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**LEGON CENTRE FOR INTERNATIONAL AFFAIRS AND DIPLOMACY**

**GLOBAL PERSPECTIVES ON OBESITY AND THE BURDEN OF HEALTH RISKS ON  
WOMEN: THE PERSPECTIVES OF HEALTH WORKERS IN GHANA**

**BY**

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THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON, IN  
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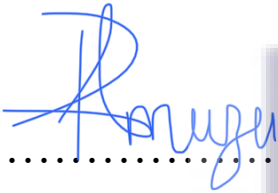
**APRIL, 2024**

## DECLARATION

I declare that with the exception of references made to the work of other researchers which have been duly acknowledged herein, this is my own work produced from research under the supervision of Dr. Daniel Dramani Kipo-Sunyehzi. This work has not been presented to any other academic institution for any academic award or for any other purpose. I am solely responsible for any lapses in this thesis.

Pauline Simone Amuzu

Date

  
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.....27/04/2025.....



### CERTIFICATION

I hereby certify that this work was done and supervised in accordance with laid down regulations of the University of Ghana.

Dr. Daniel Dramani Kipo-Sunyehzi

DATE



.....28/04/2025.....



## DEDICATION

This dissertation is dedicated to Mr. Benjamin T. Ayitiah.

This is for you, dad. Continue resting in perfect peace.



## ACKNOWLEDGEMENTS

My absolute gratitude goes to God Almighty for a successful completion of this study. I am grateful to my supervisor Dr. Daniel D. Kipo-Sunyehzi for his direction and guidance throughout the stages of this work. A special dedication to my mother, my sister Maxine and Brian Adomako for your support and encouragement in my academic development. I thank my friends and loved ones, Mr. Justice Kwaninig, Mr. Kwesi Essel, most especially Caleb Tettey for their immense support during my studies. Finally, my gratitude goes to all healthcare participants who took part in this study.

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## ABSTRACT

Obesity has emerged as a critical global health challenge, increasingly affecting populations in low- and middle-income countries, including Ghana. This qualitative study explores the perspectives of health workers in Ghana on the rising burden of obesity and its associated health risks for women. Drawing on the Constructivist theoretical framework, the study investigates three key areas: the capacity of health workers to accurately diagnose and manage obesity among women; the socio-cultural, economic, and environmental determinants of obesity; and the systemic challenges Ghana faces in addressing obesity-related health concerns. Data were collected through semi-structured interviews with sixteen healthcare professionals across diverse public and private institutions in urban Ghana. Thematic analysis revealed eight major themes, including diagnostic limitations due to overreliance on BMI, inadequate interdisciplinary training, cultural norms valorizing larger body sizes, economic barriers to care, and environmental factors such as urbanization and limited recreational infrastructure. The findings also highlighted systemic constraints such as the lack of national obesity guidelines, fragmented care pathways, and limited follow-up mechanisms. Despite these challenges, participants identified opportunities for intervention through culturally sensitive education, improved insurance coverage, and community-based prevention programs. The study concludes that obesity among women in Ghana is shaped by a confluence of clinical, socio-cultural, economic, and structural factors, and recommends integrated, context-specific, and gender-responsive policy responses. This research contributes to the global discourse on obesity by centering the voices of frontline healthcare providers and offering practical insights for enhancing women's health equity in Ghana.



## CHAPTER ONE

### INTRODUCTION

#### 1.0 Overview

This chapter provides an overview of the research project, including an introduction, a statement of the research topic, the study's scope, and the justification for doing the research. The chapter outlines the research objectives, questions, theoretical framework, literature evaluation, and methods for the study. The chapter concludes with a final section outlining the chapter layout for the study.

#### 1.1. Background to the Study

Obesity is regarded as one of the most serious health issues of the twenty-first century. Obesity is connected not only with higher mortality (Le Gales-Camus & Waxman, 2004), but also with a lower quality of life and an increased risk of hypertension, different malignancies, and cardiovascular disease, among other things (James et al., 2004). Obesity not only has negative impacts on individuals, but it also has significant economic consequences to society (Curtis & McCluskey, 2004; Parks et al., 2012), accounting for around 2 to 6% of overall health care expenses (WHO, 2007). Obesity, according to Mariona (2016), is simply defined as having a body mass index more than 30 kg/m<sup>2</sup>. Obesity can also be defined as a multifactorial chronic disease that develops in the human body when a series of excess food intakes occur such that energy intake exceeds consumption, i.e., an excess number of calories are consumed than the body can burn (Goettler et al., 2017; Chooi et al., 2019). The World Health Organisation officially designated obesity a worldwide health crisis in 1997 (WHO, 2000).

Several countries throughout the world, particularly in Africa, Asia, and Latin America, are still battling with malnutrition (Mohajan & Mohajan, 2023). Just as some countries in America, Europe,

New Zealand, and Australia, among others, are confronting significant challenges of overnutrition as obesity rates grow, other countries throughout the world are suffering from the consequences of both (Kumanyika et al., 2013). Since the 1980s, global obesity has more than doubled, with the majority of the population living in countries where obesity and overweight kill more people than poverty or malnutrition (Ng et al. 2014). According to Finucane et al. (2011), over 1.5 billion individuals had a body mass index of 25 or above in 2008, with 500 million deemed obese.

The beneficial obesity prevention guideline "eat less, move more" has become ineffective owing to factors such as geographical location and socioeconomic status (Mohajan & Mohajan, 2023). Obesity is thus a complicated health concern (Williams et al., 2015). Obesity is significantly influenced by lifestyle variables such as low levels of physical exercise and chronic overeating, excessive consumption of deserts and snacks, poor sociocultural eating habits, and carbohydrate metabolism disorders (Kahraman et al., 2015). Furthermore, obesity is impacted by a variety of individual variables, including learnt behaviours, genetics, society and public policy, and psychology (Kirk et al. 2012).

Obesity has been increasing in low-income nations, notably in Africa, and several researches have helped to record these patterns. The study undertaken by Amugsi et al. (2017), which looked at data from 24 African nations over 23 years, found that obesity levels were growing, with two countries (Zimbabwe and Egypt) topping 20% (28% and 36%, respectively). Neupane's (2016) investigation yielded comparable results, with a frequency ranging from 1.1% to 23%. However, it is worth mentioning that Amugsi's study concentrated on the frequency and temporal trends of urban females, whereas Neupane's (2016) study concentrated on rural women in these diverse African nations.

Obesity rates in Sub-Saharan Africa (SSA) have increased during the 1990s. Obesity prevalence in Western Africa increased from 2.6% to 7% between 1990 and 2015 (Agyemang et al., 2016). Obesity is recognised as a concern in Ghana's public health system. According to the World Health Organisation in 2008, over 7.5% of Ghana's population was obese, with women having a greater prevalence (10.9%) than males (4.1%). In a more recent paper, Ofori-Asenso et al. (2016) revealed in their systematic and meta-analysis of the pandemic of overweight and obesity in Ghana that around 43 percent of Ghanaian people are overweight or obese. In their study, the academics calculated that the national prevalence of obesity and overweight was 17.1%, which differed from the WHO (2014) data.

Obesity is a major issue in many high-income countries, but its fast spread in low- and middle-income countries, notably in sub-Saharan Africa, need increased attention and focused interventions. The observed rise in obesity rates across diverse African nations emphasizes the importance of targeted treatments that meet the varied difficulties and situations that urban and rural populations face. According to Mbewu and Mbanya (2011), rapid urbanization and a drastic change in dietary habits are key contributors to the increasing prevalence of obesity and its associated problems within the sub-Saharan region. According to the report on Non-Communicable Disease Risk Factor Collaboration, the sub-Saharan region of Africa has witnessed a dramatic increase in the prevalence of obesity, more than that in other regions, over recent years (Bentham et al., 2017). Per the reports of Agyemang et al. (2016), the previous difference in the prevalence of obesity between men and women in sub-Saharan Africa is gradually getting eroded, and the gap between urban versus rural as well as between developing versus developed regions in similarly closing as more towns evolve into cities. However, in a study conducted by Wariri et al. (2022), using a cross-sectional series analysis of nationally representative demographic and

health survey data, findings revealed an increasing trend in obesity among women of reproductive age across all 11 sub-Saharan countries. Additionally, findings revealed that obesity increased unequally across wealth categories, place of residence and educational measures of inequality and that the wealthiest, most educated and urban dwellers in most countries had a higher prevalence of obesity as opposed to rural dwellers of lower wealth status and education. However, in Comoros, obesity did not increase consistently with increasing wealth or education compared with the other sub-Saharan countries (Wariri et al., 2022).

Adding to the above, Bentham et al (2017), with data pooled from 2,416 studies revealed a higher increase of  $4\text{kg/m}^2$  in the mean body mass index among women in sub-Saharan Africa compared to  $2.6\text{kg/m}^2$  among women in other parts of the world. According to some scholars, developing nations are now the predominant drivers of the increase in global rates of obesity whereas the rates in developed countries around the world have seeming plateaued (Ford et al., 2017; Koliaki et al., 2023). Despite this, governments and health policy makers within sub-Saharan Africa have been noticed to devote very limited time and resources to the emerging epidemic of obesity and its related health risk (Pastakia et al., 2017). Another challenge to this crisis is the seemingly positive attitude of the society toward obesity in addition to underreporting of its prevalence and heterogeneity of techniques used to measure obesity has exacerbated the situation, thus lowering its priority among policymakers (Oluyombo et al., 2022).

In West Africa, one of the World Health Organization's African subregions, about 52 million people are living with obesity, making it one of the subregions burdened with the epidemic of obesity (FAO Regional Office for Africa, 2019). Based on this, obesity prevention and control policies have been implemented to address the epidemic. Key among them is the National Food and Nutrition Security (NFNS) in Sierra Leone and the National Policy on Food and Nutrition

(NPFN) in Nigeria. Although these policies have created awareness about the obesity problem in West Africa, the prevalence of obesity continues to increase exponentially (Amugsi et al., 2017).

## **1.2. Problem Statement**

Obesity has become a global health epidemic, with rates quickly increasing across areas and people, providing enormous challenges to public health systems across the world (Blucher, 2019; Haththotuwa et al., 2020; Ryan et al., 2021). Obesity has a wide range of implications, but its influence on women's health is a major worry. Obesity-related health concerns disproportionately affect women, posing multidimensional difficulties that need extensive understanding and focused solutions. While much research has been conducted on obesity and its health consequences (Chu et al., 2018; Pham, 2018; Safaei et al., 2021; Ahirwar & Mondal, 2019; Barber, 2023), there is still a major vacuum in understanding the varied perspectives of health workers, particularly in places experiencing increasing obesity epidemics.

Ghana, a West African country undergoing fast demographic and epidemiological changes, is witnessing a significant increase in obesity rates, particularly among women. Despite this disturbing trend, there has been little study on the perspectives of health workers on the contributing factors to obesity or causes of obesity and its accompanying health hazards, particularly for women. Understanding health professionals' perspectives, experiences, and insights is critical for developing successful solutions to reduce the burden of obesity-related health problems, improve healthcare delivery, and promote health equity (Pearce et al., 2021).

The incidence and implications of obesity among Ghanaian women are shaped by a complex interaction of societal, economic, and environmental variables. Traditional beliefs, eating habits, urbanization, socioeconomic inequality, and poor healthcare infrastructure are only a few of the many variables that influence obesity prevalence and the related health concerns. Furthermore, the

intersectionality of gender increases women's sensitivity to obesity-related morbidities such as PCOS, eclampsia, cardiovascular diseases, among other reproductive health issues (Asosega et al., 2021; Suara et al., 2019; Tuoyire., 2021).

Despite the worldwide focus on reaching the Sustainable Development Goals (SDGs) and protecting women's health rights, the SDG 3's absence of obesity as a main point provides a significant obstacle. This omission is especially prominent in Ghana, where women's obesity rates are rising, greatly increasing the burden of health concerns. Given the renewed commitment by Heads of State and governments after the high-level United Nations General Assembly in October 2018 to establish robust healthcare systems capable of responding effectively to the health needs of populations, particularly concerning non-communicable diseases, of which overweight and obesity are major predisposing risk factors, the lack of attention to obesity within the SDG framework is particularly concerning. Despite the above, there still exists limited research that extensively examines health workers' opinions on the interaction between obesity and women's health in Ghana (Asosega et al., 2021; Suara et al., 2019; Tuoyire, 2021). The absence of a comprehensive understanding of the problems and complexities of obesity and its health consequences for women in Ghana stymies the creation of tailored interventions and policies. Furthermore, the distinct insights and experiences of health professionals, who are at the frontline of healthcare delivery, remain largely untapped in this context.

As a result, this research may hopefully help to fill or bridge a gap in knowledge by studying the viewpoints of Ghanaian health professionals on obesity and its influence on female health. This study intends to explore the numerous elements of obesity-related health hazards encountered by Ghanaian women through a qualitative investigation based on health professionals' lived experiences and professional perspectives. By explaining the issues, perspectives, and potential

solutions from the standpoint of healthcare practitioners, this study hopes to influence policy formation, healthcare practices, and advocacy initiatives targeted at reducing the burden of obesity-related health hazards among Ghanaian women. This research aims to address the problem of obesity in Ghana and the growth of global health discourse by pushing for the inclusion of obesity as a key health problem within the larger framework of women's health rights and the Sustainable Development Goals.

### **1.3. Research Objectives**

The overarching aim of this study is to explore the perceptions, capacities, and challenges of health professionals in accurately diagnosing and addressing obesity among women in Ghana, with particular attention to the socio-cultural, economic and environmental determinants that influence its prevalence and management within Ghana.

To achieve this overarching aim, the study is guided by three specific objectives,

1. To investigate the capacity of health workers in accurately diagnosing and treating obesity among women in Sub-Saharan Africa.
2. To examine the socio-cultural, economic and environmental determinants of Obesity among women in Ghana.
3. To examine the challenges of the Ghanaian health sector in addressing cases of obesity.

### **1.4. Research Questions**

The research questions informing this study are as follows.

1. How is the capacity of health workers in accurately diagnosing and treating obesity among women in Sub-Saharan Africa?
2. What are the socio-cultural, economic and environmental determinants of obesity among women in Ghana?

3. What are some of the challenges Ghana face in addressing cases of obesity?

### **1.5. Scope of the Study**

The study largely examined healthcare settings in Accra's metropolitan districts, specifically the La Dadekotopon Municipality and Ayawaso West Wuogon Municipality area. This would enable the researcher to assess the situation in a more urban setting. The study focused on a varied group of health workers, including physicians, nutritionists, and community health workers, who operate in both public and private healthcare settings such as hospitals, clinics, and community health centers. The selection criteria prioritized persons with direct clinical expertise or engagement in obesity prevention, management, and women's health services to guarantee the relevance and richness of the ideas gained.

The study also looked at a variety of other topics linked to obesity and women's health, such as perceptions of obesity, cultural beliefs and norms, healthcare delivery issues, policy implications, and suggestions for improving women's health outcomes. While noting the interdependence of these topics, the scope focused on in-depth investigation of important concerns identified through literature studies and stakeholder interaction. By defining the study's scope along these dimensions, the researcher hopes to provide a focused, contextually grounded examination of health workers' perspectives on obesity and women's health in Ghana, contributing to a better understanding of the complexities and challenges surrounding this critical public health issue.

### **1.6. Rationale of the study**

Obesity is seen as a major worldwide health issue, with far-reaching consequences for morbidity, death, and healthcare costs. Despite its widespread influence, there has been little study on the connection between obesity and women's health, particularly in Global South nations like Ghana. Understanding the specific obstacles and health hazards that Ghanaian women face in connection

to obesity is critical for developing tailored treatments and policies to address this serious public health issue. Furthermore, health professionals have essential personal information and experiences that can provide unique insights into the intricacies of obesity and its influence on women's health in Ghanaian healthcare settings.

As a result, involving health professionals as major stakeholders in this study not only improves the research findings, but also develops cooperation and buy-in for adopting evidence-based interventions and practices. This project intends to empower frontline healthcare personnel to advocate for improved obesity prevention, treatment, and care delivery that is specific to the needs of Ghanaian women by amplifying their voices. In summary, the reason for this study stems from its ability to fill crucial information gaps, address health disparities, influence policy and advocacy activities, and equip healthcare practitioners to effectively manage the burden of obesity-related health hazards among Ghanaian women. This study aims to advance women's health rights and achieve the ultimate goals of health equity and sustainable development by revealing health professionals' views and contextualizing obesity within larger socio-cultural and policy landscapes.

### **1.7. Theoretical Framework**

There are various theories in international relations that provide insights into the dynamics of global health, policy development, and the confluence of health with larger political, economic, and social variables. Constructivism is one theory that might be very relevant in the study of obesity and the health problems faced by women in Ghana.

#### **1.7.1. Constructivism**

Constructivism is a theoretical approach to international relations that emphasises the significance of ideas, norms, identities, and social constructs in determining state action and international

results. Scholars such as Alexander Wendt, Peter Katzenstein, and Nicholas Onuf are key proponents of the thesis. Alexander Wendt's (1992) work, notably his important piece "Anarchy is What States Make of It," is frequently recognised as crucial to the constructivist approach. Nicholas Onuf's (2002) Constructivist Institutionalism, as well as Peter Katzenstein's emphasis on ideational and cultural variables in international relations, have both made major contributions to the development of constructivist theory. Unlike classic theories like liberalism or realism, which emphasise on tangible variables like institutions, power, and interests, constructivism emphasises the role of intersubjective meanings and common understandings in determining international politics.

At its foundation, constructivism holds that participants in the international system interpret and construct objective material facts depending on their values, beliefs, and social situations. These constructed understandings, in turn, shape actor perceptions, behaviours, and preferences, shaping the behaviour of international institutions, non-state actors, and states. The social production of reality is a fundamental postulate of constructivist theory. This assumption asserts that reality is socially produced through shared meaning, interpretations, and interactions among actors. Rather of depending on objective truths, constructivists experience and understand reality through subjective glasses formed by society norms, historical circumstances, and cultural values (Skolimowska, 2018).

Another constructivist premise is that ideas and norms play an important role in determining state conduct and international relations. Constructivism contends that norms, defined as common expectations for desirable or proper conduct, play an important role in influencing state actions and developing international institutions and practices. Constructivism emphasizes the importance of identity, both at the individual and communal levels, in influencing actors' preferences, interests,

and actions in the international system. Proponents of constructivist theory emphasize how identity constructs such as national identity, gender identity, and ethnic identity shape how states understand their place in the world and interact with other players. The constructivist approach also recognizes the relevance of context in altering actors' perceptions and action. It argues that the meaning and relevance of identities, norms, and ideas differ across historical, institutional, and cultural settings, emphasizing the need for a more nuanced examination of individual case studies.

Despite the findings, constructivism has significant limitations:

- Lack of Predictive Power: Constructivism's capacity to forecast future international activities and interactions may be restricted due to its emphasis on social constructs and their fluidity (Bertucci et al., 2018).
- Engagement with Material Factors: While constructivism emphasises the significance of ideas, norms, and identities, critics contend that it may minimise the impact of tangible forces like as military strength or economic conditions in creating international relations (Bertucci et al., 2018).
- Complexity in Policy Application: Constructivism's subtle and context-specific insights can be difficult to translate into precise policy suggestions, limiting its relevance for policymakers seeking unambiguous guidance (Bertucci et al., 2018).

### ***Relevance of the Theory to the Study***

Constructivism as a theory provides a theoretical framework that emphasizes the socially constructed aspect of international relations, the role of ideas and norms in determining state behavior, and the significance of identity and agency in driving change. Constructivism is a great

lens for analysing the intricacies of global health concerns such as obesity and women's health within Ghana's larger sociopolitical and cultural context.

Constructivism provides an important paradigm for studying the social and cultural factors that influence health outcomes, policy agendas, and healthcare practices in Ghana. Constructivism, in particular, emphasizes how society norms and values impact actors' perceptions and action (Jung, 2019). In the context of obesity and women's health in Ghana, cultural norms around body image, gender roles, and healthcare seeking behavior may shape individuals' attitudes towards obesity, influence health policies, and impact healthcare delivery methods. The use of constructivism in this study is especially significant since it emphasizes health professionals' identities and how their professional positions may impact how they view and respond to obesity as a public health concern. Furthermore, utilizing the constructivist lens to lead the study aids in analyzing the agency of health professionals in advocating for gender-responsive healthcare practices and policies.

### **1.8 Study Limitations**

The study's limitations include the reliance on qualitative methodology, which limits generalisability across broader populations. The study was geographically restricted to Ghana, potentially limiting its applicability to other sub-Saharan African contexts. Additionally, the study was limited by potential response bias inherent in self-reported data from healthcare workers and representatives of health management bodies.

### **1.9. Arrangement of Chapters**

The study is comprised of five chapters. Below is a breakdown of the chapters.

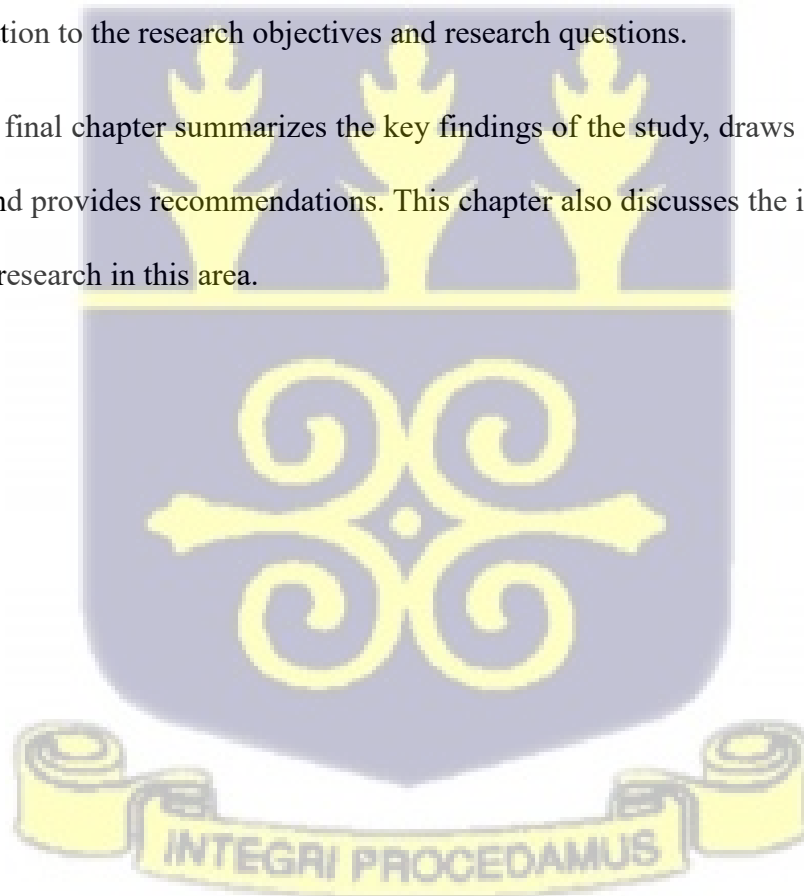
**Chapter 1:** This chapter provides an overview of the research topic, including the background of the study, the significance of the study, the research aims and objectives, and an outline of the structure of the thesis.

**Chapter 2:** In this chapter, a comprehensive review of obesity, women's health rights as well as women's health risk among others at the global level and sub-Saharan Africa.

**Chapter 3:** In this chapter, the methodologies and strategies used in the conduct of the research are identified and further explained.

**Chapter 4:** The research findings. This chapter presents the findings of the study. The results is discussed in relation to the research objectives and research questions.

**Chapter 5:** The final chapter summarizes the key findings of the study, draws conclusions based on the results, and provides recommendations. This chapter also discusses the implications of the study for future research in this area.



## CHAPTER TWO

### OVERVIEW OF OBESITY, WOMEN'S HEALTH RIGHTS AND RISKS AT THE GLOBAL LEVEL AND SUB-SAHARAN AFRICA

#### 2.0 Introduction

This chapter reviews various secondary sources on obesity, the health rights and risks of women from the global level to Sub-Saharan Africa and Ghana. This specifically entails examination of key thematic areas pertaining to the study of the prevalence and trends of obesity across different regions, the socio-economic determinants of obesity, the cultural influences of obesity and the policy framework aimed at reducing the prevailing rates of obesity. The study further assess literature on women's access to healthcare at the global and local level, the legal ramifications, the role of healthcare workers in preventing and reducing obesity and the various challenges confronting the health sector in the fight against obesity in Ghana.

#### 2.1 Prevalence and Trends of Obesity

In the 21<sup>st</sup> century, obesity has been found to be a major health challenge facing both developed and developing countries (Asosega et al., 2023; Ng et al., 2014). Obesity and overweight in the study of Stevens et al. (2014) demonstrates it as the fifth leading risk of death globally. This is to appreciate the deadly nature of an assuming health condition globally. The study of Biadgilign et al. (2017) also reveals that overweight and obesity were responsible for 3.4 million deaths globally, of which 3.9% of years was lost while 3.8% of disability-adjusted life years in 2010. The study further suggests that as at 2016, 640 million adults were considered as having obesity or being overweight. Chooi et al. (2019) notes that the prevalence of obesity since 1980 has more than

doubled with a third of the global population now classified as obese or overweight. The study further notes that obesity has increased among all categories of people including adult, children, men and women however the prevalence is higher among adults and women comparatively.

The prevalence of obesity has a gender dynamic of which the study of the National Health and Nutrition Examination Survey (NHANES) 2005–2014 notes to have been higher among women than men. The prevalence rates among women were 40% against 35% respectively. The World Health Organization (WHO) (2020) notes that the disproportionate impact of obesity among women is spread across all socioeconomic levels and have negative health implications despite it being a health complication on its own.

The study of the NCD Risk Factor Collaboration (2016) notes that the lack of a global framework for addressing obesity as a health challenge is worrying, there is therefore the need for evidenced-based approaches to mitigate this health crisis. The study further postulated that 57.8% of women summing up into 3.3 billion women may have obesity or become overweight by 2030. Boutari and Mantzoros (2022) assert that obesity is a complex disease that has reached a pandemic level yet have not been given much attention. The study further notes that 60% Europeans are either obese or overweight. The study of Chooii et al. (2019) observes that the worldwide occurrence rates of excessive weight and obesity in 2015, among adult males and females over the age of 20, categorised by age groups shows that the incidence of overweight in women was slightly lower in males among young adults (aged 20-44 years) in 2015. However, this pattern changed around the age of 45-49 years, possibly due to the onset of menopause in women. Obesity was more common in women than in males across all age categories, with the greatest inequalities between the ages of 50 and 65. The prevalence of both overweight and obesity rose progressively with age starting from 20 years old, peaked between the ages of 50 to 65 years, and then slightly decreased.

The study of Chooii et al. (2019) further observe that the prevalence of overweight, changed for all age categories, rose from 26.5% in 1980 to 39.0% in 2015, indicating a nearly 50% increase over the preceding 35 years. The incidence of obesity also increased from 7% in 1980 to 12.5% in 2015, indicating an almost 80% rise. Throughout this time period, the rates of overweight and obesity were consistently higher in women compared to men. There has been a noticeable decrease in the difference between the sexes in terms of overweight, but the difference in obesity rates has remained relatively stable (Chooii et al., 2019). This implies that the prevalence of obesity among women is higher than men.

The study of Chooii et al. (2019) further examined the regional dynamics of the prevalence of obesity within different regions across the world. The study establishes that the regions with the highest prevalence of overweight and obesity were America and Europe. In the Americas, overweight prevalence increased from 45.3% in 1980 to 64.2% in 2015, whereas obesity prevalence increased from 12.9% in 1980 to 28.3% in 2015. The countries with the highest prevalence rates of overweight and obese individuals were both the US and Mexico. In the European region, the percentage of people classified as overweight increased from 48% in 1980 to 59.6% in 2015, whereas the percentage of people classified as obese rose from 14.5% in 1980 to 22.9% in the same period. Within each of these two regions, the prevalence rates of overweight and obesity were remarkably consistent across all countries. Turkey demonstrated the highest prevalence rates of overweight and obesity among European countries in 2015, whereas the US recorded the highest rates among American countries. Conversely, in the Americas, Columbia had the lowest rates, whereas France had the lowest rates in Europe.

The prevalence of overweight individuals in the Eastern Mediterranean region increased from 37.9% in 1980 to 49.6% in 2015 (Chooii et al., 2019). Likewise, obesity became more prevalent as

the rate increased from 11.8% in 1980 to 19.6% in 2015. Between 1980 and 2015, the prevalence of overweight and obesity in Africa increased by approximately two-thirds (Ramsay et al., 2018), from 18.5% to 34.5% and 6.2% to 12.7%, respectively (Choi et al., 2019). Variations in the prevalence rates of overweight and obesity were found to be substantial between countries in the Eastern Mediterranean and Africa. As an example, while the prevalence of overweight people in Iraq remained substantially elevated, it exhibited a relatively stable trend, declining from 62.6% in 1980 to 65.6% in 2015. On the other hand, the corresponding figure rose from 24.1% in 1980 to 35.4% in 2015 in Pakistan. The prevalence of overweight individuals in South Africa increased from 49.4% in 1980 to 57.8% in 2015. Likewise, the rate increased from 7.1% in 1980 to 15.9% in 2015 in Ethiopia.

The West Pacific region also experienced a rise in overweight and obesity trends over the last three decades, despite having the lowest prevalence rates globally. The percentage of the population classified as overweight increased from 9.7% in 1980 to 28.2% in 2015, whereas the percentage of the population classified as obese rose from 0.8% in 1980 to 4.9% in 2015. The prevalence of overweight individuals in China experienced a substantial surge of approximately threefold, from 7.8% to 29.9%. Similar trends were observed in South East Asia, where the prevalence of obesity rose from 1.7% in 1980 to 6.2% in 2015 and the prevalence of overweight increased from 10.9% in 1980 to 24.3% in 2015.

## **2.2 Factors Influencing Obesity**

The accelerated nature of urbanization and its attendant consequence is influencing the epidemiological transition of obesity highlighted by a doubling burden of communicable and non-communicable diseases in Sub-Saharan Africa (Adeboye et al., 2012; Goswami, 2024; Juma et al., 2020; Ziraba et al., 2012). Urbanization among Africans have often led to the consumption of and

availability of processed and calorie-dense foods. The food options among people in urban areas is wide as a result of exposure and the high cases of heterogeneity. This therefore favors convenience over nutrition choices. The prevalence of fast food, sugary foods and drinks and high calorie snacks is usually high.

One common consequence of urbanisation is the adoption of a less active lifestyle (Juma et al., 2020; Ziraba et al., 2012). Physical activity levels may be comparatively lower in urban occupations when compared to conventional rural occupations like farming. Moreover, urban settings might lack adequately protected areas conducive to recreational activities and physical activity (Muller et al., 2024). A larger proportion of the time that women residing in metropolitan regions may devote to travelling and working in the office may be consumed by these activities, leaving them with less time to engage in physical activity (Ziraba et al., 2012). A reduction in consistent engagement in physical activity may be a contributing factor to weight gain and the progression to obesity (Jakicic et al., 2018). Urbanisation has the potential to generate socioeconomic disparities, as specific individuals residing in urban areas may be confronted with poverty and limited access to nourishing dietary options. This phenomenon could potentially lead to the development of "food deserts" in particular geographical areas, where unhealthy food is more readily accessible and inexpensive in comparison to nutritious food (Vilar-Compte et al., 2021). Women belonging to lower socioeconomic strata may face barriers in accessing fresh produce and healthier food choices, which can lead to dietary habits that increase the risk of developing obesity (Muller et al., 2024).

Urbanisation often gives rise to cultural shifts, including modifications in the way individuals perceive the body and constructs of beauty. Variation in the perception of body size is observed in specific African societies, wherein some individuals place a higher value on larger body

proportions, while others prioritize thinness. Traditional perspectives may be challenged by the Western beauty standards that may be introduced to urban areas. The vagaries of opinions may have an effect on the physical activity and dietary habits of women. Urban living, characterized by economic challenges, job-related stress, and social transformations, may induce emotional eating and the development of additional detrimental coping mechanisms. Additional constraints that urban women may encounter include balancing professional and familial responsibilities, all of which may contribute to a rise in body mass and obesity.

Agyemang et al. (2015) have observed that marriage has an influence on the prevalence of obesity among women in Africa. The study shows that being married increases women's chances of being obese. Mogre et al. (2014) confirmed in their study among Ghanaian medical students that people who were married had nearly more than six times likelihood of being obese than those who had not married. Several studies have also confirmed that marriage can be a significant factor that influences the prevalence of obesity among women in Ghana (Asosega et al., 2023; Benkeser et al., 2012; Dake et al., 2010; Pereko et al., 2013). The study of Appiah et al. (2014) suggests that parity plays a significant role in obesity, implying that women who had given birth had a higher chance of being obese than those who had no children.

Socioeconomic factors have also contributed to the prevalence of obesity among women in Ghana, the study of Case and Menendez (2009) found higher prevalence rates of obesity among rich households than poor households. Obesity is more common among women with lower socioeconomic position and educational achievement due to limited access to healthy food choices and fewer chances for physical exercise (Bhurosy & Jeewon, 2014). However, the study of Alaba and Chola (2014) revealed a mixed outcome on the prevalence of obesity among educated and uneducated women in Ghana. There is also a general ignorance among some women on the right

food to eat to keep obesity away which accounts for the prevalence of obesity among women. Cultural traditions and beliefs can influence individuals' physical activity and nutritional habits. Some African societies believe that being physically strong is linked to fertility, wealth, and attractiveness (Yiga et al., 2020). As a result, these cultures place a higher importance on consuming high-calorie foods and pay less attention to physical fitness. Unemployment, poverty, and discrimination are socioeconomic stresses that can cause psychological distress and affect emotional eating habits in women. Extended periods of stress can disrupt the balance of hormones and metabolism, leading to an increased vulnerability to obesity and related health conditions. The insufficient healthcare infrastructure and lack of preventative services in Africa may hinder efforts to combat obesity among women. Limited resources within healthcare systems might present obstacles for women in obtaining adequate medical treatment, nutritional guidance, and support for managing their weight. (Wolfenden et al., 2019)

### **2.3 Impact of Obesity on Women Reproductive Health**

The effects of obesity have been widely noted to have contributed to several diseases including hypertension and different types of cancers like colon, breast and endometrium cancers (Wei et al., 2022). A number of studies (Choudhury & Rajeswari, 2021; Mosha et al., 2021; Zheng et al., 2024) have underscored the growing number of reproductive related health risks among women due to obesity. Intuitively, obesity has been attributed to increased infertility globally. The study of Wei et al. (2022) suggests that one in every seven women of childbearing age are infertile in the global north whereas it is one in every four women in the global south. Zalanyi (2001) observes that infertility among women can be associated with several causes including malformations of the uterus, genital infections, tubal defects, ovulatory dysfunction, endometriosis and endocrine disorders. However, Wei et al. (2022) argues that one of the leading causes of infertility among women in current times is obesity; the study identified obesity as an independent risk factor for

female infertility. Broughton and Moley (2017) therefore reveal that the likelihood for infertility among obese women is three times higher than women with normal BMI. Obesity has also been observed to impact the menstrual health of women thereby increasing the risk of women with such condition to infertility.

The study of Wei et al. (2022) notes that one in five women start pregnancy as obese while 40% of women gain weight more than necessary during pregnancy, which poses a threat to pregnant women who are obese and the child. The risk that obesity has on the fetus includes macrosomia, preterm birth, congenital abnormalities and perinatal death (Wei et al., 2022). Obese pregnant women are 30% more likely than normal-weight pregnant women to have birth defects affecting the neural tube, heart, or limb (Araujo-Silva et al., 2021). It is unclear exactly how maternal obesity affects foetal development. Being overweight during pregnancy is linked to a higher risk of gestational diabetes mellitus. However, Broughton and Moley (2017) found that the risk of congenital heart disease did not go down even after glucose levels were considered. This suggests that problems with glucose metabolism may not fully explain why congenital defects happen.

Obesity has also been identified to have damaging impact on the health of off-springs of women who are obese. In numerous studies (Hamed Farahat et al., 2016; Homayouni et al., 2020; Sullivan et al., 201), it has been indicated that children whose mothers are overweight are more likely to have metabolic disorders and birth defects. As adults, children whose mothers are overweight are more likely to be overweight, suffer kidney disease, high blood pressure, and heart disease (Groves et al., 2022). It was found that a mother's fat raised her child's risk of having a birth defect affecting the kidneys by 22%. Also, according to Sun et al., (2015) children whose mothers were overweight had worse glomerular damage than children whose moms were normal weight. A general link has been found between a mother's obesity and her child's risk of having a congenital heart problem,

such as a septal defect, a conotruncal defect, or an aortic arch defect. Most malformations are congenital heart defects, which make up one-third of all serious malformations.

#### **2.4 Prevention and Intervention Strategies for Obesity**

The mechanisms put in place for preventing obesity has been elaborate yet has not been able to reverse the pace of obesity. The study of Biesma and Hanson (2024) contends that the rate of obesity has been a concern that has been attended to largely in high-income countries yet, no country has been able to reverse its prevalence globally. The study further notes that obesity prevention strategies are not an easy fight because it requires a multi-sectoral approach at all levels, including the community, national and global ones. Sim et al. (2010) notes that prevention strategies for obesity begins from a deliberated attempt to reduce the Body Mass Index (BMI) level thereby reducing the rate at which people enter the upper quartile of the BMI distribution. Biesma and Hanson (2024) profess that there should be a multisectoral strategy in place by public health institutions which range from the improvement in individual behavior, improving obesogenic environment and modifying individual behavior to suit obesity prevention strategies. Sim et al. (2010) have also postulated that the best preliminary approach is a multi-level and population-based approach that emphasizes environmental and policy change which requires the participation of stakeholders from multiple sectors. The prevention strategies for obesity are usually context specific and each country requires to review it from population prevalence and the major triggers that increases the likelihood of obesity (Sim et al., 2010).

The relevance of early intervention through prevention strategies at an early age was discovered by Biesma and Hanson (2024) as the first approach in ensuring the reduction of obesity globally especially among women. In the case of women, during the planning phase, efforts should be made to help parents-to-be be in the best shape possible (Biesma & Hanson, 2024). The goal is for

women to have a healthy body mass index (BMI) before they get pregnant, gain less weight during pregnancy, and keep the weight off after giving birth. Following birth, steps should be taken to make sure that babies, kids, and teens get enough healthy food to grow up healthy (Biesma & Hanson, 2024). The need for individual oriented strategies is important yet should be considered carefully due to its resource intensive approach (Sim et al., 2010). The study argues that these strategies are targeted at women directly, who can be considered as overweight which usually entails case identification and rigorous long-term counselling.

For the purpose of preventing obesity, most public health approaches have followed the strategies of the Spectrum of Prevention framework, this was propounded by Cohen and Swift (Cohen and Swift, 1999; Rattray et al., 2002) for the use of health promotion. This strategy identifies the hierarchical approach in addressing public health issues that usually begins at the individual level to the policy level, highlighting the pertinence of an integrated model for addressing public health related issues. This approach is similar to the ecological model that is used for intervention models in the health sector (IOM, 2006). The preventive approach to obesity among women requires a policy and legislative approach. Sim et al. (2010) contends that considering obesity as a public health crisis requires interventions that are regulatory in nature through policy action from the global, continental, national, state and community level to ensure its viability. These regulations come in the form of proposals presented by health agencies to the government for the reduction in the consumption of sugar sweetened beverages, energy dense foods and foods and drinks with high calorie. The legislative approaches that are usually rolled out includes policies and legislations that limits the availability of these type of foods and drinks at targeted environments, imposing taxes on these types of consumables and in some cases reducing their standard serving sizes. There are also legislative and policy mechanisms that encourages physical activity that prevents obesity, this

includes funding for bike paths on main roads to encourage the use of cycling, imposing taxes on fuel, among others (Peterman & Bassett, 2024).

Another approach for addressing obesity among women includes the use of strategic communication, marketing and promotion. The use of television, radio and social media commercials and documentaries have also been identified by many studies as a strategy for preventing and reducing the prevalence of obesity (Bastos et al., 2022). These campaign strategies usually reveal the consumption patterns of a targeted population, in this case, women and how it impacts their health highlighting the other health complications that come along with obesity among women (Hassim et al., 2021). Women undergo different phases of physiological changes than men. As a result, these campaigns usually target and educate women on the implication of their eating habits, the need for physical activities and also ensuring a balanced BMI to prevent obesity.

Health care interventions have been noted to have been instrumental in addressing obesity among women despite the inconclusive debate about the effectiveness of the approach (de Menezes et al., 2020; Doumouchtsis et al., 2022). Healthcare intervention nevertheless ensures early detection for prevention thereby providing anticipatory guidance on health care guidance and counselling which are efficient and effective measures for the prevention of obesity among women.

### **2.5 Women's Access to Healthcare**

Lester et al. (2010) states that women's healthcare is tied to poverty and resource-poor countries have the highest rates of women's health complications. The paradox as advanced by Lester et al. (2010) is that the diseases and disabilities that arise among women is as a result of lack of access to quality basic healthcare characterized by the low status of women in poor settings highlights a social rather than a biological determinant of health. Globally, pregnancy and childbirth have been

identified as major causes of death among women. A WHO (2024) report indicates that 287,000 women died in 2020 as a result of pregnancy and childbearing.

Maternal Mortality Ratio has however dropped by 34% between 2000 and 2020. The report notes that 95% of deaths among women out of childbearing occurred in low and middle-income countries globally. Sub-Saharan Africa is noted to have recorded 70% (202,000) of these deaths while Southern Asia recorded 16% (47,000). The WHO (2024) report shows that the prevalence of maternal mortality in some regions of the world is indicative of disparities in the availability of high-quality healthcare facilities, hence underscoring the socioeconomic divide between affluent and impoverished populations. In 2020, the MMR was 430 per 100,000 live births in low-income countries, compared to 13 per 100,000 live births in high-income nations.

Maternal mortality reduction efforts face obstacles in humanitarian, crisis, and post-conflict environments. The report (WHO, 2024) notes that according to the Fragile States Index (1) in 2020, there were 9 countries classified as either "very high alert" or "high alert" in terms of their level of instability. These countries are Somalia, the Democratic Republic of the Congo, South Sudan, Yemen, the Syrian Arab Republic, the Central African Republic, Chad, Sudan, and Afghanistan. In the same year, these countries had maternal mortality rates (MMRs) ranging from 30 (the Syrian Arab Republic) to 1223 (South Sudan). The report further notes that in 2020, the average MMR for fragile states categorised as extremely high and high alert was 551 per 100,000 live births, which is more than twice the global average (WHO, 2024).

This inarguably shows that women in low-income countries face a greater likelihood of experiencing maternal mortality over the course of their lives (WHO, 2024). The lifetime risk of maternal death refers to the likelihood that a 15-year-old woman will eventually die due to

complications related to pregnancy or childbirth. The prevalence of this condition is 1 in 5300 in high income countries, compared to 1 in 49 in low-income countries.

Fistula is a life-threatening health condition that primarily affects women, particularly those residing in poor countries. Obstetric fistula is a major worldwide health problem, mostly impacting women in low and middle-income countries. An obstetric fistula is an abnormal connection between a woman's reproductive tract and either her urinary or rectal tract, typically caused by prolonged and obstructed labour, as stated in a 2018 report by the World Health Organization (WHO). The WHO (2018) research states that the global prevalence of obstetric fistula affects between 50,000 to 100,000 women worldwide each year. Approximately 2 million young women are believed to be living with untreated obstetric fistula, mainly in Asia and Sub-Saharan Africa. According to the research (WHO, 2018), the scarcity of obstetric fistula cases and their occurrence in remote locations make it difficult to accurately determine the number of affected women. Tunçalp et al. (2014) further notes that the majority of fistulas are found in countries located in Sub-Saharan Africa or South Asia, where the health systems are inadequately equipped. The combined prevalence in investigations conducted on a population level was determined to be 0.29 per 1000 women of reproductive age across all geographic regions (Adler et al., 2013). According to Adler et al. (2013), the prevalence of the condition was 1.57 per 1000 women of reproductive age in sub-Saharan Africa and South Asia, 1.60 per 1000 women of reproductive age in sub-Saharan Africa, and 1.20 per 1000 in South Asia. Prophylaxis and Therapy Obstetric fistula can be mostly prevented by postponing the age of first pregnancy, discontinuing hazardous traditional practices, and ensuring prompt access to high-quality obstetric care (WHO, 2018). Individuals suffering from uncomplicated fistulae might have a straightforward surgical procedure to mend

the perforation in their bladder or rectum. Surgical closure is possible for around 80-95% of vaginal fistulas, according to the World Health Organization (WHO, 2018).

Abortion is a widely used medical procedure worldwide and is deemed safe when performed according to the guidelines outlined in the WHO report on Abortion for 2021. It is crucial that the method used aligns with the period of the pregnancy and is administered by an authorised professional. Nevertheless, there is a substantial disparity between global figures and those specifically pertaining to Sub-Saharan Africa (WHO, 2021). The analysis indicates that there are around 73 million induced abortions occurring globally on an annual basis (WHO, 2021). 61% of unplanned pregnancies and 29% of all pregnancies result in induced abortion. Approximately 45% of all abortions are categorised as unsafe, with 97% of them occurring in underdeveloped countries.

Unsafe abortion is a prominent, albeit avoidable, factor contributing to maternal fatalities and health complications. According to the WHO in 2021, there were approximately 33 abortions per 1,000 women aged 15-49 per year across Eastern, Middle, Southern, and Western Africa. The rate of abortions remains very consistent across these regions. The annual incidence of abortions in Sub-Saharan Africa experienced an almost twofold increase during the periods of 1995–1999 and 2015–2019, rising from 4.3 million to 8.0 million. Based on the estimates from the Guttmacher Institute (2020), about three-quarters (77%) of abortions in Sub-Saharan Africa are deemed unsafe. With 185 maternal deaths per 100,000 abortions, Sub-Saharan Africa has the highest abortion-related mortality rate worldwide. As asserted by the World Health Organization (2021), abortion is considered as secure medical procedure when performed by an experienced healthcare provider using a WHO-recommended technique appropriate for the particular stage of pregnancy. Unsafe abortion can result in both physical and mental health issues, as well as social and financial

burdens for women, communities, and health systems. A study conducted by the American Medical Association (AMA) in 2022 found that women who were denied an abortion they wanted and subsequently gave birth were at a higher risk of developing gestational hypertension, experiencing joint discomfort, headaches or migraines, reporting fair or poor health, and even facing mortality. Additionally, they experienced substantial and meaningful disparities in their economic paths, encountering greater difficulties compared to women who obtained desired abortions (AMA, 2022).

Family planning is an essential component of healthcare, especially for women. Contraception is employed to regulate the quantity and timing of a woman's offspring, which can have substantial consequences on her physical and mental health. Effects on Women's Health Implementing family planning measures can effectively mitigate the health hazards associated with pregnancy, particularly among adolescent females, as stated by the WHO (2023) report. Moreover, infants born within 2 years of an older sibling have a 60% higher risk of infant death, while those born between 2-3 years have a 10% higher risk, compared to those born after a gap of 3 years or more. Hence, the implementation of family planning measures can substantially reduce infant mortality rates.

The World Health Organization (WHO) reported in 2023 that out of the 1.9 billion women aged 15-49 in 2021, 1.1 billion require family planning. Among them, 874 million are currently using modern contraceptive methods, while 164 million have an unmet need for contraception. The global satisfaction rate for the need for family planning met by current methods has remained stagnant at approximately 77% from 2015 to 2021 (WHO, 2023). Contraception promotes the fundamental human right for individuals to have control over the quantity and timing of their offspring. The demand for family planning met by current technologies in Sub-Saharan Africa has

risen from 52% to 58% (WHO, 2023). Notwithstanding this advancement, there is nonetheless a significant demand for contraception in this area. In western Africa, the subjective need or need for contraception, as indicated by married or cohabiting women, has remained consistently low at approximately 46% over the last decade (WHO, 2023). Prevalence of HIV and sexually transmitted infections (STIs) globally by the end of 2021, was estimated at 39.0 million HIV positive individuals. Based on the data (UNAIDS 2023), 20.0 million were women who were 15 years or older. Furthermore, women and girls accounted for 46% of all new HIV infections in 2022.

Regarding STIs, the global acquisition rate is over 1 million STIs per day (UNAIDS 2023). As explained by the World Health Organization (WHO, 2023), STIs can have serious effects such as neurological and cardiovascular disorders, infertility, ectopic pregnancy, stillbirths, and an elevated susceptibility to HIV. Semwogerere et al. (2021) contend that there is a correlation between HIV and STI prevalence among women in Africa. Among young individuals in 2022, teenage girls and young women (aged 15 to 24 years) constituted about 77% of the newly acquired HIV infections in Sub-Saharan Africa. This exceeds the global average by a significant margin.

A cross-sectional study conducted in Kenya, Nigeria, Tanzania, and Uganda revealed a 7.7% prevalence of STIs. The demographic groups most vulnerable to STIs in this particular context were young individuals and women (Semwogerere et al., 2021).

Its effects on women's health is that women can experience significant health consequences as a result of HIV and STIs. They have the potential to induce gynecological health problems, elevate the likelihood of developing cervical cancer and heart disease, and can also result in complications with the side effects and drug interactions of HIV medication (Elenu et al., 2024). STIs can have severe repercussions such as neurological and cardiovascular disorders, infertility, ectopic

pregnancy, stillbirths, and heightened vulnerability to HIV (Elenu et al., 2024). Furthermore, they are linked to social disapproval, intimate partner violence, and have a negative impact on overall well-being (UNAIDS, 2023).

## **2.6. Capacity of Health Workers in Tackling Obesity**

In the study conducted by Jackson Leach et al. (2020) titled “Clinical Care for Obesity: A Preliminary Survey of sixty-eight Countries”, the scholars agreed that obesity is a chronic relapsing condition affecting a rapidly growing population. The scholars agreed that although there existed professional guidelines for obesity treatment, there existed a lack of adequate services, especially in lower income countries and in rural areas of most countries. The scholars in their report acknowledged that the lack of treatment of obesity was attributable to the lack of trained multi-disciplinary support professionals among other causes such as the high costs for care and long waiting times for surgery. In another study conducted by Moyo (2022), “Investigating the knowledge, attitudes, and practices of nurses regarding obesity in private healthcare institutions in the Oshana region of Namibia”, the scholar measured the levels of knowledge, attitudes and practices of nurses. Findings of the study revealed that the levels of knowledge, attitudes and practices regarding obesity among enrolled nurse were low and thus recommended the introduction of obesity training and obesity mentorship programs for their nurses as well as rewarding nurses who appropriately manage obese patients to promote proper treatment for patients.

Sharing a similar assertion, Goeman (2018) explored the provision of nutrition services in South Africa, focusing mainly on the nutrition-specific work components of health personnel working at the primary health care level in the public health sector. In using evidence-based workforce information through a mixed methodology, the study findings revealed significant shortcomings

in workforce development and the capacity of many practitioners to do the work as a result of a lack of know-how, lack of physical infrastructure and support.

In the study conducted by Folasire et al. (2019) titled “Obesity Beliefs and its Treatment: Insights from a Mixed Method Study in Overweight and Obese Patients and Health Care Personnel at Secondary Health Care Facility Nigeria”, the scholars aimed to compile a profile of behaviors and moderating factors for the development of a weight loss intervention. Findings from the study revealed that from the health worker’s perspective, which largely comprised of three physicians, two matrons and one nutritionist, only few health workers recognized obesity as a disease. According to the findings of the study, obesity was not routinely screened for unless it was obvious, partly due to the lack of tools and/or skills. Overall, the scholars noted a poor level of understanding of the causes of obesity and the avenues for curbing obesity.

## **2.7 Conclusion**

This empirical literature review has examined the prevalence of obesity, women’s health rights and risks at the global level and Sub-Saharan Africa. It has revealed a wide range of findings from peer review articles and reports. The literature review demonstrates a varying prevalence of obesity globally with the global north leading in terms of prevalence, however, the rising rate of prevalence among women in Sub-Saharan Africa is alarming. The study therefore reviewed literature that examined the factors that leads to the prevalence of obesity among women comparing the global trend to that of Sub-Saharan Africa. The leading factors for the prevalence of obesity among women in Africa includes rising urbanization, socio-economic factors, globalization, cultural influences, income, education and lack of public health awareness frameworks. The chapter further examined the impacts of obesity on the reproductive health of women, the literature highlights high prevalence of infertility among women as a result of obesity, women also face childbearing

complications while the child also risks several health complications. The chapter further examined the various approaches that can be used for the prevention of the prevalence of obesity. The chapter also examined women's access to health and the various health conditions that put women at risk to public health comparing the risk of women in the global north to those in the global south.



## CHAPTER THREE

### METHODOLOGY

#### 3.0. Introduction

This chapter highlights and explains the methodological approach exacted by the researcher in assessing the global perspectives on obesity and the burden of health risks on women with a particular focus on the perspectives of health workers in Ghana. Given the research objectives and questions, the researcher saw it fit to utilize the qualitative research design in the pursuit of the study objectives.

#### 3.1. Research Methodology and Philosophy

This study employs the use of the qualitative research in investigating the global perspectives on obesity and the burden of health risks to women with a particular focus on the perspectives of health workers in Ghana. Qualitative research draws from constructivist and interpretivist paradigms, seeking to deeply understand a research subject rather than predict outcomes as in the positivist paradigm (Denzin & Lincoln, 2011). Whilst interpretivism aims to build knowledge from understanding individuals' unique perspectives, lived experiences and the meaning attached to those viewpoints, constructivism envisages knowledge to be constructed as people work to make sense of their lived experience (Creswell & Poth, 2018).

Green and Thorogood (2016) state that qualitative research seeks to answer the “why”, “how” and “what” questions of a phenomenon. Qualitative research often employs the use of language as its data, be it written or oral. Haven and Grootel (2019) argued that qualitative research may equally employ the use of photos, videos, or other types of behavioral recordings. Sharing a similar assertion as Haven and Grootel (2019), qualitative research according to Guides (2019), refers to

the naturalistic study of social processes and meaning, using observations, interviews and the analysis of texts and images.

Qualitative research, at its core, asks open-ended questions, whose answers may not easily be put into numbers. According to Foley and Timonen (2015), one strength of qualitative research design, as has often been repeated in its definition is its ability to explain the processes and patterns of human behavior that can be difficult to quantify. Explaining further, Foley and Timonen (2015) argued that phenomena such as lived experiences, behaviors and attitudes can be difficult to accurately denote quantitatively, whereas a qualitative approach or design allows participants to express how, why or what they were thinking, feeling, and experiencing at a certain time or during a phenomenon or event of interest. Quantifying qualitative data is certainly possible, but at its core, qualitative data is vital in seeking out patterns and themes that can be difficult to quantify and is important to ensure that the context and narrative of qualitative work is not lost by trying to quantify something that is not meant to be quantified (Tenny et al., 2022).

This design was thus deemed appropriate as it allowed for the researcher to adequately assess the lived experiences, observations, perceptions and ideology of health workers in the study's pursuit of investigating the perspectives of Ghanaian health workers on obesity and the health risks it poses to women in Ghana.

### **3.2. Data Sources**

In this qualitative study, multiple sources of data were utilized during the study: primarily, secondary and primary data sources, to gain a deeper understanding of the research topic.

#### **3.2.1. Primary Data Sources**

The primary data for the purpose of the study was sourced through interviews with selected participants to gain a deeper understanding of their perspectives and experiences related to obesity

and women's health risks. The use of interviews served as a rich and detailed source of data that helped in exploring the research questions and generate new insights. The use of a semi-structured interview approach was mainly to allow flexibility for study participants to share their thoughts and experiences while still following a predetermined set of questions. The utilisation of a semi-structured interview facilitated the acquisition of qualitative data that is both accurate and comparable, hence enabling its subsequent analysis (Stuckey, 2013). The study utilized open-ended questions to solicit information from participants. The research also relied on the use of field notes and recordings to record the responses received during data collection. The interviews were conducted in a face-to-face setting to allow the researcher to detect non-verbal cues from the study participants. The use of semi-structured interviews allowed for the collection new exploratory data related to the research topic. Although semi-structured interviews are often an effective way to collect qualitative data, it is not without its pitfalls. A key disadvantage of the approach is the fact that some participants are difficult to engage in conversation or may be reluctant to share information on some sensitive topics (Hatch, 2023). To overcome this challenge, the study interviewed only participants who were highly interested in participating in the research to reduce the challenge of reluctance on the part of participants to give out information.

### **3.2.2. Secondary Data Sources**

Secondary data sources are largely concerned with a range of existing literature. Secondary data was obtained from the Internet, scholarly journals and articles, books and published and reviewed datasets (Pederson et al., 2020). Downloaded publications centre on the issue of obesity and women's health risks. In this regard, the data sources for this inquiry are books, book chapters, journal articles, reports, and online sources. First, these sources are reviewed as preliminary literature, which forms the basis of subsequent analysis. This caters to the limitation of using outdated data or data from unreliable sources for the study.

### 3.3. Sampling Methods and Sample Size Determination

According to Lindelof and Taylor (2017), a sampling strategy is one that helps a researcher choose which individuals to work with and also explains why they were chosen. The researchers further explained that because the precise unit(s) to be investigated are predetermined and well-thought-out, it restricts or reduces the likelihood of participating in useless attempts. The approach of purposive sampling coupled with the snowballing sampling technique was deployed for the achievement of the study's primary objective.

The purposive sampling technique, as its name suggests, involves the deliberate or purposeful selection of a participant or set of data to study because they have certain qualities and/or characteristics that are pertinent to the research, as opposed to the convenience sampling technique, which involves the selection of participants based on their availability (Rai & Thapa, 2015). They further explained that the purposive sampling technique gives the researcher more power to carry out their work and extract the best information from the samples because it relies more heavily on their expertise, judgment, and intelligence. Snowball sampling on the other hand refers to the non-probability sampling technique whereby existing study subjects recruit future subjects. This approach to sampling is selected as a suitable complement to the Purposive sampling technique mainly for its ability to reduce selection bias by the researcher (Sulaiman-Hill & Thompson, 2011).

As stated by Robinson (2014), the utilisation of sample sizes ranging from three (3) to sixteen (16) provides a viable framework for creating generalisations across different cases. By employing this method, researchers can avoid being inundated with an excessive amount of data and instead allocate unique identities to individuals within the sample range. For this study, a total of **16** key informants were interviewed. The list was made up of a varied group of health professionals as well as officials from different backgrounds such as the Ministry of Health, Ministry Gender,

Children and Social Protection as well as officials from the Ghana Health Service. This population was largely selected owing to their wealth of information on the lived realities of the study area and their knowledge of practice within the Ghanaian context.

### **3.4. Data Analysis**

Thematic analysis was employed during the data analysis process. According to Patton (2002), thematic analysis is a process of reducing and making sense of qualitative data. It involves examining a large amount of qualitative material to identify underlying patterns and significance (Braun & Clarke, 2019). Thematic analysis is a methodological approach employed to derive meaning from qualitative data. The study used a thematic analysis to identify the recurring themes and patterns that surfaced from the data collected. The recorded interviews were transcribed verbatim to facilitate the analysis of the data. After doing a comprehensive examination of the transcribed data, an evaluation of noteworthy characteristics within the data was undertaken, followed by the formulation of themes that aligned with the objectives of the research. To present the findings, descriptive narratives and quotes were used, which enabled the merger of primary and secondary data across different themes, thereby providing a richer interpretation. The analysis focused on identifying trends, patterns, and correlations to SDG 3 and women's health rights.

Data analysis also involved triangulation of data from multiple sources, such as secondary data sources and key informant interviews. Triangulation helped to increase the credibility and reliability of the findings by confirming or validating them through multiple perspectives.

### **3.5. Ethical Considerations**

Wallace and Sheldon (2015) suggest that ethics encompasses procedural components pertaining to merits and integrity, fairness, beneficence, and respect, with a particular focus on obtaining properly informed consent to mitigate potential risks associated with research. As a crucial ethical

consideration, the study obtained informed consent from the study respondents. This involved ensuring that the participants fully understood the purpose, procedures, potential risks and benefits of the study, and voluntarily agreed to participate without any coercion or undue influence (Cacciattolo, 2015). To address this ethical consideration, verbal consent was obtained from all participants in the study.

The privacy of the respondents is another important ethical consideration. To maintain privacy, all personal identifying information of the respondents was kept confidential and not linked to their responses. This included ensuring that their names were not indicated on any questionnaires (Green, 2019). Additionally, confidentiality was maintained throughout the study. All data collected from the respondents were kept securely, with access limited to only the researcher (Green, 2019). To further emphasize the importance of privacy and confidentiality, participants were assured that their information would be used for research purposes only and would not be shared with any third parties without their explicit consent (Cacciattolo, 2015). Furthermore, participants were also informed about their right to discontinue their participation in the study at any time without facing any negative consequences. As such, informed consent was sought and given both orally and written from participants that were engaged.

Also, it was ensured that the privacy and confidentiality of participant's personal information and responses were safeguarded. Thus, responses as well as data collected were anonymized and stored securely to protect the identities of participants. That aside, the study ensured that the dignity of participants was respected throughout the research process. They were treated with respect, sensitivity, and cultural awareness in all interactions (Cacciattolo, 2015).

### 3.6 Summary

This chapter details out the research methodology utilized in assessing the global perspectives on obesity and the burden of health risks on women with a particular focus on the perspectives of health workers in Ghana. The chapter thus highlighted the research design employed, the mode of data analysis, the means for sample size determination and the sampling technique utilized, the sources of data from which data was sourced as well as the ethical considerations utilized in guiding the study.



## CHAPTER 4

### RESEARCH FINDINGS

#### 4.0 Introduction

This chapter presents and discusses the findings derived from a thematic analysis of interviews with health professionals in Accra's metropolitan districts, specifically the La Dadekotopon Municipality and Ayawaso West Wuogon Municipality area. Guided by Constructivist theory, it explores how health workers construct their understanding of obesity among Ghanaian women, its determinants, and the associated challenges in management. The discussion is organised around the three research questions in chapter one.

1. What is the capacity of health workers to accurately diagnose and treat obesity among women in Sub-Saharan Africa?
2. What are the socio-cultural, economic, and environmental determinants of obesity among Ghanaian women?
3. What challenges does Ghana face in addressing obesity?

#### 4.1 What is the capacity of health workers to accurately diagnose and treat obesity in women in Sub-Saharan Africa?

##### 4.1.1 Diagnostic Capacity and Tool Utilisation

One critical dimension explored in this study was the diagnostic capacity of Ghanaian health workers to accurately identify and manage obesity in women. Accurate diagnosis of obesity is a cornerstone of effective prevention, treatment, and overall obesity management. The interviews revealed that health professionals across Ghana primarily rely on the Body Mass Index (BMI) as the foundational diagnostic tool for screening obesity. Respondents unanimously agreed that BMI

is widely known, accessible, affordable, and easy to use, facilitating its widespread adoption across healthcare facilities. For instance, one respondent explained the following:

*The tool we have is the BMI, the body mass index. Every doctor in Ghana knows how to interpret BMI. Just a glance at BMI should be able to tell you if this person has normal weight, or if this person is overweight or obese. (Interview 1)*

The dominance of BMI use is understandable, considering Ghana's limited healthcare infrastructure. The tool's simplicity makes it particularly attractive in resource-limited settings, where health providers need quick and cost-effective means to diagnose obesity (Anto et al., 2023). However, relying predominantly on BMI presents significant diagnostic limitations, which were extensively acknowledged by the respondents.

While the practicality of BMI was undisputed, its shortcomings were consistently highlighted by respondents. Particularly among women, health professionals noted concerns over the accuracy of BMI due to variations in body composition, muscle mass, and fluid retention related to hormonal changes or pregnancy.

*The nutritionist can do other assessments to determine that even though the BMI is high, it's been contributed by muscle bulk more than fat, which is not unhealthy. (Interview 1)*

Another respondent supported this statement:

*BMI gives us a general picture, but it doesn't tell us about visceral fat, muscle mass, or fluid retention, and these are crucial for a detailed diagnosis, especially in women who might be pregnant or postpartum. (Interview 6)*

The critical observations made by the respondents underscore the clinical complexities involved in accurately diagnosing obesity, especially in female patients, whose physiological states frequently alter their body composition. These complexities cannot be fully addressed by using

BMI alone. The findings illustrate a pronounced tension between diagnostic efficiency and clinical accuracy, a tension intensified by resource constraints typical of Ghana's healthcare system.

Beyond BMI, other diagnostic tools such as mid-upper arm circumference (MUAC), waist-to-hip ratios, and abdominal girth measurements have been identified as potentially useful but are inconsistently applied (Ofori-Asenso et al., 2016). Respondents indicated that their usage mostly occurred in specialised contexts or was driven by external mandates from insurers or employers rather than routine clinical decision-making.

*The mid-upper arm circumference (MUAC) helps diagnose obesity among pregnant women, but it's rarely used outside donor-funded maternal health programs.*  
(Interview 1)

Another respondent stated:

*In corporate or insured health check-ups, we may include abdominal circumference measures, but this is due to employer requirements rather than clinical practice standards.* (Interview 3)

These statements reveal that diagnostic practices in obesity management are strongly influenced by external institutional frameworks rather than purely clinical determinants. Consequently, comprehensive obesity assessment in everyday practice remains fragmented and inconsistently implemented.

These diagnostic practices and preferences among health workers can be seen as socially constructed phenomena influenced heavily by their interactions with institutional, economic, and sociocultural contexts. Health professionals do not choose diagnostic tools based solely on their scientific merit; instead, their choices are mediated by social expectations, organizational directives, resource limitations, and ingrained professional routines.

As the findings highlight, health workers in Ghana navigate the complexities imposed by limited resources, cultural understandings of body size and institutional expectations. These factors shape their diagnostic choices and clinical approaches, producing practices that might not optimally address individual clinical needs but instead reflect collective understandings shaped by the broader healthcare environment.

The respondents frequently discussed the cultural reluctance of health workers and patients alike to challenge the prevailing societal norms regarding ideal body size. This cultural hesitancy extends into clinical encounters, influencing the degree to which thorough diagnostic assessments are pursued or considered necessary.

*Culturally, direct conversation about obesity is often avoided because patients feel blamed or stigmatized, which indirectly limits comprehensive assessments.*

(Interview 2)

This reflects a constructivist understanding, where clinical realities, such as diagnostic practice, are not fixed or purely scientific but are continuously negotiated and renegotiated through social interactions, institutional norms, and cultural perceptions.

The study found that Ghanaian health workers predominantly rely on Body Mass Index (BMI) as the primary tool for diagnosing obesity because of its simplicity, affordability, and ease of use. However, respondents highlighted the significant limitations of BMI, noting that it inadequately captures variations in body composition, particularly among women who may have different muscle masses or be pregnant. The study further revealed the limited and inconsistent use of other diagnostic measures, which were influenced significantly by external institutional mandates rather than clinical appropriateness. This finding aligns with the observations of Heslehurst et al. (2015), who emphasised that healthcare professionals often rely on basic diagnostic tools, such as BMI,

owing to resource limitations, highlighting challenges in clinical interventions and proper obesity management owing to insufficient diagnostic infrastructure.

#### 4.1.2 Training and Interdisciplinary Collaboration

An essential component of effective obesity management, particularly among women, is ensuring that healthcare professionals possess robust interdisciplinary training and skills. Obesity is multifaceted and requires coordinated action across several health disciplines, including physicians, nutritionists, community health workers, and other allied health professionals. The interviews revealed the fragmented nature of training in obesity management across healthcare settings in Ghana. Respondents from various interviews expressed concerns regarding inadequate and inconsistent training, emphasising that formal training programs tailored to obesity management are rare and usually sector-dependent.

*The education and training available to us is limited and often not specifically focused on obesity as a standalone health issue. It is usually mentioned briefly as part of broader non-communicable diseases training, which doesn't fully equip us.*

(Interview 3)

Another respondent echoed this concern.

*Staff training programs exist, but they are limited by funding. Most of what we learn comes from personal research, experience, or attending international conferences funded out of pocket.* (Interview 12)

This indicates that although obesity is a rapidly growing health concern, Ghana's healthcare infrastructure has yet to prioritise training programs specifically dedicated to the comprehensive management of obesity (Kushitor & Colecraft, 2023). The absence of such targeted training further perpetuates the gap in effective clinical practice, particularly in women's health, which frequently presents unique complexities related to hormonal variations, pregnancy, and postpartum care.

Health professionals reported significant reliance on informal learning channels and external training opportunities, such as international conferences or online platforms, reflecting a critical gap within local professional development opportunities.

*We particularly need more structured training for managing complex metabolic cases related to obesity. Currently, most knowledge is acquired from international conferences or informal discussions among colleagues. (Interview 8)*

Another respondent noted:

*Local training rarely goes beyond basic BMI measurement. Detailed nutritional management and behavioural interventions training are usually only accessible through self-directed or externally funded avenues. (Interview 5)*

Such dependence on informal and external learning resources limits the standardisation of obesity management practices and creates disparities among healthcare providers in different regions or sectors (Nour, 2014). Furthermore, it highlights the broader structural issues within Ghana's health system, particularly the lack of comprehensive and ongoing professional development programs to address chronic conditions such as obesity.

Effective obesity management inherently requires collaboration across healthcare disciplines, including physicians, nutritionists, dietitians, and community health workers (Obirikorang et al., 2024). However, health workers reported that interdisciplinary collaboration was limited, mainly due to systemic, structural, and cultural factors.

One critical systemic barrier identified was the limited recognition and empowerment of health professionals, particularly nutritionists and dietitians. A respondent stated:

*Doctors are being forced to learn beyond their specialization because culturally, patients prefer medical doctors over dietitians, creating unnecessary burdens and inefficiencies. (Interview 1)*

Another respondent stated:

*Culturally, doctors hold authority in Ghanaian healthcare, and therefore, dietitians and nutritionists often get overlooked or undervalued by patients and even the healthcare system itself. (Interview 4)*

These cultural perceptions significantly impede the effectiveness of interdisciplinary care models in the field. Physicians find themselves stretched beyond their expertise, while skilled nutritionists and allied professionals remain underutilised, limiting the overall efficacy of obesity treatment programs.

From a Constructivist perspective, these dynamics illustrate how professional roles and responsibilities within healthcare are socially constructed through cultural, institutional, and interpersonal interactions. In Ghana, the physician-centric model is deeply ingrained, influencing both patient expectations and organizational structures. Health professionals thus negotiate their roles not purely based on clinical expertise or evidence-based guidelines but according to the expectations and interactions within their social environment.

*Even though we have nutritionists who can effectively manage dietary interventions, patients culturally trust doctors more. This cultural perception forces doctors to assume roles beyond their specialized training. (Interview 1)*

The socially constructed hierarchy evident in healthcare professions directly influences practice patterns, limiting interdisciplinary cooperation and creating suboptimal care (Seidell & Halberstadt, 2015). This hierarchy shapes patient interactions, resource allocation, training priorities, and, ultimately, the healthcare system's approach to obesity management.

Institutional constraints further complicate collaboration challenges. Healthcare providers indicated that professional interactions across different cadres (physicians, dietitians, nutritionists, nurses, and community health workers) are fragmented due to unclear institutional guidelines or standardised protocols for interdisciplinary engagement.

*We face real challenges coordinating care between doctors, dietitians, nurses, and community workers because clear guidelines or structured referral systems do not exist. (Interview 7)*

The lack of institutionalised interdisciplinary frameworks results in health professionals working in silos, restricting holistic obesity care and preventing a comprehensive, patient-centred approach. Therefore, health professionals' practices and perceptions emerge not solely from clinical considerations but also from interactions within institutional contexts.

The study found that training opportunities for obesity management are fragmented, inconsistent, and largely inadequate in Ghana's healthcare settings. Health workers frequently rely on informal, external, or self-funded training avenues, leading to significant disparities in their professional knowledge and practice. Additionally, the study identified limited interdisciplinary collaboration, with medical doctors often assuming roles beyond their expertise due to cultural preferences for physician-led care in the country. This practice undermines effective interdisciplinary teamwork among nutritionists, dietitians, and other allied health professionals. A study by Timm et al. (2021) supports this finding by identifying unclear roles and responsibilities among healthcare professionals in managing obesity-related conditions, emphasizing the need for clearer cross-sectoral guidelines and structured training programs to enhance care collaboration

## 4.2 What are the socio-cultural, economic, and environmental determinants of obesity among women in Ghana?

### 4.2.1 Socio-Cultural Determinants of Obesity Among Women in Ghana

Health behaviours, including dietary practices and body image perceptions, are deeply influenced by socio-cultural contexts. In Ghana, cultural beliefs and social expectations significantly shape women's understanding and experience of obesity. A strong consensus among the respondents was the existence of deeply ingrained cultural ideals associating larger body sizes with prosperity, good health, beauty, and overall well-being. The perception that being overweight or obese symbolises affluence, fertility, marital satisfaction, and economic success was repeatedly emphasised by the participants:

*From our ancient culture, beauty and well-being are closely linked with obesity. In Ghanaian culture, the bigger the person, the more beautiful and prosperous they are perceived. (Interview 1)*

Respondents consistently highlighted that these sociocultural constructions directly impact obesity prevalence and limit women's motivation to pursue weight-loss interventions:

*Being overweight is often viewed positively. Women who gain weight after marriage or childbirth are considered successful and well-cared-for, thereby discouraging intentional weight loss. (Interview 10)*

These culturally embedded perceptions, transmitted intergenerationally through familial and community interactions, are pivotal to understanding obesity within the Ghanaian social fabric (Agyemang, 2022). This aligns strongly with the constructivist perspective, which asserts that meanings and behaviours related to health are continuously constructed and reconstructed through cultural interactions rather than derived from purely biomedical interpretations.

The cultural expectation of weight gain post-marriage and during postpartum periods emerged as particularly influential in shaping women's obesity-related behaviours (Agyemang, 2022). Respondents noted that Ghanaian women often experience strong social reinforcement to gain weight during these periods, as it symbolises adequate care, marital happiness, and maternal success.

*Social pressure after marriage encourages weight gain. Women are expected to visibly demonstrate marital happiness through body weight, making obesity seem culturally acceptable and even desirable. (Interview 10)*

Another participant stated:

*Traditional postpartum practices involve dietary regimes and reduced physical activities to facilitate recovery and milk production. Such practices inadvertently encourage sustained weight gain post-childbirth. (Interview 6)*

These deeply embedded cultural expectations significantly influence women's health choices and reduce their motivation for weight management. Through Constructivism, these sociocultural norms can be viewed as collectively constructed realities that influence women's body image, behaviours, and health choices, thus perpetuating obesity within communities.

Respondents frequently described cultural interpretations that stigmatised intentional weight loss, associating it negatively with illness, psychological distress, marital problems, or poverty. Health workers reported significant difficulty in counselling women to pursue weight loss, as this behaviour often elicited suspicion or social stigma from their communities:

*If someone is losing weight intentionally, culturally, people assume that person is ill, stressed, or experiencing marital or financial problems. This social suspicion creates strong barriers to women's willingness to lose weight. (Interview 1)*

This finding indicates that, within Ghanaian communities, intentional weight loss often carries socially constructed meanings of vulnerability or distress rather than healthy self-care or improved well-being. These negative associations undermine obesity interventions, reflecting how cultural constructions actively impede the uptake of clinically advised healthy behaviours (Micklesfield et al., 2013).

Another vital cultural dimension identified was the pervasive social reluctance to discuss obesity openly and directly. Health professionals indicated that both patients and healthcare providers avoid explicit conversations about obesity due to culturally entrenched sensitivities.

*Culturally, direct conversations about obesity are often avoided because patients feel blamed, judged, or stigmatised. This indirectly limits comprehensive assessments and effective interventions. (Interview 2)*

Another participant noted the following:

*We are culturally indirect; Discussing obesity openly feels uncomfortable, intrusive, or judgmental for both parties, often leading to silent avoidance of the topic altogether. (Interview 3)*

These culturally constructed communication norms severely restrict health professionals' ability to provide effective, direct counselling on obesity management. The Constructivist lens illuminates how cultural communication patterns influence and construct clinical interactions and health communication practices, profoundly shaping the effectiveness of obesity management programs.

These socio-cultural factors influencing obesity among Ghanaian women can be interpreted as collectively and socially constructed meanings and realities. In other words, obesity is not merely a biomedical phenomenon but is defined, understood, and enacted through cultural interactions, community narratives and collective social experiences. Through shared meanings of body size,

beauty, marital expectations, and postpartum care, women internalise these cultural standards, making them integral to personal and community identity.

The socio-cultural meanings constructed around obesity profoundly shape women's health behaviours, leading them to resist clinical recommendations that contradict cultural expectations. Consequently, obesity is perpetuated through culturally constructed practices, stigmas, and communication patterns that are deeply embedded within the community's shared reality.

The study found that sociocultural norms significantly influenced the prevalence of obesity among Ghanaian women. Cultural perceptions associating larger body size with beauty, prosperity, and well-being strongly shape women's health behaviours and attitudes towards weight management. Additionally, culturally entrenched expectations regarding post-marital and postpartum weight gain, social stigmatisation of intentional weight loss, and indirect communication practices regarding obesity collectively create barriers to effective clinical interventions and sustained behavioural change. Appiah et al. (2014) also identified socio-cultural preferences for larger body sizes as a significant predictor of obesity in urban Ghanaian women, highlighting the role of cultural norms and body image preferences in driving obesity rates in Ghanaian society. Similarly, Micklesfield et al. (2013) documented that sociocultural norms strongly influence obesity rates in African populations, indicating that cultural ideals significantly impact health behaviours.

#### **4.2.2 Economic Determinants of Obesity Among Women in Ghana**

Economic determinants and health financing systems significantly shape healthcare access and influence obesity prevalence, treatment adherence and health outcomes among Ghanaian women. Health professionals frequently highlight economic factors as powerful influences on obesity management, emphasising how financial constraints, insurance limitations, and broader economic transitions contribute to obesity risks and pose significant barriers to effective intervention.

Respondents underscored high out-of-pocket payments, inadequate insurance coverage, and costly dietary and medical interventions as primary obstacles for many women.

*The out-of-pocket payments pose a significant financial burden, often discouraging patients from pursuing necessary dietary counselling or follow-up care. (Interview 1)*

Another respondent stated:

*Health insurance rarely covers dietary consultations or obesity treatments, making these critical interventions unaffordable for many women. (Interview 6)*

Respondents also indicated that medications and specialised obesity treatments tend to be prohibitively expensive because they are mostly imported, creating additional financial burdens.

*Most obesity-related medications and nutritional supplements are imported, significantly increasing their cost and placing them beyond the reach of the average Ghanaian woman. (Interview 4)*

These financial barriers reinforce disparities in healthcare access, particularly affecting lower-income and economically marginalised groups who may benefit most from targeted obesity interventions. The financial constraints discussed by health workers reflect how economic structures substantially dictate clinical realities and patient behaviours, consistent with a constructivist interpretation that health-related behaviours and healthcare accessibility are socially constructed and economically mediated (Agyemang et al., 2021).

Limited coverage of obesity and nutrition-related services by Ghana's National Health Insurance Scheme (NHIS) emerged prominently from the interviews. Respondents indicated that the exclusion of obesity management from the NHIS and private insurance schemes significantly

restricts patient access to preventive and therapeutic services, thereby perpetuating obesity prevalence.

*Our health insurance system excludes essential obesity treatments, nutritional assessments, and preventive counselling. Patients therefore have little incentive or financial capacity to seek ongoing obesity management. (Interview 1)*

The absence of comprehensive insurance coverage creates an environment in which obesity treatments become luxury services rather than essential health provisions. Consequently, health-seeking behaviours among women are shaped by these economic realities, further entrenched by societal norms that view obesity treatment as non-essential or discretionary rather than medically necessary. This illustrates a constructivist perspective, where healthcare utilisation and perceptions of service necessity are directly shaped by economic constructs within institutional frameworks.

Respondents also highlighted the paradox of economic development as both a positive socioeconomic goal and a significant contributor to obesity. Respondents argued that economic advancement and urbanisation have profoundly reshaped dietary practices, leading to increased consumption of processed, calorie-dense, and convenience foods.

*Economic advancement and urbanization have significantly altered dietary patterns in Ghana, increasing reliance on processed and convenience foods, which are cheaper, readily available, and calorie-dense. (Interview 8)*

Another participant echoed this sentiment:

*With greater economic prosperity, women consume more fast food and sugary beverages. These dietary transitions directly increase obesity prevalence, especially in urban centers. (Interview 9)*

Such dietary shifts, driven by economic growth, construct new social norms and expectations regarding food consumption, taste preferences, and lifestyle choices. Women's food-related behaviours, shaped by these changing economic circumstances, become embedded as social norms and daily practices, illustrating how economic contexts shape health behaviours and their outcomes. From a Constructivist viewpoint, these dietary transitions represent social constructions of consumption patterns dictated by economic opportunities, urban convenience, and marketing influences that frame processed and fast foods as markers of modernity and socioeconomic progress.

Respondents reported substantial economic insecurity among patients, which negatively affected their ability to maintain long-term obesity interventions. Economic instability leads women to revert quickly to less costly, calorie-dense foods, limiting their sustained adherence to recommended dietary plans and lifestyle changes.

*Many patients initially adhere to dietary advice, but financial constraints force them back to cheaper, processed foods. Economic insecurity directly undermines sustained dietary compliance. (Interview 5)*

Another participant echoed this sentiment:

*Economic hardships force women to prioritise immediate survival over long-term obesity management. Dietary interventions become unaffordable, and patients return to high-calorie, affordable food choices. (Interview 11)*

This cyclical pattern of short-term adherence followed by relapse into unhealthy habits reflects how economic insecurity continually reconstructs women's health behaviours, demonstrating constructivism's assertion that health practices are shaped by lived socioeconomic realities and their interactions with daily survival strategies.

The economic influences on obesity and its management among Ghanaian women represent socially constructed healthcare realities shaped by economic policies, institutional frameworks, insurance systems and broader societal norms. Economic structures dictate not only what health behaviours are possible but also how health interventions are perceived as essential or discretionary by the public. These economically mediated perceptions and behaviours constitute the social realities through which women interpret their health, food choices, and lifestyle behaviours. Economic barriers thus become part of the social narrative surrounding obesity, defining patient experiences and interactions with healthcare systems. Health workers' accounts highlight the constructed nature of economic determinants, demonstrating that clinical and health behaviours are deeply embedded within broader socioeconomic interactions.

The study found that economic constraints substantially limit the effectiveness of obesity management, with high out-of-pocket healthcare costs, insufficient insurance coverage, and expensive imported medications significantly restricting women's access to necessary care. Furthermore, economic development and urbanisation have increased access to calorie-dense, processed foods, exacerbating the prevalence of obesity. Economic instability severely undermines long-term adherence to recommended dietary interventions and healthy lifestyle practices. Agbeko et al. (2013) highlighted that higher economic status correlates with higher obesity prevalence, attributable to increased access to processed and calorie-dense foods coupled with sedentary lifestyles. Kushitor and Colecraft (2023) also stressed that economic factors, including affordability and access to healthy diets, profoundly influence obesity rates, particularly in rural areas, underscoring similar findings related to economic determinants.

#### 4.2.3 Environmental and Urban Determinants of Obesity Among Women in Ghana

Environmental and urban factors significantly influence the prevalence of obesity, health behaviours, and lifestyle choices. This study identifies the critical challenges and determinants embedded within Ghana's urban environments that shape women's obesity risk.

A major environmental factor identified by the respondents was the lack of infrastructure that facilitates physical activity in urban areas. Specifically, respondents cited the absence of accessible green spaces, parks, pedestrian pathways, and safe recreational facilities as significant barriers to physical activity.

*There are no green spaces, cycling paths, or safe walking areas. This severely restricts women's ability to regularly engage in physical exercise. (Interview 2)*

Another participant stated:

*Urban planning rarely prioritises recreational or pedestrian-friendly infrastructure. Women are particularly affected because safety concerns further limit their ability to engage in outdoor activities. (Interview 8)*

These infrastructural deficiencies reflect how urban environments influence physical activity behaviours. Women, constrained by safety and accessibility concerns, internalise sedentary behaviour as a normative and inevitable aspect of urban life (Agbeko et al., 2013). The absence of suitable physical environments makes sedentary lifestyles an implicit social standard rather than an active choice, exemplifying constructivist interpretations that social and physical environments mutually shape individual health behaviours.

Respondents also extensively described how rapid urbanisation has led to notable dietary transitions, emphasising the increased availability, affordability, and convenience of calorie-dense,

processed foods in urban settings. These dietary transitions, closely linked to urban lifestyles, have significantly contributed to the increased prevalence of obesity among urban women.

*Economic development and urbanisation have profoundly altered dietary practices. Processed and fast foods are now readily accessible, affordable, and culturally attractive, significantly increasing obesity prevalence. (Interview 8)*

Another participant echoed *this sentiment*:

*Urban lifestyles have become sedentary, yet dietary habits have not been adjusted accordingly. People consume high-calorie diets without equivalent physical activities, making obesity a growing urban challenge. (Interview 2)*

Urban food environments, characterised by fast-food outlets, street food vendors, convenience stores, and supermarkets, promote dietary behaviours aligned with convenience and modernity (Nonterah et al., 2018). Thus, women's food choices in urban Ghana are not merely individual preferences but reflect constructed social norms driven by urban environmental contexts. Such insights strongly resonate with constructivist assertions that health behaviours, including dietary choices, are actively constructed through interactions between individuals and their social and physical contexts.

Respondents identified the changing occupational landscape of urban Ghana as a significant contributor to sedentary behaviour among women. Employment settings, particularly office-based occupations, offer limited opportunities for physical movement and contribute substantially to decreased daily activity levels.

*Work environments in urban areas largely promote sedentary behaviour. Most women sit throughout the workday and have limited opportunities to integrate physical activity into their routines. (Interview 10)*

Further complicating this issue, long commuting hours, time poverty, and occupational demands restrict opportunities for intentional physical activities, such as gym visits or recreational sports.

*Due to early commuting times and demanding work schedules, women often skip meals or resort to unhealthy convenience foods and rarely have time for structured physical exercise. (Interview 5)*

These occupational constraints illustrate how broader urban occupational structures shape women's daily routines, health behaviours, and ultimately, obesity risks. The Constructivist perspective underscores how occupational environments socially construct normative lifestyles, making sedentary behaviour seem unavoidable rather than modifiable.

Safety and security concerns emerged from respondents' narratives as additional environmental determinants restricting women's physical activity opportunities. Particularly for women, safety issues further restrict outdoor physical activity, exacerbating sedentary behaviour.

*Even in areas with potential walking paths, women often avoid physical activity outdoors due to safety concerns such as traffic dangers, poor lighting, and crime risk. (Interview 9)*

Urban safety concerns shape women's perceptions and behaviours toward outdoor activities, reinforcing inactivity as a normative protective behaviour rather than a personal health choice. Constructivism illuminates how women's fears, community experiences, and constructed perceptions of urban safety collectively define health behaviours, limiting active living opportunities and inadvertently promoting obesity.

Urban environmental determinants, such as infrastructural inadequacies, occupational constraints, dietary transitions, and safety concerns, actively shape and reinforce social norms regarding lifestyle behaviours and physical activity. Therefore, urban environments in Ghana are not merely

neutral physical settings but socially constructed spaces that influence, constrain and facilitate particular health behaviours (Agyemang, 2022). The interplay between physical environments and social expectations shapes women's health-related behaviours and perceptions, making sedentary lifestyles and unhealthy dietary choices socially normative rather than purely individual decisions.

The study found that environmental and urban factors profoundly influenced the risk of obesity among Ghanaian women. Urban environments characterised by limited physical activity infrastructure, inadequate green spaces, and unsafe pedestrian areas significantly restrict physical exercise opportunities. Furthermore, sedentary occupational patterns, extensive commuting times, and the widespread availability of processed convenience foods reinforce sedentary lifestyles and unhealthy dietary behaviours, contributing to the increased prevalence of obesity. These findings are consistent with those of Agyemang (2022), who demonstrated that increased proximity to fast-food establishments and supermarkets positively correlates with higher obesity rates in urban Ghana, indicating the influence of urban food environments on health behaviours and obesity. This mirrors global findings by Nour (2014), who identified urbanisation as significantly altering lifestyles and dietary patterns, thereby contributing to obesity and related noncommunicable diseases globally.

#### **4.3 What are some of the challenges Ghana faces in addressing obesity?**

##### **4.3.1 Systemic and Infrastructural Challenges to Obesity Management in Ghana**

Effective management of obesity among women requires robust systemic support, including clear clinical guidelines, adequate infrastructure, and consistent resource distribution across healthcare facilities. A recurring issue raised by health professionals was the absence of standardised national guidelines for obesity management. Respondents consistently emphasised that this gap severely

hampers clinical practice, resulting in inconsistent diagnostic and therapeutic approaches across facilities.

*There is no comprehensive national guideline specifically addressing obesity, which limits our ability to standardize approaches and interventions across healthcare facilities. (Interview 4)*

Respondents noted that the lack of national guidelines leads healthcare providers to rely primarily on generic international guidelines or improvised local solutions, neither of which adequately address the specific contextual realities of Ghanaian women.

*We mostly rely on WHO guidelines, but these guidelines are quite generic and do not specifically address the unique dietary habits, cultural practices, and resource constraints we face in Ghana. (Interview 2)*

The absence of standardised guidelines creates a fragmented professional reality, forcing healthcare providers to continuously adapt and renegotiate their clinical approaches based on their individual or institutional capacities (Bagnall et al., 2019). From a Constructivist perspective, this situation exemplifies how clinical practice and professional knowledge are not simply driven by objective medical standards but are socially constructed through institutional contexts, resource availability, and professional interactions.

Another significant systemic challenge identified was the profound disparity in healthcare infrastructure between urban and rural settings of the country. Participants reported substantial differences in the availability of diagnostic equipment, medical supplies, and adequately trained staff, leading to inequities in obesity management capabilities.

*Urban facilities typically have better resources and diagnostic equipment, while rural settings often lack even basic tools like weighing scales or clinical tapes, severely limiting their ability to manage obesity effectively. (Interview 10)*

Another respondent stated:

*Rural healthcare providers face challenges accessing resources or training opportunities that urban practitioners may regularly have, creating disparities in knowledge, practice, and patient outcomes. (Interview 12)*

These infrastructural disparities significantly constrain healthcare providers' capacities in rural areas, resulting in suboptimal care and uneven patient outcomes. Infrastructural gaps reflect a constructivist reality, where clinical practices and patient interactions are shaped not only by medical expertise but also by local resource availability and healthcare settings (Wolfenden et al., 2019). Healthcare professionals in rural contexts continuously reconstruct their clinical realities by accommodating the structural constraints imposed by inadequate resources.

Respondents highlighted that limited diagnostic and treatment resources were pervasive across healthcare facilities in Ghana. Many cited the absence of advanced diagnostic tools, nutritional counselling resources, and obesity management interventions as key factors undermining effective care.

*The diagnostic capabilities vary significantly between healthcare facilities. In private or specialized centers, we may have advanced body composition analysis machines, but these are rare and largely unavailable in public and rural settings. (Interview 6)*

This resource scarcity restricts health workers' ability to conduct comprehensive assessments, thus compromising accurate diagnosis and effective treatment planning in the long term. Health workers expressed frustration with their limited capacities due to structural deficits in resource allocation.

*In our facility, basic obesity-related services like nutritional counselling or follow-up visits are severely constrained because we lack adequate staffing and appropriate equipment. (Interview 5)*

This creates a clinical environment characterised by constant adaptation and improvisation rather than consistent evidence-based practices. Through a Constructivist lens, the systemic lack of resources profoundly shapes the professional roles, clinical practices, and interactions of healthcare providers with their patients, underscoring how clinical practices emerge from interactions within institutional contexts rather than purely medical standards.

Closely tied to infrastructural deficits is the inadequacy of human resource capacity and professional training. Respondents consistently highlighted the insufficient number of specialised personnel, such as nutritionists, dietitians, and trained counsellors, as a significant systemic challenge:

*We have very few qualified dietitians and nutritionists at our facility, and those available are often overwhelmed with high patient loads, limiting their ability to provide detailed and individualized patient care. (Interview 6)*

Another participant echoed this sentiment:

*Most rural and even some urban facilities lack sufficiently trained staff to adequately manage obesity. This shortage directly compromises patient care quality. (Interview 7)*

These constraints highlight how systemic shortages of trained healthcare workers create realities in which health professionals must stretch beyond their roles, often working outside their areas of expertise (Lopes et al., 2021). This systemic reality aligns with the constructivist view that clinical roles and practices are socially constructed within broader structural and organizational contexts, significantly influencing professional responsibilities and patient interactions.

The identified systemic and infrastructural challenges illustrate how healthcare practices, professional roles, and patient outcomes are actively constructed through institutional realities,

social interactions and resource contexts. The absence of national guidelines, infrastructure disparities, resource shortages, and limited human resource capacities do not merely represent objective institutional problems; they actively shape clinical practices, define professional roles, and influence health care delivery (Frood et al., 2013).

Health workers' accounts illustrate how clinical realities and professional capacities are contextually bound and continuously reconstructed within institutional constraints. Consequently, the effectiveness of obesity management among Ghanaian women is deeply embedded in the socially constructed contexts of healthcare infrastructure, professional resources, and institutional standards.

The study found that systemic and infrastructural inadequacies pose substantial barriers to the management of obesity in Ghana. The absence of comprehensive national clinical guidelines has resulted in fragmented and inconsistent clinical practices. Additionally, severe infrastructural disparities between urban and rural healthcare facilities, insufficient diagnostic and treatment resources, and limited availability of specialised human resources, such as dietitians and nutritionists, significantly compromise healthcare providers' capacity to effectively manage obesity. Evidence from Owusu et al. (2023) corroborates these systemic and infrastructural challenges, highlighting that limited resources and an imbalance in health funding priorities towards communicable diseases have restricted the effective prevention and management of non-communicable diseases, including obesity, in Ghana.

#### **4.3.2 Disjointed Care Pathways and Limited Follow-Up in Obesity Management**

Effective obesity management, especially among women, depends heavily on structured, coordinated, and continuous care pathways. However, respondents frequently identified significant gaps and inconsistencies in referral mechanisms, follow-up care, and patient engagement across

Ghana's healthcare facilities. A primary issue identified by respondents was the fragmented and often non-existent referral systems between health professionals, facilities, and community services in managing obesity. Health workers described inconsistent processes that often led to confusion, incomplete patient care, and poor coordination among healthcare providers.

*We identify high-risk obesity cases regularly, but our referral process is unclear and informal. Patients rarely receive structured follow-up services or comprehensive specialist care after initial assessments. (Interview 11)*

The lack of clear institutional frameworks and guidelines for referrals contributes significantly to fragmentation. Providers across different specialisations, such as doctors, nurses, nutritionists, dietitians, and community health workers, often operate independently without systematic coordination or communication.

*No structured protocol exists for referring patients with obesity from the initial diagnosis by a physician to ongoing management by dietitians or community health workers. Each provider tends to operate in isolation. (Interview 6)*

These fragmented referral practices create clinical realities in which providers must continuously navigate uncertainty and ambiguity, compromising the continuity of patient care. From a Constructivist perspective, clinical pathways and professional interactions in obesity management are socially constructed within ambiguous institutional contexts, significantly influencing healthcare delivery and patient outcomes.

Participants consistently highlighted inadequate follow-up support as a critical challenge in the management of obesity. Health workers reported that once patients receive an initial diagnosis or brief counselling, systematic follow-up or continuous engagement rarely occurs, undermining treatment adherence and long-term success.

*Obesity management typically ends in the consultation room. We rarely have structured follow-up, peer support groups, or ongoing patient education that would ensure sustained behaviour change. (Interview 2)*

The absence of structured follow-up procedures and ongoing patient support creates significant challenges in achieving and maintaining long-term obesity management outcomes. Health professionals further indicated that insufficient institutional support mechanisms frequently result in patients losing motivation, disengaging from treatment plans, and reverting to previous unhealthy behaviours.

*Patients often initially adhere to our recommendations, but without regular follow-ups, counselling sessions, or support groups, their motivation declines rapidly. Many return to previous unhealthy eating habits or sedentary lifestyles. (Interview 5)*

The lack of consistent follow-up creates a healthcare reality characterised by patient disillusionment, disengagement, and repeated treatment cycles without lasting behavioural changes (Timm et al., 2021). From a Constructivist lens, these follow-up limitations illustrate how sustained health behaviours require social reinforcement, continuous support, and structured interactions, demonstrating how clinical outcomes depend significantly on socially constructed patient-provider relationships and institutional support networks.

Geographic mobility has emerged as another significant factor affecting the continuity of obesity care. Respondents reported frequent patient relocations due to work or family reasons, which significantly disrupted care continuity and long-term management strategies.

*Patients frequently relocate for work or family commitments. Once they move, maintaining ongoing care becomes challenging due to the absence of coordinated referral systems or electronic health records. (Interview 5)*

Such geographic displacement often leads patients to disengage from treatment, given the difficulties associated with accessing comparable healthcare services at their new locations. Health professionals expressed frustration that patients who relocate face substantial barriers in re-establishing care continuity elsewhere:

*When patients move, we rarely know whether they can continue accessing obesity care in their new location. Our fragmented referral systems provide no guarantee of continuity. (Interview 13)*

This geographic mobility creates a healthcare context in which patient care continuity is highly vulnerable to disruption, significantly limiting effective long-term obesity management. Constructivist theory emphasises that healthcare outcomes emerge from sustained social interactions and institutional continuity; thus, geographic disruptions directly undermine the continuous construction of the health behaviours necessary for obesity management (Diakosavvas et al., 2025).

From a Constructivist theoretical perspective, the findings on disjointed care pathways and inadequate follow-up highlight the socially constructed nature of obesity management practices. Clinical interactions, referral processes, and follow-up care pathways are not purely technical or clinical procedures but are socially negotiated interactions shaped by institutional contexts, resource constraints, professional relationships, and patient-provider dynamics.

The study found that obesity management pathways in Ghana are often fragmented and lack structured referral systems and consistent, follow-up procedures. The absence of clearly defined institutional processes for coordinating patient care across various healthcare providers results in poor care continuity. Additionally, inadequate community-based follow-up mechanisms and challenges associated with geographic mobility significantly undermine sustained patient

engagement and the long-term effectiveness of obesity interventions. This finding aligns with Timm et al. (2021), who reported similar challenges in care continuity and follow-up procedures, emphasising that unclear pathways and inconsistent guidelines contribute to fragmented obesity care and poor patient outcomes.



## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents a summary of the study's findings, draws concise conclusions from the findings, and outlines actionable recommendations based on the empirical data collected. It also highlights the study's limitations and identifies avenues for future research on obesity management among Ghanaian women from the perspective of health workers.

#### 5.2 Summary of findings

##### 5.2.1 What is the capacity of health workers to accurately diagnose and treat obesity in women in sub-Saharan Africa?

###### *Diagnostic Capacity and Tool Utilisation*

The study found that health workers in Ghana predominantly depend on Body Mass Index (BMI) as the primary diagnostic tool for obesity, largely due to its affordability, simplicity, and wide accessibility. However, they acknowledged substantial limitations of BMI, especially concerning women's varying body compositions due to pregnancy, postpartum changes, and muscle mass differences. There is minimal consistent use of supplementary diagnostic methods, such as waist circumference, body composition analysis and laboratory testing, indicating limited diagnostic accuracy and effectiveness in obesity management among Ghanaian women.

###### *Training and Interdisciplinary Collaboration*

The findings indicate significant fragmentation and inadequacy of training related to obesity management, resulting in disparities in health professionals' competencies and skills. Health workers frequently rely on informal or self-funded training methods, leading to inconsistent knowledge levels across sectors. The study also highlighted limited interdisciplinary collaboration, with healthcare professionals such as nutritionists and dietitians being underutilised because of cultural and institutional preferences for physician-led care.

### **5.2.2 What are the sociocultural, economic, and environmental determinants of obesity among women in Ghana?**

#### *Socio-Cultural Determinants of Obesity Among Women in Ghana*

The study found that sociocultural perceptions significantly influenced obesity prevalence among Ghanaian women. Cultural norms associating larger body size with beauty, prosperity, and marital success were found to strongly shape women's health behaviours and discourage weight loss interventions. Social taboos against openly discussing obesity, combined with negative perceptions of intentional weight loss, further complicate effective clinical communication and treatment.

#### *Economic Determinants of Obesity Among Women in Ghana*

Economic factors significantly impact the management of obesity in women. High out-of-pocket payments for healthcare services, limited insurance coverage for obesity-related interventions, and expensive imported medications restrict many women's access to necessary treatments. Moreover, economic growth and urbanisation contribute to increased accessibility and consumption of calorie-dense processed foods, exacerbating the prevalence of obesity. Economic instability was also identified as negatively affecting women's ability to sustain the recommended dietary practices.

#### *Environmental and Urban Determinants of Obesity Among Women in Ghana*

The findings revealed that urban environments significantly contribute to obesity risk among Ghanaian women. Limited physical infrastructure, inadequate public recreational spaces, and unsafe urban environments restrict women's opportunities to engage in regular physical activity. Additionally, urban dietary environments characterised by the widespread availability of processed and convenience foods further promote unhealthy eating patterns and sedentary lifestyles, escalating the risk of obesity.

### **5.2.3 What challenges does Ghana face in addressing obesity?**

#### *Systemic and Infrastructural Challenges to Obesity Management in Ghana*

The study identified substantial systemic challenges within Ghana's healthcare system, including inadequate infrastructure, disparities between urban and rural healthcare facilities, the absence of national obesity guidelines, and significant shortages of specialised healthcare providers such as nutritionists and dietitians. These systemic gaps severely hinder consistent and effective obesity management across healthcare settings in Ghana.

#### *Disjointed Care Pathways and Limited Follow-Up in Obesity Management*

The findings demonstrated significant gaps in obesity management continuity, with fragmented care pathways, inadequate referral systems, and poor coordination among healthcare providers. Additionally, limited structured follow-up mechanisms and community-based support significantly compromise sustained obesity intervention. The geographic mobility of patients further disrupts the continuity of care, reducing the effectiveness of long-term obesity management programs.

### **5.3 Conclusions**

This study aimed to investigate the capacity of healthcare professionals in accurately diagnosing and treating obesity among women in sub-Saharan Africa, to examine the socio-cultural, economic, and environmental determinants of obesity among women, and to assess the challenges faced by the Ghanaian health sector in addressing obesity cases.

Initially, in exploring the diagnostic and treatment capacities of healthcare professionals, the study identified significant limitations. Health professionals predominantly rely on basic tools such as

Body Mass Index (BMI), which are often inadequate for capturing the full complexity of obesity-related health risks. Diagnostic accuracy is further constrained by limited access to advanced diagnostic equipment and insufficient clinical resources. Additionally, the study identified considerable gaps in specialized training for obesity management, with many healthcare professionals relying on informal, external, or self-funded educational opportunities. These disparities in training contribute to inconsistent competencies across the healthcare system, undermining the effectiveness of multidisciplinary approaches to obesity diagnosis and treatment.

In the examination of the socio-cultural, economic, and environmental determinants of obesity among Ghanaian women, the study identified that deeply ingrained cultural norms significantly influence attitudes and behaviors regarding body weight. In numerous communities, larger body sizes are esteemed as indicators of beauty, prosperity, and social status, thereby discouraging weight loss efforts and perpetuating unhealthy behaviors. Economically, the high cost of healthcare, limited insurance coverage, and the affordability and availability of processed, calorie-dense foods constrain access to healthier alternatives, thereby contributing to the rising trend of obesity. Urbanization and inadequately planned urban environments further exacerbate the issue by restricting opportunities for physical activity and encouraging sedentary lifestyles. These findings underscore the urgent necessity for culturally sensitive educational campaigns, economic reforms, and urban planning interventions to foster environments conducive to healthier living.

Furthermore, the study investigated the challenges encountered by the Ghanaian health sector in addressing obesity and identified systemic and infrastructural deficiencies as significant impediments. The lack of comprehensive national obesity management guidelines, shortages of specialized personnel such as dietitians and nutritionists, and the uneven distribution of healthcare

resources between urban and rural areas substantially hinder the delivery of consistent and standardized care. Additionally, fragmented referral systems, poor coordination among healthcare providers, and limited mechanisms for patient follow-up undermine the continuity and efficacy of care. These challenges are further compounded by patients' geographic mobility, which disrupts long-term health interventions and outcomes.

Utilizing a Constructivist theoretical framework, this study elucidates that obesity management practices and health behaviors among Ghanaian women are not isolated occurrences but are shaped through dynamic interactions within socio-cultural, economic, institutional, and environmental contexts. In conclusion, the study highlights the urgent necessity for a comprehensive, culturally sensitive, economically viable, and institutionally robust approach to addressing obesity among women in Ghana. It is imperative to address the diagnostic and training limitations of healthcare providers, confront the entrenched socio-cultural and economic determinants, and enhance the health sector's capacity through systemic reforms and integrated community-based care models. Such a multifaceted strategy holds substantial potential to transform obesity management practices, improve health outcomes among Ghanaian women, and fortify public health systems.

#### **5.4 Recommendation**

Based on the findings of this study, several key recommendations are proposed to address the identified challenges.

##### ***Practice Recommendations***

In response to the first objective, this study advocates for the urgent enhancement of diagnostic and treatment capacities among healthcare professionals. It is recommended that nationally standardized training programs on advanced obesity management be institutionalized, supported by the provision of modern diagnostic tools beyond basic BMI assessments. The formalization of

interdisciplinary obesity care teams, integrating medical doctors, dietitians, psychologists, and physiotherapists, is critical to ensuring accurate diagnosis, consistent treatment, and cohesive patient care.

In addressing the second objective, it is imperative to launch culturally sensitive public health campaigns to challenge entrenched norms that valorize larger body sizes while promoting healthier body image ideals. Obesity education should be embedded in school curricula and community programs to shift perceptions early. Consideration could be given to adopting and fine-tuning the Japanese school nutrition program to address obesity issues from an early stage and promote healthy practices that curb obesity. Financial barriers must be addressed through the expansion of health insurance coverage to include obesity prevention and management services. Additionally, urban planning reforms should create healthier environments through pedestrian infrastructure, public recreational spaces, and regulated food markets to support sustainable lifestyle changes.

### ***Policy Recommendations***

In alignment with the third objective, it is imperative to develop and implement comprehensive national guidelines for the diagnosis, treatment, and management of obesity to ensure standardized clinical practices. The health sector must prioritize the recruitment and training of specialized personnel and address disparities in resource distribution between urban and rural healthcare settings. Strengthening care coordination through robust referral systems, patient tracking mechanisms, and community-based follow-up structures is essential for ensuring continuity of care and enhancing long-term patient outcomes. Given the economic constraints, it is crucial to expand the NHIS coverage to include essential obesity management services, such as nutritional counseling, dietary interventions, diagnostic assessments, and medications. This expansion should

be phased, beginning with high-risk populations and progressively extending to broader groups to ensure equitable access and reduce financial barriers to obesity care.

To mitigate the impact of urban environments on obesity prevalence, substantial investment in urban planning is required. This includes integrating health promotion principles into urban development policies and mandating health-supportive infrastructure, such as parks, cycling paths, and recreational facilities. Zoning regulations should limit unhealthy food outlets near residential areas, promote healthier lifestyles, and reduce environmental factors contributing to obesity. Recognizing the limitations of BMI for obesity diagnosis, this study advocates for enhancing the diagnostic infrastructure in Ghanaian healthcare facilities. This involves allocating resources for advanced diagnostic tools, such as bioelectrical impedance analysis devices and body composition analyzers. Comprehensive training programs for healthcare workers are essential to ensure the effective utilization and interpretation of these tools, thereby enhancing the accuracy and precision of obesity diagnosis and treatment.

Collectively, these recommendations call for an integrated, contextually relevant, and institutionally robust response to obesity management. Only through comprehensive reform can Ghana effectively transform the landscape of women's health and secure sustainable public health improvements.

### **5.6 Future Research**

Future research should focus on conducting quantitative studies to assess the generalisability of qualitative findings and measure the impacts of socio-cultural, economic, and infrastructural interventions. In addition, a comparative study across diverse sub-Saharan African countries is essential to uncover regional similarities and differences in obesity determinants and management strategies. Additionally, intervention-based research should evaluate the effectiveness of structured

community-based obesity management programs tailored to various Ghanaian communities to ensure tailored and effective health interventions.



## References

- Abdulai, A. (2016). Socio-economic characteristics and obesity in underdeveloped economies: does income really matter? In *The Applied Economics of Weight and Obesity* (pp. 44-56). Routledge.
- Adeboye, B., Bermano, G., & Rolland, C. (2012). Obesity and its health impact in Africa: a systematic review. *Cardiovascular journal of Africa*, 23(9), 512-521.
- Adler, A. J., Ronsmans, C., Calvert, C., & Filippi, V. (2013). Estimating the prevalence of obstetric fistula: a systematic review and meta-analysis. *BMC pregnancy and childbirth*, 13, 1-14.
- Agbeko, M. P., Kumi-Kyereme, A., Druye Adjei, A., & Osei, G. B. (2013). Predictors of overweight and obesity among women in Ghana.
- Agbeko, M. P., Kumi-Kyereme, A., Druye Adjei, A., & Osei, G. B. (2013). Predictors of overweight and obesity among women in Ghana.
- Agne, A. A., Daubert, R., Munoz, M. L., Scarinci, I., & Cherrington, A. L. (2012). The cultural context of obesity: exploring perceptions of obesity and weight loss among Latina immigrants. *Journal of immigrant and minority health*, 14, 1063-1070.
- Agyei-Mensah, S., & de-Graft Aikins, A. (2010). Epidemiological transition and the double burden of disease in Accra, Ghana. *Journal of urban health*, 87, 879-897.
- Agyemang, C., Boatemaa, S., Frempong, G. A., & de-Graft Aikins, A. (2015). *Obesity in sub-Saharan Africa*. Springer International Publishing Switzerland 2015.
- Agyemang, C., Meeks, K., Beune, E., Owusu-Dabo, E., Mockenhaupt, F. P., Addo, J., ... & Stronks, K. (2016). Obesity and type 2 diabetes in sub-Saharan Africans—Is the burden in today's

Africa similar to African migrants in Europe? The RODAM study. *BMC medicine*, 14, 1-12.

Agyemang, C., Meeks, K., Beune, E., Owusu-Dabo, E., Mockenhaupt, F. P., Addo, J., ... & Stronks, K. (2016). Obesity and type 2 diabetes in sub-Saharan Africans—Is the burden in today's Africa similar to African migrants in Europe? The RODAM study. *BMC medicine*, 14, 1-12.

Agyemang, K. (2022). *Determinants of obesity in Ghana* (Doctoral dissertation, Brunel University London).

Agyemang, K., Pokhrel, S., Victor, C., & Anokye, N. K. (2021). Determinants of Obesity in West Africa: A Systematic Review. *MedRxiv*, 2021-04.

Ahirwar, R., & Mondal, P. R. (2019). Prevalence of obesity in India: A systematic review. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 13(1), 318-321.

Ahirwar, R., & Mondal, P. R. (2019). Prevalence of obesity in India: A systematic review. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 13(1), 318-321.

AMA. (2022). Access to abortion and women's health: What the research shows. <https://www.ama-assn.org/delivering-care/population-care/access-abortion-and-women-s-health-what-research-shows>.

Amugsi, D. A., Dimbuene, Z. T., Mberu, B., Muthuri, S., & Ezeh, A. C. (2017). Prevalence and time trends in overweight and obesity among urban women: an analysis of demographic and health surveys data from 24 African countries, 1991–2014. *BMJ open*, 7(10), e017344.

- Amugsi, D. A., Dimbuene, Z. T., Mberu, B., Muthuri, S., & Ezech, A. C. (2017). Prevalence and time trends in overweight and obesity among urban women: an analysis of demographic and health surveys data from 24 African countries, 1991–2014. *BMJ open*, 7(10), e017344.
- Anto, E. O., Boadu, W. I. O., Korsah, E. E., Ansah, E., Adua, E., Frimpong, J., ... & Obirikorang, C. (2023). Unrecognized hypertension among a general adult Ghanaian population: an urban community-based cross-sectional study of prevalence and putative risk factors of lifestyle and obesity indices. *PLOS Global Public Health*, 3(5), e0001973.
- Appiah, C. A., Steiner-Asiedu, M., & Otoo, G. E. (2014). Predictors of overweight/obesity in urban Ghanaian women. *Int J Clin Nutr*, 2(3), 60-8.
- Appiah, C. A., Steiner-Asiedu, M., & Otoo, G. E. (2014). Predictors of overweight/obesity in urban Ghanaian women. *Int J Clin Nutr*, 2(3), 60-8.
- Araujo-Silva, V. C., Santos-Silva, A., Lourenço, A. S., Barros-Barbosa, C. M., Moraes-Souza, R. Q., Soares, T. S., ... & Volpato, G. T. (2021). Congenital anomalies programmed by maternal diabetes and obesity on offspring of rats. *Frontiers in physiology*, 12, 701767.
- Asosega, K. A., Adebajji, A. O., & Abdul, I. W. (2021). Spatial analysis of the prevalence of obesity and overweight among women in Ghana. *BMJ open*, 11(1), e041659.
- Asosega, K. A., Aidoo, E. N., Adebajji, A. O., & Owusu-Dabo, E. (2023). Examining the risk factors for overweight and obesity among women in Ghana: A multilevel perspective. *Heliyon*, 9(5).

- Bagnall, A. M., Radley, D., Jones, R., Gately, P., Nobles, J., Van Dijk, M., ... & Sahota, P. (2019). Whole systems approaches to obesity and other complex public health challenges: a systematic review. *BMC public health*, *19*, 1-14.
- Bastos, A., Veludo-de-Oliveira, T., Yani-de-Soriano, M., Atalla, M., & Gualano, B. (2022). Leveraging macro-social marketing to achieve sustainable development goals: a city-wide intervention addressing obesity in Brazil. *Journal of Social Marketing*, *12*(1), 29-48.
- Bentham, J., Di Cesare, M., Billano, V., & Boddy, L. M. (2017). Worldwide trends in children's and adolescents' body mass index, underweight and obesity, in comparison with adults, from 1975 to 2016: a pooled analysis of 2,416 population-based measurement studies with 128.9 million participants. *Lancet*.
- Bertucci, M. E., Hayes, J., & James, P. (2018). A new look at constructivism. *Constructivism Reconsidered: Past, Present and Future*, 1-14.
- Bhurosy, T., & Jeewon, R. (2014). Overweight and obesity epidemic in developing countries: a problem with diet, physical activity, or socioeconomic status?. *The Scientific World Journal*, *2014*.
- Biadgilign, S., Mgutshini, T., Haile, D., Gebremichael, B., Moges, Y., & Tilahun, K. (2017). Epidemiology of obesity and overweight in sub-Saharan Africa: a protocol for a systematic review and meta-analysis. *BMJ open*, *7*(11), e017666.
- Biesma, R., & Hanson, M. (2024). Global, National, and Community Obesity Prevention Programs. In *Metabolic syndrome: A comprehensive textbook* (pp. 785-799). Cham: Springer International Publishing.

- Blüher, M. (2019). Obesity: global epidemiology and pathogenesis. *Nature Reviews Endocrinology*, 15(5), 288-298.
- Bonauto, D. K., Lu, D., & Fan, Z. J. (2014). Peer reviewed: obesity prevalence by occupation in Washington State, behavioral risk factor surveillance system. *Preventing chronic disease*, 11.
- Boutari, C., & Mantzoros, C. S. (2022). A 2022 update on the epidemiology of obesity and a call to action: as its twin COVID-19 pandemic appears to be receding, the obesity and dysmetabolism pandemic continues to rage on. *Metabolism*, 133, 155217.
- Broughton, D. E., & Moley, K. H. (2017). Obesity and female infertility: potential mediators of obesity's impact. *Fertility and sterility*, 107(4), 840-847.
- Cacciattolo, M. (2015). Ethical considerations in research. In *The Praxis of English Language Teaching and Learning (PELT)* (pp. 55-73). Brill.
- Chooi, Y. C., Ding, C., & Magkos, F. (2019). The epidemiology of obesity. *Metabolism*, 92, 6-10.
- Chooi, Y. C., Ding, C., & Magkos, F. (2019). The epidemiology of obesity. *Metabolism*, 92, 6-10.
- Choudhury, A. A., & Rajeswari, V. D. (2021). Gestational diabetes mellitus-A metabolic and reproductive disorder. *Biomedicine & Pharmacotherapy*, 143, 112183.
- Chu, D. T., Nguyet, N. T. M., Dinh, T. C., Lien, N. V. T., Nguyen, K. H., Ngoc, V. T. N., ... & Pham, V. H. (2018). An update on physical health and economic consequences of overweight and obesity. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 12(6), 1095-1100.

- Cohen, L., and S. Swift. (1999). The spectrum of prevention: Developing a comprehensive approach to injury prevention. *Injury Prevention* 5(3):203-207. [PMC free article] [PubMed]
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Curtis, K. R., & McCluskey, J. J. (2004). Impacts of the westernization of food preferences on medical costs in China.
- Dake, F. A., Tawiah, E. O., & Badasu, D. M. (2011). Sociodemographic correlates of obesity among Ghanaian women. *Public health nutrition*, 14(7), 1285-1291.
- de Menezes, M. C., Duarte, C. K., Costa, D. V. D. P., Lopes, M. S., de Freitas, P. P., Campos, S. F., & Lopes, A. C. (2020). A systematic review of effects, potentialities, and limitations of nutritional interventions aimed at managing obesity in primary and secondary health care. *Nutrition*, 75, 110784.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. sage.
- Diakosavvas, M., Oyeboade, O., & Bhide, P. (2025). Weight Management Strategies to Reduce Metabolic Morbidity in Women With Polycystic Ovary Syndrome. *Current Obesity Reports*, 14(1), 22.
- Doumouchtsis, S. K., Loganathan, J., & Pergialiotis, V. (2022). The role of obesity on urinary incontinence and anal incontinence in women: a review. *BJOG: An International Journal of Obstetrics & Gynaecology*, 129(1), 162-170.

- Elendu, C., Amaechi, D. C., Elendu, I. D., Elendu, T. C., Amaechi, E. C., Usoro, E. U., ... & Balogun, B. B. (2024). Global perspectives on the burden of sexually transmitted diseases: A narrative review. *Medicine*, *103*(20), e38199.
- FAO Regional Office for Africa (2019, March 26). Food and Agriculture Organization of the United Nations. Retrieved June 11, 2024, from <https://www.fao.org/africa/news/detail-news/en/c/1187047/>
- Finucane, M. M., Stevens, G. A., Cowan, M. J., Danaei, G., Lin, J. K., Paciorek, C. J., ... & Ezzati, M. (2011). National, regional, and global trends in body-mass index since 1980: systematic analysis of health examination surveys and epidemiological studies with 960 country-years and 9·1 million participants. *The lancet*, *377*(9765), 557-567.
- Flikweert, E. R., Izaks, G. J., Reininga, I. H., Wendt, K. W., & Stevens, M. (2013). Evaluation of the effect of a comprehensive multidisciplinary care pathway for hip fractures: design of a controlled study. *BMC musculoskeletal disorders*, *14*, 1-5.
- Folasire, O., Harbron, J., & Senekal, M. (2019). Obesity Beliefs and Its Treatment: Insights from a Mixed Method Study in Overweight and Obese Patients and Health Care Personnel at Secondary Health Care Facility, Nigeria (OR08-04-19). *Current developments in nutrition*, *3*, nzz050-OR08.
- Foley, G., & Timonen, V. (2015). Using grounded theory method to capture and analyze health care experiences. *Health services research*, *50*(4), 1195-1210.
- Ford, N. D., Patel, S. A., & Narayan, K. V. (2017). Obesity in low-and middle-income countries: burden, drivers, and emerging challenges. *Annual review of public health*, *38*, 145-164.

Frood, S., Johnston, L. M., Matteson, C. L., & Finegood, D. T. (2013). Obesity, complexity, and the role of the health system. *Current obesity reports*, 2, 320-326.

Ghana Statistical Service (GSS) (2014), Ghana Health Service (GHS), ICF International . *Demographic and Health Survey 2014*. Rockville: GSS, GHS, and ICF International; 2015

Goeiman, H. D. (2018). Developing a comprehensive nutrition workforce planning framework for the public health sector to respond to the nutrition-related burden in South Africa.

Goettler, A., Grosse, A., & Sonntag, D. (2017). Productivity loss due to overweight and obesity: a systematic review of indirect costs. *BMJ open*, 7(10), e014632.

Goswami, N. (2024). A dual burden dilemma: Navigating the global impact of communicable and non-communicable diseases and the way forward. *International Journal of Medical Research*, 12(3), 65-77.

Green, J., & Thorogood, N. (2018). *Qualitative methods for health research*.

Green, R. M. (2019). Ethical considerations. In *Principles of Regenerative Medicine* (pp. 1331-1343). Academic Press.

Groves, A. M., Price, A. N., Russell-Webster, T., Jhaveri, S., Yang, Y., Battersby, E. E., ... & Taylor, P. D. (2022). Impact of maternal obesity on neonatal heart rate and cardiac size. *Archives of Disease in Childhood-Fetal and Neonatal Edition*, 107(5), 481-487.

*Guides: Qualitative Research: Definition*. (2024, April 2). Stanford Libraries. Retrieved May 13, 2024, from [https://guides.library.stanford.edu/qualitative\\_research](https://guides.library.stanford.edu/qualitative_research)

Guttmacher Institute. (December, 2020). Abortion in Sub-Saharan Africa. <https://www.guttmacher.org/fact-sheet/abortion-subsafrican-africa>.

Hamed Farahat, N., Mahmoud Soliman, N., Farouk Zidan, H., & Mostafa Abbas, E. (2016). High Risk Obese Pregnancy: Nutritional Program on Maternal Health for Controlling Obesity. *Egyptian Journal of Health Care*, 7(4), 208-234.

Hassim, N., Fernandez, P. R., Hoong, N. K., Rajaratnam, U. D., Koon, J. H. G., Ching, S. Y., & Qian, W. (2021). Childhood obesity: Health communication perspectives of Malaysian parents during COVID-19. *SEARCH Journal of Media and Communication Research*, 13(3), 141-156.

Hatch, J. A. (2023). *Doing qualitative research in education settings*. State university of New York press.

Haththotuwa, R. N., Wijeyaratne, C. N., & Senarath, U. (2020). Worldwide epidemic of obesity. In *Obesity and obstetrics* (pp. 3-8). Elsevier.

Haven, L. T., & Van Grootel, D. L. (2019). Preregistering qualitative research. *Accountability in research*, 26(3), 229-244.

Heslehurst, N., Dinsdale, S., Sedgewick, G., Simpson, H., Sen, S., Summerbell, C. D., & Rankin, J. (2015). An evaluation of the implementation of maternal obesity pathways of care: a mixed methods study with data integration. *PloS one*, 10(5), e0127122.

Homayouni, A., Bagheri, N., Mohammad-Alizadeh-Charandabi, S., Kashani, N., Mobaraki-Asl, N., Mirghafurvand, M., ... & Pourjafar, H. (2020). Prevention of gestational diabetes

- mellitus (GDM) and probiotics: mechanism of action: a review. *Current diabetes reviews*, 16(6), 538-545.
- IOM. (2006). Food marketing to children and youth: Threat or opportunity? Edited by J. M. McGinnis, editor; , J. Gootman, editor; and V. I. Kraak, editor. . Washington, DC: The National Academies Press.
- Jackson Leach, R., Powis, J., Baur, L. A., Caterson, I. D., Dietz, W., Logue, J., & Lobstein, T. (2020). Clinical care for obesity: A preliminary survey of sixty-eight countries. *Clinical obesity*, 10(2), e12357.
- Jakicic, J. M., Rogers, R. J., Davis, K. K., & Collins, K. A. (2018). Role of physical activity and exercise in treating patients with overweight and obesity. *Clinical chemistry*, 64(1), 99-107.
- James, W. P. T., Jackson-Leach, R., Mhurchu, C. N., Kalamara, E., Shayeghi, M., Rigby, N. J., ... & Rodgers, A. (2004). Overweight and obesity (high body mass index). *Comparative quantification of health risks: global and regional burden of disease attributable to selected major risk factors*, 1, 497-596.
- Juma, K., Juma, P. A., & Shumba, C. (2020). Non-Communicable Diseases and Urbanization in African Cities: A. *Public health in developing countries: Challenges and opportunities*, 31.
- Jung, H. (2019). The evolution of social constructivism in political science: past to present. *SAGE Open*, 9(1), 2158244019832703.
- Koliaki, C., Dalamaga, M., & Liatis, S. (2023). Update on the obesity epidemic: after the sudden rise, is the upward trajectory beginning to flatten?. *Current Obesity Reports*, 12(4), 514-527.

- Kumanyika, S. (2017). Getting to equity in obesity prevention: A new framework. *NAM Perspectives*.
- Kushitor, S. B., & Colecraft, E. K. (2023). Development of a facilitator guide for nutrition education on overweight and obesity in the eastern region of Ghana. *African Journal of Food, Agriculture, Nutrition and Development*, 23(1), 22275-22293.
- Le Gales-Camus, C., & Waxman, A. (2004). Fighting obesity: clarification from World Health Organization. *BMJ*, 329(7456), 53-54.
- Lester, F., Benfield, N., & Fathalla, M. M. (2010). Global women's health in 2010: facing the challenges. *Journal of Women's Health*, 19(11), 2081-2089.
- Lim, S. S., Vos, T., Flaxman, A. D., Danaei, G., Shibuya, K., Adair-Rohani, H., ... & Pelizzari, P. M. (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The lancet*, 380(9859), 2224-2260.
- Lopes, M. S., Freitas, P. P., Carvalho, M. C., Ferreira, N. L., Campos, S. F., Menezes, M. C., & Lopes, A. C. (2021). Challenges for obesity management in a unified health system: the view of health professionals. *Family Practice*, 38(1), 4-10.
- Mariona, F. G. (2016). Perspectives in obesity and pregnancy. *Women's Health*, 12(6), 523-532.
- Mbewu, A., & Mbanya, J. C. (2011). Cardiovascular disease.
- McKee, A. M., & John, E. (2021). Obesity in the Elderly. *Endotext [Internet]*.
- Micklesfield, L. K., Lambert, E. V., Hume, D. J., Chantler, S., Pienaar, P. R., Dickie, K., ... & Puoane, T. (2013). Socio-cultural, environmental and behavioural determinants of obesity

in black South African women: review articles. *Cardiovascular journal of Africa*, 24(9), 369-375.

Mohajan, D., & Mohajan, H. K. (2023). Obesity and its related diseases: a new escalating alarming in global health. *Journal of Innovations in Medical Research*, 2(3), 12-23.

Mosha, D., Paulo, H. A., Mwanyika-Sando, M., Mboya, I. B., Madzorera, I., Leyna, G. H., ... & Fawzi, W. W. (2021). Risk factors for overweight and obesity among women of reproductive age in Dar es Salaam, Tanzania. *BMC nutrition*, 7, 1-10.

Moyo, P. (2022). Knowledge, attitudes and practices of nurses regarding obesity in private healthcare institutions in Oshana region, Namibia (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Müller, C., Paulsen, L., Bucksch, J., & Wallmann-Sperlich, B. (2024). Built and natural environment correlates of physical activity of adults living in rural areas: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 21(1), 52.

NCD Risk Factor Collaboration. (2016). Trends in adult body-mass index in 200 countries from 1975 to 2014: a pooled analysis of 1698 population-based measurement studies with 19· 2 million participants. *Lancet (London, England)*, 387(10026), 1377.

Neupane, B. (2016). Role of obesity in the pathology of pulmonary hypertension.

Ng, M., Fleming, T., Robinson, M., Thomson, B., Graetz, N., Margono, C., ... & Gakidou, E. (2014). Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The lancet*, 384(9945), 766-781.

- Ng, M., Fleming, T., Robinson, M., Thomson, B., Graetz, N., Margono, C., ... & Gakidou, E. (2014). Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The lancet*, 384(9945), 766-781.
- Nonterah, E. A., Debpuur, C., Agongo, G., Amenga-Etego, L., Crowther, N. J., Ramsay, M., & Rexford Oduro, A. (2018). Socio-demographic and behavioural determinants of body mass index among an adult population in rural Northern Ghana: the AWI-Gen study. *Global health action*, 11(2), 1467588.
- Nour, N. M. (2014). Global women's health—A global perspective. *Scandinavian Journal of Clinical and Laboratory Investigation*, 74(244), 8-12.
- Obirikorang, C., Adu, E. A., Anto, E. O., Afum-Adjei Awuah, A., Fynn, A. N. B., Osei-Somuah, G., ... & Balmer, L. (2024). Prevalence and risk factors of obesity among undergraduate student population in Ghana: an evaluation study of body composition indices. *BMC public health*, 24(1), 877.
- Ofori-Asenso, R., Agyeman, A. A., Laar, A., & Boateng, D. (2016). Overweight and obesity epidemic in Ghana—a systematic review and meta-analysis. *BMC public health*, 16, 1-18.
- Ofori-Asenso, R., Agyeman, A. A., Laar, A., & Boateng, D. (2016). Overweight and obesity epidemic in Ghana—a systematic review and meta-analysis. *BMC public health*, 16, 1-18.
- Okop, K. J., Mukumbang, F. C., Mathole, T., Levitt, N., & Puoane, T. (2016). Perceptions of body size, obesity threat and the willingness to lose weight among black South African adults: a qualitative study. *BMC public health*, 16, 1-13.

- Oluyombo, R., Oguntade, H. B., Soje, M., Obajolowo, O., & Karim, M. (2022). Obesity and ckd in sub-Saharan Africa: a narrative review. *Kidney Medicine*, 4(2), 100403.
- Onuf, N. (2002). Institutions, intentions and international relations. *Review of International Studies*, 28(2), 211-228.
- Owusu, M. F., Adu, J., Dorte, B. A., Gyamfi, S., & Martin-Yeboah, E. (2023). Exploring health promotion efforts for non-communicable disease prevention and control in Ghana. *PLOS Global Public Health*, 3(9), e0002408.
- Parks, E. P., Kumanyika, S., Moore, R. H., Stettler, N., Wrotniak, B. H., & Kazak, A. (2012). Influence of stress in parents on child obesity and related behaviors. *Pediatrics*, 130(5), e1096-e1104.
- Pastakia, S. D., Pekny, C. R., Manyara, S. M., & Fischer, L. (2017). Diabetes in sub-Saharan Africa—from policy to practice to progress: targeting the existing gaps for future care for diabetes. *Diabetes, metabolic syndrome and obesity: targets and therapy*, 247-263.
- Pearce, C., Rychetnik, L., & Wilson, A. (2021). The obesity paradigm and the role of health services in obesity prevention: a grounded theory approach. *BMC Health Services Research*, 21, 1-10.
- Pederson, L. L., Vingilis, E., Wickens, C. M., Koval, J., & Mann, R. E. (2020). Use of secondary data analyses in research: Pros and Cons. *J. Addict. Med. Ther. Sci*, 6, 58-60.
- Pederson, L. L., Vingilis, E., Wickens, C. M., Koval, J., & Mann, R. E. (2020). Use of secondary data analyses in research: Pros and Cons. *J. Addict. Med. Ther. Sci*, 6, 58-60.

- Peterman, J. E., & Bassett, D. R. (2024). Transportation Policies and Obesity. In *Handbook of Obesity, Two-Volume Set* (pp. Vol1-406). CRC Press.
- Ramsay, M., Crowther, N. J., Agongo, G., Ali, S. A., Asiki, G., Boua, R. P., ... & as members of AWI-Gen and the H3Africa Consortium. (2018). Regional and sex-specific variation in BMI distribution in four sub-Saharan African countries: The H3Africa AWI-Gen study. *Global health action*, 11(sup2), 1556561.
- Rattray, T., W. Brunner, and J. Freestone. (2002). *The new spectrum of prevention: A model for public health practice*. Martinez, CA: Contra Costa Health Services.
- Ryan, D., Barquera, S., Barata Cavalcanti, O., & Ralston, J. (2021). The global pandemic of overweight and obesity: Addressing a twenty-First century multifactorial disease. In *Handbook of global health* (pp. 739-773). Cham: Springer International Publishing.
- Safaei, M., Sundararajan, E. A., Driss, M., Boulila, W., & Shapi'i, A. (2021). A systematic literature review on obesity: Understanding the causes & consequences of obesity and reviewing various machine learning approaches used to predict obesity. *Computers in biology and medicine*, 136, 104754.
- Scott, A., Ejikeme, C. S., Clotey, E. N., & Thomas, J. G. (2013). Obesity in sub-Saharan Africa: development of an ecological theoretical framework. *Health promotion international*, 28(1), 4-16.
- Seidell, J. C., & Halberstadt, J. (2015). The global burden of obesity and the challenges of prevention. *Annals of Nutrition and Metabolism*, 66(Suppl. 2), 7-12.

- Seidell, J. C., & Halberstadt, J. (2015). The global burden of obesity and the challenges of prevention. *Annals of Nutrition and Metabolism*, 66(Suppl. 2), 7-12.
- Semwogerere, M., Dear, N., Tunnage, J., Reed, D., Kibuuka, H., Kiweewa, F., ... & Esber, A. (2021). Factors associated with sexually transmitted infections among care-seeking adults in the African Cohort Study. *BMC Public Health*, 21, 1-11.
- Sim, L. J., Parker, L., & Kumanyika, S. K. (Eds.). (2010). Bridging the evidence gap in obesity prevention: a framework to inform decision making.
- Simfukwe, P., Van Wyk, B., & Swart, C. (2017). Perceptions, attitudes and challenges about obesity and adopting a healthy lifestyle among health workers in Pietermaritzburg, KwaZulu-Natal province. *African Journal of Primary Health Care and Family Medicine*, 9(1), 1-9.
- Skolimowska, A. (2018). Constructivist perspective on identity issue in International Relations. In *Perceptions of the European Union's Identity in International Relations* (pp. 9-23). Routledge.
- Stevens, G. A., Singh, G. M., Lu, Y., Danaei, G., Lin, J. K., Finucane, M. M., ... & Global Burden of Metabolic Risk Factors of Chronic Diseases Collaborating Group (Body Mass Index). (2012). National, regional, and global trends in adult overweight and obesity prevalences. *Population health metrics*, 10, 1-16.
- Suara, S. B., Siassi, F., Saaka, M., Foroshani, A. R., & Sotoudeh, G. (2019). Association between Carbohydrate Quality Index and general and abdominal obesity in women: a cross-sectional study from Ghana. *BMJ open*, 9(12), e033038.

- Sullivan, E. L., Smith, M. S., & Grove, K. L. (2011). Perinatal exposure to high-fat diet programs energy balance, metabolism and behavior in adulthood. *Neuroendocrinology*, 93(1), 1-8.
- Sun, R., Liu, M., Lu, L., Zheng, Y., & Zhang, P. (2015). Congenital heart disease: causes, diagnosis, symptoms, and treatments. *Cell biochemistry and biophysics*, 72, 857-860.
- Tenny, S., Brannan, J. M., & Brannan, G. D. (2022). Qualitative Study. 2022 Sep 18. *StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing, 1.*
- Timm, A., Nielsen, K. K., Christensen, U., & Maindal, H. T. (2021). Healthcare professionals' perspectives on the cross-sectoral treatment pathway for women with gestational diabetes during and after pregnancy—a qualitative study. *Journal of Clinical Medicine*, 10(4), 843.
- Tunçalp, Ö., Tripathi, V., Landry, E., Stanton, C. K., & Ahmed, S. (2014). Measuring the incidence and prevalence of obstetric fistula: approaches, needs and recommendations. *Bulletin of the World Health Organization*, 93, 60-62.
- Tuoyire, D. A. (2021). Overweight/obesity among 15-to 24-year-old women in Ghana: 21-year trend, future projections and socio-demographic correlates. *Journal of Biosocial Science*, 53(6), 839-855.
- UNAIDS. (2023). Global HIV & AIDS statistics — Fact sheet. <https://www.unaids.org/en/resources/fact-sheet>.
- Vilar-Compte, M., Burrola-Méndez, S., Lozano-Marrufo, A., Ferré-Eguiluz, I., Flores, D., Gaitán-Rossi, P., ... & Pérez-Escamilla, R. (2021). Urban poverty and nutrition challenges associated with accessibility to a healthy diet: a global systematic literature review. *International journal for equity in health*, 20(1), 40.

- Wariri, O., Alhassan, J. A. K., Mark, G., Adesiyun, O., & Hanson, L. (2021). Trends in obesity by socioeconomic status among non-pregnant women aged 15–49 y: a cross-sectional, multi-dimensional equity analysis of demographic and health surveys in 11 sub-Saharan Africa countries, 1994–2015. *International health*, 13(5), 436-445.
- Wei, W., Zhang, X., Zhou, B., Ge, B., Tian, J., & Chen, J. (2022). Effects of female obesity on conception, pregnancy and the health of offspring. *Frontiers in Endocrinology*, 13, 949228.
- Wendt, A. (1992). Anarchy is what states make of it: the social construction of power politics. *International organization*, 46(2), 391-425.
- Westbury, S., Oyebode, O., Van Rens, T., & Barber, T. M. (2023). Obesity stigma: causes, consequences, and potential solutions. *Current obesity reports*, 12(1), 10-23.
- WHO region, 2023. <https://cdn.who.int/media/docs/default-source/hq-hiv-hepatitis-and-stis-library/j0294-who-hiv-epi-factsheet-v7.pdf>.
- Wolfenden, L., Ezzati, M., Larijani, B., & Dietz, W. (2019). The challenge for global health systems in preventing and managing obesity. *Obesity Reviews*, 20, 185-193.
- World Health Organization (WHO). (2018). Obstetric fistula. <https://www.who.int/news-room/facts-in-pictures/detail/10-facts-on-obstetric-fistula>.
- World Health Organization (WHO). (2021). Abortion. <https://www.who.int/news-room/fact-sheets/detail/abortion>.
- World Health Organization (WHO). (2023 a). Family planning/contraception methods. <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception>.

World Health Organization (WHO). (2023 b). Sexually transmitted infections (STIs). <https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-%28stis%29>.

World Health Organization (WHO). (2023). Epidemiological fact sheet. HIV statistics, globally and by

World Health Organization (WHO). (2024). Maternal mortality. <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>.

World Health Organization. (2021). *Nutrition, overweight and obesity: factsheet on Sustainable Development Goals (SDGs): health targets* (No. WHO/EURO: 2021-2574-42330-58595).

World Health Organization. Regional Office for Europe.

World Health Organization. Obesity and Overweight. WorldHealthOrganisation;2021.

World Health Organization. WHO Obesity. (2014). Last accessed on 2019 Dec 17 World Health Organization <https://www.who.int/topics/obesity/en/>

Yiga, P., Seghers, J., Ogwok, P., & Matthys, C. (2020). Determinants of dietary and physical activity behaviours among women of reproductive age in urban sub-Saharan Africa: a systematic review. *British Journal of Nutrition*, 124(8), 761-772.

Zalanyi, S. (2001). Progesterone and ovulation. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 98(2), 152-159.

Zheng, L., Yang, L., Guo, Z., Yao, N., Zhang, S., & Pu, P. (2024). Obesity and its impact on female reproductive health: unraveling the connections. *Frontiers in Endocrinology*, 14, 1326546.

Ziraba, A. K., Fotso, J. C., & Ochako, R. (2009). Overweight and obesity in urban Africa: a problem of the rich or the poor?. *BMC public health*, 9, 1-9.



## Appendix A

### Interview Guide

You are hereby invited to participate in a research study on the topic “GLOBAL PERSPECTIVES ON OBESITY AND THE BURDEN OF HEALTH RISKS ON WOMEN: THE PERSPECTIVES OF HEALTH WORKERS IN GHANA”. This is a research project conducted for a Master of Arts Degree in International Relations at the University of Ghana, Legon. This interview guide has been approved by the student supervisor and Research Fellow Dr. Daniel Kipo-Sunyezi. The supervisor’s profile is available at <https://leciad.ug.edu.gh/faculty/dr-daniel-dramani-kipo-sunyezi>. Please be assured your response will be treated with utmost confidentiality and only be used for academic purposes.

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### Background Information

1. Can you please tell me about your professional background and your role in the healthcare sector?
2. How many years have you been practicing in this field?
3. What specific experience do you have in dealing with obesity, particularly among women?

### To investigate the capacity of Healthcare Professionals

1. In your opinion, how well-equipped are Ghanaian health professionals in diagnosing obesity among women?
2. What diagnostic tools or criteria do you use in your practice to identify obesity in female patients?
3. How effective do you believe the current treatment protocols are for managing obesity among women?
4. Are there any training programs or resources available to health workers to improve their capacity in managing obesity?
5. From your perspective, how does Ghana's approach to managing obesity compare with other countries?

6. What lessons or best practices from other countries could be applied in the Ghanaian context?

7. How do international health guidelines and recommendations influence your approach to obesity management?

### **Determinants of Obesity Among Women**

1. What socio-cultural factors do you think contribute to the prevalence of obesity among women in Ghana?

2. How do economic factors such as income level and access to healthcare influence obesity rates among women?

3. In your experience, what environmental factors (e.g., urbanization, access to healthy food or any other environmental factor) play a role in obesity among women?

4. How do cultural perceptions of body image in Ghana impact women's health decisions and obesity rates?

### **Challenges in Addressing Obesity**

1. What are the main challenges you face in addressing obesity among women in the Ghanaian health sector?

2. How do you think these challenges can be overcome to improve the management of obesity?

3. Are there any policy or infrastructure gaps that hinder the effective treatment of obesity in Ghana?

4. What role do you think the government and other stakeholders should play in combating obesity among women?

