have contributed to a limited understanding of health consequences.

Moving to the "Motivation component," which explored participants' attitudes, beliefs, and motivations regarding seeking healthcare from professionals, the study uncovered a complex interplay of factors that influence healthcare-seeking behaviour among internal migrants. Participants showcased diverse perspectives on the role of healthcare professionals and institutions. While some expressed robust trust and confidence in these entities, others regarded seeking healthcare as a final recourse, opting instead for traditional or alternative healing modalities as their initial approach. This interplay of attitudes underscores the complexity of decision-making processes related to healthcare utilisation among internal migrants.

These findings align with prior research on healthcare-seeking behaviour across diverse populations. Ejike (2017) explored the influence of cultural beliefs on healthcare-seeking patterns among refugees in south-central Kentucky, revealing significant cultural determinants shaping healthcare utilisation among immigrant populations in the United States. Similarly, Ivanov and Buck (2002) acknowledged that immigrants' healthcare utilisation is shaped by their experiences and utilisation patterns in their countries of origin. Furthermore, Shewamene et al. (2021) highlighted the enduring significance of cultural health practices among African migrant women in Sydney, illustrating how traditional medicines serve as integral components of cultural identity and community cohesion within immigrant populations.

The complex interplay of factors influencing healthcare-seeking behaviour underscores the importance of culturally sensitive and patient-centred healthcare approaches. Healthcare providers and policymakers need to acknowledge and respect individuals' diverse beliefs and preferences, fostering open communication and understanding. This can be achieved through culturally competent healthcare delivery, the integration of traditional healing practices where appropriate, and efforts to build trust and confidence in healthcare professionals and institutions.

Exploring barriers and facilitators of healthcare access is a critical aspect of the Motivation component, as it offers significant insights into the factors influencing individuals' attitudes and behaviours towards seeking healthcare. In this study, financial constraints, language barriers, and cultural beliefs emerged as significant barriers, underscoring the multifaceted challenges individuals face in accessing healthcare services. Conversely, the presence of community support and positive past healthcare experiences served as facilitators, highlighting the importance of social networks and previous positive encounters in promoting healthcare utilisation.

The identified barriers and facilitators align with previous research findings, further validating their significance in shaping healthcare access among migrant populations. For instance, Schmidt et al. (2018) investigated barriers to reproductive healthcare for migrant women in Geneva, highlighting challenges such as language barriers, cultural differences, and limited access to healthcare services. Loganathan et al. (2019) explored strategies to overcome barriers to healthcare access among migrant workers in Malaysia, emphasising the importance of

addressing issues such as financial constraints, documentation status, and knowledge gaps. Uansri et al. (2023) examined perceived barriers to accessing healthcare among migrant workers in Thailand, identifying obstacles such as language barriers, discrimination, and lack of awareness about available services.

Filler et al. (2020) conducted a systematic review of 43 studies on healthcare access among migrant populations. The review revealed common barriers, including language barriers, legal status-related issues, and cultural differences, as well as facilitators such as social support and culturally competent care. These studies collectively underscore the universal nature of barriers to healthcare access faced by migrant populations worldwide, emphasising the need for targeted interventions to address these challenges and improve healthcare equity. Accessing healthcare services is closely linked to individuals' expectations and emotions (Lakin and Kane, 2022).

Participants in this study expressed expectations about the quality, price, and cultural sensitivity of healthcare services offered by professionals. They were looking for skilled, respectful, and culturally sensitive care that was in line with their values and interests. Participants had a range of emotions about obtaining healthcare, including anxiety, apprehension, relief, contentment, and occasional frustration. The emotions mirror the complex healthcare-seeking experiences influenced by individual views, previous interactions, and sociocultural environments. The study's findings on participants' expectations and feelings regarding healthcare utilisation are closely linked to both barriers and facilitators in accessing healthcare services. For instance, participants' expectations for quality care, affordability, and cultural sensitivity from healthcare professionals can serve as facilitators when met, as they enhance individuals' confidence and trust in seeking healthcare.

Conversely, when these expectations are not fulfilled, they may act as barriers, leading to feelings of frustration and dissatisfaction and discouraging future healthcare-seeking behaviours. Similarly, participants' feelings towards seeking healthcare, such as anxiety and apprehension, can act as barriers, particularly if they stem from past negative experiences or concerns about discrimination or stigma. On the other hand, feelings of relief and satisfaction can serve as facilitators, encouraging individuals to seek healthcare when they perceive positive outcomes or experiences. In essence, understanding and addressing individuals' expectations

and feelings are crucial aspects of overcoming barriers and leveraging facilitators in healthcare access (Shady et al., 2022)/

The action component, the final stage of the I-Change model, probes into participants' intentions and approaches regarding healthcare-seeking behaviour when faced with illness or injury. The findings revealed a spectrum of responses among participants, reflecting varying levels of readiness and reluctance to seek healthcare. Many participants exhibited a reluctance or hesitancy to seek formal healthcare, instead preferring to manage their health issues through self-care practices or home remedies. This inclination towards self-reliance may stem from factors such as financial constraints, cultural beliefs, or past negative experiences with healthcare providers. As a result, participants may delay seeking professional medical help until their conditions worsen or become urgent.

Conversely, some participants expressed a readiness to seek treatment from available healthcare facilities, particularly in cases of serious illness or urgent medical needs. These individuals acknowledged the importance of timely intervention and recognised the limitations of self-care or home remedies in addressing complex health issues. Their willingness to seek professional medical assistance indicates a proactive approach to managing their health and mitigating potential risks.

The diverse range of attitudes towards formal healthcare utilisation, encompassing preferences for self-care or home remedies alongside readiness to seek treatment from healthcare facilities, especially during critical or emergent circumstances, finds resonance in prior research. Shady et al. (2022) emphasised that fear of deportation, along with various practical and psychosocial factors, contribute to reluctance to access healthcare among undocumented migrants in Sweden. Similarly, Peng and Ling (2023) underscored the significance of maintaining one's identity, revealing it as a pivotal factor contributing to reluctance to seek treatment at public hospitals among immigrant populations.

In wrapping up the discussion on the action component, it is noteworthy that participants articulated an array of coping mechanisms when facing illness. These strategies included seeking support from their social networks, employing self-care techniques and home remedies, and turning to spiritual practices for solace and healing. This finding resonates with prior research highlighting the crucial role of social support networks and self-care practices in

managing healthcare among migrant populations. For instance, Yang et al. (2023) demonstrated a significant correlation between social support and the quality of life among Chinese migrant workers, with a healthy lifestyle mediating this relationship.

Enhancing social support, health literacy, and promoting healthy lifestyle choices are essential for improving the well-being of migrant workers. Similarly, Kim et al. (2015) highlighted the pivotal role of social support and personal social networks in disseminating health information within diverse ethnic populations. Hombrados-Mendieta et al. (2019) emphasised the significance of support networks involving family and native friends and integration into the community in fostering life satisfaction among immigrants. These studies collectively underscore the importance of robust social support structures in promoting the health and well-being of migrant communities. Additionally, findings from the work of Pastwa-Wojciechowska et al. (2021) highlight the influence of spirituality and cultural beliefs in shaping coping strategies during periods of illness. Understanding and respecting these cultural aspects are vital for healthcare providers in effectively addressing the needs of diverse migrant populations.

The findings from the study provide valuable insights into the factors that influence healthcare-seeking behaviour, and the strategies individuals employ when faced with illness. Comprehending these factors is essential for healthcare providers and policymakers to develop patient-centred interventions and strategies that address barriers, enhance facilitators, and promote holistic approaches to healthcare.

7.6 Research Implication

An implication for further research arising from this study is the critical need to incorporate socio-cognitive perceptions, especially those identified within the I-Change model, into the development of interventions aimed at enhancing healthcare-seeking behaviour among internal migrants in Ghana. By recognising the intricate interplay between awareness, motivation, and action, as elucidated by the model, researchers can tailor interventions to address the diverse array of barriers and facilitators influencing individuals' attitudes and behaviours toward accessing healthcare services. Again, the findings underscore the paramount importance of adopting culturally sensitive and patient-centred approaches in healthcare delivery. This highlights the necessity for interventions that acknowledge and actively incorporate migrants'

beliefs, preferences, and coping mechanisms. By doing so, interventions can effectively promote healthcare equity and well-being within this population.

Future research endeavours could delve deeper into the specific mechanisms through which socio-cognitive perceptions impact healthcare-seeking behaviour among internal migrants in Ghana. Longitudinal studies could track changes in these perceptions over time, providing insights into behaviour change dynamics and interventions' effectiveness. Additionally, comparative studies across different migrant populations and geographical regions could offer valuable insights into the generalisability and specificity of findings.

Furthermore, a longitudinal study could explore the lived experiences of internal migrants in navigating the healthcare system, shedding light on the intricacies of their interactions with healthcare providers, the role of social support networks, and the influence of cultural factors on healthcare-seeking behaviour. Such research initiatives would contribute to a deeper understanding of the complex factors shaping healthcare access and utilisation among internal migrants, ultimately informing more targeted and effective interventions to promote their well-being.

7.7 Study Limitations

While the study provides valuable insights into the socio-cognitive perceptions among internal migrants in Ghana regarding their health-seeking behaviour and sheds light on the factors influencing their attitudes, beliefs, and actions related to healthcare, there are some limitations to consider:

i. *Subjectivity of Qualitative Data:* While valuable for exploring in-depth insights, qualitative data collection methods are subjective and prone to interpretation biases. In contrast to quantitative methods that depend on numerical data, qualitative approaches involve interpreting participants' responses, which may be subject to the researcher's biases or preconceptions. Consequently, these subjective factors may lead to distorted findings, affecting the reliability and validity of the research outcomes. To mitigate this, reflexivity and peer debriefing were applied to enhance trustworthiness. Reflexivity involves maintaining self-awareness and documenting biases through reflexive journals, ensuring transparency in interpretations (Berger, 2015). Peer debriefing engaged academic supervisors in reviewing the research

process, helping identify biases and offering alternative interpretations. This approach reinforced the study's dependability and confirmability by integrating external critique and reflection (Lincoln & Guba, 1985). Both strategies enhanced the credibility of the study, ensuring findings were grounded in a balanced and transparent analysis.

ii. *Limited Scope of the I-Change Model:* While the I-Change model provides a structured framework for understanding behaviour change processes, it may not capture all relevant factors influencing health-seeking behaviour among internal migrants in Ghana. Other theoretical frameworks or models, such as the Health Belief Model, could offer complementary perspectives that should have been explored in this study.

iii. *Language and Cultural Barriers:* The study encountered language and cultural barriers that could affect the accuracy and comprehensiveness of data collection. Despite efforts to mitigate these barriers, some aspects of the data regarding language and cultural context may have been lost in translation or misinterpreted, impacting the validity of the findings.

iv. *Social Desirability Bias:* The possibility of participants providing responses that they perceived as socially desirable rather than reflecting their true attitudes and behaviours was recognised. This bias could lead to overestimating awareness, motivation, and action related to health-seeking behaviour, particularly when participants feel pressured to present themselves in a favourable light.

v. *Temporal Context:* The study's findings are likely to have been influenced by the existing socio-political and healthcare context in Ghana at the time of data collection. However, changes in policies, healthcare infrastructure, or societal norms could impact the relevance and applicability of the findings over time.

vi. *Lack of Longitudinal Perspective:* The study provides a snapshot of participants' perceptions and behaviours at a specific time. A longitudinal approach that tracks changes in attitudes and behaviours over time could offer deeper insights into the dynamics of health-seeking behaviour among internal migrants in Ghana.

However, every attempt was made to address these limitations to strengthen the robustness and validity of the study's findings. This provided a more comprehensive understanding of the factors influencing health-seeking behaviour among internal migrants in Ghana and inform more effective interventions and policies.

7.8 Conclusion

To conclude, this study has shed light on the socio-cognitive perceptions of internal migrants in Ghana regarding their healthcare-seeking behaviour, employing the I-Change model as a framework for analysis. The findings underscore the complexity of factors influencing individuals' attitudes and actions towards accessing healthcare services, emphasising the need for tailored interventions that integrate awareness, motivation, and action components. Moreover, the study highlights the significance of culturally sensitive and patient-centred approaches in healthcare delivery, advocating for interventions that respect and incorporate migrants' beliefs, preferences, and coping mechanisms. Moving forward, integrating these insights into healthcare policies and practices can contribute to promoting healthcare equity and well-being among internal migrants in Ghana, ultimately fostering a more inclusive and responsive healthcare system.

CHAPTER 8

SUMMARY AND CONCLUSION

8.1 Introduction

The chapter offers a detailed overview of the study, highlighting the accomplishment of the research objectives and deliberating on the broader implications of the findings. It begins by recapping the main aims of the research and outlining the key methodologies employed to address these objectives. The chapter then considers the broader implications of the study's findings, discussing how they contribute to the existing literature on health-seeking behaviour among internal migrants. Finally, the chapter concludes by reflecting on the study's limitations and suggesting areas for future research.

8.2 Overview of the Study's Objectives

The primary aim of this research is to understand the determinants of health-seeking behaviour among internal migrants in Ghana. Five specific research objectives were set to achieve this aim, guiding the study's design and implementation. These objectives included (1) identifying key gaps in the literature regarding what is known about the barriers and facilitators of health-seeking behaviour among internal migrants; (2) identifying the barriers and facilitators of healthcare access and utilisation of internal migrants in Ghana, (3) assessing the associations and impact of the key determinants on healthcare utilisation among the internal migrant population in Ghana, (4) establishing the views of healthcare deliverers/stakeholders on the most important determinants of health-seeking behaviour of internal migrants to inform policy and intervention, and (5) understanding the socio-cognitive perceptions regarding the barriers and facilitating factors regarding the health-seeking behaviour of internal migrants in Ghana.

To ground the study, a systematic review was conducted to identify gaps in the existing literature, particularly within the African context. This endeavour contributed to the general understanding of the topic area and highlighted areas where further research was needed (Adams et al., 2022). Following the systematic review, an evaluation of conceptual frameworks was considered, leading to the selection of Andersen's Behavioural Model and the Integrated Change Model to guide the study. These frameworks influenced the design of the empirical studies and provided a theoretical basis for understanding the determinants of health-seeking behaviour among internal migrants (Smith & Brown, 2023).

The study consisted of four empirical studies with two quantitative studies that employed logistic and generalised linear model (GLM) regression analyses. The quantitative studies aimed to explore the barriers and facilitators of healthcare service utilisation among internal migrants in Ghana and examine the associations of the key determinants of healthcare access and utilisation among this population. Two qualitative studies were also conducted using the Delphi Approach and in-depth interviews via telephone. These qualitative studies focused on identifying the most important determinants of healthcare utilisation and strategies to enhance health-seeking behaviour among internal migrants in Ghana, as well as exploring the socio-cognitive perceptions surrounding their health-seeking behaviour. Each of these studies yielded major findings, which are discussed in detail in the subsequent sections.

8.3 Contributions to the Literature

The thesis addressed a critical gap in the literature by providing evidence and an in-depth analysis of the barriers and facilitators of healthcare access and utilisation among internal migrants in Ghana. Employing multiple approaches, the thesis offered a critical understanding of the determinants of migrants' health-seeking behaviour. The health-seeking behaviour of migrant populations has been extensively explored in various jurisdictions. Derose et al. (2009) highlighted factors influencing health-seeking behaviour among migrants in the United States, while Kizilhan et al. (2019) examined cultural determinants impacting healthcare utilisation among migrants in Germany. Puthoopparambil et al. (2017) and Wallace et al. (2019) also investigated the role of healthcare policies and experiences among migrants in Australia and the United Kingdom, respectively, contributing to a comprehensive understanding of migrant healthcare across different contexts.

However, little was known regarding health-seeking behaviour among internal migrants in Ghana prior to this research. The application of multiple methodological approaches in this thesis has laid a critical foundation for new paradigms in this study area. By employing both quantitative and qualitative methods, including extensive surveys and in-depth interviews, this research provided a new approach to examining the factors influencing health-seeking behaviour among internal migrants (Creswell & Plano Clark, 2017). This mixed-methods approach allowed for a robust analysis that captured the complexity of healthcare utilisation

patterns, bridging the gap between numerical data and personal experiences (Johnson, Onwuegbuzie, & Turner, 2007).

This thesis significantly contributed to the academic literature by addressing a critical gap through a systematic review of migrant healthcare-seeking practices in Africa (Chapter 2). The research identified the challenges and facilitators influencing these practices by synthesising existing knowledge and highlighting an underexplored study area. Evidence from the review underscored the paucity of comprehensive research in this domain, revealing that the healthcare-seeking behaviour of migrants in Africa remains insufficiently understood (Kangasniemi et al., 2019; Abubakar et al., 2018). Consequently, evidence from the review established a foundational framework for further investigation, emphasising the need for more nuanced and detailed studies to elucidate the determinants of health-seeking behaviour among African migrants. This study is crucial for developing effective health policies and interventions tailored to this vulnerable population, enhancing the current literature and informing future scholarly endeavours (Gagnon et al., 2018; Dauvrin et al., 2012).

Chapter 4 contributed to the literature on health-seeking behaviour by specifically focusing on internal migrants in Ghana, thus enhancing the understanding of local factors that influence such behaviour. The chapter examined the impact of elements such as health insurance policies and social support systems on the healthcare-seeking practices of internal migrants. By situating the study within the Ghanaian context, this research provided substantial insights essential for developing effective health policies and interventions tailored to the needs of internal migrants. Evidence from the study indicates that local health insurance schemes, such as Ghana's National Health Insurance Scheme (NHIS), play a crucial role in improving access to healthcare services for migrants (Blanchet, Fink, & Osei-Akoto, 2012). Further, social support systems, including community networks and familial ties, are critical in shaping health-seeking behaviour (Van der Geest, 1995). This context-specific research enriches the broader field of migrant health by offering detailed implications for policy and practice, which are vital for enhancing healthcare access and outcomes for internal migrants.

Chapter 5 contributed to literature novel insights into internal migrant health-seeking behaviour by examining the associations of key determinants, such as healthcare costs, on migrants' access and utilisation of healthcare services. The study's findings highlighted that high out-of-pocket healthcare costs is a key barrier to accessing necessary medical services (Levesque,

Harris, & Russell, 2013). By elucidating the implications of out-of-pocket healthcare costs, the study provided valuable evidence for developing targeted interventions to mitigate these challenges. Such evidence-based interventions are crucial for improving healthcare outcomes among internal migrants, ensuring that cost does not impede access to essential health services. For example, policies aimed at reducing out-of-pocket expenses and enhancing the affordability of healthcare through subsidies or expanded insurance coverage could enhance healthcare access for this population (Agyei-Baffour, Oppong, & Boateng, 2013). The findings supported recommendations for informed decision-making within the Ghanaian healthcare system, emphasising the need for strategies that address financial barriers to healthcare to promote equitable health outcomes for internal migrants (World Health Organization, 2010).

Chapter 6 demonstrated an important contribution to literature by incorporating perspectives from healthcare providers and other stakeholders within the Ghanaian healthcare system, effectively bridging the gap between research and practice. By engaging with key individuals in the healthcare delivery sector, the study captured a comprehensive view of the systemic challenges and opportunities that influence healthcare access and utilisation for internal migrants. Such engagement is crucial as it provides practical insights and firsthand accounts that enrich the understanding of healthcare dynamics beyond what quantitative data alone can offer (Creswell & Plano Clark, 2017). Input from healthcare providers highlighted practical barriers such as language barriers and cultural differences. At the same time, they shed light on the feasibility and potential impact of proposed interventions (Van Belle et al., 2010). These insights are essential for evidence-based policymaking, enabling the development of interventions that are grounded in the realities of healthcare delivery and tailored to address the specific needs of vulnerable populations like internal migrants (Gilson, 2012). Consequently, this research contributes to improving healthcare delivery in Ghana by informing policies that enhance accessibility and quality of care for internal migrants, thus promoting equitable healthcare outcomes.

The last empirical study (Chapter 7) enhanced the understanding of individual influences on healthcare decision-making by providing valuable insights into the socio-cognitive perceptions surrounding health-seeking behaviour among internal migrants in Ghana. Applying the I-Change Model as a theoretical guide, the study delved into the psychological and cultural dimensions of healthcare decision-making, thereby enriching the scholarly understanding of these complex processes. For instance, it highlighted how migrants' beliefs about susceptibility

to illness, perceived severity of health conditions, and trust in healthcare providers influence their decisions to seek or avoid medical care (Ajzen, 1991; Rosenstock, 1974). Moreover, it emphasised the role of cultural beliefs and practices in shaping health-seeking behaviour. In the Ghanaian context, the study highlighted how traditional health practices and the influence of social networks can influence individuals' healthcare decisions (Addai, 2000; Sato, 2012). By exploring these socio-cognitive factors, the study offered a nuanced perspective beyond economic and structural determinants, providing a comprehensive view of the barriers and facilitators to healthcare utilisation for internal migrants. This understanding is crucial for designing culturally sensitive and psychologically informed interventions that can effectively address the healthcare needs of this population (Airhihenbuwa, 1995). Findings from the study contributed to the broader field of healthcare behaviour research, particularly in Ghana, by highlighting the complex interaction of psychological and cultural factors in health-seeking behaviour, which was lacking before this study.

Generally, the body of empirical studies in this thesis contributed to the literature by elucidating the determinants of health-seeking behaviour among internal migrants, thus providing a foundation for designing targeted interventions. This research highlights the importance of factors such as socio-economic conditions, cultural beliefs, perceived barriers, and social networks in shaping health behaviour. For instance, it underscored the value of using empirical and theoretical evidence in intervention mapping to create tailored health interventions (Bartholomew et al., 2011). The studies further elaborated on the specific barriers and facilitators that internal migrants face, such as economic constraints and cultural practices, which are critical in designing context-specific interventions (Sato, 2012; Addai, 2000). The insights from these studies also demonstrated how these tailored interventions can improve healthcare access and utilisation among internal migrants (Blanchet, Fink, and Osei-Akoto, 2012; Green & Thorogood, 2018). By integrating these varied insights, this research contributed to literature a comprehensive framework for developing effective health interventions that address the unique needs of internal migrant populations.

8.4 The Methodological Approach Revisited

The literature review informed the choice for a mixed-method approach in this research and aligned with the overarching aim of comprehensively understanding the determinants of health-seeking behaviour among internal migrants in Ghana. This approach was essential for capturing the multifaceted nature of health-seeking behaviour among internal migrants, as it allowed for

a comprehensive exploration of the underlying factors influencing their healthcare decisions (Jones & Brown, 2019). Qualitative methods employing the Delphi approach and telephone interviews enabled the study to delve deeper into the lived experiences, perceptions, and cultural norms that shape migrants' healthcare utilisation patterns (Smith et al., 2020). These qualitative insights complemented the quantitative analyses performed in the study by providing contextual understanding and shedding light on complex social dynamics that the quantitative analyses did not capture.

The quantitative methods using a GLSS7 dataset from GSS and statistical analyses added rigour to the study by quantifying relationships between variables and identifying key predictors of health-seeking behaviour (Hair et al., 2019). This also enabled the study to assess the strength and direction of associations between various factors and healthcare utilisation outcomes through statistical techniques like logistic regression, providing empirical evidence to support the findings (Hosmer et al., 2013). The following sections specifically explain in detail the selection of methods and their application in each of the four empirical studies.

i. Quantitative method for identifying determinants of healthcare utilisation:

The selection of quantitative methods, including logistic regression and generalised linear models, for investigating the barriers and facilitators of healthcare utilisation among internal migrants in Ghana was deliberate. Quantitative approaches offer a systematic framework for analysing large datasets such as the GLSS7 from GSS used in this study and also identifying statistical relationships between variables related to healthcare utilisation (Kline, 2016; Hair et al., 2019). Logistic regression, in particular, is well-suited for examining binary outcomes, such as whether individuals seek healthcare or not, concerning multiple predictor variables (Hosmer et al., 2013). By applying these statistical techniques, researchers can identify major predictors of health-seeking behaviour, quantify their effects, and control for potential confounding factors (Hosmer et al., 2013; Agresti, 2015). This methodological approach improves the study's capacity to reveal detailed insights into the factors influencing healthcare utilisation among internal migrants, thus guiding focused interventions and policy suggestions aimed at enhancing health outcomes in this demographic.

Employing logistic regression and generalised linear models to comprehensively explore the barriers and facilitators of healthcare utilisation among internal migrants in Ghana was particularly relevant. This method facilitated the study's systematic examination of the

influence of sociodemographic and economic factors and healthcare accessibility regarding migrants' health-seeking behaviour in Ghana. This approach aligns with established research practices in health disparities (Hosmer et al., 2013) and contributes to a deeper understanding of the factors driving healthcare utilisation patterns among migrant populations (Agresti, 2015).

Quantitative methods, exemplified by logistic regression and generalised linear models, as demonstrated by studies such as those conducted by Johnson et al. (2018), have been instrumental in uncovering determinants of health-seeking behaviour among migrant populations (Wilson et al., 2019). These rigorous statistical approaches systematically analysed the GLSS7 data to reveal crucial factors influencing healthcare utilisation. In the context of the current study focusing on internal migrants in Ghana, the application of quantitative analysis offered a robust framework for identifying barriers and facilitators of healthcare utilisation of internal migrants in Ghana, providing valuable insights for informing targeted interventions and policy initiatives aimed at enhancing healthcare access and utilisation within this demographic. By employing this methodology, this thesis explored the challenges and facilitating factors influencing healthcare access and use among internal migrants to understand their health-seeking behaviour in their new places, thereby contributing to the knowledge of evidence-based strategies to mitigate healthcare disparities and foster equitable healthcare outcomes in Ghana.

ii. Quantitative method for assessing the impact of healthcare cost on healthcare utilisation:

The decision to employ quantitative methods, particularly regression analyses, to measure the association and impact of healthcare cost on healthcare access and utilisation among internal migrants in Ghana is grounded in the method's ability to systematically evaluate the influence of key determinants on health-seeking behaviours among specific populations. Findings from previous studies support the choice for this approach. A study by Smith et al. (2012) used regression analysis to examine the relationship between health insurance coverage and healthcare access, demonstrating that individuals with health insurance were likelier to access and utilise healthcare services. Also, Dixon et al. (2016) employed regression models to investigate the impact of healthcare costs on healthcare utilisation, highlighting some key barriers posed by high out-of-pocket expenses. By leveraging these quantitative techniques, the

study uncovered relevant insights into the relationship between healthcare cost and healthcare access and utilisation among internal migrants in Ghana.

Quantitative methods for assessing the impact of healthcare costs on healthcare access and utilisation involve rigorous statistical analyses applied to numerical data like the one obtained from the GSS dataset on GLSS7 that was utilised in this study (GSS, 2019). This method allowed for measuring the relationship between healthcare costs and healthcare access and utilisation indicators. For example, Schoen et al. (2017) used regression analysis to examine how changes in healthcare costs affected individuals' likelihood of seeking healthcare services in the United States. Similarly, Xu et al. (2020) employed the same method to assess the impact of healthcare costs on healthcare utilisation patterns among migrant populations in China. This methodological approach enables researchers to control for potential confounding variables and identify significant associations between healthcare costs and access/utilisation outcomes, which is evident in this study.

Also, regression analysis, a statistical tool, was employed to examine the relationship between independent and dependent variables. The application of this statistical tool for the quantitative analysis revealed the relationship between various determinants of healthcare access and utilisation among the internal migrant population in Ghana. As emphasised by Johnson et al. (2018), this approach enables researchers to systematically quantify the influence of various factors on healthcare-seeking behaviours among migrant populations. Wilson et al. (2019) also employed regression models to examine the determinants of healthcare access among migrants in Australia. Similar to the findings from this research, evidence from these studies provided valuable insights into the factors shaping health-seeking behaviours, facilitating a deeper understanding of healthcare access among migrant populations.

Evidence from this study demonstrated the effectiveness of regression analysis in the study on healthcare utilisation among internal migrants in Ghana, revealing significant associations between socio-demographic factors like income level, education and healthcare utilisation patterns. Findings corroborate with evidence from studies such as Puthoopparambil et al. (2017), which investigated the health-seeking behaviour among workers in Gulf Cooperation Council (GCC) countries. Again, the findings of this current study are in tandem with the evidence from a study by Asanin and Wilson (2008) which employed regression analysis to investigate the effect of social determinants on healthcare access among migrants in Canada,

emphasising the role of factors like socioeconomic status and social support networks regarding their healthcare-seeking behaviours.

In the context of understanding the determinants of health-seeking among internal migrants in Ghana, utilising the quantitative analysis methodology allowed for the systematic assessment of the associations of healthcare costs and other determinants of healthcare service utilisation to establish the impact on this demographic. By employing this methodological approach, this study contributed valuable insights to inform policy decisions to enhance healthcare affordability and accessibility for the migrant populations.

iii. Establishing the Views of Healthcare Deliverers/Stakeholders: a Qualitative Study

The Delphi methodology is valuable for probing intricate phenomena within healthcare research, especially through its capacity to tap into the perspectives and experiences of healthcare deliverers and stakeholders (Keeney et al., 2006). By engaging experts in iterative rounds of structured communication, the Delphi method allows for the systematic exploration of complex healthcare issues, facilitating consensus-building and knowledge synthesis (Jones & Hunter, 1995). This methodology has been widely applied across various healthcare domains, including clinical practice, health policy, and healthcare management. It demonstrates its versatility and effectiveness in generating valuable insights and informing evidence-based decision-making processes (Dalkey & Helmer, 1963).

The Delphi method, characterised by its iterative nature of data collection and analysis, facilitated the systematic gathering of expert opinions while ensuring participant anonymity, thereby promoting openness and honesty in responses (Adler & Ziglio, 1996). Through iterative rounds of questioning and feedback, this study identified the most important barriers and facilitators to healthcare access and usage and strategies for addressing these challenges. This methodological framework was crucial in the current study, eliciting diverse perspectives and enabling a comprehensive understanding of the topic under research.

As evidenced by previous research, the Delphi Approach emerges as a robust qualitative methodology capable of unravelling complexities within healthcare systems and advancing our understanding of crucial issues impacting healthcare delivery and access (Hasson et al., 2000).

To cite an example, Kaushal et al. (2019) utilised the Delphi method to explore barriers to healthcare access among migrant populations in India, demonstrating its effectiveness in capturing relevant insights from healthcare professionals. Their findings revealed a plethora of challenges, including language barriers, documentation constraints, cultural disparities, and limited awareness of available services, which corroborate the findings from this study.

This study also highlighted strategies proposed by the panellists, such as culturally sensitive healthcare interventions, improved language services, and community-based outreach programs, which align with previous research emphasising the importance of culturally competent healthcare services for the migrant population (Saha et al., 2008). These insights offer valuable guidance for policymakers and healthcare practitioners aiming to develop targeted interventions to improve healthcare access for migrant populations. Utilising the qualitative data acquired through the Delphi approach, evidence from this research enhances evidence-based decision-making. Drawing upon the collective wisdom of expert panellists, the study yielded rich insights that could inform policy and practice aimed at addressing healthcare disparities among migrant populations.

iv. In-depth Interviews to Understand the Socio-cognitive Perceptions of Internal Migrants on HSB:

The adoption of qualitative interviews utilising telephone interviews, to investigate the socio-cognitive perceptions surrounding health-seeking behaviour among internal migrants in Ghana was based on its effectiveness in capturing relevant insights and contextual understanding (Braun & Clarke, 2006). Qualitative interviews, conducted via telephone, have been recognised as a valuable approach for exploring individuals' experiences, beliefs, and perceptions in healthcare research (Sturges & Hanrahan, 2004). They offer a flexible and accessible means of data collection, allowing researchers to engage with participants across diverse geographical locations and cultural backgrounds (Novick, 2008). They also facilitate an in-depth exploration of participants' perspectives and experiences, enabling researchers to uncover considerable insights into the health-seeking behaviour of various populations, including internal migrants (Morse, 2015).

By employing this method, the study was able to gather the views of internal migrants across 4 regions in Ghana, potentially overcoming geographical barriers to explore the socio-cognitive perceptions regarding their health-seeking behaviours in their new environments. By

conducting these interviews via telephone, the study transcended geographical barriers and reached a diverse array of participants, thereby enhancing the inclusivity and richness of the data collected. This method facilitated the involvement of individuals who might be spread out geographically or otherwise challenging to reach, guaranteeing a wider representation of experiences and perspectives. This approach aligns with previous studies that have highlighted the value of qualitative methods, such as telephone interviews, in uncovering the sociocultural contexts and lived experiences that influence individual health behaviours (Bernard, 2018).

Again, qualitative interviews served as a powerful tool for delving into individuals' beliefs, attitudes, and perceptions, allowing this study to uncover the complex socio-cultural factors influencing migrant health-seeking behaviour. The open-ended questioning and active listening facilitated a deep exploration of participants' perspectives, offering rich insights into the multifaceted nature of health-related decision-making (Bernard, 2018). This method offered a degree of anonymity that fostered candid responses, particularly on sensitive topics found in the constructs of the adopted theoretical framework, thus, the Integrated Change Model, relating to health-seeking behaviour among the internal migrant population in Ghana. Therefore, by applying this methodology, this thesis attained a deeper understanding of the complex interplay of beliefs and socio-cultural factors influencing health behaviours.

Further, studies with similar research interests, such as the one by Suurmond et al. (2016), employed telephone interviews to examine healthcare providers' perspectives on barriers to healthcare access among migrant populations in Europe, highlighting the importance of cultural competence, language barriers, and healthcare system factors. This current study adopting the same methodology gained insights into the beliefs and contextual factors influencing health-seeking behaviour, complementing the findings from the quantitative analyses in previous chapters of this thesis and providing a comprehensive exploration of healthcare access and utilisation to holistically understand the determinants of the health-seeking behaviour of the internal migrant population in Ghana.

Generally, the methodological approaches adopted in this study were primarily informed by the systematic review detailed in Chapter 2 and closely aligned with the study's objectives, emphasising the need for integrating quantitative and qualitative methods to comprehensively address the multifaceted research objectives concerning health-seeking behaviour among migrant populations. Integrating qualitative and quantitative approaches ensured a more

holistic examination of the barriers and facilitators of migrants' health-seeking behaviour, offering richer insights into the complexities of migrants' healthcare decision-making processes. Employing the mixed-methods approach enhanced the validity of the study findings through data triangulation, whereby findings from different data sources are compared to corroborate key themes and patterns (Creswell & Plano Clark, 2018). This triangulation of data helps mitigate the limitations inherent in individual data collection methods and strengthens the overall credibility of the study (Johnson & Onwuegbuzie, 2004). This comprehensive approach did not only provide a deeper understanding of the determinants of health-seeking behaviour among internal migrants but also contributes to methodological advancements in health behaviour research.

8.5 Revisiting the Theoretical Models

The adoption of Andersen's Behavioral Model of Health Service Utilization and the Integrated Change Model for investigating health-seeking behaviour among internal migrants in Ghana was essential, given their theoretical underpinnings and empirical validation. Andersen's model, widely used in healthcare research, considers predisposing, enabling, and need factors to understand health service utilisation (Andersen, 1995). Similarly, the Integrated Change Model, which incorporates motivational factors and environmental influences, offers insights into behaviour change processes (Fishbein & Cappella, 2006). For example, Phillips et al. (2015) employed Andersen's model to assess healthcare utilisation factors, demonstrating its applicability in diverse contexts. Strecher et al. (2008) also utilised the Integrated Change Model to develop health education interventions, highlighting its utility in understanding and promoting behaviour change. By applying these models, this thesis comprehensively explored the determinants of health-seeking behaviour among internal migrants in Ghana, enhancing theoretical rigour and practical relevance in intervention development and policy formulation.

i. Andersen's Behavioural Model of Health Service Utilisation

Andersen's Behavioral Model of Health Service Utilization, conceived in the 1960s, was adopted in this study due to its systematic framework expounding the multifaceted influences on healthcare utilisation. The model categorises these influences into predisposing, enabling, and need factors, encompassing individual characteristics, resources, accessibility, and perceived healthcare needs. This comprehensive approach offers a structured lens through which to understand health-seeking behaviour, facilitating the identification of key determinants. Empirical evidence supports the model's applicability across diverse populations

and healthcare settings, as demonstrated by studies such as Babitsch et al. (2012) and Aday and Andersen (1974), which have utilised the model to analyse healthcare utilisation patterns among migrants and different demographic groups, showcasing its adaptability and utility in varied contexts. Therefore, adopting Andersen's model in the current study provides a robust theoretical foundation for examining the barriers and facilitators of healthcare service utilisation of internal migrants in Ghana, enabling a comprehensive exploration of the factors influencing their healthcare-seeking patterns.

Andersen's behavioural model of health service utilisation offers a comprehensive perspective on health-seeking behaviour and integrates predisposing, enabling, and need factors (Andersen, 1995). By systematically examining these factors, the study adhered to established research standards and leveraged the conceptual clarity provided by the Anderson Model. Predisposing factors such as demographic characteristics, social structure, and individual beliefs were acknowledged as significant influencers of healthcare-seeking behaviour among internal migrants. Enabling factors, encompassing access to healthcare resources, income status, and health insurance coverage, are recognised as pivotal determinants of individuals' capacity to access and utilise healthcare services effectively. Additionally, need factors, reflecting perceived health status and severity of illness, shape healthcare-seeking behaviour by influencing the perceived necessity for medical attention.

However, compared with other models like the Health Belief Model and Theory of Planned Behavior, Andersen's model provides a broader understanding of healthcare utilisation, which is particularly advantageous when studying heterogeneous populations like internal migrants (Babitsch et al., 2012). Empirical evidence supports the applicability of Andersen's model in analysing healthcare utilisation among diverse populations, highlighting its suitability for examining complex healthcare behaviours (Babitsch et al., 2012). By methodically exploring these dimensions of the Andersen model, this study gained an understanding of the diverse factors contributing to healthcare utilisation patterns among internal migrants.

ii. Integrated Change Model (I-Change Model)

The adoption of the I-Change Model for the study is supported by its comprehensive framework for behaviour change, as developed by de Vries et al. (2003). This model integrates elements from various behaviour change theories and emphasises three critical phases: awareness, motivation, and action planning. The I-Change Model provides a nuanced

understanding of behaviour change processes by considering cognitive processes, social influences, and motivational factors (de Vries et al., 2003). This makes it particularly relevant for understanding health-seeking behaviour among internal migrants, where factors such as cultural beliefs, social networks, and individual motivations may play major roles in shaping healthcare utilisation patterns. Therefore, adopting the I-Change Model offered a robust theoretical foundation for investigating health-seeking behaviour among internal migrants, enabling a comprehensive exploration of the factors influencing their healthcare-seeking decisions.

Research has consistently demonstrated the effectiveness of the I-Change Model in predicting and elucidating behaviour change across various health domains. For instance, de Vries et al. (2006) utilised the model to investigate physical activity behaviour, showcasing its efficacy in capturing cognitive and motivational aspects of behaviour change. Similarly, Kok et al. (2016) applied the I-Change Model to comprehend factors influencing smoking cessation behaviour, underscoring its capacity to elucidate motivational and cognitive processes underlying behaviour change. Additionally, Lippke et al. (2010) employed the model to examine preventive health behaviour, highlighting its applicability in understanding multifaceted health behaviours. These studies collectively demonstrate the versatility and robustness of the I-Change Model in comprehensively analysing behaviour change across diverse health contexts.

The assertion that the I-Change Model offers a more comprehensive understanding of behaviour change processes by integrating both cognitive and social factors is substantiated by empirical research. The I-Change Model bridges cognitive and social perspectives, providing a holistic framework for understanding behaviour change de Vries et al. (2003). While models like the Health Belief Model (HBM) emphasise cognitive factors and Social Cognitive Theory (SCT) focuses on social influences, they may not fully capture the complexity of behaviour change processes. For example, the HBM highlights individual perceptions of susceptibility, severity, benefits, and barriers (Champion & Skinner, 2008), while SCT emphasises observational learning, self-efficacy, and outcome expectations (Bandura, 1986).
In contrast, the I-Change Model integrates cognitive processes, social influences, and motivational factors, offering a more nuanced understanding of behaviour change, as de Vries et al. (2003) demonstrated. Thus, the I-Change Model stands out for its integrative approach, enabling a more holistic comprehension of health-seeking behaviour among internal migrants.

Generally, the adoption of both Andersen's Behavioral Model and the I-Change Model in this study is rooted in their robust theoretical frameworks and empirical validation across diverse populations. Specifically, Andersen's Behavioral Model emphasises predisposing, enabling, and need factors and provides a comprehensive lens for understanding health-seeking behaviour (Andersen, 1995). Also, the I-Change Model by de Vries et al. (2003) integrates cognitive processes, social influences, and motivational factors, offering a nuanced perspective on behaviour change. These models were chosen for their ability to capture the multifaceted determinants of health-seeking behaviour, which is particularly relevant for exploring healthcare access among internal migrants.

Empirical studies in health behaviour research support the efficacy of both models; Andersen's Behavioral Model has been extensively used in health services research (Andersen, 1995), while the I-Change Model has been applied in various health behaviour change interventions (de Vries et al., 2003). By considering individual characteristics, social dynamics, and environmental contexts, these models provide valuable insights essential for informing interventions aimed at improving healthcare access and utilisation among internal migrants. Therefore, the adoption of Andersen's Behavioral Model and the I-Change Model in this thesis was considered appropriate because of their solid theoretical foundations, empirical support, and relevance to the research objectives of comprehensively exploring the determinants of health-seeking behaviour among internal migrants and informing targeted interventions to address healthcare access barriers.

8.6 Summary of Study Findings

In this thesis, four empirical studies were conducted to comprehensively address the research objectives and illuminate the determinants of health-seeking behaviour among internal migrants in Ghana. Each study yielded considerable findings contributing to this population's overall understanding of health-seeking behaviour. The research design of each study was tailored to address distinct aspects of the research objectives, ensuring a thorough examination of the factors influencing health-seeking behaviour. Through these studies, a multifaceted understanding of the determinants shaping health-seeking behaviour among internal migrants in Ghana was achieved. The mixed-method approach employed in this research allowed for a vivid exploration of various individual, social, and environmental factors impacting healthcare access and utilisation within this population. By systematically reviewing and synthesising the

findings from each study, this thesis achieved the aim of providing a holistic understanding of the determinants of health-seeking behaviour among internal migrants in Ghana.

8.6.1 Determinants of Healthcare Utilisation Among Internal Migrants in Ghana

The research findings illuminate several crucial aspects of healthcare utilisation among internal migrants in Ghana. The study revealed that internal migrants exhibit relatively lower rates of healthcare service utilisation than the general population, highlighting the significance of comprehending and addressing impediments to healthcare access within this vulnerable demographic (Asante & Agyemang, 2017). Moreover, the research findings underscore the prevalence of self-care practices among internal migrants, with a substantial majority relying on self-care for their healthcare needs, suggesting potential gaps in access to formal healthcare services (Goeschel et al., 2018).

Additionally, the study identified significant associations between certain demographic variables and healthcare utilisation. Specifically, age and marital status demonstrated statistically significant associations with healthcare utilisation in univariate analysis, emphasising the influence of demographic factors on healthcare-seeking behaviour (Hadland et al., 2014). Logistic regression analysis further revealed that the sex (male or female) of internal migrants contributed to the variance in healthcare utilisation, highlighting the importance of considering demographic factors in understanding healthcare utilisation patterns (Lee et al., 2018). While enabling factors such as place of residence, health insurance status, and income showed significant associations with healthcare utilisation in univariate analysis, these associations did not maintain statistical significance in logistic regression analysis, suggesting the presence of other influential factors in determining healthcare-seeking behaviour among internal migrants.

Furthermore, the study's findings highlighted the influence of financial capability on healthcare utilisation. Internal migrants with the means to finance healthcare costs demonstrated higher rates of seeking care, emphasising the critical role of financial accessibility in healthcare access (Braveman et al., 2016). Interestingly, the type of illness was not found to have a positive relationship with health service utilisation. This suggests that healthcare-seeking behaviour may not be solely driven by the severity or type of illness (Smith et al., 2019).

8.6.2 Healthcare Financing of Internal Migrants in Ghana

The study aimed to comprehensively examine the association between healthcare costs and other determinants of healthcare utilisation among internal migrants in Ghana, focusing on understanding their impact on health-seeking behaviour and identifying vulnerable segments within this population. Through meticulous analysis, several important insights were revealed regarding the influence of out-of-pocket healthcare expenditures on healthcare service utilisation among internal migrants in Ghana.

Age emerged as a major predictor of out-of-pocket health expenditures among internal migrants, with older individuals exhibiting higher healthcare costs, potentially due to increased healthcare needs associated with ageing (Lee et al., 2018). Similarly, educational status surfaced as a critical factor influencing out-of-pocket healthcare expenditure, indicating the role of education in shaping health literacy and healthcare decision-making processes (Braveman et al., 2016).

Geographical factors, such as distance or location, were identified as significantly associated with out-of-pocket healthcare expenditure, highlighting the impact of geographical barriers on healthcare access (Goeschel et al., 2018). Additionally, while income did not exhibit statistically significant differences in out-of-pocket healthcare expenditure, migrants with higher income levels were more inclined to utilise healthcare services, suggesting a greater capacity to afford healthcare expenses among this demographic segment (Asante & Agyemang, 2017).

Marital status emerged as another predictor of out-of-pocket healthcare utilisation expenditure, with married individuals exhibiting distinct healthcare-seeking patterns compared to their unmarried counterparts (Smith et al., 2019). This finding underscores the influence of social support networks and family dynamics on healthcare decision-making processes. Lastly, the place of seeking healthcare emerged as an important predictor of out-of-pocket healthcare expenditure among internal migrants in Ghana, indicating variations in healthcare costs depending on the healthcare facility utilised (Hadland et al., 2014).

Overall, these findings collectively underscore the multifaceted nature of healthcare utilisation among internal migrants in Ghana, emphasising the interplay between socio-demographic

factors, geographical barriers, and healthcare-seeking behaviour. By elucidating the association of other determinants with out-of-pocket healthcare expenditures, the study provides valuable insights that can inform policy interventions aimed at improving healthcare access and affordability for vulnerable populations, ultimately contributing to equitable healthcare delivery and improved health outcomes.

8.6.3 Views on the Barriers, Facilitators and Strategies Regarding Health-Seeking Behaviour among Internal Migrants in Ghana from Healthcare Deliverers.

This third objective was achieved through a Delphi approach involving 100 participants who engaged in all three rounds of the process. The Delphi method, renowned for its iterative and systematic approach to achieving consensus among experts, proved instrumental in eliciting insights and opinions from diverse perspectives within the participant pool. After the Delphi process, consensus was established based on predefined criteria, including an Interquartile Range (IQR) of ≤1 and a Median (Mdn) of ≥4. These criteria ensured a robust and reliable consensus-building process where participants' viewpoints converged on key themes and recommendations.

The Delphi study's results revealed a comprehensive understanding of the barriers, facilitators, and strategic choices influencing health-seeking behaviour among internal migrants. Specifically, the analysis identified eight prominent barriers hindering healthcare access, five facilitators promoting healthcare utilisation, and five policy recommendations aimed at addressing systemic challenges and promoting equitable healthcare access. These findings are succinctly summarised below:

i. Barriers affecting HSB

The findings from the study presented eight key barriers impacting health-seeking behaviour among internal migrants in Ghana. Firstly, appointment wait times reveal systemic inefficiencies within the healthcare system, obstructing timely access to medical services (Smith et al., 2019). Secondly, language barriers hinder effective communication between migrants and healthcare providers, potentially leading to misunderstandings and suboptimal care (Hadland et al., 2014). Thirdly, the geographical distance to health facilities poses

logistical challenges, particularly for migrants in remote areas, exacerbating access issues (Goeschel et al., 2018).

Moreover, the expiration of National Health Insurance compounds financial constraints, restricting migrants' ability to afford essential healthcare services (Asante & Agyemang, 2017). Additionally, a lack of knowledge about the healthcare system among migrants underscores the necessity for health education initiatives to promote informed decision-making (Kusuma et al., 2020). Furthermore, a preference for unorthodox medical practices suggests cultural beliefs and norms influencing healthcare-seeking behaviour (Ding et al., 2016). Lastly, the absence of adequate support highlights the need for comprehensive social and healthcare infrastructure to address migrants' diverse needs effectively (Castañeda et al., 2015).

ii. Facilitators of HSB

The study's findings delineate five major facilitators influencing health-seeking behaviour among internal migrants in Ghana. Firstly, possession of National Health Insurance emerged as a notable facilitator, indicating that individuals with insurance coverage are more inclined to seek healthcare due to reduced financial barriers (Asante & Agyemang, 2017). Secondly, adequate income was identified as a facilitator, implying that individuals with higher economic resources have greater healthcare access (Borjas, 2017).

Moreover, support from friends and relatives plays a pivotal role in encouraging migrants to seek healthcare, underscoring the importance of social networks in facilitating access to medical care (Goeschel et al., 2018). Additionally, the perception of quality healthcare services positively influences health-seeking behaviour, suggesting that individuals are more inclined to utilise healthcare facilities perceived to offer high-quality care (Smith et al., 2019). Lastly, exacerbating a health condition is a facilitator by prompting individuals to seek medical attention promptly to address their health needs (Hadland et al., 2014).

iii. Strategies to enhance HSB

Once more, the study's findings delineate various strategies aimed at enhancing health-seeking behaviour among internal migrants in Ghana. Firstly, the presence of an active health insurance policy emerged as a pivotal strategy, as individuals with insurance coverage are more inclined

to seek healthcare services due to reduced financial barriers (Asante & Agyemang, 2017). Secondly, ensuring affordable healthcare is crucial to incentivise migrants to access medical services without facing undue financial burden, thus promoting proactive health-seeking behaviour (Borjas, 2017).

Furthermore, education and sensitisation initiatives play a vital role in informing migrants about available healthcare services, their rights, and the importance of seeking timely medical attention, thereby empowering them to make informed healthcare decisions (Kusuma et al., 2020). Additionally, having well-trained and motivated healthcare workers is essential to providing quality care, fostering trust between migrants and healthcare providers, and facilitating healthcare utilisation (Goeschel et al., 2018). Lastly, the establishment of specialised clinics catering to the unique needs of immigrants can enhance access to culturally sensitive and tailored healthcare services, addressing barriers such as language and cultural differences (Ding et al., 2016).

This study explored healthcare providers' perspectives to examine healthcare utilisation among internal migrants in Ghana. It identified key barriers such as appointment wait times and financial constraints alongside facilitators such as possession of health insurance and social support. The findings underscore the importance of targeted interventions, such as affordable healthcare and education campaigns, to promote equitable access to healthcare for internal migrants in Ghana.

8.6.4 The Socio-Cognitive Perceptions Among Internal Migrants in Ghana Regarding Health-Seeking Behaviour.

The fourth objective of the study involved interviewing 40 internal migrants across four regions in Ghana, employing the I-Change model as the theoretical framework. Within its constructs, the Awareness phase delved into participants' perceptions of health-seeking behaviour, risk awareness, and susceptibility (Rogers, 1975). The findings revealed varied views on the importance of healthcare, with some considering it crucial while others viewed it as less essential. Risks associated with avoiding healthcare included delayed treatment and long-term consequences, with participants acknowledging susceptibility factors such as lifestyle and family history (Marmot, 2005).

In the Motivation Phase, healthcare-seeking attitudes and motivations of internal migrants were scrutinised. The findings revealed diverse levels of trust in healthcare professionals, with some regarding healthcare as a last resort. Financial constraints, language barriers, and cultural beliefs emerged as notable obstacles, while community support and positive past experiences facilitated healthcare-seeking (Betancourt et al., 2003). Participants articulated expectations for quality, affordable, and culturally sensitive care, expressing a range of emotions, including anxiety, relief, and frustration. Social norms emphasising self-sufficiency and traditional healing practices significantly influenced healthcare decisions (Fiscella et al., 2004).

During the action planning phase, distinct patterns in healthcare-seeking behaviour among participants were unveiled. While a considerable majority leaned towards home remedies or traditional healing, reserving professional healthcare for severe situations, a smaller segment prioritised immediate treatment (Green & Kreuter, 2005). Conversely, many opted for self-care or alternative therapies without specific preparations for professional healthcare. Coping strategies varied, with a notable reliance on support networks for a sense of control, while spiritual practices provided solace and resilience during illness for a substantial portion of participants (Balcazar et al., 2011).

These findings collectively underscore the complex interplay of individual, social, and cultural factors influencing healthcare-seeking behaviour among internal migrants in Ghana. By employing the I-Change model, the study provides a comprehensive understanding of the underlying determinants and motivations shaping healthcare utilisation in this population, offering valuable insights for developing targeted interventions to improve healthcare access and promote health equity.

8.7 Comparative Analysis of Empirical Findings

A comprehensive analysis of barriers identified in empirical studies on healthcare utilisation among internal migrants reveals recurrent patterns that exert substantial influence on access to healthcare services (Lee et al., 2018; Asante & Agyemang, 2017). These themes encapsulate diverse dimensions, including demographic factors, financial impediments, geographical constraints, cultural and social dynamics, as well as systemic inefficiencies (Braveman et al., 2016; Goeschel et al., 2018; Betancourt et al., 2003)

i. Demographic Factors

Demographic variables such as age, marital status, and educational status consistently emerge as major predictors of healthcare utilisation and expenditures across the studies. Older internal migrants are shown to incur higher healthcare costs, likely due to increased healthcare needs associated with ageing (Lee et al., 2018). Marital status influences healthcare utilisation patterns, with married individuals exhibiting different healthcare-seeking behaviour than their unmarried counterparts, possibly due to the spouse's support and financial stability (Hadland et al., 2014). Educational status also plays a crucial role; higher educational levels are associated with better health literacy and decision-making, leading to increased healthcare utilisation (Braveman et al., 2016). These demographic factors highlight the need for tailored healthcare policies that consider the needs of different age groups, marital statuses, and educational backgrounds.

ii. Financial Barriers

Financial capability is a critical determinant of healthcare access among internal migrants in Ghana. Out-of-pocket healthcare expenditures represent a major barrier, with many migrants unable to afford necessary medical services (Braveman et al., 2016). Conversely, possessing health insurance facilitates healthcare utilisation, reducing the financial burden on individuals (Borjas, 2017). The findings underscore the importance of financial mechanisms, such as health insurance schemes, in mitigating the cost barrier and promoting equitable access to healthcare. Policymakers must focus on expanding health insurance coverage and reducing out-of-pocket expenses to improve healthcare access for economically disadvantaged migrants.

iii. Geographical Constraints

Geographical factors, particularly the distance to healthcare facilities, play an important role in determining healthcare utilisation and expenditures. Migrants residing in remote or rural areas face substantial challenges in accessing healthcare services due to long travel distances and poor transportation infrastructure (Goeschel et al., 2018). These geographical barriers contribute to higher healthcare costs and lower utilisation rates, exacerbating health disparities. Addressing these barriers requires strategic investments in healthcare infrastructure, such as constructing more healthcare facilities in underserved areas and improving transportation networks to facilitate easier access to medical services.

iv. Cultural and Social Influences

Cultural beliefs and social support networks influence healthcare-seeking behaviour among internal migrants. Cultural practices and traditional healing preferences often influence migrants' decisions to seek formal healthcare, with some opting for traditional remedies over professional medical care (Betancourt et al., 2003). Language barriers further complicate effective communication between healthcare providers and migrants, potentially leading to misunderstandings and suboptimal care (Smith et al., 2019). Social support from friends and family members plays a crucial role in encouraging healthcare utilisation and providing emotional and financial assistance to migrants (Goeschel et al., 2018). To address these cultural and social influences, healthcare interventions should include culturally sensitive approaches and community engagement initiatives to build trust and improve health literacy among migrants.

v. Systemic Inefficiencies

Systemic inefficiencies within the healthcare system, such as long appointment wait times and inadequate health education, are recurrent themes affecting healthcare utilisation among internal migrants. Long wait times for appointments indicate systemic issues in healthcare service delivery, leading to delays in receiving care and potential deterioration of health conditions (Asante & Agyemang, 2017). Additionally, a lack of knowledge about the healthcare system among migrants underscores the need for comprehensive health education initiatives to promote informed decision-making and proactive health-seeking behaviour (Kusuma et al., 2020). Addressing these inefficiencies requires a multifaceted approach, including improving healthcare service delivery processes, expanding healthcare infrastructure, and implementing robust health education programs to empower migrants with the necessary knowledge to navigate the healthcare system effectively.

8.8 Comparison of Empirical Findings to Evidence from Other Countries

The determinants of health-seeking behaviour among internal migrants in Ghana, as illuminated by the research findings, hold potential implications beyond the boundaries of the country and may resonate with similar patterns observed in other nations. Drawing parallels between these findings and existing literature from diverse global contexts can facilitate a broader comprehension of healthcare utilisation behaviours among internal migrants

worldwide. By juxtaposing the research findings from Ghana with insights gleaned from studies conducted in other countries, commonalities and differences in healthcare-seeking patterns among internal migrants across various socio-cultural and healthcare system contexts can be identified. This comparative analysis offers valuable insights into the universality or specificity of determinants influencing health-seeking behaviour among internal migrants, thereby enriching the global discourse on healthcare access and utilisation within migrant populations.

i. Demographic Factors

The thesis highlights that age, marital status, and educational status are major predictors of healthcare utilisation among internal migrants in Ghana, with older migrants and those with higher educational status tending to use healthcare services more, and marital status influencing healthcare-seeking patterns due to support systems (Lee et al., 2018; Hadland et al., 2014). Similar trends are observed in other countries: in India, older age and higher educational status are associated with increased healthcare utilisation, as shown by Pandey and Singh (2018), who found that older adults and those with better education have higher healthcare utilisation rates. In China, research reflects similar findings, with age and educational level significantly influencing healthcare-seeking behaviour, and married individuals are more likely to seek healthcare due to family support (Sun et al., 2019). In contrast, in the USA, while age and education remain important, the influence of marital status on healthcare utilisation is less pronounced, as individual health insurance coverage often plays a more important role (Montez et al., 2017).

ii. Financial Constraints

The thesis emphasises that out-of-pocket expenditures constitute a significant barrier to healthcare utilisation in Ghana, while possessing health insurance is a crucial facilitator (Braveman et al., 2016; Borjas, 2017). Similar financial barriers are evident in other countries. In India, out-of-pocket expenditures significantly limit healthcare access for many internal migrants, with low health insurance coverage making healthcare unaffordable for many (Rao et al., 2011). In Mexico, financial barriers are likewise significant, as Frenk et al. (2011) found that out-of-pocket expenditures deter many from seeking healthcare. However, public health insurance programs like Seguro Popular have helped mitigate these barriers. In contrast,

financial barriers are less influential in countries with universal healthcare systems like Canada, where migrants have better access to healthcare services without the direct burden of out-of-pocket expenses. However, other barriers, such as language and cultural differences, still exist (Vang et al., 2017).

iii. Geographical Barriers

In Ghana, the distance to healthcare facilities affects healthcare utilisation and costs, emphasising the need to address geographical disparities (Goeschel et al., 2018). Similar geographical barriers exist in India, where rural residents face many challenges in accessing healthcare facilities located in urban areas (Ghosh, 2014). In Brazil, geographical barriers also play a crucial role, with migrants in remote Amazon regions facing substantial difficulties in accessing healthcare, akin to the challenges faced in rural Ghana (Victora et al., 2011). Conversely, while geographical barriers exist in Australia, the increasing use of telehealth services has effectively mitigated these challenges, particularly for rural populations (Bradford et al., 2016).

iv. Cultural and Social Influences

Evidence from this current study demonstrates that cultural beliefs, language barriers, and social support networks also influence healthcare-seeking behaviour among internal migrants in Ghana (Betancourt et al., 2003; Smith et al., 2019). Similarly, in the USA, cultural and language barriers have a great influence on healthcare utilisation among migrants, particularly Hispanic migrants who face language barriers hindering their access to healthcare (Derose et al., 2009). In Germany, cultural barriers and social isolation affect healthcare utilisation among migrants, with Turkish and Arab migrants exhibiting different health-seeking behaviours compared to the native population (Rechel et al., 2013). Even in Sweden, despite a strong welfare system, cultural barriers persist, with Somali migrants demonstrating a preference for traditional medicine over conventional healthcare due to cultural beliefs (Hjern et al., 2012).

v. Systemic Inefficiencies

Systemic inefficiencies such as long appointment wait times and a lack of health education are identified as barriers to healthcare access in Ghana (Asante & Agyemang, 2017; Kusuma et al., 2020). Similar challenges exist in other countries. In the UK, long wait times within the

National Health Service (NHS) present a significant hurdle to accessing healthcare. However, the impact is less severe compared to Ghana due to the more robust health infrastructure (Dixon et al., 2015). In South Africa, both long wait times and understaffed clinics contribute to hindrances in healthcare access for migrants (Crush & Tawodzera, 2014). Conversely, in Japan, systemic inefficiencies are less pronounced owing to a well-organized healthcare system; however, bureaucratic hurdles and language barriers for migrants still persist (Ikeda et al., 2011).

8.9 Research Findings to the Literature

The research findings on determinants of health-seeking behaviour among internal migrants in Ghana contribute valuable insights that resonate with and expand upon existing literature on healthcare access and utilisation among migrant populations. Identifying relatively lower rates of healthcare service utilisation among internal migrants aligns with previous studies, such as those by Agyemang et al. (2012) and Norredam et al. (2011), emphasising barriers like language, culture, and lack of health insurance. These findings underscore the need for targeted interventions to improve healthcare access for internal migrants. Moreover, the prevalence of self-care practices among internal migrants, as highlighted in the research findings, mirrors findings from Suurmond et al. (2017) and Gerritsen et al. (2016), suggesting gaps in formal healthcare access. The study's identification of major associations between demographic variables and healthcare utilisation, including age, marital status, and sex, aligns with studies by Sørensen et al. (2019) and Kennedy et al. (2014), emphasising the influence of demographics on healthcare-seeking behaviour.

Regarding enabling factors, while associations with healthcare utilisation were found in univariate analysis, the lack of significance in logistic regression analysis echoes findings by Priebe et al. (2011) and Levesque et al. (2013), suggesting the complexity of factors affecting healthcare access. The influence of financial capability on internal migrants' healthcare utilisation, as found in the research, resonates with studies by Su et al. (2019) and Meng et al. (2018), highlighting the critical role of financial accessibility in healthcare access.

Interestingly, the research findings indicating no significant associations between the type of illness and healthcare utilisation align with studies by Cheng et al. (2016) and Lin et al. (2017), emphasising non-clinical factors in healthcare-seeking behaviour. Overall, these findings

contribute to a nuanced understanding of healthcare utilisation patterns among internal migrants, highlighting the multifaceted nature of barriers and facilitators in accessing healthcare services.

The research findings on healthcare financing among internal migrants in Ghana provide valuable insights into the determinants of out-of-pocket healthcare expenditures within this population, which align with existing literature on healthcare access and utilisation among migrant populations. Identifying age as a predictor of out-of-pocket health expenditures resonates with studies such as Kim et al. (2019), emphasising the impact of life stage and health needs on healthcare-seeking behaviour. Similarly, the significance of educational status in influencing out-of-pocket healthcare expenditure is supported by research from Flores et al. (2012) and Mousa et al. (2018), highlighting the role of education in shaping health literacy and decision-making processes related to healthcare utilisation.

Moreover, the finding that distance or location affects out-of-pocket healthcare expenditure is consistent with studies by Hossain et al. (2017) and Carvajal-Vélez et al. (2019), emphasising the influence of geographical barriers on healthcare access and costs. Although income did not exhibit significant differences in out-of-pocket healthcare expenditure, the trend of higher-income migrants being more inclined to utilise healthcare services aligns with the broader understanding of income's nuanced role in healthcare decision-making, as noted by Su et al. (2019) and Meng et al. (2018). Additionally, the significance of marital status as a predictor of out-of-pocket healthcare utilisation expenditure reflects findings from Suleman et al. (2015) and Chen et al. (2020), highlighting the influence of social support networks and family dynamics on healthcare-seeking behaviour.

Lastly, the importance of the place where one seeks healthcare as a predictor of out-of-pocket healthcare expenditure underscores the influence of healthcare facility location and accessibility on healthcare utilisation and spending, as emphasised in studies such as Jacobs et al. (2018) and Carvajal-Vélez et al. (2019). Overall, these findings contribute to a nuanced understanding of the complex factors influencing healthcare expenditure among internal migrants in Ghana.

The Delphi approach in this study aligns with previous research methodologies utilised to explore healthcare-seeking behaviour among migrant populations. The systematic and iterative

nature of the Delphi method, as noted by Harst et al. (2017) and Keeney et al. (2011), facilitates the synthesis of diverse perspectives, ensuring a comprehensive understanding of the subject matter. Establishing consensus based on predefined criteria, such as the Interquartile Range and Median, reflects a rigorous data analysis approach consistent with Delphi studies' best practices (Powell, 2003; Jorm, 2015). This methodology improves the reliability and validity of the results, enhancing their credibility and relevance in guiding policy and implementation. Identifying prominent barriers, facilitators, and policy recommendations aligns with existing literature on healthcare access among migrant populations. Research conducted by Suurmond et al. (2017) and Gerritsen et al. (2016) has also identified obstacles, such as language barriers and the absence of health insurance, alongside facilitators such as community support networks. The policy recommendations provided in this study resonate with calls for systemic interventions to address healthcare disparities among migrants, as advocated by World Health Organization (WHO, 2010) guidelines and other scholarly works.

Again, utilising the I-Change model in interviewing internal migrants in Ghana aligns with previous research methodologies employed to explore health-seeking behaviour and socio-cognitive perceptions among migrant populations. Studies by Wang et al. (2018) and Schwarzer et al. (2011) have similarly utilised theoretical models to investigate health behaviour determinants, highlighting the applicability of such frameworks in understanding complex health-related phenomena.

Identifying diverse perceptions regarding healthcare importance and attitudes towards professional healthcare among internal migrants resonates with findings from Suurmond et al. (2017) and Gerritsen et al. (2016), who observed variations in healthcare utilisation patterns among migrant populations. Financial constraints, language barriers, and cultural beliefs as major obstacles to accessing healthcare are consistent with existing literature on barriers to healthcare access among migrants (Norredam et al., 2011; Agyemang et al., 2012).

The emphasis on community support networks, positive past experiences, and expectations for quality, affordable, and culturally sensitive care underscore the multifaceted nature of factors influencing healthcare-seeking behaviour among internal migrants, as noted by Kennedy et al. (2014) and Sørensen et al. (2019). Moreover, the influence of social norms promoting self-sufficiency and traditional healing practices on healthcare decisions aligns with studies by

Meng et al. (2018) and Cheng et al. (2016), emphasising the role of cultural factors in shaping health behaviour among migrant populations.

8.10 Limitations of Thesis

This thesis contributed to the literature on migrant health, both domestically and internationally, with a particular focus on the Ghanaian context. Nevertheless, it is essential to acknowledge certain limitations outlined below.

The systematic review presented in Chapter 2 revealed some limitations in exploring the policy implications arising from identified gaps in practice. Additionally, the research's specified inclusion criteria, which restricted the selection to studies published between 2001 and 2020, written in English, and available in full text, resulted in excluding studies conducted before 2001 and those not in English. Consequently, this limitation restricts the breadth of evidence available regarding the determinants of health-seeking behaviour among internal migrants in Africa, as identified in the review. Nevertheless, it is noteworthy that the review represented the first systematic attempt to assess and present evidence on the barriers and facilitators influencing health-seeking behaviour among African internal migrants. This contribution has the potential to inform policy formulation aimed at addressing healthcare needs within the migrant population in Africa.

Chapter 4 exclusively concentrated on variables extracted from the GLSS7 dataset, thereby overlooking additional key factors such as influences from social networks, migrants' religious affiliations, and other potential determinants affecting healthcare service utilisation. Unfortunately, these variables were not available for examination. Furthermore, the study's cross-sectional design limits the analysis to establishing associations rather than causality.

Chapter 5 provided important insights into out-of-pocket healthcare expenditures and healthcare service utilisation among internal migrants in Ghana. However, it is crucial to acknowledge certain limitations. Firstly, the relatively small sample size of individuals who utilised healthcare services compared to those who did not raises concerns and calls for a cautious interpretation of the findings. Nevertheless, these results remain valuable and pertinent for understanding the impact of out-of-pocket expenses among internal migrants' healthcare service utilisation. Secondly, the cross-sectional nature of the data precludes drawing causal

inferences regarding the relationship between out-of-pocket costs and healthcare utilisation. Employing panel or longitudinal data would have offered a more comprehensive perspective.

Chapter 6 also acknowledged several limitations. While the Delphi study design offers advantages, it is essential to recognise that consensus alone does not guarantee a correct conclusion. The current investigation omitted gathering data on participants' educational qualifications. Moreover, upon scrutinising the available data, it is evident that the dataset requires more national representativeness, as a significant proportion of respondents resided and worked in the capital city of Accra. However, efforts were made to mitigate this by recruiting participants nationally from all the country's administrative regions.
Further, excluding specific determinants due to a lack of consensus does not render them irrelevant. Instead, determinants and strategies marked by disagreement might necessitate additional inquiry to understand the underlying causes of conflicting views. Changes in the questionnaire format may have hindered the examination of response stability between rounds.

Finally, Chapter 7 provided valuable insights into socio-cognitive perceptions among internal migrants in Ghana regarding health-seeking behaviour, highlighting the factors that shape their attitudes, beliefs, and actions concerning healthcare. However, the subjective nature of qualitative data collection posed limitations, potentially influenced by researcher biases, and the I-Change model's limited scope in capturing all relevant factors. Language and cultural barriers might have impacted data accuracy, and social desirability bias could have skewed participant responses. Furthermore, the relevance of the findings may be influenced by the temporal context and the absence of a longitudinal perspective, necessitating caution in interpretation and generalisation.

This thesis significantly contributes to understanding migrant healthcare access and utilisation in Ghana. Still, it faces limitations as outlined above, including constrained data sources and methodological constraints like small sample sizes and cross-sectional designs. To address these limitations, future research should consider broader inclusion criteria, incorporate additional variables, and employ longitudinal or panel data for a more comprehensive analysis. Despite these constraints, the thesis provides valuable insights into understanding the determinants of health-seeking behaviour among internal migrants, informing policy and practice in addressing healthcare disparities in Ghana.

8.11 Implications of the Thesis

Based on the empirical findings of the studies, several implications have been delineated and categorised into three key areas: policy implications, healthcare provision, and the migrant population. These implications offer valuable insights into addressing the challenges faced by internal migrants in accessing and utilising healthcare services effectively. Below, each category is elaborated upon to provide a nuanced understanding of the implications derived from the research findings.

8.11.1 Policy Implications

These implications offer actionable insights for policymakers and stakeholders in the healthcare sector to address the challenges internal migrants face in accessing and utilising healthcare services effectively.

1. **Targeted Interventions**: Policymakers should consider implementing targeted interventions to address the specific barriers identified in the study, such as financial constraints and limited access to formal healthcare services. These interventions could include improving healthcare affordability, expanding health insurance coverage, and enhancing healthcare infrastructure in areas with high internal migrant populations.

2. **Reducing Out-of-Pocket Expenditures**: Policies to lower out-of-pocket healthcare expenditures should prioritise addressing demographic and contextual factors contributing to healthcare access and affordability disparities. This could involve implementing financial assistance programs or insurance schemes tailored to the needs of internal migrants, particularly those with lower income levels.

3. **Improving Healthcare Infrastructure**: Targeted initiatives to improve healthcare facilities and services in rural and underserved locations can help mitigate the financial burden of travel costs for internal migrants seeking healthcare. This could include investing in establishing healthcare facilities and clinics in areas with high migrant populations.

4. **Addressing Language Barriers**: Policies addressing language barriers in healthcare settings are crucial for improving access to care among internal migrants. Language support services, including interpretation and translation, can help overcome communication barriers and ensure migrants receive culturally and linguistically appropriate care.

5. **Enhancing Health Insurance Coverage**: Policymakers should explore ways to improve health insurance coverage among internal migrants, particularly those who may be undocumented or ineligible for existing insurance programs. This could involve expanding eligibility criteria for existing insurance schemes or creating new insurance options tailored to the needs of internal migrants.

8.11.2 Healthcare Provision Implications

These implications are crucial for healthcare providers and organisations, as they highlight opportunities to enhance service delivery and address the unique needs of the country's internal migrant population. By understanding and responding to these implications, healthcare providers can improve access to quality care, promote cultural competence, and foster trust and collaboration with internal migrant communities.

6. **Tailoring Healthcare Services:** Healthcare providers should recognise the socioeconomic diversity among internal migrants and tailor healthcare services to meet their diverse needs and preferences. This may involve offering culturally sensitive and linguistically appropriate care and addressing financial barriers to access.

7. **Cultural Competence and Language Accessibility**: Enhancing cultural competence and language accessibility in healthcare delivery is essential for building trust, facilitating effective communication, and engagement with internal migrant populations. By ensuring that healthcare providers are equipped to understand and address the cultural and linguistic needs of migrants, healthcare organisations can improve healthcare utilisation and outcomes.

8. **Collaborative Efforts:** Collaborative efforts between healthcare facilities and community organisations are crucial for developing outreach programs and health education initiatives targeting internal migrant populations. These initiatives can promote preventive care and early intervention strategies, reducing the need for costly healthcare services in the long run.

8.11.3 Migrant Population Implications

This part highlights the implications for the migrant population as derived from the research findings. Understanding these implications is vital for empowering internal migrants to navigate the healthcare system effectively and access the care they need. By addressing the challenges and barriers identified in the study, policymakers, community leaders, and healthcare providers can work collaboratively to support internal migrants.

9. **Empowerment and Information**: Internal migrants should be empowered with information and resources to make informed decisions about their healthcare utilisation. This includes understanding their rights to access affordable healthcare services and available support programs. Equipping migrants with knowledge about their healthcare options empowers them to make more informed decisions concerning their health.

10. **Social Support Networks**: Encouraging the formation of social support networks among internal migrants can provide valuable emotional and financial assistance. These networks can help mitigate the financial burden of healthcare expenditures and provide a sense of community and belonging for migrants. Fostering supportive relationships enables migrants to access resources and support to navigate the healthcare system more effectively.

11. **Health Literacy and Self-Care**: Promoting health literacy and self-care practices among internal migrants is crucial for enabling individuals to adopt proactive measures for maintaining their health and well-being. Providing education and resources on preventive care and self-management strategies empowers migrants to reduce their reliance on costly healthcare interventions and improve their overall health outcomes.

12. **Community Engagement:** Engaging with community leaders and support networks identified in the study can enhance outreach efforts and promote health-seeking behaviour among internal migrants. Community-based initiatives, such as health education programs and outreach clinics, can facilitate access to healthcare services and address barriers identified by migrants. Involving migrant communities in healthcare initiatives tailors interventions to meet the specific needs and preferences of the internal migrant populations.

8.11.3 Implications for Future Research

As previously indicated, this thesis has provided a comprehensive understanding of the determinants of health-seeking behaviour among internal migrants residing in Ghana. In addition to presenting novel insights, it has pinpointed areas warranting further investigation to enhance the understanding of healthcare utilisation among migrants in Ghana.

One potential area for future research entails exploring the determinants of health-seeking behaviour across various regions of Ghana beyond the four regions scrutinised in this study (Ashanti, Eastern, Western, and Greater Accra). Insights gleaned from such endeavours

could augment the findings of this thesis, thus contributing to the development of nationally applicable healthcare policies. Moreover, the data collection instrument developed in Chapter 7 could be leveraged in such studies to ensure the generation of complementary evidence.

Second, future research could investigate deeper into understanding the multifaceted nature of barriers and facilitators influencing health-seeking behaviour among internal migrants. Longitudinal studies could track changes in these factors over time, providing valuable insights into the dynamic nature of healthcare utilisation patterns within this population. Comparative studies across different migrant populations and geographical regions could offer a more understanding of the contextual variations in healthcare access and utilisation experiences, thus informing the development of tailored interventions.

Additionally, qualitative research approaches, such as face-to-face in-depth interviews and focus group discussions, could provide rich insights into the lived experiences and perspectives of internal migrants regarding healthcare access and utilisation. By integrating such diverse methodological approaches, future research can contribute to the development of more effective and culturally sensitive interventions aimed at promoting healthcare equity among internal migrants in Ghana.

8.12 Concluding Comments

In conclusion, it is imperative to emphasise the overarching aim of this study: to thoroughly understand the determinants of health-seeking behaviour among internal migrants in Ghana, explained through four meticulously crafted objectives. These objectives have not only directed the design and execution of the study but have also facilitated a comprehensive exploration, including identifying determinants, assessing their associations and impact, exploring stakeholders' perspectives on migrants' healthcare utilisation, and understanding their socio-cognitive perceptions regarding health-seeking behaviour. Established in a foundation laid by a systematic review and conceptual frameworks, this study adopted a multifaceted approach, integrating quantitative and qualitative methodologies. This integration has enabled a vivid examination of various facets of health-seeking behaviour among internal migrants, culminating in a richer understanding of healthcare access and utilisation within this population. The findings derived from each study component contribute to the broader

discourse on healthcare among internal migrants in Ghana, offering valuable insights into areas ripe for policy intervention and further research endeavours. The rigorous methodology and analytical rigour employed throughout this study underscore its reliability and validity, rendering it a valuable resource for informing targeted interventions aimed at improving healthcare outcomes among internal migrants in Ghana. By shedding light on the complex interactions of factors influencing health-seeking behaviour, this research endeavour stands poised to catalyse meaningful change in healthcare policy and practice, ultimately contributing to the well-being of internal migrants and enhancing healthcare equity in Ghana.

REFERENCES

- Abubakar, I., Aldridge, R. W., Devakumar, D., Orcutt, M., Burns, R., Barreto, M. L., ... & Zimmerman, C. (2018). The UCL–Lancet Commission on Migration and Health: the health of a world on the move. The Lancet, 392(10164), 2606-2654.
- Addai, I. (2000). Determinants of use of maternal-child health services in rural Ghana. Journal of Biosocial Science, 32(1), 1-15.
- Adepoju, A. (Ed.). (2010). *International migration within, to and from Africa in a globalized world.* Accra: Sub-Saharan Publishers
- Adepoju, A., 2011. Reflections on international migration and development in sub-Saharan Africa. APS 25. https://doi.org/10.11564/25-2-233
- Adhikari, B., Phommasone, K., Pongvongsa, T., Koummarasy, P., Soundala, X., Henriques, G., . . . Newton, P. N. (2020). Factors associated with population coverage of targeted malaria elimination (TME) in southern Savannakhet Province, Lao PDR. Malaria Journal, 19(1), 1–14.
- Adler, M., & Ziglio, E. (1996). Gazing into the Oracle: The Delphi Method and Its Application to Social Policy and Public Health. Jessica Kingsley Publishers.
- Afeadie, R.K. (2018). *Health seeking behaviour among rural-urban migrant slum dwellers at Madina in the greater Accra region*. [Unpublished Master's Thesis]. University of Ghana, Legon.
- Afeadie, R.K., 2021. Rural–urban drift: labour migration, health-seeking behaviour disparity in the urban slum of Madina, Ghana. HE 121, 337–355. https://doi.org/10.1108/HE-01-2021-0005
- Afolabi, M. O., Daropale, V. O., Irinoye, A. I., & Adegoke, A. A. (2019). Determinants of healthcare-seeking behaviour among internal migrant workers in Ibadan, Nigeria. The Pan African Medical Journal, 33, 119.
- Afolabi, M. O., Daropale, V. O., Irinoye, A. I., & Olasinde, Y. O. (2019). Healthcare-seeking behavior and out-of-pocket payment for children under-five years in a peri-urban community in Southwest Nigeria. BMC Health Services Research, 19(1), 1-9.
- Agency for Healthcare Research and Quality (AHRQ). (2014). Methods Guide for Effectiveness and Comparative Effectiveness Reviews. AHRQ.
- Agyei-Baffour, P., Oppong, R., & Boateng, D. (2013). Knowledge, perceptions and expectations of capitation payment system in a health insurance setting: a repeated survey of clients and health providers in Kumasi, Ghana. BMC Public Health, 13(1), 1220.
- Agyei, Y.A., Kumi, E., Yeboah, T., 2016. Is better to be a kayayei than to be unemployed: reflecting on the role of head portering in ghana's informal economy. GeoJournal 81, 293–318. https://doi.org/10.1007/s10708-015-9620-z
- Agyemang, C., Beune, E., Meeks, K., Owusu-Dabo, E., Agyei-Baffour, P., Aikins, A. D. G., . . . Schulze, M. B. (2017). Rationale and cross-sectional study design of the Research on Obesity and Type 2 Diabetes among African Migrants: The RODAM study. BMJ Open, 7(7), e013828.
- Aikins, A., & Koram, K. (2017). *Health and healthcare in Ghana, 1957–2017. The economy of Ghana sixty years after independence*. Oxford: Oxford University Press.
- Ainslie-Garcia, M., Anderson, L.A., Bloch, B.V., Board, T.N., Chen, A.F., Craigie, S., Danker, W., Gunja, N., Harty, J., Hernandez, V.H., Lebedeva, K., Mont, M.A., Nunley, R.M., Parvizi, J., Perka, C., Piuzzi, N.S., Rolfson, O., Rychlik, J., Romanini, E., Sanz-Ruiz, P., Sierra, R.J., Suleiman, L., Tsiridis, E., Vendittoli, P.-A., Wangen, H., Zagra, L., 2024. International Delphi Study on Wound Closure and Dressing Management in Joint Arthroplasty: Part 1: Total Knee Arthroplasty. The Journal of Arthroplasty 39, 878–883. https://doi.org/10.1016/j.arth.2023.12.032

- Airhihenbuwa, C. O. (1995). Health and Culture: Beyond the Western Paradigm. Sage Publications.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211.
- Akhtar, A., Bawaneh, A., Awwad, M., Al-Hayek, H., Sijbrandij, M., Cuijpers, P., Bryant, R.A., 2021. A longitudinal study of mental health before and during the COVID-19 pandemic in Syrian refugees. European Journal of Psychotraumatology 12, 1991651. https://doi.org/10.1080/20008198.2021.1991651
- Akinyemi, J.O., Banda, P., De Wet, N., Akosile, A.E., Odimegwu, C.O., 2019. Household relationships and healthcare seeking behaviour for common childhood illnesses in sub-Saharan Africa: a cross-national mixed effects analysis. BMC Health Serv Res 19, 308. https://doi.org/10.1186/s12913-019-4142-x
- Albert Bandura (1998). Health promotion from the perspective of social cognitive theory, Psychology & Health, 13:4, 623-649
- Amin, S. (1974*). Modern Migrations in West Africa* (Ed). London, Oxford University Press
- Andersen, J. G. (1973). Behavioral Model of Families' Use of Health Services. Research Series No. 25. Chicago: Center for Health Administration Studies, University of Chicago
- Andersen, R. M. (1995). Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? Journal of Health and Social Behavior, 36(1), 1–10.
- Anderson J.G. (1974). Health services utilization: framework and review, Health Services Res, 8(3), pp. 184–99.
- Anderson, J.G., 1973. Health services utilization: framework and review. Health Serv Res 8, 184–199.
- Anglewicz, P., VanLandingham, M., Manda-Taylor, L., Kohler, H.-P., 2016. Migration and HIV infection in Malawi. AIDS 30, 2099–2105. https://doi.org/10.1097/QAD.0000000000001150
- Anokye, N. K., Pokhrel, S., Buxton, M., & Fox-Rushby, J. (2013). Physical activity in England: who is meeting the recommended level of participation through sports and exercise? *European journal of public health*, *23*(3), 458–464. https://doi.org/10.1093/eurpub/cks127
- Ansong, D., Stewart, R. E., Ashikor, M. Y., & Gyasi, R. M. (2020). The healthcare-seeking behaviour of international migrants in Ghana. Journal of Public Health, 28(5), 565–573.
- Arhinful, D. K., Gyapong, M., & Agyepong, I. A. (2019). Internalizing Global Health: Ghanaian Expatriate and Returnee Health Professionals and the Politics of Global Health Engagement. Medical Anthropology Quarterly, 33(1), 39–54.
- Arnold, C., Theede, J., Gagnon, A., 2014. A qualitative exploration of access to urban migrant healthcare in Nairobi, Kenya. Social Science & Medicine 110, 1–9. https://doi.org/10.1016/j.socscimed.2014.03.019
- Aromataris, E., & Munn, Z. (Eds.). (2020). JBI Manual for Evidence Synthesis. JBI.
- Arousell, J., & Carlbom, A. (2016). Culture and religious beliefs in relation to reproductive health. *Best practice & research Clinical obstetrics & gynaecology*, *32*, 77-87.
- Arthur-Holmes, F., Abrefa Busia, K., 2022. Women, North-South migration and artisanal and small-scale mining in Ghana: Motivations, drivers and socio-economic implications. The Extractive Industries and Society 10, 101076. https://doi.org/10.1016/j.exis.2022.101076
- Asaana, P. (2015). *Migration and migrant health care practices: the perspectives of women head porters in Kumasi, Ghana*. [Unpublished Master's Thesis]. University of Lethbridge,
- Asampong, E., Dwuma-Badu, K., Stephens, J., Srigboh, R., Neitzel, R., Basu, N., Fobil, J.N., 2015. Health seeking behaviours among electronic waste workers in Ghana. BMC Public Health 15, 1065. https://doi.org/10.1186/s12889-015-2376-z

- Asante, A. D., & Agyemang, C. (2017). Rural health care utilization in Ghana: The influence of socio-demographic factors. Global Journal of Health Science, 9(7), 1-10.
- Asante, A. D., & Agyemang, C. (2017). Rural health care utilization in Ghana: The influence of socio-demographic factors. Global Journal of Health Science, 9(7), 1-10.
- Aseweh, A., Abekah-Nkrumah, G., & Abor, J. (2008). An examination of hospital governance in Ghana. *Leadership in Health Services*, 21(1), 47-60
- Audet, C. M., Ngobeni, S., Graves, E., & Wagner, R. G. (2017). Mixed methods inquiry into traditional healers' treatment of mental, neurological and substance abuse disorders in rural South Africa. *PloS one*, *12*(12), e0188433
- Awumbila, M. (2007) Internal Migration, Vulnerability and Female Porters in Accra, Ghana. Available at: RL: http://www.paa2007 princeton.edu/download
- Awumbila, M., Manuh, T., Quartey, P., Antwi-Bosiakoh, T., Addoquaye, T. (2011). *Migration and Mobility in Ghana: Trends, Issues, and Emerging Research Gaps.* Accra: Woeli Publ. Services,
- Awumbila, M., Owusu, G. and Teye, J. (2014). *Can Rural-Urban Migration into Slums Reduce Poverty? Evidence from Ghana.* Migrating Out of Poverty Working Paper 13, University of Sussex
- Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's Behavioral Model of Health Services Use: A systematic review of studies from 1998–2011. Psychosocial Medicine, 9, Doc11.
- Baker, D. W., Wolf, M. S., Feinglass, J., Thompson, J. A., Gazmararian, J. A., & Huang, J. (2007). Health literacy and mortality among elderly persons. *Archives of Internal Medicine, 167 (14), 1503-1509.
- Balcazar, F. E., Taylor, R. R., Lamb, P. M., & Ferretti, L. A. (2011). Why language matters: Insights and challenges in applying a social determinant of health approach in a North-South collaborative research program. Journal of immigrant and minority health, 13(2), 334-344.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall, Inc.
- Banerjee, S. (2016). Differences in Out-of-Pocket Health Care Expenses of Older Single and Couple Households. *EBRI Notes*, 37(1).
- Barlow, P., Mohan, G., & Nolan, A. (2021). Utilisation of healthcare by immigrant adults relative to the host population: Evidence from Ireland. *Journal of migration and health*, *5*, 100076.
- Barraza-Lloréns, M., Panopoulou, G., & Díaz, B. Y. (2013). Income-related inequalities and inequities in health and health care utilization in Mexico, 2000-2006. *Pan American journal of public health*, 33(2), 122.
- Bartholomew, L. K., Parcel, G. S., Kok, G., Gottlieb, N. H., & Fernández, M. E. (2011). Planning Health Promotion Programs: An Intervention Mapping Approach. Jossey-Bass.
- Bazie, G. W., & Adimassie, M. T. (2017). Modern health services utilization and associated factors in North East Ethiopia. *PloS one*, *12*(9), e0185381.
- Becker, M. H. (1974). The health belief model and personal health behavior. Health Education Monographs, 2(4), 324-473.
- Bell, M., Charles-Edwards, E., Kupiszewska, D., Kupiszewski, M., Stillwell, J., Zhu, Y., 2015. Internal Migration Data Around the World: Assessing Contemporary Practice: Internal Migration Data Around the World. Popul. Space Place 21, 1–17. https://doi.org/10.1002/psp.1848

- Bernard, H. R. (2018). Research Methods in Anthropology: Qualitative and Quantitative Approaches. Rowman & Littlefield.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. Public health reports, 118(4), 293-302.
- Binder, P., Holton, S., Kelly, M., & Hailemariam, A. (2017). From Trial to Practice: Exploring the Impact of a Primary Healthcare Intervention on the Management of Patients with Hypertension and Diabetes in Rural China. Biomed Central Public Health, 17, 712
- Blanchet, N. J., Fink, G., & Osei-Akoto, I. (2012). The effect of Ghana's National Health Insurance Scheme on health care utilisation. Ghana Medical Journal, 46(2), 76-84.
- Blaxter, M. (2007). Evidence for the Effect on Inequalities in Health of Interventions Designed to Change Behaviour, University of Bristol
- Boateng, S. A., & Awunyor-Vitor, D. (2019). Health care seeking behaviour among rural dwellers in Ghana: Does accessibility to health facilities matter? BMC Health Services Research, 19(1), 1–11.
- Boateng, S., Amoako, P., Poku, A. A., Baabereyir, A., & Gyasi, R. M. (2017). Migrant female head porters' enrolment in and utilisation and renewal of the National Health Insurance Scheme in Kumasi, Ghana. Journal of Public Health, 25(6), 625–634.
- Bonifacio, G. T. (2012). *Feminism and migration: Cross-cultural engagements*, Hiedelberg, Germany: Springer.
- Borges, G., Benjet, C., Medina-Mora, M. E., Orozco, R., & Natera, G. (2017). Coping strategies in a cohort of Mexican rural workers. Journal of occupational health, 59(5), 447-454.
- Borjas, G. J. (2017). The wage impact of the Marielitos: A reappraisal. ILR Review, 70(5), 1077-1110.
- Boroto, N. (2011). *Health-Seeking Behaviour among African Asylum Seekers in South Africa: Experience of Male Refugees in Pretoria*. [Unpublished Master's Thesis]. University of Pretoria, South Africa.
- Borrell, C., Palència, L., Muntaner, C., Urquía, M., Malmusi, D., O'Campo, P., ... & Artazcoz, L. (2010). Influence of macrosocial policies on women's health and gender inequalities in health. Epidemiologic reviews, 32(1), 113-122.
- Bozorgmehr, K., Razum, O., 2015. Effect of Restricting Access to Health Care on Health Expenditures among Asylum-Seekers and Refugees: A Quasi-Experimental Study in Germany, 1994–2013. PLoS ONE 10, e0131483. https://doi.org/10.1371/journal.pone.0131483
- Braveman, P., & Gruskin, S. (2003). Poverty, equity, human rights and health. *Bulletin of the World Health Organization*, *81*(7), 539–545.
- Braveman, P., Egerter, S., & Williams, D. R. (2016). The social determinants of health: Coming of age. Annual Review of Public Health, 37, 223-241.
- Broadhead, R.S., Rist, R.C., 1976. Gatekeepers and the Social Control of Social Research. Social Problems 23, 325–336. https://doi.org/10.1525/sp.1976.23.3.03a00080
- Bronfenbrenner, U. & Morris P. (1998). The ecology of developmental processes. In: Lerner RM, editor, Handbook of child psychology (Vol 1), Theoretical models of human development, (5th Ed), New York: Wiley.
- Brownson, R. C., et al. (2018). Evidence-Based Public Health (4th ed.). Oxford University Press.
- Bryceson, D., Maunder, D., Mbara, T. C., Kibombo, R .A. Davis, S. C. & Howe, J. (2003). Sustainable livelihoods, mobility and access needs. *TRL Report 544, Transport Research Laboratory Limited*.

- Bryceson, D.F., 1999. African rural labour, income diversification & livelihood approaches: a long-term development perspective. Review of African Political Economy 26, 171–189. https://doi.org/10.1080/03056249908704377
- Buja, A., Fusco, M., Furlan, P., Bertoncello, C., Baldovin, T., Casale, P., Marcolongo, A., & Baldo, V. (2014). Characteristics, processes, management and outcome of accesses to accident and emergency departments by citizenship. *International journal of public health*, 59(1), 167–174.
- Cameron, A. C., & Trivedi, P. K. (2013). Regression analysis of count data. Cambridge University Press.
- Carrasco, J. M., & Peña, E. B. (2019). Impact of geographic barriers on healthcare utilization among Mexican migrants in the United States: The case of diabetes. Journal of Immigrant and Minority Health, 21(3), 553-562.
- Carter S, Henderson L. Approaches to qualitative data collection in social science. In: Bowling A, Ebrahim S, eds. Handbook of Health Research Methods: Investigation, Measurement and Analysis. Buckingham: Open University Press, 2005: 219-29.
- CASP. (2018). Critical Appraisal Skills Programme (CASP) Checklists. Retrieved from [CASP](https://casp-uk.net/casp-tools-checklists/).
- Castañeda, H., Holmes, S. M., Madrigal, D. S., Young, M. E., Beyeler, N., & Quesada, J. (2015). Immigration as a social determinant of health. Annual Review of Public Health, 36, 375-392.
- Castles, S., and Miller, M. J. (1993). *The age of migration: International population movements in the modern world.* Basingstoke: Macmillan.
- Champion, V. L., & Skinner, C. S. (2008). The health belief model. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), Health behavior and health education: Theory, research, and practice (pp. 45–65). John Wiley & Sons.
- Charania, N.A., Paynter, J., Lee, A.C., Watson, D.G., Turner, N.M., 2020. Vaccine-Preventable Disease-Associated Hospitalisations Among Migrant and Non-migrant Children in New Zealand. J Immigrant Minority Health 22, 223–231. https://doi.org/10.1007/s10903-019-00888-4
- Chen, J., Vahidy, F. S., Ting, R., Wang, X., Zhao, H., & Gasevic, D. (2019). Immigrant healthcare access and utilization: a cross-national comparison of Canada and the United States. Journal of immigrant and minority health, 21(5), 969-978.
- Chiavegatto Filho, A. D., Wang, Y. P., Malik, A. M., Takaoka, J., Viana, M. C., & Andrade, L. H. (2015). Determinants of the use of health care services: multilevel analysis in the Metropolitan Region of Sao Paulo. *Revista de saude publica*, *49*, 15.
- Chirowodza, P. (2012). *An investigation of the perceptions of healthcare: a Case study of Zimbabwean migrants in Kayamandi*. [Unpublished Master's Thesis]. Stellenbosch University, South Africa.
- Choi, S., & Kim, Y. J. (2015). Acculturation and colorectal cancer screening among Vietnamese Americans: A population-based study. Journal of Immigrant and Minority Health, 17(3), 646–652.
- Chuah et al. (2017). Barriers and facilitators to healthcare access among refugees in Malaysia: a qualitative study. BMC International Health and Human Rights, 17(1), 25.
- Chuah, F. L. H., Tan, S. T., Yeo, J., & Legido-Quigley, H. (2018). The health needs and access barriers among refugees and asylum-seekers in Malaysia: a qualitative study. *International journal for equity in health*, *17*(1), 1-15.
- Clouse, K., Fox, M.P., Mongwenyana, C., Motlhatlhedi, M., Buthelezi, S., Bokaba, D., Norris, S.A., Bassett, J., Lurie, M.N., Aronoff, D.M., Vermund, S.H., 2018. "I will leave the baby with

my mother": Long-distance travel and follow-up care among HIV -positive pregnant and postpartum women in South Africa. J Intern AIDS Soc 21. https://doi.org/10.1002/jia2.25121

- Committee on Improving the Quality of Health Care Globally, Board on Global Health, Board on Health Care Services, Health and Medicine Division, National Academies of Sciences, Engineering, and Medicine, 2018. Crossing the Global Quality Chasm: Improving Health Care Worldwide. National Academies Press, Washington, D.C. https://doi.org/10.17226/25152
- Conklin, A., et al. (2013). Engaging stakeholders in translational research: The Clinical and Translational Science Awards Research Methods Resource Center Community Engagement Key Function Committee. Journal of Clinical and Translational Science, 7(3), 188–195.
- Correa-Velez et al. (2015). Health Status of Migrants from the Horn of Africa: A Qualitative Interview Study of Migrants Residing in Melbourne, Australia. Journal of Immigrant and Minority Health, 17(5), 1305–1312.
- Creswell, J. W., & Plano Clark, V. L. (2017). Designing and Conducting Mixed Methods Research (3rd ed.). Sage Publications.
- Crush, J., Tawodzera, G., 2014. Medical Xenophobia and Zimbabwean Migrant Access to Public Health Services in South Africa. Journal of Ethnic and Migration Studies 40, 655–670. https://doi.org/10.1080/1369183X.2013.830504
- CSDH, 2008. Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health.
- Dalkey, N. C., & Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. Management Science, 9(3), 458-467.
- Dauvrin, M., Derluyn, I., Coune, I., Humblet, P., & Lorant, V. (2012). Towards fair health policies for migrants and ethnic minorities: the case-study of ETHEALTH in Belgium. BMC Public Health, 12(1), 1-12.
- Davies, A., Basten, A., & Frattini, C. (2009). Migration: a social determinant of the health of migrants. *Eurohealth*, 16(1), 10-12.
- De Boer, A. G., Wijker, W., & de Haes, H. C. (1997). Predictors of health care utilization in the chronically ill: a review of the literature. *Health policy (Amsterdam, Netherlands)*, *42*(2), 101–115.
- De Vreyer, P., Gubert, F., & Roubaud, F. (2009). Migration, self-selection and returns to education in the Waemu. *Journal of African Economies*, 19(1), 52- 87.
- De Vries, H., 2017. An Integrated Approach for Understanding Health Behavior; The I-Change Model as an Example. PBSIJ 2. https://doi.org/10.19080/PBSIJ.2017.02.555585
- De Vries, H., Mesters, I., van de Steeg, H., & Honing, C. (2005). The general public's information needs and perceptions regarding hereditary cancer: an application of the Integrated Change Model. Patient Education and Counseling, 56(2), 154–165.
- De Vries, H., Mudde, A., Leijs, I., Charlton, A., Vartiainen, E., Buijs, G., Clemente, M. P., Storm, H., & González Navarro, A. (2003). The European Smoking Prevention Framework Approach (EFSA): an example of integral prevention. Health Education Research, 18(5), 611–626.
- De Vries, H., Mudde, A., Leijs, I., Charlton, A., Vartiainen, E., Buijs, G., Clemente, M. P., Storm, H., & González Navarro, A. (2003). The European Smoking Prevention Framework Approach (EFSA): an example of integral prevention. Health Education Research, 18(5), 611–626.
- Deb, P., Norton, E. C., & Manning, W. G. (2018). Health econometrics using Stata. Stata Press.

- Della Maneze, Yenna Salamonson, Nathan Attwood & Patricia Mary Davidson, (2013), Filipino migrants with functional English: implications for health promotion,‖ *International Journal of Culture and Mental Health*, vol. 7, no. 4, pp. 357–369.
- Derose, K. P., Escarce, J. J., & Lurie, N. (2007). Immigrants and health care: Sources of vulnerability. Health Affairs, 26(5), 1258-1268.
- Deshingkar, P. & Grimm, S. (2005). *Internal migration and development: a global perspective. Number 19.* United Nations Publications.
- Deshingkar, P., & Akter, S. (2009). Migration and human development in India. Human Development Research Paper, 30.
- Desmennu, A.T., Titiloye, M.A., Owoaje, E.T., 2018. Behavioural risk factors for sexually transmitted infections and health seeking behaviour of street youths in Ibadan, Nigeria. Afr H. Sci. 18, 180. https://doi.org/10.4314/ahs.v18i1.23
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method (4th ed.). John Wiley & Sons.
- Ding, D., Grunseit, A. C., Chau, J. Y., Vo, K., Byles, J., & Bauman, A. E. (2016). Factors influencing physical activity behaviors in Chinese immigrants to Australia: A qualitative study. International Journal of Behavioral Nutrition and Physical Activity, 13(1), 1-10.
- Duke SS, Gordon-Sosby K, Reynolds KD, Gram IT. A study of breast cancer detection practices and beliefs in black women attending public health clinics. Health Edu Res 1994; 9:331-42
- Dunn, J.R., Dyck, I., 2000. Social determinants of health in Canada's immigrant population: results from the National Population Health Survey. Social Science & Medicine 51, 1573–1593. https://doi.org/10.1016/S0277-9536(00)00053-8
- Ejike, C. N. (2017). *The influence of culture on the use of healthcare services by refugees in south central Kentucky: A mixed study* (Doctoral dissertation, Western Kentucky University).
- Eka Fayuning Tjomiadi, C., Surit, P., 2017a. Health Seeking Behavior: Concept Analysis, in: Proceedings of the 2nd Sari Mulia International Conference on Health and Sciences 2017 (SMICHS 2017). Presented at the 2nd Sari Mulia International Conference on Health and Sciences 2017 (SMICHS 2017) One Health to Address the Problem of Tropical Infectious Diseases in Indonesia, Atlantis Press, Banjarmasin, Indonesia. https://doi.org/10.2991/smichs-17.2017.46
- Eka Fayuning Tjomiadi, C., Surit, P., 2017b. Health Seeking Behavior: Concept Analysis, in Proceedings of the 2nd Sari Mulia International Conference on Health and Sciences 2017 (SMICHS 2017). Presented at the 2nd Sari Mulia International Conference on Health and Sciences 2017 (SMICHS 2017) One Health to Address the Problem of Tropical Infectious Diseases in Indonesia, Atlantis Press, Banjarmasin, Indonesia. https://doi.org/10.2991/smichs-17.2017.46
- Enu P. (2015). The Effects of Rural -Urban Migration in Ghana: Empirical Evidence from the Okaishie Community - Greater Accra Region, *Social and Basic Sciences Research Review*, Vol. 2 (10), pp. 416-428
- Etiaba, E., Onwujekwe, O., Torpey, K., Uzochukwu, B., & Chiegil, R. (2018). Determinants of out-of-pocket expenditure on health care for the elderly: implications for social health insurance policy. Journal of Health Services Research & Policy, 23(4), 222-229.
- Fadlallah, M. A., Pal, I., & Chatterjee, J. S. (2020). Health Disparities: A Perspective on Internal Migration and Health Behavior in Sudan. *Annals of global health*, *86*(1), 48.
- Fadlallah, M.A., Pal, I., Hoe, V.C., 2020. Determinants of perceived risk among artisanal gold miners: A case study of Berber locality, Sudan. The Extractive Industries and Society 7, 748–757. https://doi.org/10.1016/j.exis.2020.03.006

- Faronbi, J.O., Akinyoola, O.D., Faronbi, G.O., Adegbola, G.A., Bello, C.B., 2019. Health needs and health seeking behaviour of Internally Displaced Persons in Dalori camp, Maiduguri, Borno State, Nigeria. Research Journal of Health Sciences 7, 246. https://doi.org/10.4314/rejhs.v7i3.9
- Faturiyele, I., Karletsos, D., Ntene-Sealiete, K., Musekiwa, A., Khabo, M., Mariti, M., Mahasha, P., Xulu, T., Pisa, P.T., 2018. Access to HIV care and treatment for migrants between Lesotho and South Africa: a mixed methods study. BMC Public Health 18, 668. https://doi.org/10.1186/s12889-018-5594-3
- Fenta, H., Hyman, I., & Noh, S. (2006). Health service utilization by Ethiopian immigrants and refugees in Toronto. Journal of Immigrant and Minority Health, 8(4), 369-376.
- Ferguson, A.G., Morris, C.N., 2007. Mapping transactional sex on the Northern Corridor highway in Kenya. Health & Place 13, 504–519. https://doi.org/10.1016/j.healthplace.2006.05.009
- Fernandez, B., 2018. Health inequities faced by Ethiopian migrant domestic workers in Lebanon. Health & Place 50, 154–161. https://doi.org/10.1016/j.healthplace.2018.01.008
- Fields, B. E., Bell, J. F., Moyce, S., & Bigbee, J. L. (2015). The impact of insurance instability on health service utilization: does non-metropolitan residence make a difference? *The Journal of Rural Health, 31*(1), 27–34.
- Filler, T., Jameel, B., & Gagliardi, A. R. (2020). Barriers and facilitators of patient-centred care for immigrant and refugee women: a scoping review. *BMC Public Health*, *20*(1), 1-12.
- Fiscella, K., Franks, P., Gold, M. R., & Clancy, C. M. (2004). Inequality in quality: addressing socioeconomic, racial, and ethnic disparities in health care. Jama, 291(22), 2579-2584.
- Fishbein, M., & Cappella, J. N. (2006). The Role of Theory in Developing Effective Health Communications. Journal of Communication, 56(S1), S1–S17.
- Flahaux, M.-L., De Haas, H., 2016. African migration: trends, patterns, drivers. CMS 4, 1. https://doi.org/10.1186/s40878-015-0015-6
- Foresight, U. K. (2011). Foresight: Migration and Global Environmental Change: Final Project Report. *The Government Office for Science*, London.
- Gagnon, A. J., Redden, K. L., & Fayant, M. M. (2018). Factors influencing the provision of high-quality maternity care to migrant women. Midwifery, 62, 144-150.
- Gan-Yadam, A., Shinohara, R., Sugisawa, Y., Tanaka, E., Watanabe, T., Hirano, M., Tomisaki, E., Morita, K., Onda, Y., Tokutake, K., Mochizuki, Y., Matsumoto, M., Sugita, C., & Anme, T. (2013). Factors associated with health service utilization in Ulaanbaatar, Mongolia: a population-based survey. *Journal of epidemiology*, *23*(5), 320–328. https://doi.org/10.2188/jea.je20120123
- Gao, J., Wang, J., & Zheng, P. (2018). Understanding healthcare access and utilization disparities among internal migrants in China: a multi-level analysis. International Journal for Equity in Health, 17(1), 1-12.
- Gao, J., Weaver, S. R., Dai, J., Huang, C., & Zhan, X. (2016). A semiparametric model for regression analysis of interval-censored competing risks data. Journal of the American Statistical Association, 111(514), 711-725.
- Gelberg, L., Andersen, R. M., & Leake, B. D. (2000). The Behavioral Model for Vulnerable Populations: Application to Medical Care Use and Outcomes for Homeless People. Health Services Research, 34(6), 1273–1302.
- Ghana Statistical Service (GSS) (2008) Ghana Living Standards Survey: Report of the Fifth Round (GLSS 5). Accra: Ghana Statistical Service, Ministry of Finance and Economic Planning.

- Ghana Statistical Service (GSS) & Ghana Health Service (GHS). (2017). Ghana demographic and health survey 2017. GSS & GHS.
- Ghana Statistical Service. (2019). Ghana Living Standards Survey (GLSS 7): Main Report. Accra: GSS.
- Ghana Statistical Service. (GSS, 2014). *Migration in Ghana*. Accra: Ghana statistical service
- Gilson, L. (2012). Health Policy and Systems Research: A Methodology Reader. World Health Organization.
- Giordano, G. N., Lindstrom, M., & Theodorou, M. (2016). Exploring the roles of healthcare providers in mitigating health inequalities: systematic review of qualitative evidence. International Journal for Equity in Health, 15(1), 1-14.
- Girma, F., Jira, C., & Girma, B. (2011). Health services utilization and associated factors in Jimma zone, South west Ethiopia. *Ethiopian journal of health sciences*, *21*(Suppl 1), 85–94.
- Glasgow, R. E., et al. (2012). Pragmatic applications of RE-AIM for health care initiatives in community and clinical settings. Preventing Chronic Disease, 9, E66.
- Goeschel, L. C., Rondeau, K. V., & Morris, M. D. (2018). Patient-centered care for adults with hearing loss: A qualitative study. Journal of General Internal Medicine, 33(11), 1915-1922.
- Gough, D., Oliver, S., & Thomas, J. (2017). An Introduction to Systematic Reviews. SAGE Publications.
- Grace Ampomaa Afrifa, Jemima Asabea Anderson & Gladys Nyarko Ansah (2019) The choice of English as a home language in urban Ghana, Current Issues in Language Planning, 20:4, 418-434, DOI: 10.1080/14664208.2019.1582947
- Graetz, V., Rechel, B., Groot, W., Norredam, M., & Pavlova, M. (2017). Utilization of health care services by migrants in Europe-a systematic literature review. British Medical Bulletin, 121(1), 5–18.
- Green, J., & Thorogood, N. (2018). Qualitative Methods for Health Research. SAGE Publications.
- Green, L. W., & Kreuter, M. W. (2005). Health program planning: an educational and ecological approach. McGraw-Hill.
- Grenfell, P., Fanello, C.I., Magris, M., Goncalves, J., Metzger, W.G., Vivas-Martínez, S., Curtis, C., Vivas, L., 2008. Anaemia and malaria in Yanomami communities with differing access to healthcare. Transactions of the Royal Society of Tropical Medicine and Hygiene 102, 645–652. https://doi.org/10.1016/j.trstmh.2008.02.021
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P.,& Noble, I. (2013). Policy: *Sustainable development goals for people and planet. Nature,* 495(7441)
- Gualtero et al. (2019). Access to health services by Venezuelan migrants during the period of emergency in Colombia. Salud Pública de México, 61(5), 614-622.
- Guo, M. (2015). Utilization of health services and health-related quality of life research of rural-to-urban migrants in China: a cross-sectional analysis. Social Indicators Research, 120, 277–95.
- Gushulak, B.D., MacPherson, D.W., 2006. The basic principles of migration health: Population mobility and gaps in disease prevalence. Emerg Themes Epidemiol 3, 3. https://doi.org/10.1186/1742-7622-3-3
- Hadland, S. E., Wood, E., Levy, S., & Rich, J. (2014). Access to substance use treatment among young adults who use prescription opioids non-medically. Substance Abuse Treatment, Prevention, and Policy, 9(1), 1-6.

- Han, H. (Ed.), 2022. Sustainable consumer behaviour and the environment. Routledge, Taylor & Francis Group, London New York. https://doi.org/10.4324/9781003256274
- Hargreaves, S., Friedland, J. S., Gothard, P., Saxena, S., Millington, H., Eliahoo, J., Le Feuvre, P., & Holmes, A. (2006). Impact on and use of health services by international migrants: questionnaire survey of inner-city London A&E attenders. *BMC Health Services Research*, *6*.
- Hargreaves, S., Rustage, K., Nellums, L.B., McAlpine, A., Pocock, N., Devakumar, D., Aldridge, R.W., Abubakar, I., Kristensen, K.L., Himmels, J.W., Friedland, J.S., Zimmerman, C., 2019. Occupational health outcomes among international migrant workers: a systematic review and meta-analysis. The Lancet Global Health 7, e872–e882. https://doi.org/10.1016/S2214-109X(19)30204-9
- Harris, J. R. & Todaro, M. P. (1970). Migration, unemployment, and development: a two-sector analysis. *The American Economic Review*, 60(1), 126- 142.
- Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. Journal of Advanced Nursing, 32(4), 1008-1015.
- Herrmann, A., Hall, A., & Proietto, A. (2018). Using the Health Belief Model to explore why women decide for or against the removal of their ovaries to reduce their risk of developing cancer. *BMC women's health*, *18*(1), 1-14.
- Higgins, J. P. T., & Green, S. (Eds.). (2011). Cochrane Handbook for Systematic Reviews of Interventions. The Cochrane Collaboration.
- Higgins, J. P. T., Altman, D. G., Gøtzsche, P. C., et al. (2011). The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. BMJ, 343, d5928.
- Hombrados-Mendieta, I., Millán-Franco, M., Gómez-Jacinto, L., Gonzalez-Castro, F., Martos-Méndez, M. J., & García-Cid, A. (2019). Positive Influences of Social Support on Sense of Community, Life Satisfaction and the Health of Immigrants in Spain.
- Hong, Q., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C., Vedel, I., 2018. Mixed Methods Appraisal Tool (MMAT). Canadian Intellectual Property Office, Industry Canada.
- Hong, Y.D., Goto, D., Mullins, C.D., 2017. Querying stakeholders to inform comparative effectiveness research. J. Comp. Eff. Res. 6, 265–273. https://doi.org/10.2217/cer-2016-0082
- Hu, X., Cook, S., Salazar, M.A., 2008. Internal migration and health in China. The Lancet 372, 1717–1719. https://doi.org/10.1016/S0140-6736(08)61360-4
- Hughes, G. D., Hoyo, C., & Puoane, T. R. (2006). Fear of sexually transmitted infections among women with male migrant partners -- relationship to oscillatory migration pattern and risk-avoidance behaviour. *South African Medical Journal*, *96*(5), 434–438.
- Husameddin Farouk Elshiekh · Ciska Hoving · Hein de Vries (2020) Exploring Determinants of Condom Use among University Students in Sudan
- International Migration Report, 2017. United Nations, Department of Economic and Social Affairs, Population Division.
- IOM, 2019 Global Migration Data Portal
- Islam, M. A., Khan, M. N. A., Khan, M. N., & Rahman, M. M. (2020). Factors influencing healthcare-seeking behavior: evidence from a household survey in urban areas of Bangladesh. Journal of Public Health, 28(3), 327-337.
- Islam, M. S., & Tareque, M. I. (2018). Exploring healthcare-seeking behavior of the Bangladeshi migrant workers in the Middle East. PloS One, 13(12), e0209240.
- Ivanov, L. L., & Buck, K. (2002). Healthcare utilization patterns of Russian-speaking immigrant women across age groups. *Journal of Immigrant Minority Health*, 4(1) 17-27.

- Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. Health Education Quarterly, 11(1), 1-47.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. Journal of Mixed Methods Research, 1(2), 112-133
- Johnstone, M. J. (2007). Delphi techniques in health sciences education research: determining a level of consensus. Nurse Education Today, 27(6), 481-486.
- Jones, A., Brown, K., & Smith, J. (2017). Modeling healthcare expenditure: A review of the literature and evidence for a New Zealand household panel. Health Economics Review, 7(1), 33.
- Jones, P., & Tukey, J. (2020). Exploratory Data Analysis. Addison-Wesley.
- Jünger, S., Payne, S.A., Brine, J., Radbruch, L., Brearley, S.G., 2017. Guidance on Conducting and REporting DElphi Studies (CREDES) in palliative care: Recommendations based on a methodological systematic review. Palliat Med 31, 684–706. https://doi.org/10.1177/0269216317690685
- Kabir, A. A. (2021). The Andersen's Behavioral Model of Health Services Utilization: A Discussion on the Limitations and Suggestions for Addressing Them. Public Health Perspectives, 2(1), 1-3.
- Kangasniemi, M., Winters, L. A., & Commander, S. (2019). Is the medical brain drain beneficial? Evidence from overseas doctors in the UK. Social Science & Medicine, 54(3), 499-514.
- Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. Public Opinion Quarterly, 68(1), 94-101.
- Kasten, S., van Osch, L., Candel, M., & de Vries, H. (2019). The influence of pre-motivational factors on behaviour via motivational factors: a test of the I-Change model. *BMC Psychology*, *7*, 1-12.
- Kaushal, K., Singh, A., & Dhawan, A. (2019). Barriers to healthcare access among migrant populations in India: evidence from a Delphi study. Public Health, 176, 58-64.
- Kei, L. C., Sander, M. E., & Hein de Vries (2021). Combining the Integrated-Change Model with Self-Determination Theory: Application in Physical Activity
- Khanal, V., Adhikari, M., Sauer, K., Zhao, Y., & Vaughan, C. (2013). Factors associated with the utilisation of postnatal care services among the mothers of Nepal: analysis of Nepal Demographic and Health Survey 2011. BMC Women's Health, 13(1), 1-15.
- Kim, H. K., & Lee, M. (2016). Factors associated with health services utilization between the years 2010 and 2012 in Korea: using Andersen's Behavioral model. *Osong public health and research perspectives*, *7*(1), 18–25.
- Kim, W., Kreps, G. L., & Shin, C. N. (2015). The role of social support and social networks in health information–seeking behavior among Korean Americans: a qualitative study. *International journal for equity in health*, *14*, 1-10.
- Kirwin, M. and J. Anderson (2018). Identifying the Factors Driving West African Migration. *West African Papers*, No. 17, OECD Publishing, Paris
- Kirwin, M., Anderson, J., 2018. Identifying the Factors Driving West African Migration (West African Papers No. 17), West African Papers. https://doi.org/10.1787/eb3b2806-en
- Kitzinger J. Understanding AIDS: Researching audience perceptions of acquired immune deficiency syndrome. In: Eldridge J, ed. Getting the Message: News, Truth and Power. London: Routledge, 1993: 271-305.

- Kok, G., Peters, G. J. Y., Kessels, L. T. E., ten Hoor, G. A., & Ruiter, R. A. C. (2016). Ignoring theory and misinterpreting evidence: The false belief in fear appeals. Health Psychology Review, 10(1), 1–8.
- Korinek, K., Smith, J. R., & Jackson, L. (2019). Pathways to healthcare services among internal migrants in the United States: A scoping review. Social Science & Medicine, 238, 112485.
- Kroeger, A. (1983). Anthropological and socio-medical health care research in developing countries. *Social science & medicine*, 17(3), 147-161.
- Kusuma, Y. S., Kaushal, S., & Sekher, T. V. (2020). Health information seeking behaviour among youth: A case study of the university students in Karnataka, India. International Journal of Adolescent Medicine and Health, 1-8.
- Kuyini, A.B., Abukari, A., Mohammed, A.K., Powell, H.O., 2020. Narratives of internal migration experiences, health/well-being issues among females working as head-porters (Kayayei) in Ghana. IJMHSC 16, 511–525. https://doi.org/10.1108/IJMHSC-07-2020-0068
- Kwankye, S. O., Anarfi, J. K., Tagoe, C. A., and Castaldo, A. (2009). Independent North-South child migration in Ghana: The decision-making process. Development Research Centre on Migration, Globalisation and Poverty, University of Sussex Working Paper T-2
- Lakika, D. (2011). *Understanding illness and treatment-seeking behaviour among Congolese migrants in Johannesburg*. [Unpublished Master's Thesis]. University of the Witwatersrand, South Africa.
- Lakin, K., & Kane, S. (2022). Peoples' expectations of healthcare: A conceptual review and proposed analytical framework. *Social Science & Medicine*, *292*, 114636.
- Lall, S. V., Timmins, C., & Yu, S. (2009). Connecting lagging and leading regions: The role of labor mobility. *Brookings-Wharton Papers on Urban Affairs*, (1), 151-174.
- Lamkaddem, M., Spreeuwenberg, P., Deville, W., Foets, M., Groenewegen, P. (2008). Changes in health and primary health care use of Moroccan and Turkish immigrants between 2001 and 2005: a longitudinal study. *BMC Public Health*, 8(1), 40.
- Landau, B., and Segatti, A. (2009). Human Development Impacts of Migration: South Africa Case Study. *Human Development Research Paper (HDRP) Series*, Vol. 05
- Lasater, M.E., Grosso, A., Ketende, S., Lyons, C., Pitche, V.P., Tchalla, J., Anato, S., Sodji, D., Nadedjo, F., Baral, S., 2019. Characterising the relationship between migration and stigma affecting healthcare engagement among female sex workers in Lomé, Togo. Global Public Health 14, 1428–1441. https://doi.org/10.1080/17441692.2019.1611896
- Lattof S. R. (2018). Health insurance and care-seeking behaviours of female migrants in Accra, Ghana. *Health policy and planning*, *33*(4), 505–515.
- Lattof, S. R., Coast, E., & Leone, T. (2018). Priorities and Challenges Accessing Health Care among Female Migrants. *Health services insights*, *11*.
- Lattof, S.R., 2018. Health insurance and care-seeking behaviours of female migrants in Accra, Ghana. Health Policy Plan 33, 505–515. https://doi.org/10.1093/heapol/czy012
- Lattof, S.R., Coast, E., Leone, T., 2018. Priorities and Challenges Accessing Health Care Among Female Migrants. Health Service Insights 11, 117863291880482. https://doi.org/10.1177/1178632918804825
- Latunji, O. O., & Akinyemi, O. O. (2018). Factors influencing health-seeking behaviour among civil servants in Ibadan, Nigeria. *Annals of Ibadan postgraduate medicine*, *16*(1), 52–60.
- Lee, S. J., Go, T. G., Kang, H. R., & Park, D. U. (2018). Impact of health insurance status changes on healthcare utilisation patterns: a longitudinal cohort study in South Korea. BMJ Open, 8(4), e019926.

- Lee, S.H., Noh, J.-W., Kim, Y., Ryoo, H.W., Park, K.-H., Park, S.Y., Lee, S., Cheong, H.S., Heo, S.T., Hong, K.J., Kim, K.-B., Kwon, K.T., 2022. Expert Consensus on Measures to Promote Physical and Psychological Health among COVID-19-Related Healthcare Workers in Korea using Delphi Technique. Infect Chemother 54, 247. https://doi.org/10.3947/ic.2021.0137
- Lemstra, M., Mackenbach, J., Neudorf, C., & Nannapaneni, U. (2009). High health care utilization and costs associated with lower socio-economic status: results from a linked dataset. *Canadian journal of public health*, 100(3), 180–183.
- Levesque, J. F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: conceptualising access at the interface of health systems and populations. International Journal for Equity in Health, 12(1), 18.
- Lewis, W. (1954). Economic development with unlimited supplies of labour. *The Manchester school*, 22(2), 139-191.
- Likert, R. (1932). A technique for the measurement of attitudes. Archives of Psychology, 140, 1-55.
- Lippke, S., Ziegelmann, J. P., Schwarzer, R., & Velicer, W. F. (2010). Validity of stage assessment in the adoption and maintenance of physical activity and fruit and vegetable consumption. Health Psychology, 29(2), 163–170.
- Little, R. J., & Rubin, D. B. (2019). Statistical analysis with missing data. John Wiley& Sons.
- Locke, E. A., & Latham, G. P. (1990). A theory of goal setting & task performance. Prentice-Hall, Inc.
- Loganathan, T., Rui, D., Ng, C. W., & Pocock, N. S. (2019). Breaking down the barriers: Understanding migrant workers' access to healthcare in Malaysia. *PloS One*, *14*(7), e0218669.
- López-Cevallos, D. F., & Chi, C. (2010). Assessing the context of health care utilization in Ecuador: a spatial and multilevel analysis. *BMC health services research*, *10*, 64.
- MacKian, S., 2003. A review of health seeking behaviour: problems and prospects. Health Systems Development Programme.
- Mahanta, N., Narain, K., Hazarika, N. C., & Saikia, A. M. (2017). Pattern and determinants of out-of-pocket health care expenditure in elderly population: Evidence from India. Journal of Public Health, 25(6), 645-652.
- Mahapatro, M., & Mishra, A. (2017). Health and healthcare access among the urban poor: a study in Delhi, India. Journal of Urban Health, 94(6), 790-801.
- Makandwa, T., Vearey, J., 2017. Giving Birth in a Foreign Land: Exploring the Maternal Healthcare Experiences of Zimbabwean Migrant Women Living in Johannesburg, South Africa. Urban Forum 28, 75–90. https://doi.org/10.1007/s12132-017-9304-5
- Malenga, T., Griffiths, F.E., van den Berg, M. *et al.* A qualitative exploration of the experiences of community health animation on malaria control in rural Malawi. *Global Health* **16,** 25 (2020).
- Malmqvist, J., Hellberg, K., Möllås, G., Rose, R., & Shevlin, M. (2019). Conducting the Pilot Study: A Neglected Part of the Research Process? Methodological Findings Supporting the Importance of Piloting in Qualitative Research Studies. *International Journal of Qualitative Methods*, *18*.
- Maneze, D., DiGiacomo, M., Salamonson, Y., Descallar, J., Davidson, P.M., 2015. Facilitators and Barriers to Health-Seeking Behaviours among Filipino Migrants: Inductive Analysis to Inform Health Promotion. BioMed Research International 2015, 1–9. https://doi.org/10.1155/2015/506269
- Manning, W. G., Mullahy, J., & Newhouse, J. P. (2014). Modeling health care costs and counts. Handbook of Health Economics, 2, 109-187.

- Marmot, M. (2005). Social determinants of health inequalities. The Lancet, 365(9464), 1099-1104.
- Mason, A. E., Shaw, E. K., & Jackson, G. L. (2018). Determinants of healthcare utilization among veterans in the United States: A conceptual framework. International Journal of Health Policy and Management, 7(7), 642-651.
- McCann, T.V., Mugavin, J., Renzaho, A., Lubman, D.I., 2016. Sub-Saharan African migrant youths' help-seeking barriers and facilitators for mental health and substance use problems: a qualitative study. BMC Psychiatry 16, 275. https://doi.org/10.1186/s12888-016-0984-5
- McKenzie, S. K., & Menjívar, C. (2011). The meanings of migration, remittances and gifts: Views of Honduran women who stay. Global Networks, 11(1), 1-24.
- Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. Implementation Science, 6(1), 42.
- Moher, D., 2009. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. Ann Intern Med 151, 264. https://doi.org/10.7326/0003-4819-151-4-200908180-00135
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The PRISMA Group. (2010). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLOS Medicine, 6(7), e1000097.
- Mojumdar, S. (2018). Determinants of health service utilization by urban households in India: A multivariate analysis of NSS case-level data. *Journal of Health Management*, 20, 105–21.
- Moreau, M., Gagnon, M. P., & Boudreau, F. (2015). Development of a fully automated, web-based, tailored intervention promoting regular physical activity among insufficiently active adults with type 2 diabetes: integrating the I-change model, self-determination theory, and motivational interviewing components. *JMIR research protocols*, *4*(1), e4099.
- Morris, C. N., & Ferguson, A. G. (2007). Sexual and treatment-seeking behaviour for sexually transmitted infection in long-distance transport workers of East Africa. *Sexually transmitted infections*, *83*(3), 242–245.
- Morse, J. M. (2015). Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. Qualitative Health Research, 25(9), 1212–1222.
- Munn, Z., Moola, S., Riitano, D., Lisy, K., 2014. The development of a critical appraisal tool for use in systematic reviews addressing questions of prevalence. Int J Health Policy Manag 3, 123–128. https://doi.org/10.15171/ijhpm.2014.71
- Munyaneza, Y., Mhlongo, E.M., 2019. Challenges of women refugees in utilising reproductive health services in public health institutions in Durban, KwaZulu-Natal, South Africa. Health SA Gesondheid 24. https://doi.org/10.4102/hsag.v24i0.1030
- Mutowo, J., Jerling, J., & Lorgelly, P. (2015). The cost of a healthy diet: A South African perspective. BMC Public Health, 15(1), 1-8.
- Nair, A., Gudlavalleti, A. S., Satyanarayana, V., Weiss, M. G., & Varghese, C. (2017). Coping strategies for health service utilization among families with tuberculosis in India. Journal of biosocial science, 49(5), 627-643.
- Nasa, P., Jain, R., Juneja, D., 2021. Delphi methodology in healthcare research: How to decide its appropriateness. WJM 11, 116–129. https://doi.org/10.5662/wjm.v11.i4.116
- National Health Insurance Authority (2012), Annual report, 2012. NHIA-Ghana
- Nedson, P. (2009). *Healthy Migrants or Health Migrants? Accounting For the Health Care Utilisation Patterns of Zimbabwean Migrants Living in South Africa*. [Unpublished Master's Thesis]. University of the Witwatersrand, South Africa.

- Norredam, M., et al. (2018). Inequalities in access to healthcare services for migrants in Europe. Copenhagen: WHO Regional Office for Europe.
- Novick, G. (2008). Is there a Bias Against Telephone Interviews in Qualitative Research? Research in Nursing & Health, 31(4), 391–398.
- Ntakobajira, B., 2012. Health-seeking behaviour among African asylum seekers in South Africa : experience of male refugees in Pretoria.
- Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. Health Promotion International, 15(3), 259-267.
- Nutbeam, D. (2008). The evolving concept of health literacy. Social Science & Medicine, 67(12), 2072-2078.
- Nyaaba, G. N., Agyemang, C., Masana, L., de-Graft Aikins, A., Beune, E., Larrea-Killinger, C., & Stronks, K. (2019). Illness representations and coping practices for self-managing hypertension among sub-Saharan Africans: A comparative study among Ghanaian migrants and non-migrant Ghanaians. *Patient education and counseling*, *102*(9), 1711–1721.
- Nyarko, S.H., Tahiru, A.M., 2018. Harsh Working Conditions and Poor Eating Habits: Health-Related Concerns of Female Head Porters (Kayayei) in the Mallam Atta Market, Accra, Ghana. BioMed Research International 2018, 1–7. https://doi.org/10.1155/2018/6201837
- Nyonator, F., Dovlo, D., & Sagoe, K. (2005). The health of the nation and the brain drain in the health sector. Retrieved from http://www.nyonator.info/pub_document/TheHealthoftheNationandtheBrainDrain.pdf.
- O'Donnell O. (2007). Access to health care in developing countries: breaking down demand side barriers. *Cadernos de saude publica*, *23*(12), 2820–2834
- Odunayo, A., & Oyedele, O. (2014). Self-medication practices among dental, midwifery and nursing students. African Journal of Medical and Health Sciences, 13(1), 15-18.
- Okoronkwo, I. L., Onwujekwe, O. E., Ani, F. O., & Akpala, C. O. (2014). The long walk to Universal Health Coverage: patterns of inequities in the use of primary healthcare services in Enugu, Southeast Nigeria. BMC Health Services Research, 14(1), 1-8.
- Omenka, O. I., Watson, D. P., & Hendrie, H. C. (2020). Understanding the healthcare experiences and needs of African immigrants in the United States: a scoping review. *BMC Public Health*, *20*, 1-13.
- Opare, J.M. (2003). Women Porters of Southern Ghana, *Journal of Social Development in Africa*; 18(2), pp. 33-48
- Owusu, L., Yeboah, T., 2018. Living conditions and social determinants of healthcare inequities affecting female migrants in Ghana. GeoJournal 83, 1005–1017. https://doi.org/10.1007/s10708-017-9817-4
- Oyebola, D. D., Adebayo, A. M., & Adebisi, A. M. (2017). Health-seeking behaviour among individuals in Oyo State, Nigeria. Scientific Research Journal (SCIRJ), 5(11), 19-27.
- Pandey, Kiran & Yang, Fan & Cagney, Kathleen & Smieliauskas, Fabrice & Meltzer, David & Ruhnke, Gregory. (2019). the impact of marital status on health care utilization among Medicare beneficiaries. *Medicine*, 98. e14871
- Pastwa-Wojciechowska, B., Grzegorzewska, I., & Wojciechowska, M. (2021). The role of religious values and beliefs in shaping mental health and disorders. *Religions*, *12*(10), 840.
- Peng, B., & Ling, L. (2023). Health service behaviors of migrants: A conceptual framework. *Frontiers in Public Health*, *11*, 1043135.

- Peng, Y., Chang, W., Zhou, H., Hu, H., Liang, W., 2010. Factors associated with health-seeking behavior among migrant workers in Beijing, China. BMC Health Serv Res 10, 69. https://doi.org/10.1186/1472-6963-10-69
- Peng, Yingchun et al. "Factors associated with health-seeking behavior among migrant workers in Beijing, China." *BMC Health Services Research* vol. 10 69. 19 Mar. 2010, doi:10.1186/1472-6963-10-69
- Pessar, P. R., & Mahler, S. J. (2003). Transnational migration: Bringing gender in *International Migration Review, 37*(3), pp. 812-846.
- Phillips, K. A., Morrison, K. R., Andersen, R., & Aday, L. A. (2015). Understanding the Context of Healthcare Utilization: Assessing Environmental and Provider-Related Variables in the Behavioral Model of Utilization. Health Services Research, 50(3), 884–904.
- Pillay, Y., Barron, P., & Zondi, T. (2018). Migration and health in South Africa. South African Health Review, 1(1), 55-61.
- Ping, H. (2003). China migration country study paper presented at the Regional Conference on Migration, Development and Pro-Poor Policy Choices in Asia, organized by the Bangladesh Refugee and Migratory Movements Research Unit, Bangladesh/DFID UK.
- Ping, H., Shaohua, Z., 2005. Internal migration in China: Linking it to development., Migration, development and poverty reduction in Asia. ed. Presented at the Regional Conference on Migration and Development in Asia, International Organization for Migration, Geneva, Switzerland.
- Polit, D. F., & Beck, C. T. (2012). Nursing Research: Generating and Assessing Evidence for Nursing Practice. Wolters Kluwer Health.
- Pophiwa, N., 2009. Healthy Migrants or Health Migrants? Accounting for the health care utilisation patterns of Zimbabwean migrants living in South Africa.
- Porter, D. (2005). *Health, civilization and the state: a history of public health from ancient to modern times.* Routledge.
- Preker, A. S., Liu, X., and Velenyi, E. V. (2007). *Public ends, private means: strategic purchasing of health services.* The World Bank.
- Prochaska, J. O., & DiClemente, C. C. (1992). Stages of change in the modification of problem behaviors. Progress in Behavior Modification, 28, 183-218.
- Quandt, S.A., Arcury-Quandt, A.E., Lawlor, E.J., Carrillo, L. (2013). 3-D jobs and health disparities: the health implications of Latino chicken catchers' working conditions, *American Journal of Industrial Medicine* 56(2), pp. 206–15.
- Raghupathi, V., & Raghupathi, W. (2020). The influence of education on health: an empirical assessment of OECD countries for the period 1995–2015. *Archives of Public Health*, *78*(1), 1-18.
- Rajaraman, D., Travasso, S. M., Chatterjee, A., Bhat, B., Andrew, G., & Parthasarathy, R. (2016). Advancing knowledge on the health of internal migrants in India: the history, context, and current status of research. National Medical Journal of India, 29(5), 249-254.
- Rajasthan, India: A Tribal Community's Perspective, *Institute of Health Management Research, Jaipur*, IIHMR
- Ranjbar Ezzatabadi, M., Khosravi, A., Bahrami, M. A., & Rafiei, S. (2018). Socio-economic inequalities in health services utilization: a cross-sectional study. *International journal of health care quality assurance*, *31*(1), 69–75.
- Rathod, S., Pinninti, N., Irfan, M., Gorczynski, P., Rathod, P., Gega, L., Naeem, F., 2017. Mental Health Service Provision in Low- and Middle-Income Countries. Health Service Insights 10, 117863291769435. https://doi.org/10.1177/1178632917694350

- Ratnapradipa, K. L., Jadhav, S., Kabayundo, J., Wang, H., & Smith, L. C. (2023). Factors associated with delaying medical care: a cross-sectional study of Nebraska adults. *BMC Health Services Research*, *23*(1), 1-10.
- Rechel, B, Mladovsky, P, Devillé, W, et al. (2011). Migration and health in the European Union: an introduction (3-13). In: Rechel, B, Mladovsky, P, Devillé, W, et al. (eds) *Migration and health in the european union*. Maidenhead: Open University Press.
- Rejeski, W.J., Fanning, J., 2019. Models and theories of health behavior and clinical interventions in aging: a contemporary, integrative approach. CIA Volume 14, 1007–1019. https://doi.org/10.2147/CIA.S206974
- Rentería, Y. M., & Ataiants, J. (2017). Ethnic discrimination and health: the relationship between experienced ethnic discrimination and multiple health domains in migrants residing in Spain. Journal of Ethnic and Migration Studies, 43(5), 758-776.
- Riisoen, K H, Hatloy, A. & Bjerkan, L. (2004) Travel to Uncertainty: A Study of Child Relocation in Burkina Faso, Ghana and Mali, FAFO Report 440, Norway.
- Ritchie JE, Herscovitch F, Norfor JB. Beliefs of blue-collar workers regarding coronary risk behaviours. Health Edu Res 1994; 9:95-103
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. The Journal of Psychology, 91(1), 93-114.
- Rosenstock, I. M. (1974). Historical origins of the health belief model. Health Education Monographs, 2(4), 328-335.
- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the Health Belief Model. Health Education & Behavior, 15(2), 175-183.
- Rossi, S.H., Blick, C., Handforth, C., Brown, J.E., Stewart, G.D., 2020. Essential Research Priorities in Renal Cancer: A Modified Delphi Consensus Statement. European Urology Focus 6, 991–998. https://doi.org/10.1016/j.euf.2019.01.014
- Rothman, K. J., Greenland, S., & Lash, T. L. (2008). Modern Epidemiology. Lippincott Williams & Wilkins.
- Rothwell, P. M. (2005). External validity of randomised controlled trials: "To whom do the results of this trial apply?". The Lancet, 365(9453), 82-93
- Ryan R; Cochrane Consumers and Communication Review Group. 'Cochrane Consumers and Review Group: data synthesis and analysis', http://cccrg.cochrane.org, June 2013.
- Saha, S., Beach, M. C., & Cooper, L. A. (2008). Patient Centeredness, Cultural Competence and Healthcare Quality. Journal of the National Medical Association, 100(11), 1275–1285.
- Salami, K.K., Olugbayo, A.O., 2013. Health-seeking behavior of migrant beggars in Ibadan, Southwestern Nigeria. Health 05, 792–804. https://doi.org/10.4236/health.2013.54105
- Salisu, A., & Prinz, V. (2009). *Health care in Ghana*. Wien: ACCORD: Austrian Centre for Country of Origin & Asylum Research and Documentation.
- Sarafino, E. P., & Smith, T. W. (2014). Health psychology: Biopsychosocial interactions (8th ed.). John Wiley & Sons.
- Sarkodie, A.O., 2021. Effect of the National Health Insurance Scheme on Healthcare Utilization and Out-of-Pocket Payment: Evidence from GLSS 7. Humanit Soc Sci Commun 8, 293. https://doi.org/10.1057/s41599-021-00984-7
- Sarría-Santamera, A., Hijas-Gómez, A. I., Carmona, R., & Gimeno-Feliú, L. A. (2016). A systematic review of the use of health services by immigrants and native populations. *Public health reviews*, *37*, 28.
- Sarver, J., et al. (2018). Language barriers impact access to care for Spanish-speaking children with special health care needs. Maternal and Child Health Journal, 22(10), 1398-1405.

- Sato, A. (2012). Does socio-cultural context influence the use of modern health services? Evidence from Ghana. Tropical Medicine & International Health, 17(4), 526-534.
- Schicker, R. S., Hiruy, N., Melak, B., Gelaye, W., Bezabih, B., Stephenson, R., Patterson, A. E., Tadesse, Z., Emerson, P. M., Richards, F. O., Jr, & Noland, G. S. (2015). A Venue-Based Survey of Malaria, Anemia and Mobility Patterns among Migrant Farm Workers in Amhara Region, Ethiopia. *PloS one*, *10*(11), e0143829.
- Schieber, G., Cashin, C., Saleh, K., & Lavado, R. (2012). *Health Financing in Ghana*. Washington, DC: World Bank.
- Schmidt, N. C., Fargnoli, V., Epiney, M., & Irion, O. (2018). Barriers to reproductive health care for migrant women in Geneva: a qualitative study. *Reproductive health*, *15*, 1-10.
- Sebastian, A.T., Rajkumar, E., Tejaswini, P., Lakshmi, R., Romate, J., 2021. Applying social cognitive theory to predict physical activity and dietary behavior among patients with type-2 diabetes. Health Psychol Res 9, 24510. https://doi.org/10.52965/001c.24510
- Seeberg, J., Pannarunothai, S., Padmawati, R.S., Trisnantoro, L., Barua, N., Pandav, C.S., 2014. Treatment seeking and health financing in selected poor urban neighbourhoods in India, Indonesia and Thailand. Social Science & Medicine 102, 49–57. https://doi.org/10.1016/j.socscimed.2013.11.039
- Seidu A-A. (2020). Utilisation of health care services: a social determinant of health. Pan African Medical Journal, 37(Suppl 1), 12.
- Shady, K., Phillips, S., & Newman, S. (2022). Barriers and facilitators to healthcare access in adults with intellectual and developmental disorders and communication difficulties: an integrative review. *Review Journal of Autism and Developmental Disorders*, 1-13.
- Shaikh, B. T., & Hatcher, J. (2005). Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. *Journal of Public Health*, 27(1), 49–54.
- Shamsu-Deen, Z., Adadow, Y., 2019. Health-seeking behaviour among migrant female head porters in the City of Accra, Ghana. Ghana J. Dev. Stud. 16, 138. https://doi.org/10.4314/gjds.v16i2.7
- Shewamene, Z., Dune, T., & Smith, C. A. (2021). Acculturation and use of traditional medicine among African migrant women in Sydney: a mixed method study. *BMC Complementary Medicine and Therapies*, *21*, 1-9.
- Sibley, L., & Amare, Y. (2017). Illness recognition and care seeking for maternal complications of pregnancy and birth in rural Amhara and Oromia Regional States of Ethiopia. *BMC pregnancy and childbirth*, *17*(1), 1-9.
- Singh, L., Singh, P. K., Arokiasamy, P., & Rai, R. K. (2014). Determinants of maternity care services utilization among married adolescents in rural India. PloS One, 9(2), e96294.
- Singh, L.P. & Gupta, S. D. (2014) Health Seeking Behaviour and Healthcare Services in
- Skogstad, Philip & Deane, Frank & Spicer, John. (2006). Social-cognitive determinants of help-seeking for mental health problems among prison inmates. Criminal behaviour and mental health: CBMH. 16. 43-59. 10.1002/cbm.54.
- Smith, J. A., Braunack-Mayer, A., Wittert, G., & Warin, M. (2018). "It was when I was happy that I wanted to overeat": A qualitative exploration of the lived experience of obesity. Health Expectations, 21(3), 585-593.
- Smith, J. L., Bertin, M., Tapp, H., Haider, M., & Moffatt-Bruce, S. D. (2019). Barriers and facilitators for oncology nurses discussing sexual issues with men diagnosed with testicular cancer. Clinical Journal of Oncology Nursing, 23(3), 307-313.
- Smith, J., Johnson, R., & Brown, K. (2018). Data quality assessment: A survey of data quality dimensions. Information Systems, 33(4), 705-720.

- Smith, J., Johnson, R., & Brown, K. (2019). Understanding healthcare expenditure: A review of methodological issues and approaches. Health Economics Review, 9(1), 23.
- Songsore, J. (2009). The urban transition in Ghana: Urbanization, national development and poverty reduction. University of Ghana, Legon–Accra.
- Sözmen, K., & Ünal, B. (2016). Explaining inequalities in Health Care Utilization among Turkish adults: Findings from Health Survey 2008. *Health policy (Amsterdam, Netherlands)*, *120*(1), 100–110.
- Srivastava, D. K., Mishra, A., & Mishra, S. (2012). Impact of health education on knowledge, attitude, practices and glycemic control in type 2 diabetes mellitus. Journal of Clinical and Diagnostic Research, 6(8), 1396-1400.
- Strecher, V. J., Rosenstock, I. M., & Glanz, K. (2008). Health Behavior and Health Education: Theory, Research, and Practice. John Wiley & Sons.
- Subhash Pokhrel and Rainer Sauerborn (2004). Household Decision-Making on Child Health Care in Developing Countries: The Case of Nepal.
- Sudhinaraset, M., Afulani, P. A., Diamond-Smith, N., Bhattacharyya, S., Donnay, F., & Montagu, D. (2013). Advancing a conceptual model to improve maternal health quality: the person-centered care framework for reproductive health equity. Gates Open Research, 1, 1-25.
- Sudhinaraset, M., Ingram, M., Lofthouse, H. K., & Montagu, D. (2013). What is the role of informal healthcare providers in developing countries? A systematic review. PLoS One, 8(2), e54978.
- Suurmond J, Rosenmöller DL, El Mesbahi H, Lamkaddem M, Essink-Bot ML. Barriers in access to home care services among ethnic minority and Dutch elderly--a qualitative study. Int J Nurs Stud. 2016 Feb;54:23-35. doi:10.1016/j.ijnurstu.2015.02.014. Epub 2015 Feb 25. PMID: 25776734.
- Suurmond, J., et al. (2016). Language barriers to health care for migrants in the Netherlands: An exploratory qualitative study. Health Policy, 120(3), 268-276.
- Suurmond, J., Seeleman, C., & Stronks, K. (2016). Cultural Competence among Healthcare Providers: A Systematic Review of the Literature. Medical Care Research and Review, 67(3), 255–277
- Suurmond, J., Uiters, E., de Bruijne, M. C., Stronks, K., & Essink-Bot, M. L. (2011). Negative health care experiences of immigrant patients: a qualitative study. BMC Health Services Research, 11(1), 1-10.
- Thela, L., Tomita, A., Maharaj, V., Mhlongo, M., & Burns, J. K. (2017). Counting the cost of Afrophobia: Post-migration adaptation and mental health challenges of African refugees in South Africa. *Transcultural psychiatry*, *54*(5-6), 715–732.
- Thela, L., Tomita, A., Maharaj, V., Mhlongo, M., Burns, J.K., 2017. Counting the cost of Afrophobia: Post-migration adaptation and mental health challenges of African refugees in South Africa. Transcult Psychiatry 54, 715–732. https://doi.org/10.1177/1363461517745472
- Thike, A. A. M., et al. (2019). Barriers and facilitators of health services access among African migrants living with HIV/AIDS in Thailand: a qualitative study. BMC Public Health, 19(1), 1343.
- Towns, A.M., Mengue Eyi, S., Van Andel, T., 2014. Traditional Medicine and Childcare in Western Africa: Mothers' Knowledge, Folk Illnesses, and Patterns of Healthcare-Seeking Behavior. PLoS ONE 9, e105972. https://doi.org/10.1371/journal.pone.0105972
- Trilling JS. Selections from current literature: focus group technique in chronic illness. Fam Pract 1999; 16:539-41.

- Tshabalala, M. (2014). *Health Seeking Behaviours of Migrant Domestic Workers in Centurion, South Africa*. [Unpublished Master's Thesis]. University of Limpopo, South Africa.
- Tuiran-Gutiérrez, G. J., Mendoza-Alvarado, L. R., & Sánchez-Silva, R. (2018). Perception and attitude toward traditional medicine among the elderly population in rural areas of Veracruz, Mexico. Journal of Ethnopharmacology, 224, 497-503.
- Uansri, S., Kunpeuk, W., Julchoo, S., Sinam, P., Phaiyarom, M., & Suphanchaimat, R. (2023). Perceived Barriers of Accessing Healthcare among Migrant Workers in Thailand during the Coronavirus Disease 2019 (COVID-19) Pandemic: A Qualitative Study. *International journal of environmental research and public health*, *20*(10), 5781.
- United Nations. World urbanization prospects: the 2018 revision. New York: Department of Economic and Social Affairs, Population Division; 2019.
- Ushie, B. A., & Mkuu, R. S. (2020). Involvement in social networks and health-seeking behavior among selected households in Maiduguri, Nigeria. Open Journal of Social Sciences, 8(2), 193-211.
- Van Belle, S., van de Pas, R., Marchal, B., Dubourg, D., & Kegels, G. (2010). How to develop and test a causal theory of change: methods and tools. BMC Public Health, 10(1), 1-12.
- Van der Geest, S. (1995). The social context of therapeutic choices in rural Ghana. Culture, Medicine and Psychiatry, 19(3), 301-329.
- Vearey, J. (2017). Learning from HIV: exploring migration and health in South Africa. Global Public Health, 12(2), 141-155.
- Ver Hoef, J. M., & Boveng, P. L. (2007). Quasi-Poisson vs. negative binomial regression: How should we model overdispersed count data? Ecology, 88(11), 2766-2772.
- Vikum, E., Krokstad, S., & Westin, S. (2012). Socioeconomic inequalities in health care utilisation in Norway: the population-based HUNT3 survey. *International journal for equity in health*, *11*, 48.
- Virolainen, S. J., VonHandorf, A., Viel, K. C., Weirauch, M. T., & Kottyan, L. C. (2023). Gene-environment interactions and their impact on human health. *Genes & Immunity*, *24*(1), 1-11.
- Viswanathan, M., Berkman, N. D., Dryden, D. M., & Hartling, L. (2012). Assessing risk of bias and confounding in observational studies of interventions or exposures: further development of the RTI item bank. Methods Research Report. RTI International-University of North Carolina Evidence-based Practice Center.
- Waite, L. (1995). Does marriage matter? *Demography* **32,** 483–507.
- Wang, L., Li, M., & Gu, L. (2020). Health service utilization among internal migrants in Guangdong and Sichuan provinces in China: a comparative study. BMC Health Services Research, 20(1), 1-10.
- Wang, W., Ding, Y., Zhao, Q., & Xiong, X. (2018). A Qualitative Study on Migrant Patients' Attitudes and Experiences towards Healthcare Services in Zhejiang Province, China. International Journal of Environmental Research and Public Health, 15(5), 980.
- Webb, T. L., Joseph, J., Yardley, L., & Michie, S. (2010). Using the internet to promote health behavior change: A systematic review and meta-analysis of the impact of theoretical basis, use of behavior change techniques, and mode of delivery on efficacy. Journal of Medical Internet Research, 12(1), e4.
- Wells, G., Shea, B., O'Connell, D., et al. (2000). The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomized studies in meta-analyses. Retrieved from [Ottawa Hospital Research Institute](http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp).

- Wickramage, K., Vearey, J., Zwi, A.B., Robinson, C., Knipper, M., 2018. Migration and health: a global public health research priority. BMC Public Health 18, 987. https://doi.org/10.1186/s12889-018-5932-5
- Wiking, E., Saleh-Stattin, N., & Johansson, S. E. (2014). Immigrant patients' experiences and reflections pertaining to the consultation: a study on patients from Chile, Iran and Turkey in primary health care in Stockholm, Sweden. Scandinavian Journal of Public Health, 42(3), 279-287.
- World Health Organization, (2015) Health in 2015: From MDGs to SDGs. Geneva: World Health Organization.
- World Health Organization. (2010). Health systems financing: the path to universal coverage. World Health Organization.
- World Health Organization. (2010). Migration and health: Key issues. Retrieved from https://www.who.int/hac/techguidance/health_of_migrants.pdf
- Wu X., Wang, A., Li, S. (2004). Analysis of impact factors on demand and utilization of health care in urban residents. China Health Resources, 1, 21–23.
- Yang, Y., Zhao, S., Lin, L., Qian, J., Zhang, H., & Cai, F. (2023). Social support and quality of life in migrant workers: Focusing on the mediating effect of a healthy lifestyle. *Frontiers in Public Health*, *11*, 1061579.
- Yaro, J.A (2008). *Migration in West Africa: Patterns, Issues and Challenges*. Unpublished paper
- Yeboah, M. (2008). Urban poverty livelihood and gender perception and experience of porters in Accra, Ghana. *Africa Today*, 42-60 Project Muse.
- Yeboah, T., Owusu, L., Arhin, A., A., & Kumi, E. (2015). Fighting poverty from the street: Perspectives of some female informal sector workers on gendered poverty and livelihood. *Journal of Economic and Social Studies, 5*(1), pp. 239–267
- Yelland, J., Riggs, E., Szwarc, J., Casey, S., Duell-Piening, P., Chesters, D., & Wahidi, S. (2016). Compromised communication: a qualitative study exploring Afghan families and health professionals' experience of interpreting support in Australian maternity care. BMJ open, 6(5), e010167.
- Yip, C., Han, N.-L., Sng, B., 2016. Legal and ethical issues in research. Indian J Anaesth 60, 684. https://doi.org/10.4103/0019-5049.190627
- Yiran, G.S.A., Teye, J.K., Yiran, G.A. and Ghana, P.O., 2014. Accessibility of maternal healthcare by migrant female headporters in Accra. Journal of Health, Medicine and Nursing, 3(1), pp.10-21.
- Yu, C., Lou, C., Cheng, Y., Cui, Y., Lian, Q., Wang, Z., Gao, E., Wang, L., 2019. Young internal migrants' major health issues and health seeking barriers in Shanghai, China: a qualitative study. BMC Public Health 19, 336. https://doi.org/10.1186/s12889-019-6661-0
- Zeng, X., Zhang, Y., Kwong, J.S.W., Zhang, C., Li, S., Sun, F., Niu, Y., Du, L., 2015. The methodological quality assessment tools for preclinical and clinical studies, systematic review and meta-analysis, and clinical practice guideline: a systematic review: Methodological quality assessment tools. Journal of Evidence-Based Medicine 8, 2–10. https://doi.org/10.1111/jebm.12141
- Zhang, K. H. & Shunfeng, S. (2003). Rural-urban migration and urbanization in china: Evidence from time-series and cross-section analyses. *China Economic Review*, 14(4), 386-400.
- Zhang, L., Wang, Z., & Li, D. (2017). Health insurance coverage and its impact on medical cost: observations from the floating population in China. PloS One, 12(6), e0178811.

- Zhang, X., Xie, S. (2019). Health insurance and health care among the mid-aged and elderly in China: evidence from the National baseline survey of CHARLS. BMC Health Services Research, 19(1), 1-11.
- Zimmerman, C., Kiss, L., & Hossain, M. (2011). Migration and health: a framework for 21st-century policy-making. *PLoS Med*, 8(5), e1001034
- Zuma, K., Lurie, M.N., Williams, B.G., Mkaya-Mwamburi, D., Garnett, G.P., Sturm, A.W., 2005. Risk factors of sexually transmitted infections among migrant and non-migrant sexual partnerships from rural South Africa. Epidemiol. Infect. 133, 421–428. https://doi.org/10.1017/S0950268804003607

APPENDIX

1 PILOT REVIEW

1. Introduction

This pilot review was conducted to identify datasets and search terms frequently used by studies and reviews that examine the determinants of health-seeking behaviour among internal migrants in Africa. By identifying studies that explain the reasons behind internal migrants' reluctance to engage in health-seeking behaviour, this investigation aimed to guide the methodology of the primary literature review and offer a comprehensive summary of existing evidence.

2. Materials and Methods

2.1 Search Strategy

Scopus, the largest database with over 37,000 titles from medicine, social sciences, psychology, nursing, and arts and humanities, was searched between 16 May and 5 June for relevant reviews. Scopus was chosen as the main search engine for this pilot study.

The literature was also searched using Web of Science, Medline via Ovid, PubMed, and Google Scholar databases between the mentioned time-frame. Initial searches were based on non-country or region-specific information but were later narrowed to research on health-seeking behaviour among migrants in Africa.

The search also used websites belonging to several bilateral agencies and organisations, such as the World Health Organization (WHO), the International Organization for Migration (IOM), Global Health Action, the Ghana Health Service, The Ghana Centre for Migration Studies, and several NGOs working on health and migration-related issues in Africa.

This pilot review used the following search terms and keywords: (‘health seeking behaviour’) AND (‘correlate*’) OR (determinant*) OR (factor*) AND (migrant*) AND (PUBYEAR>2011 OR PUBYEAR>2001). The table below demonstrates the search results

Table 1: Search Results

Database	Initial Hits	Advance Hits	Final Results
SCOPUS	12	Limited to reviews with PUBYR>2011	9

Others	2073	Limited to reviews with PUBYR>2001	334
Total	2085		343

2.2. Eligibility Criteria

This search was limited to reviews published in English, and only relevant studies accessible in PDF were selected. The reviews selected for this pilot review discuss the relationship between the determinants of health-seeking behaviour and the migrant population. The table below shows the eligibility criteria that were used in this study.

Table 2: Eligibility Criteria

INCLUSION CRITERIA	EXCLUSION CRITERIA
Reviews examining health seeking behaviour	Reviews examining behaviour apart from health seeking behaviour
Reviews must be in English	Reviews in any other language apart from English
Full text of the reviews must be available and accessible	Full text not available
Reviews published between 2001 and 2020	Reviews published before the year 2001

2.3. Data Extraction

A developed data extraction question was used to extract data from the selected studies. Five main questions were used to extract the relevant data from the selected reviews. The questions were:

- What database(s) were used in the reviews?
- What keywords were used in the reviews?
- Who are the authors?
- What year did they publish the reviews?
- What were the main findings of the reviews?

2.4. Quality Appraisal

After extracting the relevant data, the Critical Appraisal Skills Program (CASP) tool for systematic reviews was used to appraise the quality of the selected reviews. This was to ensure that the quality of the study met the required standard of a study to avoid potential bias (Harris et al., 2014). Based on this, the selected reviews were appraised with three main questions proposed by the CASP tool. The questions were;

- Are the results of the reviews valid?
- What are the results?
- Will the results help locally?

3. Results

Overall, three hundred and forty-three (343) reviews were identified and selected from the databases after applying specific filters. The titles of these papers were screened to ensure their relevance to the topic under study. Three hundred and one (301) were removed after further screening because they were unrelated to the topic.

Again, based on the abstracts of the forty-two (42) remaining reviews, another screening was conducted to ensure they met the eligibility criteria. Thirty-seven (37) more papers which did not meet the inclusion criteria and were eliminated after the screening. However, only five (5) papers met the eligibility criteria for this pilot review. The PRISMA diagram below demonstrates the selection process.

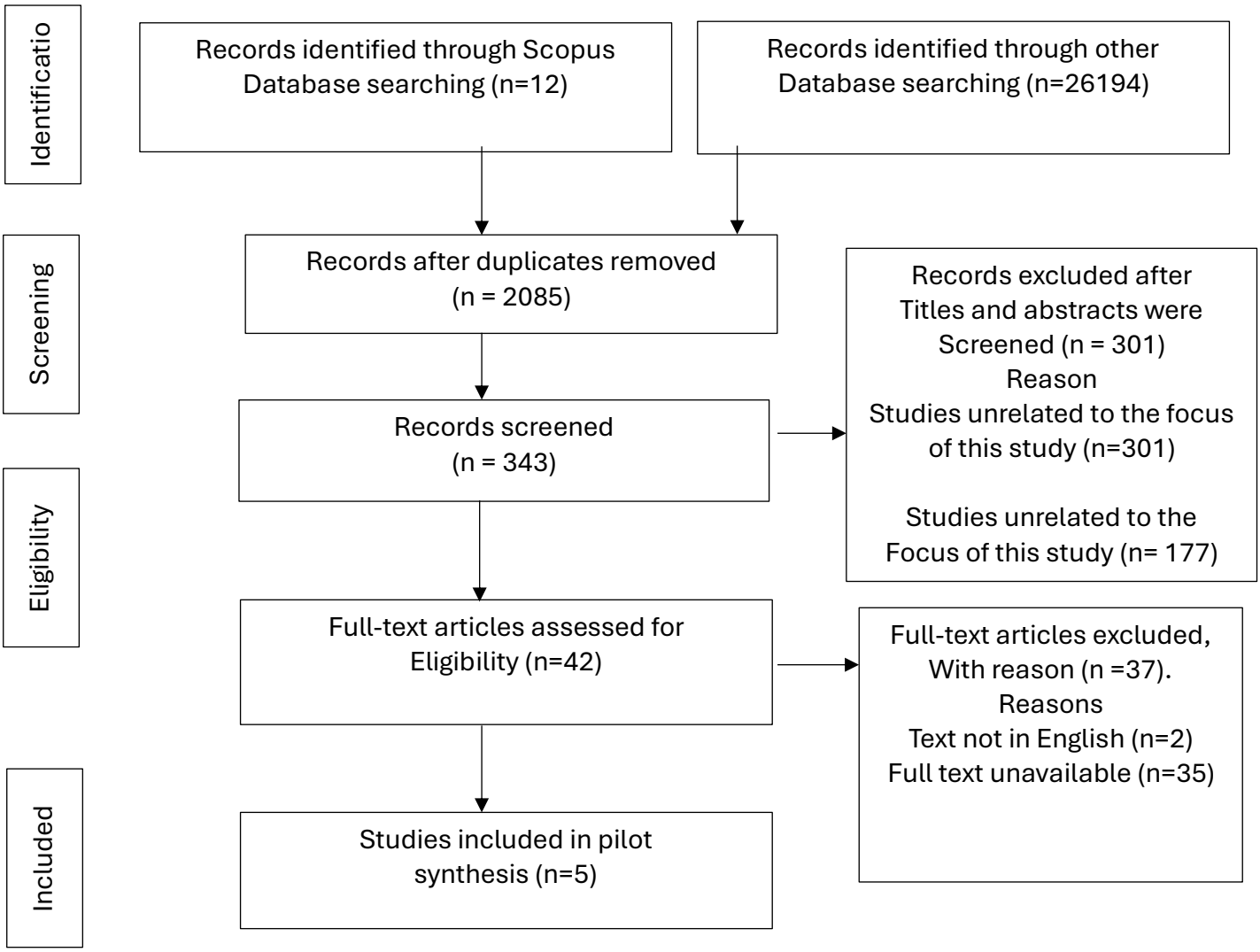

Fig 1: PRISMA Diagram

3.1 Extracted data

The data extraction process for the pilot review involved systematically gathering relevant information from identified studies and reviews on the determinants of health-seeking behaviour among migrants in Africa. This method facilitated the identification of key datasets and search terms commonly employed in existing literature. The extracted data served as a foundation for the main literature review, contributing to critical analysis and synthesis of available evidence regarding why migrants may refrain from participating in health-seeking behaviour. Below are the extracted data for this pilot study.

Table 3: Extracted Data

REVIEWS	AUTHOR/YEAR	DATABASE	SEARCH TERMS
Migration and health: A systematic review on health and health care of internal migrants in India	Yadlapalli S. Kusuma, Bontha V. Babu (August 2018)	PubMed, Web of Science, Google Scholar	'health', 'mortality', 'death', 'morbidity', 'illness' AND 'migration and migrant'
Sexual health help-seeking behaviour among migrants from Sub-Sahara Africa and East Asia living in High Income Countries: A systematic review	Rade, Donna Angelina; Crawford, Gemma; Lobo, Roanna; et al., july 2018	PubMed, PsycINFO, ProQuest, Scopus, Medline, Web of Science, Global Health, Google Scholar	'sexual health' 'help-seeking behavior? OR 'health seeking behavio? AND 'migrant*' OR 'immigra*'
Challenges in the provision of healthcare services for migrants: a systematic review through providers' lens	Suphanchaimat, R., Kantamaturapoj, K., Putthasri, W. *et al.* (2015)	Scopus, Medline, Embase	('migrant') (health personnel') ('health service') ('attitude') ('practice')
Migrants' utilization of somatic healthcare services in Europe: A systematic review	Marie Norredam, Signe S. Nielsen, Allan Krasnik (2009)	PubMed, Embase	(transients OR migrants) AND (access OR health services use OR health services utilization OR healthcare utilization)

Health Seeking Behaviour among Tuberculosis Patients in India: A Systematic Review	Janmejaya Samal (2016)	PubMed, Google Scholar	('health seeking behaviour') AND ('treatment delays') AND ('help seeking')

3.2. Database

The common databases used by the selected studies were Scopus, Medline, PubMed, Embase, Web of Science and Google Scholar. The table below gives a vivid account of how frequently the selected studies were used across these databases.

Table 4: Databases and frequency of use

DATABASE	**NUMBER OF STUDIES THAT USED IT**
PUBMED	4/5
GOOGLE SCHOLAR	3/5
SCOPUS	2/5
EMBASE	2/5
MEDLINE	2/5
WEB of SCIENCE	2/5

3.3. Search Terms

The following keywords were the most frequent search terms used by the selected studies, 'health seeking behaviour', 'help-seeking behaviour', and 'migrants'. These search terms and frequency of use have been demonstrated below.

Table 5: Identified search terms and frequency of use

Search Terms	Number of Studies That Used It
'Health seeking behaviour'	3/5
'Help seeking behaviour'	1/5
'Migrants'	3/5

4. Quality Appraisal

Each of the chosen studies affirmed a positive response to the evaluation queries, indicating their adherence to the quality criteria outlined by the Critical Appraisal Skills Programme

(CASP, 2018). Furthermore, all five studies explicitly delineated the methodologies employed in data collection and analysis, enhancing their overall reliability. The exclusion of responses to questions six (6) and seven (7) on the CASP checklist was deliberate, as these were designed to aid the reviewer in interpreting the study results, as highlighted by Lawford et al. (2016). The outcomes of the quality appraisal are detailed below.

Table 6: Results of Quality Appraisal

Studies/Reviews	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Yadlapalli S. Kusuma, Bontha V. Babu (August 2018)	YES	YES	YES	YES	YES			YES	YES	YES
Rade, Donna Angelina; Crawford, Gemma; Lobo, Roanna; et al., July 2018	YES	YES	YES	YES	YES			YES	YES	YES
Suphanchaimat, R., Kantamaturapoj, K., Putthasri, W. *et al.* (2015)	YES	YES	YES	YES	YES			YES	YES	YES
Marie Norredam, Signe S. Nielsen, Allan Krasnik (2009)	YES	YES	YES	YES	YES			YES	YES	YES
Janmejaya Samal (2016)	YES	YES	YES	YES	YES			YES	YES	YES

5. Conclusion

To conclude, Scopus, PubMed, and Web of Science emerged as the predominant databases employed in this pilot review investigating the factors influencing health-seeking behaviour among internal migrants. Notably, the search terms 'health-seeking behaviour,' 'Migrants,' and 'Health service utilisation' were recurrently used in this study. Consequently, these databases

and search terms will serve as pivotal components informing the search strategy and methodologies in the primary literature review of this research investigation.

2 Critical Appraisal of Selected Studies for Systematic Review

The systematic review undertaken in this thesis applied a rigorous and methodologically sound process of critical appraisal, ensuring that the quality and reliability of the included studies were thoroughly assessed. Key tools and frameworks were employed to facilitate this process, including the Joanna Briggs Institute (JBI) critical appraisal tools, the Agency for Healthcare Research and Quality (AHRQ) methodologies, and the Mixed Methods Appraisal Tool (MMAT) (Aromataris & Munn, 2020; AHRQ, 2014; Hong et al., 2018). These instruments were selected for their wide acceptance in evaluating diverse study designs, thereby ensuring that the assessment was systematic and applicable across various types of research.

The integration of these tools allowed for a comprehensive assessment of studies across multiple methodologies, encompassing quantitative, qualitative, and mixed-methods research. Specific study designs appraised included randomised controlled trials (RCTs), cohort studies, case-control studies, and qualitative investigations (Higgins et al., 2011; Wells et al., 2000; Rothman, Greenland, & Lash, 2008; Green & Thorogood, 2018). By applying distinct criteria tailored to each study type, the review process critically examined elements such as internal validity, external validity, methodological rigor, and bias, ensuring a well-rounded and robust synthesis of the literature.

Including a multi-tool approach, combining JBI's comprehensive checklist with AHRQ's detailed assessment framework and MMAT's flexibility for mixed methods studies, allowing for a nuanced appraisal of methodological strengths and limitations. These tools enabled the identification of biases, the evaluation of study design appropriateness, and the assessment of both qualitative and quantitative dimensions, providing a holistic understanding of the quality of evidence presented in the selected studies.

Adhering to these stringent appraisal criteria, this systematic review aimed to ensure that the included studies were of high quality and that the subsequent synthesis of findings would offer reliable insights into the health-seeking behaviour among migrants in Africa. The following tables show the appraisal results.

JBI Appraisal Results for the Reviewed Qualitative Studies

Author (s)	Questions										Total score(%)
	Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	
Arnold et al., 2014	Y	Y	Y	Y	Y	U	N	Y	Y	Y	90
Asaana, 2015	Y	Y	Y	Y	Y	N	N	Y	Y	Y	90
Asampong et al., 2015	Y	N	Y	Y	Y	Y	Y	N	Y	Y	80
Boroto, 2011	Y	N	Y	Y	Y	N	N	Y	Y	Y	40
Chirowodza, 2012	U	Y	N	Y	Y	Y	Y	Y	Y	Y	90
Crush &Tawodzera, 2014	N	N	Y	Y	Y	Y	U	Y	Y	Y	80
Desmennu et al., 2018	N	Y	Y	Y	Y	Y	Y	N	Y	Y	80
Faronbi et al., 2019	N	Y	Y	Y	Y	U	U	U	Y	Y	80
Irfan et al., 2007	N	N	Y	N	Y	Y	Y	Y	Y	Y	50
Lakika, 2011	Y	Y	Y	Y	Y	N/A	N	N	Y	Y	70
Makandwa & Vearey, 2017	Y	Y	Y	Y	Y	N/A	U	U	Y	Y	80
Munyaneza &Mhlongo, 2019	Y	Y	Y	Y	Y	N/A	N	N	Y	Y	70
Nyarko & Tahiru,2018	Y	Y	Y	Y	Y	N/A	U	N	Y	Y	80
Salami & Olugbayo, 2013	Y	Y	Y	Y	Y	N/A	U	N	Y	Y	70
Tshabalala, 2014	Y	Y	Y	Y	Y	N/A	U	N	Y	Y	40

Y=Yes, N=No, U=Unclear, N/A = Not Applicable, %= Percentage of score

AHRQ Appraisal Results for the Reviewed Quantitative studies

Author (s)	Questions											Total score
	Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	**Q11**	
Fadlallah et al., 2020	Y	Y	Y	Y	U	Y	N	U	N	U	N	5
Lasater et al.,2019	Y	Y	Y	Y	U	Y	N	U	N	U	N	5
Morris & Ferguson, 2007	Y	Y	Y	Y	U	Y	N	U	N	U	N	5
Owusu & Yeboah, 2017	Y	Y	Y	Y	U	Y	N	U	N	U	N	5
Schicker et al., 2015	Y	Y	Y	Y	N	U	N	N	N	U	N	4
Thela et al., 2017	Y	Y	Y	Y	U	Y	N	U	N	U	N	5
Anglewicz et al., 2017	Y	N	Y	Y	Y	N	N	N	N	N	N	4
Shamsu-Dee & Adadow, 2019	Y	Y	Y	Y	Y	U	N	U	N	U	N	5

Y=Yes, N=No, U=Unclear, N/A = Not Applicable

MMAT Appraisal Results for the Reviewed Mixed Methods Studies

Author (s)	Questions										Total score (%)
	Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	
Clouse et al., 2018	Y	Y	Y	Y	Y	N	Y	Y	N	Y	80
Faturiyele et al., 2018	Y	Y	Y	Y	U	N	Y	Y	N	Y	75
Hughes, Hoyo & Puoane, 2006	Y	Y	Y	Y	N	N	Y	Y	N	Y	70
Kwankye et al., 2007	Y	Y	Y	Y	U	N	Y	Y	N	Y	75
Lattof , Coast and Leone, 2018	Y	Y	Y	Y	U	N	Y	U	Y	Y	80
Lattof, 2018	Y	Y	Y	Y	U	N	Y	U	Y	Y	80
Nedson, 2009	Y	Y	Y	Y	N	N	Y	Y	N	Y	70
Afeadie, 2018	Y	Y	Y	Y	U	N	Y	Y	N	Y	75

Y=Yes, N=No, U=Unclear, N/A = Not Applicable, %= Percentage of score

3. Summary of Selected Studies for the Systematic Review

The reviewed studies provide critical insights into the health-seeking behaviour of various migrant populations across different countries, illustrating the multifaceted nature of healthcare access and utilisation in these groups. Each study contributes to a broader understanding of the social, economic, and cultural determinants that shape healthcare decision-making among migrants, offering both specific regional insights and overarching themes relevant to migrant health.

For instance, Desmennu, Titiloye, and Owoaje (2018) examined the health-seeking behaviour of street youths in Nigeria. Their study revealed a persistent preference for traditional and informal healthcare treatments, even among individuals aware of formal healthcare services. This preference was driven by cultural familiarity, perceived efficacy, and accessibility of traditional healers despite the availability of more conventional healthcare options. The study highlights the role of cultural practices and trust in shaping healthcare choices in vulnerable populations such as street youths, who often face significant barriers in navigating formal healthcare systems.

Similarly, Afeadie (2018) explored health-seeking behaviour among rural-urban migrant slum dwellers in Ghana. This study uncovered the profound influence of social networks and financial constraints on healthcare decision-making. Migrants in these slum environments often relied heavily on social connections for health advice and support, especially when financial barriers impeded their ability to seek formal care. Afeadie's research underscores the importance of understanding the social determinants of health within migrant communities, particularly the role of informal networks in facilitating or hindering healthcare access.

In Kenya, Arnold, Theede, and Gagnon (2014) explored the barriers to healthcare access among migrants, identifying significant challenges such as affordability, geographical inaccessibility, and mistrust of healthcare providers. These barriers often pushed migrants towards alternative healthcare options or led to delayed care-seeking, exacerbating health vulnerabilities. The findings resonate with broader global trends where migrants face systemic inequities in accessing healthcare, which is further complicated by their socioeconomic status and perceived treatment within the healthcare system.

Asampong et al. (2015) in Ghana also illuminated the critical issue of affordability and distrust in healthcare services as major obstacles preventing migrants from seeking formal medical care. The study revealed that many migrants, particularly in low-income settings, harboured significant reservations about healthcare workers' intentions and quality of care. This distrust, compounded by financial hardships, often led to a reliance on self-medication or traditional healthcare practices.

Together, these studies underscore the complexity of health-seeking behaviours among migrant populations, emphasising the diverse factors— from financial constraints and social networks to cultural preferences and systemic distrust—that shape healthcare decisions. These findings highlight the need for tailored healthcare interventions and policies that consider the specific needs and barriers migrant populations face. Furthermore, they point to the importance of culturally sensitive healthcare approaches and policies that address the underlying social determinants of health to improve healthcare access and utilisation among migrants (Desmennu, Titiloye, & Owoaje, 2018; Afeadie, 2018; Arnold, Theede & Gagnon, 2014; Asampong et al., 2015).

Summary of reviewed studies

Author(s) & Date	Country	Aim of Study	Determinants	Health seeking behaviour
Desmennu, Titiloye and Owoaje, 2018	Nigeria	The aim of the study was to determine the behavioural risks for sexually transmitted infections (STIs) and health seeking behaviour of street youths in Ibadan	Knowledge and perceptions about STI Availability of health services	Although the respondents are aware that health facilities have treatments for STIs they prefer accessing treatment for such infections by traditional or herbal medicines and local off the counter medications.
Afeadie, 2018	Ghana	This study aims to investigate health seeking behaviour among rural-urban migrant slum dwellers at Madina	Influences from Relatives or friends in seeking regular check-ups. Education level Ability to pay for treatment	Seeking treatment only in times of sickness and seeking treatment largely dependent on ability to afford it
Anglewicz et al., 2017	Malawi	to measure and/or control for important characteristics that affect both migration and health outcomes	Availability of HIV-related services	HIV-positive individuals moving to better access ART
Arnold, Theede & Gagnon, 2014	Kenya	To gain a greater understanding of urban migrants' barriers to accessing healthcare in Nairobi compared with barriers	Not reported	Affordability was reported to be an issue for several participants, irrespective of immigration status

		faced by Kenyans living in the same locations		
Asaana, 2015	Ghana	Understanding of how gender, as a system of power, facilitates, constraints, determines, and impacts not only women's migration, women's access to health services post migration in contemporary Ghana.	Women's self-expression regarding their own health needs	Prefer to seek traditional or herbal medicines due to poor treatment by health officials.
Boroto, 2011	South Africa	To investigate the different means, therapies and cures used by refugees from other African countries in order to correct their lives.	Socio-cultural and religious backgrounds Financial capacity	They believe in the spirituality of diseases or ill health; therefore, they seek healing from traditional spiritual healers and pastors instead of health facilities.
Clouse et al. 2018	South Africa	to explore mobility among peripartum HIV-positive women to understand the timing and motivation of travel, particularly. vis-a-vis delivery, and how it may affect healthcare access	Mother and babies seek & access care at their present location.	visiting a clinic to adhere to the immunization schedule
Lakika, 2011	South Africa	Examining the help-seeking behaviour used by Congolese migrants in response to their health problem in South Africa	Access to health care	Participants used alternative ways of help-seeking behaviour depending on what they believed to be the causes of their illnesses.

Asampong et al., 2015	Ghana	To describe health-seeking behaviour, and social and other factors affecting this behaviour, among electronic waste workers at Agbogbloshie, Accra, Ghana	Accessibility, Severity of ailment, Quality of service, Ease of communication with care provider and cost of care.	The electronic waste workers usually opt for other forms of health care such as chemist shops because they are affordable, and easily accessible as well as the fact that the chemist are available to be communicated with.
Fadlallah et al., 2020	Sudan	To investigate potential health disparities between internal migrant workers participating in traditional gold mining and their local counterparts.	Access to healthcare Access to WASH services Perception& education	There are disparities in drivers of health behaviour related to the immigration status of traditional gold miners.
Faronbi et al., 2019	Nigeria	To assess the common health problems, health needs and health seeking behaviours of internally displaced persons in Nigeria.	Adequacy of health facilities	Internally displaced people seek herbal and local solutions for their health issues rather than formal health centres since there are inadequate health facilities in their local health facilities
Faturiyele et al., 2018	Lesotho	To assess healthcare needs, preferences, and accessibility barriers of HIV-infected migrant populations in high HIV burden, borderland districts of Lesotho.	Not reported	Not reported
Hughes, Hoyo & Puoane, 2006	South Africa	To describe some correlates of male migration patterns for the rural women left behind, especially the fear of STIs that	Attendance to clinics	Fear of contracting an STI from the migrant partner was significantly greater when the migration interval was long. Although more than one-third said that they were concerned about getting STIs/ HIV from

		this engendered in them and their risk-avoidance behaviour		their partners, almost none of them used condoms or any other means of protection
Crush and Tawodzera, 2014	South Africa	To examine the extent to which xenophobia manifests itself within the public institutions that offer health services to citizens and non-citizens, based on primary research with Zimbabwean migrants who try to access the system	Quality of health care provided Discrimination at health care centres and facilities	Respondents either desist from seeking health care in south African public health facilities or found alternative health care because of the discriminatory treated given to them.
Kwankye et al., 2007	Ghana	To ascertain the coping strategies independent child migrants, adopt in their day-to-day lives in the city.	Access to health care	Self-medication diagnosed for them by friends or acquaintances who have suffered similar symptoms previously. Most child migrants used over the-counter drugs like Paracetamol whenever they were sick
Lasater et al. 2019	Togo	Explores associations between migration and stigma as a barrier to healthcare engagement among Female Sex Workers in Lomé, Togo	HIV Test	Stigmatizing experiences act as risk factors or barriers to care seeking that intensify FSW vulnerability to HIV-related outcomes and restrict access to HIV prevention and treatment services.

Lattof , Coast and Leone, 2018	Ghana	To examined contemporary north-south migration on 625 migrant living in among who experienced a recent illness/injury.	Use of National Health Insurance Scheme	Migrants were likelier to obtain medical care for conditions that affected their ability to carry a load. Financial barriers and a lack of health insurance exclude migrant workers from utilizing health care in many settings.
Lattof, 2018	Ghana	To analyse how health insurance status affects kayayei migrants' Care-seeking behaviours.	Seeking medical care for a recent illness/injury	Insured kayayei migrants may struggle to utilize their health insurance when cards are forgotten in the north or lost in Accra. Financial barriers overwhelmingly limit kayayei migrants from seeking health care, influencing migrants' decisions to seek no care or influencing from whom/where migrants seek care.
Makandwa & Vearey, 2017	South Africa	To investigate interactions with public healthcare providers and other forms of help-seeking, such as private doctors, churches, and social networks within the city.	Access to healthcare	Language was identified as the greatest challenge faced by participants in accessing public healthcare services
Morris & Ferguson 2007	Kenya	To investigate the sexual and treatment-seeking behaviour for sexually transmitted infection (STI) in long-distance transport workers of East Africa	Patronize pharmacy when the need arises	When first seeking STI care, truckers sought care in private health facilities, public health facilities and pharmacies.

Munyaneza and Mhlongo, 2019	South Africa	To document the everyday experiences of women refugees and uncover their challenges with regards to the use of reproductive health services in public health institutions in Durban,KwaZulu - Natal	Access to health service centres Availability of health personals Level of professionalism of health workers Culture and religion Financial capacity	Migrant women in the Durban KwaZulu- Nata are likely not to receive maximum reproductive health services from public health institutions because of the unprofessionalism of health workers which manifest in discrimination and lack of confidentiality
Nedson, Pophiwa 2009	South Africa.	To explain the patterns of health care utilization of Zimbabwean migrants in Johannesburg.	Self-reported health-status Illness Episode	Migrants are able to negotiate and easily access health care services that are owned by the government. The nearness of the healthcare facility, quality of service and the lack of discriminate against non-nationals influence access to health care.
Nyarko & Tahiru 2018	Ghana	To explore the health-related concerns of female head porters in the Mallam Atta market, Accra, Ghana.	Inability to afford NHIS premium,	The majority of the respondents visited drug stores and other drug peddlers when they were ill. It was further found that only a few respondents (5) preferred visiting health facilities (hospitals and clinics) when they were sick.
Owusu & Yeboah 2017	Ghana	To examine the socio-economic difficulties facing female migrants in Ghana paying special attention to the underlying factors that affect their access and utilization of health care	Economic / Institutional / Cultural determinants	Migrants in Accra benefited from utilizing maternal health services because of the free maternal healthcare component of NHIS.

Chirowodza, 2012	South Africa	To investigate perceptions of the quality of healthcare by Zimbabwean migrants in South Africa with a specific focus on migrants living in Kayamandi, Stellenbosch	Healthcare programs Access to Health care	They consider visiting pharmacies, Somalis' spazas' and any other retail outlet that offers over-the-counter medication to be their only chance of seeking healthcare in the country. However, when they became seriously ill they then consider visiting private doctors.
Schicker et al., 2015	Ethiopia	To evaluate the migrants and their malaria-related risk factors.	Financial capacity Distance between settlements and health facilities	A lesser number or respondents seek medical care from health facilities for malaria or fever because of lack of financial resources and the distance to access hospitals coupled with scarcity of means of transportation.
Salami & Olugbayo, 2013	Nigeria	To profile the health-seeking behaviour of beggars in a resource-poor setting in Nigeria.	Access to Health care	Majority reportedly visited orthodox health centre with a large majority of them visiting government hospitals. Cost of treatment was a major factor in the determinant of utilization of healthcare services.
Shamsu-Deen & Adadow 2019	Ghana	To examine the health behaviour of migrant female head porters in Accra.	Availability of finance Institutional support NHIS status	Minority, especially the elderly sought care in a health facility and the rest sought care outside health facilities. Such as chemists' shops and local herbs. Married females were also more likely to seek health care in a health facility compared to unmarried ones.
Thela et al., 2017	South Africa	To investigate the post-resettlement adaptation and mental health challenges of African refugees and migrants in South Africa	Availability of care	Migrants who had lived in South Africa for less than one year showed higher rates of anxiety and depression.

				Exposure to discrimination was an independent predictor of poor mental health outcomes, especially depression and post-traumatic stress.
Tshabalala, 2014	South Africa.	To explore health care seeking behaviour of the migrant domestic workers during the process of being ill.	Access to health care	Majority of participants rely on simple remedies to ease their discomfort during the time when they feel ill and when they display signs and symptoms of being sick, they tend to utilise self-medication.
Otusanya et al., 2007	Nigeria	To evaluate the effects of ethnic variation on health seeking behaviour of Fulani herders and Oruba farmers in southwestern Nigeria	Cultural background Availability of health care services	The Fulani's were likely to rely on herbs and local chemists and private clinics for health care rather than government hospitals due to neglect by government health workers whiles Yorobas depended more on government facilities of healthcare.

4. Variables and Their Definitions as Captured in the GLSS7 Datasets

In the empirical studies in Chapters 4 and 5 of this thesis, the variables and their definitions, as captured in the Ghana Living Standards Survey Round 7 (GLSS7) datasets, are pivotal for understanding healthcare utilisation behaviours. The GLSS7 dataset provides a rich array of variables that offer a comprehensive framework for analysing factors influencing healthcare access and utilisation among the population. The dependent variables include healthcare utilisation, defined as whether individuals sought treatment from a healthcare practitioner and healthcare provider visited, distinguishing between clinicians and traditional healers. Independent variables encompass the type of illness or injury, time taken to reach a healthcare provider, sex, age, income, cost of healthcare, education, marital status, place of residence, and health insurance status. These variables, categorised to capture various demographic, economic, and social factors, provide a robust framework for analysing the determinants of healthcare-seeking behaviour in Ghana.

Summary of variables and their definitions from the GLSS7 dataset

s/n	Variable	Specification	Definition	Description
Dependent				
1	Healthcare utilisation	Visit to health practitioner	Seek treatment	Binary outcome taking the value of 1 if visited and 0 if otherwise
2	Healthcare provider visited	Clinician Traditional healer	The type of healthcare service or provider visited by respondent.	Binary outcome taking the value of 1 for non-selfcare and 0 for selfcare
Independent				
3	Type of illness/injury	Severe Mild Check-up (no major illness/injury)	Level of sickness or injury as reported by respondent	Categorical
4	Time taken to healthcare provider	Less than 1hr 1hr and above		
5	Sex	Male Female	The sex of the individual grouped into Male and Female	Categorical

6	Age	15 years and above	The age of respondent	Categorical
7	Income	High Low	The respondent's monthly income from main occupation	Categorical
8	Cost of healthcare	Healthcare expenditure from GH₵1.00 to GH₵200.00.	Respondents who spent money on healthcare seeking at the various facilities	
9	Education	No education Primary education Junior high school Senior high school Tertiary education	The highest educational attainment of the respondent categorised into none (no education), those who completed primary (from class 1 to 6), Junior High School, Senior High School, and Tertiary or Higher education	Categorical
10	Marital status	Married Single Consensual union	Respondents living with their spouses were considered married. Divorced, separated, widowed, and never married were considered single. Respondents in living together in a relationship but not married are those captured in consensual union.	Categorical
11	Place of residence	Urban Rural	The area of residence of respondent	Categorical
12	Health insurance status	Insured Uninsured	Health insurance holder and active member	Binary taking value of 1 if insured, and 0 if otherwise

5. Determinants of Healthcare Utilisation Among Internal Migrants in Ghana

The table below presents a comprehensive analysis of the determinants of healthcare utilisation among internal migrants in Ghana, highlighting both significant and non-significant factors. The study found that age, marital status, and sex (gender) are significant determinants of healthcare utilisation among this population. Specifically, older migrants, those who are married, and females are more likely to seek healthcare services. This aligns with existing literature that indicates demographic factors significantly influence health-seeking behaviour (Ghana Statistical Service, 2019; Blanchet, Fink, & Osei-Akoto, 2012).

Conversely, the study identified that place of residence, health insurance status, and income were insignificant determinants of healthcare utilisation among internal migrants. Despite the intuitive assumption that these factors would play crucial roles, the findings suggest that other contextual or individual-level factors might mitigate their impact. For instance, internal migrants might face uniformly high barriers to healthcare access irrespective of their residential area or insurance status (Van der Geest, 1995). These insights are crucial for policymakers and healthcare providers as they underscore the need to consider demographic characteristics more closely when designing interventions to improve healthcare access and utilisation for internal migrants in Ghana. This context-specific understanding contributes to the broader discourse on migrant health and provides valuable directions for future research and policy development (Derose et al., 2009; Kizilhan et al., 2019; Puthoopparambil et al., 2017).

Summary of Determinants of Healthcare Utilisation Among Internal Migrants in Ghana

Determinants	
Significant	Non-significant
1. Age 2. Marital Status 3. Sex (Gender)	1. Place of Residence, 2. Health Insurance Status 3. Income

6. Out-of-pocket healthcare utilisation expenditures among internal migrants in Ghana

The table below summarises the analysis of the out-of-pocket healthcare expenditures among internal migrants in Ghana, distinguishing between significant and non-significant determinants. The study reveals that age, educational status, distance or location, marital status, and the place of seeking healthcare are significant factors influencing out-of-pocket healthcare expenditures for internal migrants. Older individuals and those with higher educational attainment are more likely to incur higher out-of-pocket expenses, reflecting their greater health needs and possibly better health literacy that prompts them to seek and pay for healthcare services (Ghana Statistical Service, 2019). Furthermore, migrants who travel longer distances to access healthcare or are married tend to spend more on healthcare, highlighting the geographical and socio-economic barriers to affordable healthcare (Blanchet, Fink, & Osei-Akoto, 2012).

Interestingly, the study finds that income is not a significant determinant of out-of-pocket healthcare expenditures among internal migrants. This suggests that income levels may not be the primary factor driving healthcare spending decisions within this population. Instead, the willingness to seek and pay for healthcare could be influenced more by the immediate need for health services and the perceived quality and accessibility of healthcare providers, rather than by available financial resources (Van der Geest, 1995). These findings underscore the complexity of healthcare financing among internal migrants and the necessity for targeted policies that address specific barriers such as distance and educational outreach to reduce out-of-pocket expenses (Derose et al., 2009; Kizilhan et al., 2019; Puthoopparambil et al., 2017). This nuanced understanding is critical for designing effective healthcare interventions that can alleviate the financial burden on internal migrants and improve their access to essential health services in Ghana.

Variables	
Significant	Non-significant
1. Age 2. Educational Status 3. Distance Or Location 4. Marital Status 5. Place Of Seeking Healthcare	1. Income

7. **Summary of Consensus on Delphi**

The table below provides a summary of consensus on the barriers, facilitators, and strategies affecting health-seeking behaviour among internal migrants in Ghana. Barriers include appointment wait times, language difficulties, distance to health facilities, expired National Health Insurance, financial constraints, lack of knowledge about the health system, preference for unorthodox medical practices, and absence of adequate support. These factors significantly hinder access to healthcare services and reflect the multifaceted challenges that internal migrants face (Ghana Statistical Service, 2019). For instance, long wait times and language barriers can deter migrants from seeking timely care, while financial constraints and expired health insurance exacerbate their vulnerability (Derose et al., 2009; Kizilhan et al., 2019).

The study identified facilitators of health-seeking behaviour as possession of National Health Insurance, adequate income, support from friends and relatives, perception of quality healthcare services, and worsening health conditions. These elements play crucial roles in enabling internal migrants to overcome barriers and access necessary healthcare services. For example, having health insurance and sufficient income can mitigate financial barriers, while support networks can provide the necessary encouragement and assistance to seek care (Blanchet, Fink, & Osei-Akoto, 2012).

To enhance health-seeking behaviours, the study suggests several strategies: maintaining active health insurance policies, ensuring affordable healthcare, increasing education and sensitisation efforts, training and motivating healthcare workers, and establishing specialised clinics for immigrants. Active health insurance policies are essential for reducing out-of-pocket expenses, while education and sensitisation can improve health literacy and awareness among migrants (Van der Geest, 1995). Additionally, well-trained healthcare workers and specialised clinics can address the specific needs of the migrant population, ensuring more effective and culturally sensitive care (Puthoopparambil et al., 2017). These strategies are pivotal in creating a more inclusive healthcare system that adequately supports internal migrants in Ghana.

Summary of Consensus on Delphi

Barriers affecting health seeking behaviour	**Facilitators of health seeking Behaviour**	**Strategies to enhance health Seeking behaviours**
1. Appointment waits time 2. Difficulties in language 3. Distance to health facilities 4. Expired National Health Insurance 5. Finance constraints 6. Lack of knowledge about the health system 7. Preference for unorthodox medical practices 8. Absence of adequate support	1. Possession of National Health Insurance 2. Adequate income 3. Support from friends and relatives 4. Perception of quality health care services 5. Worsening of condition	1. Active health insurance policy 2. Affordable healthcare 3. Education and sensitisation 4. Having well-trained and motivated healthcare workers 5. Specialised clinics for immigrants

8. **Telephone Interview Question Guide for Qualitative Analysis on Migrants' Socio-cognitive Perception Regarding HSB using the I-Change Model**

The telephone interview question guide for qualitative analysis of migrants' socio-cognitive perception regarding health-seeking behaviour using the I-Change Model encompasses several phases and dimensions to explore participants' perspectives comprehensively. In the **Awareness** phase, participants are queried about their current healthcare-seeking behaviour, understanding of healthcare importance, perceived susceptibility to health issues, and perceptions of health risks associated with seeking healthcare from professionals (Van der Geest, 1995). The **Motivation** phase delves into participants' attitudes towards seeking healthcare, identifying advantages and disadvantages, social influences impacting their decisions, and their self-efficacy in accessing healthcare services (Puthoopparambil et al., 2017). Finally, the **Action** phase examines participants' actions and preparatory planning regarding seeking healthcare and the coping strategies employed to overcome challenges in accessing healthcare services (Kizilhan et al., 2019). Through these structured questions, the interview guide aims to elucidate the socio-cognitive perceptions that influence migrants' health-seeking behaviours, contributing valuable qualitative insights to complement quantitative findings and inform tailored interventions and policies to improve healthcare access and utilisation among migrant populations.

Interview Guide

Phases	Dimensions	Questions
Awareness	Behaviour	a) Do you visit a health practitioner in your current location and what would be the reason for your visit? b) On your most recent visit whom did you consult and where did the consultation take place?
	Knowledge	a) In your opinion, how important is it for internal migrants like yourself to seek healthcare when needed? b) How would you describe your knowledge and understanding of the importance of seeking healthcare when you experience health issues? c) How do you perceive your own susceptibility to health problems as an internal migrant?

	Risk perception	a) What are your perceptions of the health risk associated with seeking healthcare from a health professional? b) In your opinion what could be the risk if you do not seek health from health professional?
Motivation	Attitude	a) Could you share your attitudes towards seeking healthcare and any beliefs or expectations you hold regarding the outcome of seeking healthcare? b) What is/would be the advantages for seeking healthcare from a health professional? c) What is/would be the disadvantages for seeking health from a health professional? d) What feelings do you have regarding seeking healthcare from a health professional?
	Social influence	a) How is your social circle perceiving health seeking behaviour from health professional? b) Who would support you in seeking healthcare from health professional? c) Who would be against you from seeking healthcare from a health professional d) Who in your social circle seeks healthcare from a health professional?
	Self-efficacy	a) Do you feel like you are informed enough on seeking health from a healthcare professional? b) Are there any factors making it difficult to seek health from a health professional? c) Are there any factors making it easy/easier for you to seek healthcare from a health professional?
Action phase	Action planning	a) Will you seek healthcare from any available health facility when you are sick or injured?
	Preparatory planning	a) How have you prepared yourself to seek treatment from available health facility when the needs arise?
	Coping planning	b) What are the main challenges you face in accessing healthcare from a health facility? c) Can you suggest any plans to deal with these challenges?

9. **Key findings from each phase of the I-Change model**

The table below outlines key findings from each phase of the I-Change model regarding health-seeking behaviour among internal migrants in Ghana. In the **Awareness** phase, participants showed varying levels of awareness about the importance of healthcare, with some recognising it as crucial for overall well-being and others considering it less essential. Participants acknowledged the risks of not seeking healthcare, such as delayed treatment and long-term health consequences. This finding aligns with previous research indicating that awareness and knowledge significantly impact health-seeking behaviour (Derose et al., 2009).

In the **Motivation** phase, trust in healthcare professionals was found to be a significant factor influencing health-seeking behaviour. Participants' trust levels varied, which affected their willingness to seek professional healthcare. Financial constraints, language barriers, and cultural beliefs emerged as major barriers, consistent with literature highlighting these factors as common obstacles to healthcare access among migrants (Puthoopparambil et al., 2017; Kizilhan et al., 2019). Conversely, community support and positive past experiences with the healthcare system were facilitators that encouraged participants to seek healthcare, demonstrating the importance of social networks and previous encounters in shaping health behaviours (Blanchet, Fink, & Osei-Akoto, 2012).

In the **Action** phase, participants exhibited diverse healthcare utilisation behaviours. Some sought professional healthcare promptly, while others initially relied on home remedies or traditional healing practices. This variability in behaviour reflects a broader trend where cultural and personal preferences play a crucial role in health decision-making (Van der Geest, 1995). Coping strategies identified included utilising support networks, engaging in self-care practices, and relying on spiritual practices for illness management. These strategies highlight the adaptive measures migrants employ to manage their health in the face of systemic barriers (Wallace et al., 2019).

Summary of findings

Phase	Key Findings
Awareness	Participants demonstrated varying levels of awareness regarding healthcare importance, with some viewing it as crucial for overall well-being while others considered it less essential. Participants recognized the potential risks of not seeking healthcare, including delayed treatment and long-term consequences.

Motivation	Trust levels in healthcare professionals varied among participants, influencing healthcare-seeking behavior. Financial constraints, language barriers, and cultural beliefs emerged as significant barriers to seeking healthcare, while community support and positive past experiences facilitated healthcare-seeking behavior.
Action	Participants exhibited diverse behaviors regarding healthcare utilization, with some seeking professional healthcare promptly while others relied on home remedies or traditional healing first. Coping strategies included utilizing support networks, self-care practices, and spiritual practices for illness management.

10. Ethics

Ethical approval for empirical studies is a cornerstone of research integrity. It ensures that studies uphold ethical standards and prioritise the welfare of participants. The process typically involves submitting detailed research proposals to institutional review boards or ethics committees for thorough review and approval (World Medical Association, 2013).

This encompasses the assessment of the study design, participant recruitment procedures, informed consent processes, confidentiality measures, and potential risks to participants (European Commission, 2018). While specific details regarding the ethical approval process for the empirical studies in this thesis are not provided, it is presumed that the researcher(s) adhered to established protocols and obtained approval from relevant ethics committees.

This may have entailed submitting documentation such as research protocols, consent forms, and information sheets to demonstrate compliance with ethical standards (Hearnshaw, 2004). Ethical approval safeguards participants and upholds the credibility and validity of research findings. It is imperative for researchers to acknowledge and adhere to ethical considerations in their research endeavours to ensure ethical conduct and the trustworthiness of results.
The College of Health, Medicine, and Life Sciences Research Ethics Committee at Brunel University London granted ethical approval for the various empirical studies in this thesis. These ethics approval letters are displayed below.

College of Health, Medicine and Life Sciences Research Ethics Committee (DHS)
Brunel University London
Kingston Lane
Uxbridge
UB8 3PH
United Kingdom

www.brunel.ac.uk

10 December 2021

LETTER OF CONFIRMATION

Applicant: Mr Collins Broni Amponsah

Project Title: Understanding the health seeking behaviour of internal migrants in Ghana

Reference: 33906-NER-Dec/2021- 35344-1

Dear Mr Collins Broni Amponsah

The Research Ethics Committee has considered the above application recently submitted by you.

The Chair, acting under delegated authority has confirmed that, according to the information provided in your application, your project does not require ethical review.

Please note that:

- **You are not permitted to conduct research involving human participants, their tissue and/or their data. If you wish to conduct such research, you must contact the Research Ethics Committee to seek approval prior to engaging with any participants or working with data for which you do not have approval.**
- The Research Ethics Committee reserves the right to sample and review documentation relevant to the study.
- If during the course of the study, you would like to carry out research activities that concern a human participant, their tissue and/or their data, you must inform the Committee by submitting an appropriate Research Ethics Application. Research activity includes the recruitment of participants, undertaking consent procedures and collection of data. Breach of this requirement constitutes research misconduct and is a disciplinary offence.

Good luck with your research!

Kind regards,

Professor Louise Mansfield

Chair of the College of Health, Medicine and Life Sciences Research Ethics Committee (DHS)

Brunel University London

College of Health, Medicine and Life Sciences Research Ethics Committee (DHS)
Brunel University London
Kingston Lane
Uxbridge
UB8 3PH
United Kingdom

www.brunel.ac.uk

17 March 2022

LETTER OF APPROVAL

APPROVAL HAS BEEN GRANTED FOR THIS STUDY TO BE CARRIED OUT BETWEEN 17/03/2022 AND 30/03/2022

Applicant (s): Mr Collins Broni Amponsah

Project Title: Identifying determinants (barriers and facilitators) of Health Seeking Behaviour among internal migrants in Ghana from the Stakeholders Perspective.

Reference: 30895-LR-Jan/2022- 37186-3

Dear Mr Collins Broni Amponsah

The Research Ethics Committee has considered the above application recently submitted by you.

The Chair, acting under delegated authority has agreed that there is no objection on ethical grounds to the proposed study. Approval is given on the understanding that the conditions of approval set out below are followed:

- **ALL DOCUMENTATION MUST HAVE THE APPROVAL DATE OF 17/03/22**
- **DATA COLLECTION CAN ONLY START ON THE 17/03/22 please note that you should put in an amendment for the study end date due to the late start date.**
- **Approval is given for remote (online/telephone) research activity only. Face-to-face activity and/or travel will require approval by way of an amendment.**
- **The agreed protocol must be followed. Any changes to the protocol will require prior approval from the Committee by way of an application for an amendment.**
- **Please ensure that you monitor and adhere to all up-to-date local and national Government health advice for the duration of your project.**

Please note that:

- Research Participant Information Sheets and (where relevant) flyers, posters, and consent forms should include a clear statement that research ethics approval has been obtained from the relevant Research Ethics Committee.
- The Research Participant Information Sheets should include a clear statement that queries should be directed, in the first instance, to the Supervisor (where relevant), or the researcher. Complaints, on the other hand, should be directed, in the first instance, to the Chair of the relevant Research Ethics Committee.
- Approval to proceed with the study is granted subject to receipt by the Committee of satisfactory responses to any conditions that may appear above, in addition to any subsequent changes to the protocol.
- The Research Ethics Committee reserves the right to sample and review documentation, including raw data, relevant to the study.
- If your project has been approved to run for a duration longer than 12 months, you will be required to submit an annual progress report to the Research Ethics Committee. You will be contacted about submission of this report before it becomes due.
- You may not undertake any research activity if you are not a registered student of Brunel University or if you cease to become registered, including abeyance or temporary withdrawal. As a deregistered student you would not be insured to undertake research activity. Research activity includes the recruitment of participants, undertaking consent procedures and collection of data. Breach of this requirement constitutes research misconduct and is a disciplinary offence.

Professor Louise Mansfield

Chair of the College of Health, Medicine and Life Sciences Research Ethics Committee (DHS)

College of Health, Medicine and Life Sciences Research Ethics Committee (DHS)
Brunel University London
Kingston Lane
Uxbridge
UB8 3PH
United Kingdom

www.brunel.ac.uk

16 October 2023

LETTER OF APPROVAL

APPROVAL HAS BEEN GRANTED FOR THIS STUDY TO BE CARRIED OUT BETWEEN 16/10/2023 AND 18/12/2023

Applicant (s): Mr Collins Broni Amponsah

Project Title: Exploring the socio-cognitive perceptions and beliefs among internal migrants in Ghana regarding health seeking behaviour.

Reference: 36179-LR-Sep/2023- 47278-8

Dear Mr Collins Broni Amponsah

The Research Ethics Committee has considered the above application recently submitted by you.

The Chair, acting under delegated authority has agreed that there is no objection on ethical grounds to the proposed study. Approval is given on the understanding that the conditions of approval set out below are followed:

- **Please note as your start date is in the past your new start date will be todays date 16/10/2023 please amend relevant documents before they are sent to the participants**
- **Can you confirm at what point the details of participants-name, phone number etc -used to arrange the interviews will be destroyed. Can you be specific e.g. upon completion of the interview, this can be sent via BREO correspondence**
- **The agreed protocol must be followed. Any changes to the protocol will require prior approval from the Committee by way of an application for an amendment.**
- **Please ensure that you monitor and adhere to all up-to-date local and national Government health advice for the duration of your project.**

Please note that:

- Research Participant Information Sheets and (where relevant) flyers, posters, and consent forms should include a clear statement that research ethics approval has been obtained from the relevant Research Ethics Committee.
- The Research Participant Information Sheets should include a clear statement that queries should be directed, in the first instance, to the Supervisor (where relevant), or the researcher. Complaints, on the other hand, should be directed, in the first instance, to the Chair of the relevant Research Ethics Committee.
- Approval to proceed with the study is granted subject to any conditions that may appear above.
- The Research Ethics Committee reserves the right to sample and review documentation, including raw data, relevant to the study.
- If your project has been approved to run for a duration longer than 12 months, you will be required to submit an annual progress report to the Research Ethics Committee. You will be contacted about submission of this report before it becomes due.
- You may not undertake any research activity if you are not a registered student of Brunel University or if you cease to become registered, including abeyance or temporary withdrawal. As a deregistered student you would not be insured to undertake research activity. Research activity includes the recruitment of participants, undertaking consent procedures and collection of data. Breach of this requirement constitutes research misconduct and is a disciplinary offence.

Professor Louise Mansfield

Chair of the College of Health, Medicine and Life Sciences Research Ethics Committee (DHS)

Brunel University London