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SCHOOL OF PUBLIC HEALTH

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

EVALUATING THE IMPLEMENTATION OF THE GHANA HEALTH SERVICE WELLNESS CLINIC IN THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES IN SELECTED FACILITIES IN GREATER ACCRA

BY

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THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF SCIENCE PUBLIC HEALTH MONITORING AND EVALUATION DEGREE

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DECLARATION

I thus declare that this work is all mine, except any references to other authors' works that I have fully recognized. I further certify that neither this work nor any other work has been submitted in whole or in part for any degree to be awarded at this institution or any other institution.

………………………… Date: 19TH May, 2023

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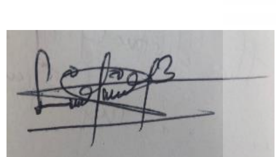

…………………………. Date: 19th May, 2023

Dr Leonard Baatiema

(Supervisor)

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DEDICATION

I dedicate this work to the Almighty God who has been gracious enough to grant me the good health, strength, knowledge, and resources that have allowed me to complete this work successfully.

Again, I dedicate this to my late father Mr. John Kwaku Sissuh, who died as a result of NCDs. May his soul rest in peace.

This is to Emmanuel Bentil, my support person in my study.

I once more dedicate this effort to Dr Leonard Baatiema, my honorary supervisor, for his assistance throughout my research.

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Lastly, this is dedicated to my siblings, loved ones, close friends, coworkers and the head of maternity at Kaneshie Polyclinic (PNO Florence Aryeh).

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LIST OF ACRONYMS

NCD	Communicable Disease SDG
SDG	Sustainable Development Goal-
GHS	Ghana Health Service
MOH	Ministry of Health
WHO	World Health Organisation
DALY	Disability Adjusted Life Year
LMIC	Low- and Middle-Income Country
DM	Diabetes Mellitus
MDG	Millennium Development Goal
HLM	High-Level Meeting
GDA	Guideline Daily Amount
IDF	International Diabetic Federation
RHD	Rheumatic Heart Disease
SSA	Sub-Saharan Africa
IHD	Ischemic heart disease
COPD	Chronic Obstructive Pulmonary Disease
CNCD	Chronic Non-Communicable Diseases
CVA	Cardiovascular Accident
ART	Antiviral Therapy
GDHS	Ghana Demographic and Health Survey
UN	United Nations
USA	United States of America
MSA	Multi-Sectoral Action
HIV	Human Immunodeficiency Virus
TB	Tuberculosis
RHNP	Regeneration Health Nutrition Programme
FDB	Food and Drugs Board

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LI	Legislative Instrument
NCDCP	Non-Communicable Disease Control Programme
GHS-ERC	Ghana Health Service Ethical Review Committee
LFT	Liver Functioning Test
NHIS	National Health Insurance Scheme
STGs	Standard Treatment Guide
EML	Essential Medication List
NHIS	National Health Insurance Scheme
DDNS	Deputy Director of Nursing Services
SNO	Senior Nursing Officer
JHS	Junior High School
SHS	Senior High School

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ABSTRACT

Background: NCDs are the world's leading cause of death and ill health. Ghana, like other African nations has a rising burden of NCDs. NCDs currently account for 43% of all deaths, with increasing trends anticipated in the upcoming year. As a result, the Ghana government through the Ghana Health Service (GHS) and the Ministry of Health (MOH) has developed policies and interventions to respond to the growing burden of NCDs. One of them is the establishment of the wellness clinic. The wellness clinic is a set-up separated from the health facilities managed by qualified health staff and equipped with basic and key equipment such as weighing scales, blood pressure apparatus, glucometers, cervical screening tools, beds for breast screening, and other necessary medical equipment.

The idea is to make it simple for individuals to walk into the health facilities for screening (blood pressure, blood sugar, body mass index, breast and cervical screening) to detect anomalies early and receive treatment and complications-preventative care without any delay in the health facility. (GNA, 2022).

Aim: With the establishment of the wellness clinics in some Ghana Health service Facilities, the study therefore, seeks to evaluate the purpose of the wellness clinic, its function and its effectiveness in the prevention and control of non-communicable diseases.

Objectives: the objectives of the study include;

1. To examine the categories of NCD cases presented at the GHS. Wellness clinics
2. Understand the types and scopes of NCD services provided at the wellness clinic.
3. To know the views of service users /patients on NCD care access (challenges and barriers) at the wellness clinic.

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4. To understand the perspective and views of the health workers and managers of the wellness clinic about the management and organizational capacity and the contextual (barriers/challenges) and facilitators affecting the implementation of the wellness clinics.

Method: The study is sequential explanatory design, which employed a mixed-method approach using in-depth qualitative interviews and a standardized survey questionnaire in the data collection process. Data were collected in three (3) health facilities within the Accra Metropolitan; one polyclinic and two hospitals.

Results: The findings show that, the wellness clinics in all the health facilities does not render all the required NCD services. They provide only hypertension and diabetes services. Aside that they offer counselling and community services. Cases that are beyond them are referred to the doctor for further management. They have limited staff (nurses) in the department. Assigned staff had no formal training nor protocols to guide them in the work. Their work based on the knowledge they have as nurses. Services provided are not totally free as perceived. Screening for diabetes (glucose test) is paid out of pocket so, client who do not have money to pay are not be able to access the service. Challenges mentioned include inadequate space, resources, funds, working protocols and limited staffs.

Conclusion: The wellness clinic is not operational as expected and this is happening as a result of the programme being left in the hands of the health facilities to manage.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of Study

Non-communicable diseases (NCDs) have been a focus for the World Health Organization (WHO) since the early 1980s and are spreading globally (Heller et al., 2019). According to Tindana et al. (2020), NCDs include diabetes, cancer, chronic obstructive pulmonary disease (COPD), cardiovascular disease (stroke and hypertension), and mental health disorders. Non-communicable diseases (NCDs) account for 41 million deaths annually, or over 71% of all fatalities worldwide, making them the leading cause of death globally. Malignancies (9 million), respiratory illnesses (3.9 million), cardiovascular diseases (17.9 million each year), and diabetes (1.6 million) are only a few examples. The four leading causes of premature NCD fatalities account for more than 80% of all NCD deaths combined. NCDs are the world's leading cause of death and ill health. (Wekwete & Mangombe, 2022). It is the seventh out of ten global fatalities (Bennett et al., 2020). Another study mentioned that 73% of all deaths worldwide in 2017 were caused by NCDs and these death rates are higher in low- and middle-income countries (LMICs) than in high-income nations (Coates et al., 2020). To estimate, NCDs already represent more than 60% of the global burden of years lived with a handicap (DALYs) (Buse et al., 2020).

Over the past 20 years, nations have experienced tremendous urbanization and social growth and this has increased the burden of NCDs. Social structure has also caused changes in populations' lifestyles. The social structures are mostly defined as an increase in unhealthy eating, inactivity, and cigarette use (Sivanantham et al., 2021). Being overweight or obese is as well a risk factor for NCD (Aburto et al., 2021). In addition, social-environmental factors (family income, education

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level, and settlement areas) and NCD family histories all contribute to the development of the disease. (Jeong et al., 2021). Non-Communicable diseases have placed a heavy burden on people's lives and the economies of their homes, communities and nations, particularly in low- and middle-income nations (World Health Organization, 2020). Due to the restricted access to comprehensive services for chronic illness prevention, treatment, and management, the most vulnerable groups are more likely to develop NCDs and pass away prematurely. It further strains patients' families financially (Kazibwe et al., 2021).

In sub-Saharan Africa (SSA) non-communicable diseases are common and growing burden among older cohorts (Gyasi & Phillips, 2020). Obesity prevalence is 20%, diabetes prevalence is 5.1%, and hypertension prevalence is 48% (Mudie, Jin, Tan, et al., 2019). The burden of NCDs in sub-Saharan Africa has increased during the previous two decades (Wekwete & Mangombe, 2022). Unhealthy nutrition, physical inactivity, abuse of alcohol and cigarettes, and auto accidents are risk factors for NCDs. The process of epidemiological transformation is facilitated by rapid urbanization and most Africans' unfavourable lifestyle. (Wekwete & Mangombe, 2022). Most people in SSA have switched from their original agrarian lifestyle to the Western way of life as a result of rising globalization, urbanization, and industrialization. In most SSA, subsistence farming, hunting, long-distance foot travel, and other forms of frequent and frequently intense physical exertion are characteristics of traditional lifestyles and cultures. These are accompanied by sustenance from a whole-plant, high-fiber diet that is abundant in fruits, vegetables, and legumes. The fast-paced, wage-earning economy and sedentary lifestyles of urban or "Western lifestyles" have steadily destroyed and replaced these old types of lifestyles. An issue that has led to a heavy reliance on motorized transportation and widespread consumption of unhealthy meals heavy in salt, refined carbs, and fats. Due to this economic transformation, there has been a marked

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decline in overall physical activity levels, a loss in leisure time, a fall in the quantity and quality of sleep, and an increase in stress (Adelowo, n.d.,2021) Additionally, social and environmental risk factors like exposures throughout early development and air pollution can result in NCDs (Dalal et al., 2011).

With the prevalence of NCDs rising, more people are affected by co-occurring infectious diseases, comorbidities, and multiple NCDs (Nyirenda, 2016). The socioeconomic development of the majority of LMICs is currently by NCDs. Millions of people in the micro economy fall below the poverty line each year as a result of the direct and indirect expenses of managing NCDs, which result in billions of dollars in lost national income. (Adelowo, n.d.)

Ghana, like other African nations, has a rising burden of NCDs (Nyaaba et al., 2020). Cardiovascular illnesses contributed 19% of all deaths in the nation, followed by malignancies (5%), diabetes (3%) and chronic respiratory diseases (3%). NCDs were responsible for 43% of all deaths. According to estimates, Ghana has a greater rate of premature death thus, 21% between the ages of 30 and 70 than the rest of the world (which is higher than the global average,18%) as a result of NCDs (Osei et al., 2021). Age, marital status, gender, and place of residence are the non-modifiable risk factors for hypertension in Ghana. The risk factors that could be changed included using more table salt, eating salted meat, smoking, drinking alcohol, eating canned meats, and engaging in stressful or anxious thoughts (Konlan et al., 2022). The socioeconomic well-being of individuals and families has been threatened by NCDs. It has increased healthcare expenditures and significantly hampered efforts to achieve Sustainable Development Goals. (Adu-Gyamfi et al., 2020).

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1.2 Problem Statement

In Ghana, NCDs currently account for 43% of all deaths, with increasing trends anticipated in the upcoming year (Atorkey & Owiredua, 2021). The wave of rural-urban migration has resulted in changes in lifestyle and nutritional choices. This has increased the prevalence of hypertension which is a category of non-communicable disease**.** The alarming trend has been attributed to several variables, including a positive attitude toward fat, an increase in sedentary behaviour, excessive consumption of high-calorie foods, genetic susceptibility, increased salt intake, and longer life expectancies (Atibila et al., 2021). Studies on the prevalence of diabetes mellitus (DM) in Ghana have revealed a significant rise. Even with that, Ghana still lacks basic knowledge of DM and its complexities (Afaya et al., 2020).

In the scope of hypertension, many people are also ignorant of their blood pressure and the difficulties associated with it (Tannor et al., 2022). Although there is an estimated 16,600 cancer cases in Ghana each year, there is still lack of public awareness of the disease. This mostly causes late presentation of the illness at medical facilities and poor treatment outcomes. (Mensah et al., 2019). NCD prevalence is closely connected with age. Ageing is typically accompanied by an increase in morbidity, functional decline, varying degrees of disability, and preventable early mortality (Gyasi & Phillips, 2020). Compared to other human illnesses, population ageing has resulted in a large increase in the burden of NCDs. Individuals' subjective well-being and quality of life may be closely related to their medical issues, especially in older persons. (Christian et al., 2020).

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NCDs were overlooked in discussions of global health policy discussion despite their prevalence, burden, and unequal distribution (absent from the Millennium Development Goals). There have finally been some changes toward increased priority and action on NCDs. This happened during

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the first UN General Assembly High-Level Meeting (HLM) on NCDs in 2011. The inclusion of an NCDs-related aim in the Sustainable Development Goals (SDGs) agenda in 2015 marked a turning point (target 3.4 to reduce premature mortality from NCDs by one-third by 2030) (Buse et al., 2020).

The government through the Ghana Health Service (GHS) and the Ministry of Health (MOH) has also developed policies and interventions to respond to the growing burden of NCDs in Ghana as part of the intervention to prevent and control NCDs in Ghana. Part of the strategy to reduce the rising burden of NCDs is the establishment of wellness clinics to prevent and control the rising burden of non-communicable diseases (Ministry of Health, 2022). Despite the introduction of the wellness clinic program, it remains unclear how the program is being implemented, the nature of the services provided in these settings, the systems set up to support the implementation and the contextual factors influencing the implementation of the policies.

This study, therefore, seeks to evaluate the implementation process of the wellness clinic and understand the factors driving the implementation process toward the prevention and control of non-communicable diseases .The establishment of the wellness clinic was made necessary due to the rising prevalence of NCDs.

1.4 Specific Questions

1. What categories of NCD cases are presented at wellness clinics?
2. What NCD services are provided at the GHS wellness clinics?
3. What are the views of service users /patients on NCD care access (challenges and barriers) at the wellness clinics?
4. How are the wellness clinics managed and what are the possible barriers and challenges facing the implementation of the wellness clinic?

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1.5 General Objective

To evaluating the implementation of the wellness clinic in the prevention and control of non-communicable disease in the Accra Metropolitan Assembly.

1.6 Research Objectives

1. To examine the categories of NCD cases presented at the GHS. Wellness clinics
2. To understand the types and scopes of NCD services provided at the wellness clinic.
3. To explore the views of service users on NCD care access (challenges and barriers) at the wellness clinic.
4. To understand the perspective and views of the health workers and managers on the contextual (barriers/challenges) affecting the implementation of the wellness clinics.

1.7 Justification

Ghana has endorsed the UN Sustainable Development Goal to attain universal health coverage (UHC), guaranteeing that everyone can access the medical treatment they need without facing financial hardship. In most situation, it is challenging to accomplish that purpose. As the burden of non-communicable diseases (NCDs) rises and creates a dual burden with infectious diseases, the issues are further worsened by a shifting disease landscape. (Koduah et al., 2021) (Nyaaba et al., 2020) Comprehensive national non-communicable disease (NCD) policy development and execution are essential for avoiding and controlling the growing NCD burden, particularly in the Africa area where the greatest rise in NCD-related mortality is anticipated by 2030. However, even in countries with national NCD strategies, their successful implementation is still hampered for unknown reasons. Therefore, it will be important to evaluate the Ghana Health Service Wellness

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Clinic it to know how effectively and efficiently it's being run. This will help identify the gaps and challenges been faced and address them.

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CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant research on how to use wellness clinics to prevent and control non-communicable diseases. It begins by describing the impact of non-communicable diseases. It further reviews the risk factors and impact of non-communicable diseases and finally expounds on the policies, plans, programmes and interventions for non-communicable diseases (NCDs). Peer-reviewed journal articles as well as papers from the "other literature" that the researcher considered legitimate sources were included in the research literature (Government of Ghana documents, research reports, WHO documents and UN documents).

2.2 Global Burden

In recent years, non-communicable diseases (NCDs), primarily diabetes, cancer, chronic respiratory diseases, cardiovascular illnesses, and mental health disorders, have drawn increased attention (Frumkin & Haines, 2019). According to Meghani et al. (2021), it is the major global cause of morbidity and loss of adjusted life years due to disability. NCDs account for 41 million fatalities annually and 74% of the world's mortality burden with cardiovascular disease, cancer, diabetes, and chronic lung illnesses accounting for roughly two-thirds of non-communicable diseases (NCDs)-related fatalities.

According to Sun et al. (2022), the prevalence of diabetes has reached pandemic levels worldwide. It has grown to be one of the most serious and common chronic diseases in our day, reducing life expectancy and causing costly, life-threatening consequences. 9% (463 million adults) of the population were affected in 2019, according to the IDF's 9th edition. According to Ogurtsova et al. (2022), the number of people with diabetes globally was forecast to be 536.6 million in 2021

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(diagnosed or undiagnosed), and by 2045, that number was projected to increase by 46% to 783.2 million.

With 19 million new cases and 10 million new cancer deaths in 2020, cancer is a factor in more than one in six fatalities worldwide (Anderson et al., 2021). Globally, cardiovascular illnesses are becoming the leading cause of death. Cardiomyopathies, congenital heart disease, peripheral vascular disease, coronary heart disease, and cerebrovascular illness are some of these disorders (Ali et al., 2021). According to Roth et al. (2020), there were 18.6 million fatalities and 523 million cases of CVD worldwide in 2019. Chronic respiratory conditions affected 545 million individuals worldwide in 2017, an increase of 398 per cent since 1990. It has resulted in 3 million deaths in 2017 (an increase of 18% since 1990) and 1470 disability-adjusted life years (DALYs) per 100,000 people (112,3 million total DALYs; an increase of 13% since 1990) (Labaki & Han, 2020).

According to Azadnajafabad et al., (2021), environmental and occupational, behavioural, and metabolic risk factors are the three primary categories of risk factors for non-communicable diseases. Exposure to toxins, indoor and air pollution from substances like lead and arsenic, and airborne particulate are some of the environmental risk factors (Chowdhury et al., 2018). Again, NCD is increased by behavioural risk factors such as smoking, an unhealthy diet, being physically inactive, and abusing alcohol (Pengpid & Peltzer, 2019). (Guerra et al., 2021) mentioned overweight/obesity, hypertension, hyperglycemia, and hyperlipidemia as metabolic risk factors.

Tobacco use, harmful alcohol use, physical inactivity, and unhealthy deaths are the four most prevalent modifiable behavioural risk factors for NCDs (Sithey et al., 2021). (Mitra et al., 2021) also mentioned age, family history, and sex are risk factors that are non-modifiable.

Global public health is seriously threatened by NCDs. The impacts of NCD include mortality and rising medical expenses. In many parts of the world, medical expenses associated with NCDs

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account for a sizable portion of total healthcare spending. 14 million adults or those between the ages of 30 and 70, died prematurely every year. (Zhang et al., 2022). NCDs have significant economic repercussions; with an estimated $47 trillion cost to the global economy over the next 20 years. (Frumkin & Haines, 2019).

2.2.1 Global Incidence

The burden of NCDs worldwide is still too high. The burden of non-communicable diseases (NCDs) in terms of disability and mortality has increased globally. According to the WHO NCDs country profiles (2018), of the 57 million deaths worldwide in 2016, 41 million were caused by NCDs (71 percent). Of them, 15 million deaths were premature (30 to 70 years). In low- and middle-income nations, where 78 percent of all NCD fatalities and 85 percent of premature deaths occurred, the burden is greatest. Additionally, about 800,000 deaths in 2016 were caused by suicide. A slight relative decrease of 6% from 2010 has reduced the risk of dying too soon from one of the four major NCDs to 18% in 2016. 9.6 million premature deaths might be prevented by 2025 if all 194 Member States adopted the WHO's "best buys," which total 16 in number. According to Luciani et al. (2022), seven of the top 10 causes of mortality worldwide are NCDs, and they were responsible for 41 million fatalities, or 71.0 percent of all deaths globally, in 2019.

About 5.8 million fatalities per year in the Americas are caused by NCDs, particularly chronic respiratory diseases, cancer, and cardiovascular disorders (80.7 percent of total deaths). In the Americas, NCDs are responsible for 80.7% of all fatalities, with a regional NCD mortality rate of 411.5/100 000 people. 24 countries had higher NCD death rates than the regional average, and rates are greater in males than in women (482.6/100 000 versus 351.6/100 000). Additionally, Haiti has the highest rate of NCD mortality in the Caribbean, with a rate of 838.7/100,000. Canada has the lowest rate, at 301.5/100,000. The major cause of NCD fatalities in the Americas area in 2019

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was cardiovascular disease (34.8%; 2.0 million deaths), followed by cancer (23.4%; 1.4 million deaths), chronic respiratory disorders (9.2%; 534 242 deaths), and diabetes (4.9%). (284 049 deaths). In the Americas region, more than a third (36.2%) of NCD deaths occurred in adults under the age of 70, translating to 2.1 million deaths in 2019.

As in other nations, NCDs account for 75% of deaths in Brazil, making them a more serious health issue than in other nations (Malta et. al. 2017). In the EU, the overall all-cause death rate for adolescents aged 10 to 24 was 25.35 (95% UI 24.44-26.27) per 100,000 people in 2019. In this age range, NCDs were responsible for 38.8% (37.4–39.8) of all fatalities. Neoplasms were the most common level 2 cause of death for NCDs in adolescents aged 10 to 24 (401 [362–425] per 100,000), accounting for 40.8% (36–432) of total NCD mortality. Other malignant neoplasms were the main level 3 cause of death for NCDs (105 [088-114] per 100,000 people).

In 2019, NCDs were the top level 1 cause of death for both males and females in all age groups (54.1% [52.0-56.0] for males aged 10–14 years, 52.1% [95% UI 50–3-53–3] for females aged 10–24 years, 63.9% [61–1-65–6] for females aged 10–14 years, 48.0% [45.8–49.5] for females aged 15–19 years, and 50. Additionally, mortality from NCDs increased for both sexes across the three age categories, rising from 557 (531-584) per 100,000 for 10–14 years to 947 (896–999) per 100,000 for 15–19 years and 1430 (1367–1495) per 100,000 for 20–24 years. (Armocida et al., 2022)

Bulgaria and Estonia had the highest level 2 NCD-related death rates in 2019, which was more than twice as high as the lowest rate (France, Belgium, and Spain). Eight Member States—Bulgaria, Estonia, Latvia, Lithuania, Romania, Malta, the UK, and Finland—as well as the EU as a whole (composite estimate), showed significant disparities in the excess mortality rate caused by

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NCDs. Neoplasms were the most common level 2 cause of death in all EU Member States, except for Estonia, where drug use disorders were the main cause. (Armocida et al., 2022)

2.2.2 Global Risk Factors

According to the WHO's report on NCDs information sheet 2022, the main causes of the growth in NCDs are four primary risk factors: cigarette use, physical inactivity, hazardous alcohol consumption, and poor diets.

According to Peters et al. (2019), there are three categories of risk factors for NCDs: (1) metabolic risk factors, such as hyperlipidemia, hyperglycemia, HT, and obesity. (2) modifiable risk factors, such as unhealthy eating, smoking, and alcohol, tea, and coffee use and (3) unchangeable risk factors such as sex and age. Physical, emotional, behavioural, socioeconomic, and environmental risk factors for NCDs are caused by people.

Risk variables can be categorized in many ways, according to other studies. Risk variables can be categorized using one approach, according to Budreviciute et al. in 2020. As a result, they divided them into two categories: elements that can be changed and those that cannot be changed. High blood pressure, smoking, diabetes, obesity, inactivity, and high blood cholesterol are risk factors that can be changed, whereas age, gender, genetics, race, and ethnicity are risk factors that cannot be changed. It's interesting to note that while age and gender cannot be changed, the majority of the linked characteristics can. Additionally, the non-modifiable elements can be divided into three groups: (i) biological factors, including obesity, dyslipidemia, hyperinsulinemia, and hypertension; (ii) behavioural factors, including diet, inactivity, tobacco use, and alcohol consumption; and (iii) societal factors, which include intricate arrangements of interrelated socioeconomic, cultural, and environmental factors. Chronic disorders that are long-lasting and caused by a mix of genetic, environmental, physiological, and behavioural variables are known as

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non-communicable diseases (NCDs). Cardiovascular illnesses, malignancies, chronic respiratory conditions, and diabetes mellitus are the NCDs that have the most impact. The biggest health and development challenges of the twenty-first century are NCDs (Mucheru, 2021).

2.2.3 Global Socio-Economic Impact

Households are financially and emotionally burdened by NCDs. Households spend more money on treating NCDs than they do on other household expenses for welfare. The significant increase in NCDs put a burden on the healthcare system's human resources and financial resources. The cost of purchasing the most cutting-edge technical equipment necessary for diagnosing and treating NCDs, which is typically expensive because it is imported, puts a financial strain on local and national governments (Mucheru, 2021). Evidence from around the world suggests that the high health burden of NCDs has significant economic and social costs that threaten to lower millions of people's quality of life, impoverish families, put universal health coverage in jeopardy, and widen health disparities both within and between nations. Goal 3 of the Sustainable Development Goals includes a specific objective of reducing mortality from NCDs by one-third by 2030 in recognition of trends in NCDs, worldwide evidence of their multifaceted costs, and their potential to impede development (Etienne C.F., 2018). High treatment costs associated with NCDs place a direct financial strain on households, societal institutions, and health systems. Additionally, NCDs cause large productivity losses due to early labour force departures, premature mortality, absenteeism, and work at reduced capacity (PAHO,2022).

2.3 Burden of NCDs in Sub-Sahara Africa (SSA)

NCD is not a problem affecting developing countries only (Frumkin & Haines, 2019). In SSA, the prevalence of NCDs is increasing, especially with cancer, chronic respiratory diseases, diabetes, mental illnesses, and cardiovascular disease. NCDs account for 2.6 million deaths, making them

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the second most frequent cause of mortality (about 35 percent of all deaths in SSA) (Disang et al., 2021). The primary cause of death in SSA by 2030 is expected to be NCDs, which will account for more than half of all deaths (CVD), with ischemic heart disease (IHD) and stroke being the main contributors to cardiovascular morbidity and disability as well as the leading causes of global cardiovascular (CV) mortality. In all parts of the world, CVD is a significant contributor to early mortality and rising healthcare expenses (Yuyun et al., 2020).

2.3.1 Incidence in Sub-Saharan African

In less than three decades, the non-communicable disease burden in the SSA region has increased by 67% (Pallangyo et al., 2022). 86% of the global burden of premature deaths from NCDs are from low- and middle-income countries (LMICs) (Frumkin & Haines, 2019). The total number of CVD deaths has increased by more than 50% over the last three decades (Yuyun et al., 2020). Additionally, 463 million individuals worldwide were estimated to have diabetes mellitus in 2019 (Lopes et al., 2022). The estimated cancer incidence in sub-Saharan Africa was 811,000 new cases and 527,000 deaths in 2018, and as the population ages and expands, that number is predicted to double to more than 1.6 million cases yearly by 2040 (Mutebi et al., 2020).

Currently, the third leading cause of death globally is Chronic Obstructive Pulmonary Disease (COPD). According to reports, 3.8 million people died from Chronic Obstructive Pulmonary Disease (COPD) in 2019, with LMICs accounting for about 90% of those deaths (Awokola et al., 2022).

2.3.2 Risk Factors in Sub-Saharan African

With the increased burden of non-communicable illnesses, the majority of nations in SSA are currently going through an epidemiological transformation (Mbakwem et al., 2021). There has been a transition from infectious diseases to non-communicable diseases. Urbanization,

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industrialization, longer life expectancies, and the adoption of a Western lifestyle—characterized by decreased physical activity and a shift away from diets high in fruits and vegetables to those that are refined, energy-dense, and fatty are the causes of this. (Olawuyi & Adeoye, 2018). Choosing dangerous habits, such as abusing alcohol and tobacco, has also contributed to an increase in NCDs. According to research, antiretroviral therapy (ART) has considerably improved HIV-positive patients' chances of survival, but they are also more likely to develop chronic illnesses like cancer, depression, and cardiovascular disease (Disang et al., 2021). NCDs, particularly in LMICs, hinder economic growth, retain millions of people in poverty (Frumkin & Haines, 2019) and strain already-weak health systems (Pallangyo et al., 2022). The burden of NCDs also disproportionately affects those with low socioeconomic status and high healthcare expenses and exacerbated economic inequality and poverty (Thow et al., 2021).

2.3.3 Socio-Economic Impact in SSA

According to studies by Osei et. al. (2021), the burden of NCDs in Sub-Saharan Africa (SSA) has increased over the past two decades and is predicted to surpass infectious diseases as a major cause of morbidity and mortality by the year 2035. If prompt action is not taken, it is predicted that fatalities from NCDs will rise from 25% of all deaths in 2004 to over 46% of all deaths in 2030. Due to factors such as changing lifestyles, fast urbanization and population expansion, increased life expectancy, and epidemiological transition, the burden of NCDs is increasing in SSA. The NCD epidemic is also fueled by preventable variables like cigarette use, poor diet, inactivity, excessive salt consumption, and dangerous alcohol use, all of which contribute to metabolic conditions like obesity, hypertension, and high cholesterol, which in turn cause NCDs (Osei et. al. 2021).

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WHO (2013) states that the rise of non-communicable diseases (NCDs) poses a threat to reverse the advancements in Africa's health and development, particularly among young people (adolescents and youth). Given that Africa has the world's youngest population and a rapidly growing adolescent and youth population (estimated at 360 million), with roughly 120 million or 1/3 of them aged 10 to 14 years, this is especially noteworthy. There Increased absenteeism, job loss, out-of-control medical costs, increased caregiving responsibilities on the part of family members, or total loss of income due to the death of the breadwinner are just a few of the social and economic burdens brought on by the rise in NCDs in Africa (Naik, R. and Kaneda, T. (2015)). Low-income households are further pushed into poverty as a result of the loss of income, whether it is partial or total (Juma et al. 2018).

According to WHO (2013), on a larger scale, the interaction of declining labour outputs, worse returns on human capital expenditures, rising healthcare expenses, and a decline in economic activity results in growing inequality not only between populations but also between countries. Ghana's burden of NCDs is increasing, as it is in other African countries (Nyaaba et al., 2020). Cardiovascular illnesses contributed 19% of all deaths in the nation, followed by malignancies (5%), diabetes (3%) and chronic respiratory diseases (3%). NCDs were responsible for 43% of all deaths. According to estimates, Ghana has a greater rate of premature death thus, 21% between the ages of 30 and 70 than the rest of the world (which is higher than the global average,18%) as a result of NCDs (Osei et al., 2021). They include obesity, hypertension, diabetes, and heart disease. 2018 (Kushitor & Boatemaa). The data that are currently available from studies and surveys imply that NCDs and the risk factors that are related to them are on the rise. This is seen from the Ministry of Health's assessment of the Global Burden of Disease Study from 2016, which

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reveals an increase in the burden of NCDs as the second biggest cause of Disability Adjusted Life Years (DALYs)

2.4 Burden of NCDs in Ghana

In Ghana, NCD-related mortality accounted for around 27.7% of deaths in 1990, 31% in 2000, 35.8% in 2010, and approximately 46% at the end of 2019. Evidently, comparable year-over-year proportions of NCD fatalities in Ghana are greater than the figures for the rest of Africa, necessitating. The Ghana Demographic and Health Survey (GDHS) data in 2014 also stated that, hypertension affects 13% of people in Ghana between the ages of 15 and 49, regardless of gender. Hypertension is thought to be more prevalent in older age groups, though. Additionally, according to statistics from WHO (2018), there is a 50% frequency in some Ghanaian demographic subgroups (Konkor et al., 2023).In According to another study, the prevalence of chronic non-communicable diseases (CNCDs) has reached epidemic levels. According to estimates, CNCDs are to responsibility for 43% of all death rate in the nation. Despite this fact, decision-makers and people still view CNCDs as a rare occurrence and as a result, do not give it the attention it requires. Amu and colleagues 2021). If current trends continue, it is predicted that NCDs would overtake all other causes of mortality in Ghana by 2030 and in Africa by 2035. Therefore, policymakers and the general public must take action to lessen the growing burden of NCDs. 2017 (Nyirenda)

2.4.1 Incidence of NCDs in Ghana

The prevalence and mortality from NCDs have reached epidemic levels in Ghana. According to estimates, over 43% of fatalities in the nation are thought to be caused by NCDs (Amu et. al., 2021). According to the WHO's 2018 estimate, over 94,000 deaths from NCDs made up 43% of all fatalities that occurred in the nation in 2016. Cardiovascular diseases were the leading cause of

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death, accounting for 19% of all fatalities, followed by cancers (5%), diabetes (3%), and chronic respiratory diseases (2%). Ghana is expected to have a 21% likelihood of early death between the ages of 30 and 70 from the major NCDs, which is higher than the global average of 18%.

2.4.2 Risk Factors in Ghana

The increased rates of major risk factors for NCDs, namely poor diet, obesity, being overweight or obese, being physically inactive, drinking alcohol, and salt use. The delivery of healthcare in Ghana is impacted by the rising incidence of NCDs and their risk factors, (Lamptey et. al., 2017). Osei et al. (2021) defined physical inactivity, high salt consumption, a lack of fruit intake, elevated blood glucose, and high relative blood pressure as the NCD's modifiable risk factors in Ghana, which agrees with Lamptey et. al. (2013). The key modifiable risk factors for these NCDs, according to Bandoh et al (2020), are the hazardous use of alcohol, physical inactivity, cigarette use, and unhealthy food. Additionally, recognized as the main causes of NCDs among Ghanaians in the adult population, these modifiable risk factors. Recently released National Policy on NCDs from the Ministry of Health (MOH) acknowledges the detrimental effects that NCD-related disabilities have on a person's mobility, participation in social activities, ability to work, and quality of life in Ghana, as well as the health infrastructure system.

2.5 Policies, Plans, Programmes and Intervention for NCDs

The mandate for action on NCDs has been further strengthened since the WHO European Strategy for the Prevention and Control of Noncommunicable Diseases and the Action Plan for the Implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012-2016 were approved. The Action Plan for the Global Prevention and Control of Noncommunicable Diseases 2013-2020 and the global monitoring framework were adopted

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following the United Nations' high-level political statement on NCDs in 2011. In addition, a set of deadline-bound obligations for reporting by 2018 were adopted at the second United Nations high-level summit in 2014. The WHO's Health 2020 European Health Policy Framework tracks the decline in premature death from NCDs in addition to being one of the Sustainable Development Goals (WHO Europe Region, 2016).,

2.5.1 Global Policies

In the Annual University College London-Lancet Global Health Lecture in April 2019, it was stated that non-communicable diseases (NCDs) should be viewed as a global emergency and that the increase of NCDs is comparable to climate change, a global emergency of unprecedented proportions. There are numerous arguments in favor of the statement. In the world, NCDs are a serious and pervasive threat to people, and they are responsible for more than 70% of all fatalities from medical conditions. Over 1 billion people around the world have high blood pressure, 800,000 people die by suicide every year, 425 million adults have diabetes, and 40% of adults are overweight or obese. All of these figures are projected to increase. According to the WHO, the Sustainable Development Goal (SDG) aim to reduce early NCD mortality by a third by 2030 would not be achieved without significant new intervention. Beyond statistics, NCDs have preventable causative elements. Human behaviour is largely to blame for NCDs, which calls for a multisectoral solution (WHO, 2019).

Unfortunately, responsible national and international policymakers have not given it much attention. It is also simple to criticize ineffective leadership and NCD-related activity. One of the most commonly ratified UN treaties, the WHO Framework Convention on Tobacco Control, is not ratified by many states, including the USA, and its impact is weakened by industry interference and inconsistent implementation. The implementation of suggested national policies for the

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prevention of NCDs is tracked by WHO's NCD Progress Monitor 2022, which reveals that progress is insufficient (WHO, 2022). There isn't a global health organization devoted just to NCDs. WHO recently downgraded the Geneva leadership position in charge of NCDs, and other global health organizations have retracted earlier statements that they were willing to engage in NCDs (Nugent, 2019).

2.5.2 African Policies in Sub-Saharan

Empirical studies conducted in Malawi, Nigeria, and Kenya have shown how health policymakers in Low-and Middle-Income Countries (LMICs) create policies despite inadequate regulatory frameworks, an overreliance on donor funding, and insufficient buying power settings and monitoring mechanisms (Mwagomba et al., 2018, Juma et al., 2018a). Policy-making for non-communicable diseases is a relatively new area of study in SSA, claim Juma et al. (2018a). However, there hasn't been much contemporary study on NCD policy formation, with the majority of the studies focusing on the development of policies for alcohol, tobacco, and nutrition. A thorough multi-country case study that included Cameroon, Malawi, South Africa, Nigeria, and Kenya with each country as a separate case study sought to describe the policy process for the development of NCD policies through key informant interviews with national policymakers in various sectors and document reviews. The extent to which these countries' NCD policies embraced the WHO's "best purchase" programs was also examined in the study.

Once more, he referred to the unequal policy-making processes in these nations, where cigarettes and alcohol received more attention while the WHO's "best buy" medicines were mostly disregarded. South Africa was the only country that was found to have made progress in the creation of nutrition strategies. The main sources of concern were identified as the availability of local data for monitoring impacts, a lack of political backing for policy implementation, and issues

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with budget allocation. Juma et al. (2018) finally looked at the creation of risk factor policies for NCDs in Kenya, South Africa, Nigeria, Cameroon, and Malawi, with a focus on the use of Multi-Sectoral Action (MSA). In a multiple-case study approach, the authors gathered information by conducting key informant interviews with policymakers and implementers as well as document reviews. In all the countries, the development of cigarette policies had a greater MSA than that of alcohol policies. The key challenges included the inability to effectively coordinate sectoral contacts, a lack of funding, ignorance of the contributions made by many sectors to the creation of NCD policy, and a lack of political will. The study came to the conclusion that in order for MSA to be more effective in Africa, there needs to be more robust coordination structures and clear norms, with an emphasis on techniques for resource generation and capacity building in NCD policy processes.

Oladepo, Oluwasanu, and Abiona (2018) evaluated the evolution of tobacco policies in Nigeria while taking into account the inclusion of the WHO's "best-buy" initiative. They learned that a comprehensive tobacco strategy was only developed in 2015, after attempts to establish one in the 1950s. The overall tobacco policy was impacted by strong multi-sectoral action and covered all WHO initiatives, despite other tobacco policies being determined to have limited MSA and WHO "best buy" methods. The biggest barriers to the policy-making process (relating to the protection of individuals from cigarette smoking to the economic contribution of the sector) were a lack of funding and conflicts of interest (Oladepo et al, 2018).

2.5.3 Policies for addressing NCD in Ghana

In the 1990s, the MOH began attempts to build a comprehensive NCD program with the Non-Communicable Diseases Control and Prevention (NCDCP) program. The NCDCP program's responsibilities include planning, lobbying, coordination, research, health promotion, the

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development of clinical guidelines, and resource mobilization. The program's main objective is to increase Ghanaians' lifespan and quality of life while lowering morbidity, complications, and disability among those who have NCDs. The NCDCP program attempts to prevent and control a number of diseases, including sickle cell anemia, cancer, chronic respiratory diseases, and heart disease. Although the majority of the financing came from other vertical programs managed by the MOH, such as the HIV, TB, and immunization programmes, among others, the NCDCP faced a serious problem because there was no money specifically set out for program delivery (Bosu, 2012).

Over the past 10 years, efforts have also been made to develop the Regenerative Health and Nutrition Program (RHNP), which was introduced by the Ministry of Health in 2005 and first implemented in 2006 (MOH, 2009). With a focus on a balanced diet, the safety and quality of food and water, an active lifestyle, as well as other factors like improving personal hygiene and environmental sanitation, the RHNP works to promote healthy lifestyles as a means of health promotion and illness prevention (GHS, 2009; MOH, 2011). The RHNP aims to engage with the local communities through outreach programs like community forums, media outreach, schools, matrons, and midwives, among others. However, according to recent reports, because the RHNP is overseen by the MOH rather than the Department of Public Health, which is responsible for putting health policies into practice, there is no coordination to assure its effective implementation (MOH, 2009). Food and Drugs Board (FDB) regulatory regulations for tobacco importers and producers also require them to register their products and use the required labeling (Owusu-Dabo et al., 2010).

In 2013, a nutrition policy was introduced. The goal of the nutrition strategy was to clearly link concerns about food security and safety to nutritional outcomes (MOH, 2013). By promoting

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breastfeeding, healthy eating, and an active lifestyle, the nutrition strategy gives the nutritional needs of expectant mothers and new moms top priority (MOH, 2013). Even though the nutrition strategy primarily focuses on a few components of nutrition, the WHO's guidelines for fruit and vegetable consumption are not mentioned. The nutrition approach, which also strongly emphasizes women and children, ignores the elderly, who have the highest risk of developing NCDs. The national alcohol policy was also created with the goal of regulating the production, promotion, and distribution of alcoholic beverages across the country. The approach aims to reduce Ghanaians' risky alcohol consumption. Raising the levy on alcoholic beverages, restricting access to and consumption of alcohol, and zealously enforcing the rules against driving while intoxicated are some of the methods used by the policy to accomplish these objectives.

Ghana has advanced significantly in the prevention, control, and management of NCDs as a result of adopting the aforementioned policy documents and strategies; nevertheless, the implementation of these programs has lagged, in part because of ineffective coordination. After earlier policy bonsu prioritize funding for NCD prevention and control. To ensure successful implementation, the NCD policy addresses primary prevention, secondary prevention, NCDs Special Concerns, as well as monitoring and evaluation measures (MOH, 2022).

2.6 Screening and Treatment

According to Sithey et al. (2021), eliminating these four behavioral risk factors will cut the burden of NCDs by more than half. Screening is the first step in identifying and treating NCDs, particularly CVDs. Despite screening being acknowledged as the entry to care, routine NCD screening at community and health institutions has historically been viewed as impractical in Africa due to a lack of capacity within health systems. As screening programs are introduced in diverse contexts and for other illnesses throughout Africa, the integration of NCD screening with

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current screening services has been suggested. However, there is a lack of knowledge in Malawi about the efficacy of screening programs for common NCDs, notably CVDs. (Jaffer et al, 2013.)

With varying degrees of effectiveness, many policies and programme efforts have been carried out. A national control programme has been established, NCDs are currently a priority for national policy, a draught tobacco control law has been prepared, public awareness campaigns on healthy lifestyles have been launched, cervical cancer screening has been implemented, and a national health insurance system has been put in place to lower the cost of chronic NCD care. The ineffective management of programmes, limited funding, lack of political interest, low level of community knowledge, high cost of medications, and lack of formal screening programmes are major obstacles. Some of the new possibilities include government funding for a widespread cancer screening program, basic and applied research, and the utilization of funds from well-funded health programs to improve the health system as a whole. In order to prevent and control chronic non-communicable diseases (NCDs), Ghana recently decided to prioritize healthy environments and lifestyles as a major health policy (Bosu, 2012). However, a lack of funding and poor governance have slowed down the effective and prompt implementation of suggested interventions.With guidance from the NCD steering committee established under the previous policy and strategic plan, the NCD Prevention and Control Programme (NCDPCP), a division of the Department of Disease and Control, has taken the lead in the programmatic effort at NCD prevention and control. The NCDPCP has consistently engaged stakeholders and partners in carrying out its mandate.

Along with the NCDPCP and the steering committee, there are other approaches already in place, including the concept of one health, collaboration with security agencies on port health, the Ministry of Education and Ghana Education Service on school health, the Ministry of Gender,

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children, and social protection on cancer, and others, all of which show an effort at intersectoral collaboration on NCD. They are intended to concentrate on primary, secondary, and tertiary NCD prevention and management. The primary level will concentrate on promoting good health, the secondary level on screening, early identification and clinical care, and the tertiary level on rehabilitation, and palliative care. The overall national health policy theme, "ensuring healthy lives for everyone," is in alignment with the strategy in addition to Ghana's Roadmap to Universal Health Coverage (2020-2030). To accomplish the primary and secondary measures (health promotion, screening, early identification, and treatment), The Wellness Clinic was implemented. (MOH, 2022). The Wellness Clinic is a separate structure from the health facilities where clients can just walk in for screening without going through the health care process in the health facility. The goal is to make it convenient for people to visit health facilities for screenings anytime. Screening done include blood pressure, blood sugar, body mass index, breast, and cervical screenings for detection of any abnormalities, possible treatment as well as complications-preventative care. The clinic is run by qualified health professionals and equipped with essential equipment including scales for weighing, blood pressure monitors, glucometers, tools for cervical screening, beds for breast screening, and other essential needs. (GNA, 2022).

No study has yet been done on Wellness Clinic since its inclusive in the 2022 NCD policy. Therefore, this study is to evaluate the implementation of the Wellness Clinic in some selected facilities in the Greater Accra Region to know if they are working as planned.

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CHAPTER THREE

3.0 RESEARCH METHOD

3.1 Introduction

This chapter presents the method of the study. It includes the following areas; the study site, the study design, the study population, sample size and sampling procedure, data collection and ethical issues. Data management, analysis and quality assurance are also included.

3.2 Study Area

This study was conducted in the Accra Metropolitan Assembly in Greater Accra Region, which has major health facilities and established wellness clinic for NCD services.

The Accra Metropolitan Assembly is located in the 'greater Accra Region'. It is among Ghana's 261 Metropolitan, Municipal and District Assembly. It was established by Legislative Instrument (LI) 2034 and has a 173 square kilometer surface area. It is situated in Ghana's southern region. Accra serves as its administrative center. La-Dale Kotopon Municipal borders the metro area on the East, Ga West Municipal, Ga Central and Ga South Municipal Assembly border it on the West. The Metropolitan Assembly and the Gulf of Guinea share a border. The Metropolitan Assembly has a population of 284, 124 persons, according to the 2021 census. There are 134,124 men and 150,079 women among them (AMA, 2021). It has one teaching hospital, three district hospitals, two polyclinics, one maternity home, and 62 CHPS zones in terms of medical facilities, 28 private hospitals, 2 CHAG and 6 quasi-government institutions. These facilities work together to provide the district with health services.

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Figure 1: Map of Accra Metropolitan Assembly

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3.3 Study Design

The study employed a sequential explanatory design thus, a mixed-method approach using in-depth qualitative interviews, a standardized survey and questionnaire in the data collection process on NCD cases presented at the clinics, the type of services offered and barriers and challenges to providing and accessing NCD care at the wellness clinics.

3.4 Study Population

The Ghana Demographic and Health Survey (GDHS) of 2014 estimated the prevalence of hypertension in Ghana at 13% for both sexes among people between the ages of 15 and 49. However, it is believed that hypertension is more common in older age groups. There have also been reports of a 50% incidence in specific Ghanaian demographic segments WHO (2018). In relation to this study, a purposive selection of facilities were done for Kaneshie Polyclinic, Ussher Hospital and Mamprobi Hospital in the Accra Metropolitan Assembly taking into consideration both male and female client above 15 years who visited the Wellness Clinic. Also included were nurses and supervisors in the Wellness Clinic.

3.5.1 Inclusive and Exclusive Criteria

Male and female patients who visited the wellness center for screening and were over 15 years old were included in the study. In addition, staff working in the Wellness Clinic; nurses and supervisors (Deputy Director of Nursing Services, Senior Nursing Officer) for the Wellness Clinic were included in the study.

Staff who work at the wellness clinic but were not available during the data collection and client who visited the wellness clinic but did consent to the study were excluded.

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3.6 Sampling Procedure

The study use purposive sampling technique to select study participants base on their availability. 6 staff were interview and given a survey to answer and 90 clients were provided a questionnaire; 30 from each facility. Purposive was suitable for the detailed examination of the comparatively small samples. When the number of cases that can contribute to a study is restricted, purposive selection especially is helpful in identifying cases that are rich in information or in making the most of a few resources.

3.7 Data Collection

First, data were gathered from facility records on the types and categories of patients with NCDs at the wellness clinics. The data were gathered from their medical records using a clinical records sheet designed purposively for this exercise.

A structured questionnaire on a phone with both open and close-ended questions was used to gather quantitative data from the selected facilities (Kaneshie Polyclinic, Mamprobi Hospital and Ussher Hospital) with a functional wellness clinic. Clients who were capable of responding on their own were allowed. Those who couldn't were given assistance filling out the questionnaire. Also, an observational checklist was used to gather data from the staff and supervisors working in the wellness on available resources used.

A face-to-face indepth interviews were conducted with staff working in the wellness clinic and supervisors of the wellness clinic. These interviews were recorded after seeking their consent. Both participants and the principal investigator agreed on a place of convenience. The interview did not last more than 30 minutes.

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To evaluate the data management on the wellness clinic, records from October 2022 to March 2023 were examined. Since only a small number of participants were questioned, the principal investigator was the only one responsible for collecting data from the healthcare facilities.

Analysis of the Data

The items on each questionnaire were serially labelled to facilitate easy identification, error-free coding, and analysis of the quantitative data following data collection. All errors, such as outliners and missing numbers, were ran through frequencies. The data gathered were analysis based on the study objectives; the NCD cases addressed at the wellness clinic, challenges/barrier client faced in the wellness clinic, available resource, funding for the wellness clinic as well as background information of respondents using computer software STATA version 16.0.

After transcribing the interviews, the qualitative data were analysed. Thematic data analysis, which includes data reduction, data display, and conclusion or data verification was employed during the analysis of the qualitative data. This was done to enable data expansion. Then, similar replies were grouped together to a common subject and given codes. The content and arrangement of the individual themes were then interpreted. However, verbatim reporting was done in cases where the respondents' actual words were required to convey meaning or underline crucial problems for in-depth interviews. Names were titles were not used in the analysis or report writing. The content and argument of the individual themes were then interpreted.

3.9 Data Storage, Safety and Ownership

Surveys and consent forms are safely stored in the principal investigator's possession. Electronically collected data is archived in the principal investigator’s email. The information is only accessible to the principal investigator, study facilities and the Metropolitan Directorate for the service.

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3.10 Ethical Consideration

The Ghana Health Ethical Review Committee (GHS- ERC NO: 023/02/23) of the Research Development Division, Accra, gave its consent and approval for the study to be carried out. Additionally, consent and approval were sought from the Ghana Health Service Regional Directorate for the study to be done in their facilities.

3.10.1 Consent Process

Participants were given a written consent form after being informed of the study's history, purpose, and goals. Written consent was only given to participants after they have agreed to take part in the study. Participants were informed of their right to withdraw from the study at any point in time without any consequences.

3.10.2 Privacy and Confidentiality

Personal information about the client was not used to identify any data. For identification, hard copies were given an ID number. The interview location depended on the convenience of both the interviewer and the participant. Information gathered is treated as totally private and confidential and will not be disclosed to anybody outside the research team. Results will be used for improvement for the intervention and study purposes.

3.11 Risk and Benefits of the Research

The study will not immediately benefit participants, but it will assist in improving the wellness clinic strategies implement in the prevention and control of non-communicable diseases in the Accra Metropolitan Assembly. Additionally, study participants won't suffer any harm.

3.12 Compensation

No payment will be made to study participants.

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3.13 Conflict of Interest

The principal investigator has no conflict of interest in conducting this research.

3.14 Results Communication

There is no plagiarism or other forms of research misconduct in the presentation of study results**.**

3.15 MONITORING AND EVALUATION ISSUES

3.15.1 Description of Program

The wellness clinic is a strategy adopted by the Ministry of Health through the Ghana Health Service to reduce NCDs through screening. To achieve the success of the wellness clinic in reducing non-communicable disease in Ghana, each person has to be involved.

The policymakers should be able to support the health facilities with funds, policies, guidelines and requirements for the establishment of the wellness clinic.

The health providers will have to ensure sensitization is done to increase awareness of the existence of the wellness clinic. Also, provide screening service for client who visit the wellness clinic, educate on the prevention of NCDs, early detection and prompt management.

This will enable the individuals to live a healthy lifestyle, visit the health facilities often for screening, adhere to medication and attend regular follow-up services.

These will help in the reduction of NCDs in Ghana.

As a new policy, there is the possibility of a few challenges so, the study evaluated the wellness clinic to know how effective it is and some of the possible challenges hindering the progress. In doing this, the appropriate method to use is the Process Evaluation.

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Figure 2: **Conceptual Framework**

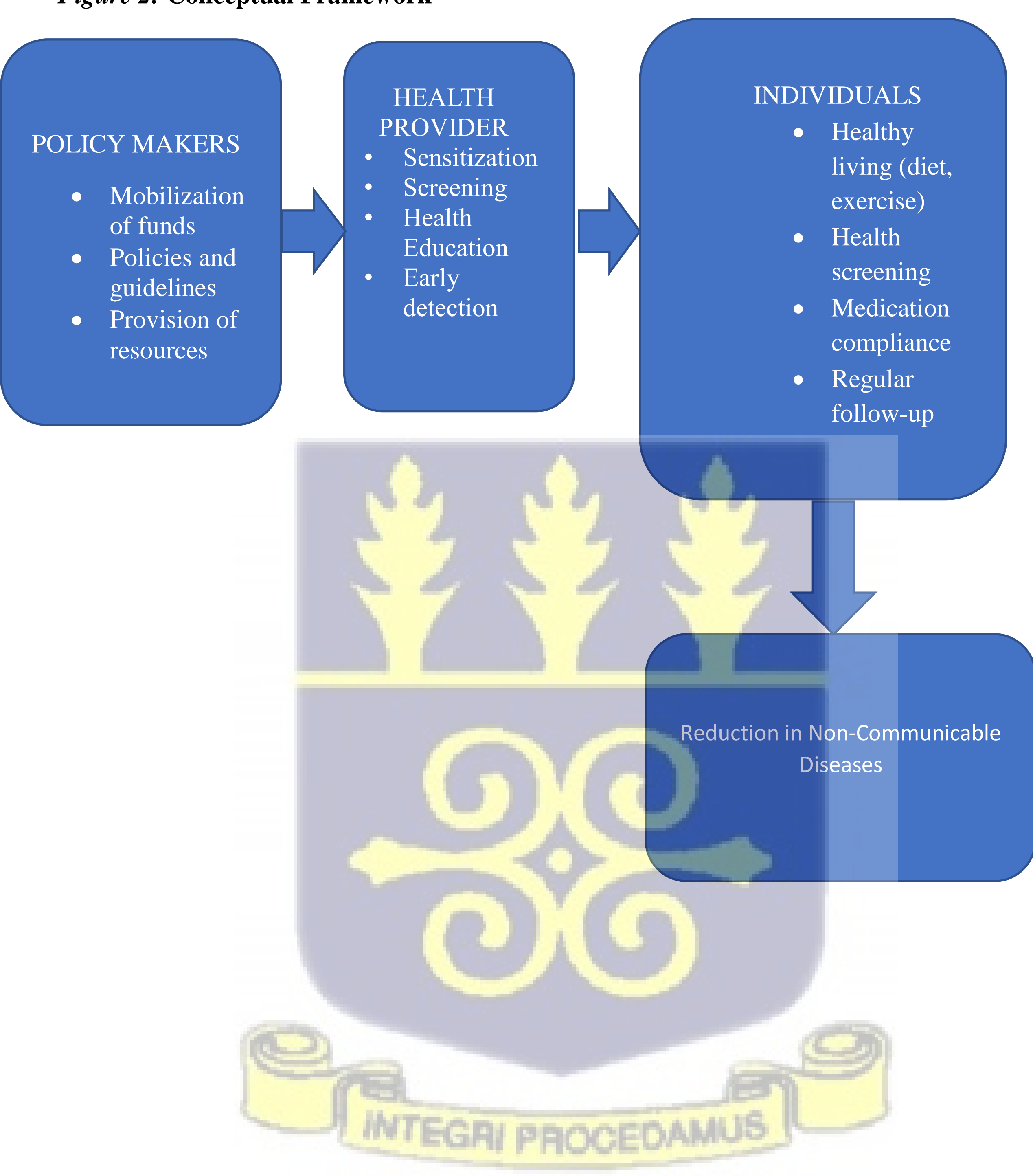

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Table 1: Logic Framework

INPUT	PROCESS	OUTPUT	OUTCOME	IMPACT
• Funds • Equipment (Registers, sphygmomanometers, thermometers, weighing scales, pulse oximeters • Staff • Policy and Guidelines • Structures	• Training of staff • Sensitization • Screening • Health promotion	• Staff trained • Well clinic sensitization done. • Service users screened • Health education given.	• Self -health screening • Knowledge on NCD • Healthy living (diet, exercise) • Medication compliance • Regular follow-up	Reducing Non-Communicable Diseases

Table 2: Definition of Indicators

OBJECTIVES	INDICATORS
1. Activities	• Checking of vital signs such as blood pressure, pulse rate, weight temperature and oxygen saturation • Checking of blood glucose • Breast screening • Pap smear test • High vaginal Swab
2. People (Human Resources)	• Availability staffs with appropriate orientation on the wellness programme • Periodic training of medical staff. • Staffs trained on data NCD collection
3. Burden	• Availability of resources needed • Availability of screening guidelines and their use. • NCD care part of NHIS packages eg. Cervical cancer and some laboratory investigations (LFT, BUE, lipid, creatinine) • Emergency services for NCD clients.

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	• Essential medicines for NCD in the Standard Treatment Guidelines (STDs) and Essential Medicine List (EML)
4. Awareness creation	• Sensitization in the community • Community involvement • Planned activities for health promotion and screening in a year • Activities held for health promotion and screening in a year
5. Challenges	• Increased funding for NCD prevention and management • Provision of equipment needed for NCD services • Data on NCDs collected and reviewed • Knowledge of clients on NCDs • Provision of support for counselling therapy to restore and enable optimum function.

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CHAPTER FIVE

5.0 RESULTS

5.1 Introduction

This chapter reports the results of the study which aimed to assess the wellness clinic in Kaneshie Polyclinic, Mamprobi Hospital and Ussher Hospital to know if they are working according to the plan of the Ghana Health Service. The study collected both qualitative and quantitative data through the use of an interview guide and questionnaire respectively. The quantitative data focused on;

- the views of service users /patients on NCD care access and the existence of the wellness clinic.

The qualitative data explored the views of staff and supervisor of the wellness clinic to;

- Understand the types and scopes of NCD services provided at the wellness clinic.
- Understand the perspective and views of the health workers and managers of the wellness clinic about the conceptual factors (barriers/challenges) associated with the implementation of the wellness clinic.

5.2 Background, Socio-demographic Characteristics of the Study Respondents.

The background characteristics of the respondents visiting the wellness clinic are shown below (Table 3). In the study, there were 90 respondents from 3 different health facilities; Kaneshie Polyclinic, Mamprobi Hospital and Ussher Hospital. 30 people representing each facility. For the age groups, those aged 40 and above were the majority of people who visited the wellness clinic 56.7%. Out of that; 13, 15 and 23 participants were from Kaneshie Polyclinic, Mamprobi Hospital and Ussher Hospital respectively. Again, participants were mostly females in all the facilities. The number of

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respondents from Kaneshie Polyclinic were 20, Mamprobi Hospital 19 and Ussher Hospital 18 which totalled 63.3%.

In terms of educational achievement, the majority 38 (42.2%) of respondents attended school up until JHS in the 3 facilities while a few of them; 9 (10%) had no education. Christian respondents made up the vast majority of all respondents 79 (87.8%), 27 participants are from Kaneshie, 24 were from Mamprobi Hospital were d 28 from Ussher Hospital. For employment, 66 (73.3%) of all the people who visited the wellness clinic at the 3 health facilities were employed, 1 (1.1%) was a student, and the others were not working. Half of the 90 individuals, were married or cohabiting, 5.5% (2) were widows, 27.8% (15) had never been married, and the other individuals were devoiced. 82% have valid health insurance that supports them in terms of health financing. 35 people, 38.9%, were Ga Dangme. Akans were 34 (37.8%), and others were 14 (15.5%). Even though 83.3% of the participants, 24 from Kaneshie Polyclinic, 26 from Mamprobi Hospital and 25 from Ussher Hospital claimed they have not heard of the wellness clinic, 16.3% 6, 4 and 5 participants from Kaneshie Polyclinic, Mamprobi Hospital and Ussher Hospital respectively said they are aware of its existence. The health facility is the major place as their source of information. When the purpose of the visit enquires, 55.6% of the total respondents in all the 3 facilities said they care for screening.

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Table 3: Demographic characteristics of the study participants

Characteristics	Kaneshie polyclinic	Mamprobi hospital	Ussher hospital	Total	frequency(%
Age group					
20-25	4	5	1	10	11.1
26-30	6	2	2	10	11.1
31-35	3	6	4	13	14.4
36-40	4	2	0	6	6.7
>40	13	15	23	51	56.7
Total	30	30	30	90	100
Sex					
Female	20	19	18	57	63.3
Male	10	11	12	33	36.7
Total	30	30	30	90	100
Marital status					
Never married	10	9	6	25	27.8
Married/cohabiting	17	14	14	45	50
Divorced	2	5	8	15	16.7
Widow	1	2	2	5	5.5
Total	30	30	30	90	100
Ethnic group					
Akan	22	5	8	35	38.9
Ewe	1	8	2	11	12.2
Ga / Dangme	3	9	18	30	33.3
Other	4	8	2	14	15.5
Total	30	30	30	90	100
Religion					
Christian	27	24	28	79	87.8
Moslem	3	6	2	11	12.2
Total	30	30	30	90	100
Education					

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Non	2	4	3	9	10
Primary	0	5	4	9	10
JHS	15	9	14	38	42.2
SHS	9	9	7	25	27.8
Tertiary	4	3	2	9	10
Total	30	30	30	90	100
Occupation					
Employed	23	22	21	66	73.3
Unemployed	7	8	8	23	25.6
Student	0	0	1	1	1.1
Total	30	30	30	90	100
Awareness of wellness clinic					
No	24	26	25	75	83.3
Yes	6	4	5	15	16.7
Source of information on wellness clinic					
Health facility	3	2	7	12	80
media	1	1	1	3	20
Purpose of Visit					
Screening	18	21	11	50	55.6
Check blood pressure	8	6	10	24	26.6
Check glucose	0	2	6	8	8.9
Others	4	1	3	8	8.9
Total	30	30	30	90	100
Has NHIS					
Yes	28	27	27	82	91.1
No	2	3	3	8	8.9
Total	30	30	30	90	100

5.2.1 NCD clients who visited the at the wellness clinics

The study also assessed NCD cases that visited the 3 health facilities. Analysis of the results is captured in Table 4 below. The results indicate that Diabetes and hypertension are the main NCD services provided in the 3 wellness clinics thus, not all the NCD services are provided. The most common one is hypertension which also signifies that, hypertension is the highest NCD in the facilities. In all. Out of that, hypertensive cases recorded were 9 in each of the health facilities.

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Only I mental disorder was recorded in Ussher Hospital. 6 participants from Ussher Hospital and 2 from Mamprobi Hospital had both hypertensive and diabetes. The rest were diabetics. Again, females represented the majority of NCD participants who visited the wellness clinic in all the facilities. 88.2 % from Ussher, 77.8% from Kaneshie Polyclinic and 91.7% from Mamprobi Hospital. This indicates that, females have more positive health seeking behaviors than men. Finally, in terms of age group, most of them are age 40 years and above in all the 3 facilities. Even though age 26-30 years recorded NCD, the findings show that, advance age is one of the key risk factors in NCD.

Table 4: NCD clients who visited the wellness clinics

		Diabetes	Hypertension	Diabetes and Hypertension	Mental Disorder	Total (%)
Ussher Hospital	Age					
	31-35	0	1	0	0	5.9
	36-40	0	1	0	0	5.9
	>40	1	7	6	1	88.2
	Total	1	9	6	1	100
	Total (%)	5.9	53	35.2	5.9	100
	SEX					
	Male	0	2	0	0	11.8
	Female	1	7	6	1	88.2
	Total	1	9	6	1	100

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KANESHIE POLYCLINIC	**AGE**					
	26-30	0	1	0	0	11.1
	31-35	0	0	0	0	0
	36-40	0	1	0	0	11.1
	>40	0	7	0	0	77.8
	Total	0	9	0	0	100
	Total (%)	0	100	0	0	100
	SEX					
	Male	0	2	0	0	22.2
	Female	0	7	0	0	77.8
	Total	0	9	0	0	100
MAMPROBI HOSPITAL	**AGE**					
	26-30	0	1	0	0	8.3
	31-35	0	0	0	0	0
	36-40	0	1	0	0	8.3
	>40	1	7	2	0	83.3
	Total	1	9	2	0	99.9
	Total (%)	8.3	75	16.7	0	100
	SEX					
	Male	1	0	0	0	8.3

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Female	0	9	2	0	91.7
Total	1	9	2	0	100

5.2.2 Clients' access to NCD care and Challenges

Table 5 reports on NCD care, treatment and challenges in the wellness clinic. Participants were asked if they paid for the services at the wellness clinic. 28 (73.3%) said they did not pay and 10 (26.3%) said they paid for the blood glucose check. Whilst the majority of the participant 12 (31.6%) reported they use their NHIS to support NCD services (drugs and laboratory investigations) 10 (26.3%) also said the healthcare worker sometimes prescribe for them to buy. 7 (18.4%) mentioned that they only purchase it themselves when the NHIS expires. There were other people 4 (10.5%) who think the laboratory investigations and medications are expensive and as a result, they have decided to stop the medication. Again, the majority 17 (44.7%) of the NCD participants think the laboratory investigations are expensive. From participants, they neither have challenges with coming into the health facilities nor care or receiving NCD care from the health facilities. This depicts that, screening in the wellness clinic is not totally free. Clients who do not have money cannot benefit from all the NCD services provided. In a way, wellness services are limited. The NHIS supports NCD treatment though but the most expensive ones (the labs) are been paid out of pocket. This has made it impossible for some client to continue with NCD care. In all, They testify that, they do not have challenges in access NCD services in the health facilities.

Table 5 Clients' access to NCD care and Challenges

Characteristic	Frequency	Percentage (%)
Payment after screening at the wellness clinic		
I was not charged	28	73.7
I paid 10gh for the sugar	10	26.3

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Test		
Total	38	100
Payment of other NCD services		
I only pay when my insurance expires	7	18.4
They sometimes write drugs for me to buy	10	26.3
I always use the NHIS	12	31.6
Yes, because of the price, I stop taking the medication	4	10.5
I pay for labs	5	13.2
Total	38	100
Cost of treatment		
Not so much	6	15.8
Is affordable	11	29
Is expensive	4	10.5
Is the labs that are expensive	17	44.7
Total	38	100
The challenge in coming to the hospital for NCD services		
No	38	100
Difficulty in accessing NCD care in the facility		
No	100	100

5.3 Types and scopes of NCDs services provided by healthcare providers at the wellness clinic

The study qualitatively interviewed the health care providers at the wellness clinics about the nature and scope of NCD services provided and these were categorized into four major themes namely a) provide education and information about NCDs to the public, b) screening for NCDs,

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c) check blood pressure and blood glucose of community members and d) make referrals to complex NCDs conditions.

5.3.1 Education

Patient education was one of the major services offered by the health care providers. Education is an essential component in the general practice of the management of chronic NCDs. It ensures that patients adhere to management practices to improve their health. Education on NCDs mainly centres on the need to exercise, better medication-taking behaviour, good nutrition and the need to stop taking alcohol.

> *We do educate them and we also do the screening for them, thus the sugar, we screen to know their sugar level and also we check the BP level to know whether it is high or low and we give them the appropriate education. We also educate them on the importance of adhering to their routine medication* ***(Staff female)****.*

> *We give education to the clients; we educate them on how to live healthy, that is, exercise, eat good food, drinks and how to take their drugs* ***(SNO Supervisor, female).***

5.3.2 Screening

Participants indicated that they perform screening for people who visit the clinic. Screening is done to detect the early onset of diseases and also identify the presence of diseases.

In this study, health professionals indicated the various activities they perform at the wellness clinic. The services provided to clients are general irrespective of the condition they present at the facility. These services are necessary to manage the condition to improve the general well-being of the clients. In this study, the services provided were mainly related to general assessments of patients on their conditions. These were mainly done to check their vital signs, including

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temperature, blood pressure, pulse, weight, height, body mass index and blood glucose. recording of their registers. Some of the services indicated include:

Here at the wellness clinic, we check vitals such as blood pressure, temperature, pulse…. We check sugar too; FBS and RBS ***(Staff Nurse female).***

In the wellness clinic, we check……We check the height, weight, and also do BMI and counselling. ***(DDNS Supervisor females).***

Per the NCD policy document, the wellness clinic is supposed to do all forms of screening which include checking blood pressure, blood glucose, weight and height for body mass index, breast, cervical, eye, mental health illness, and HIV among others but the analysis shows that limited services are offered at all the wellness clinics in the 3 facilities visited and this can affect the purpose of the wellness clinic. See the quotes below;

No, we don't do. As I said, for now the room is too small and we can't invite a lot of people in. Ideally, when they come to wellness, they are supposed to do eye testing, basic ENT testing and they are also supposed to do TB tests, HIV test, breast screening and all that ***(DDNS Supervisor, female).***

According to one of the supervisors at the wellness clinic, even though they don't provide all the services required by policy, they can provide one of the most important NCD services in their wellness clinic, which is screening for cardiovascular diseases. According to her, cardiovascular diseases was ranked as the leading cause of death in Greater Accra during the annual review in 2022 and so, if they are able to provide that service for that, then they are doing well.

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We don't provide all but we know that from last year, the annual review of Greater Accra Region, the first cause of death has to do with cardiovascular disease which we are screening at our wellness clinic so I think we are doing well and is free and the staffs here are also people who work in other department and so we cannot get the screening for all the NCDs but we are starting from somewhere and we are hoping to expand ***(SNO Supervisor female)****.*

5.3.3 Community and outreach services

Health workers not only provide services at the health facility (wellness clinic) but extends this to the community as well. This is important to help identify people at risk of developing NCDs who cannot visit the facility.

For NCD in our wellness clinic, for the facility one, we do screening for BMI, we do that for hypertension and diabetes but for the community one, we do that for hypertension, diabetes, and breast cancer screening ***(DDNS Supervisor, female)****.*

5.3.4 Referral

Referral is mainly done due to the constraints of resources and the lack of skills and experiences of staff to manage complicated cases. More often, patients are referred to a higher level when healthcare providers at the lower level cannot manage the case. A nurse accounted that:

We check bp, we check glucose and in case we detect something which is high, we do some referrals, we enter into our books ***(Staff Nurse, female).***

INTEGRI PROCEDAMUS

5.4 Management and organization of the wellness clinics

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The study collected data on the human resource capacity at the wellness clinics and the funding allocated to manage the facilities. Table 6 presents an overview of the health workforce for each of the facilities. In terms of funding, in-depth interviews with the staff found that show of the facilities provide outpatient services in the wellness clinic and 1 facility provides both inpatient and outpatient care. Only nurses are assigned to the wellness clinic in all the facilities. The facilities have 1 nurse, 2 nurses and 3 nurses respectively. Out of that, 2 (33.3%) are enrolled nurses and the rest are one midwife, staff nurses and a community mental health nurse. This means there is no special trained personnel in all the wellness clinics. 2 (66.7%) facilities said they use the internally generated fund (IGF) to manage the wellness clinic and the other said they rely on both internally generated funds and donations. 66.7% mentioned that they budget for the wellness clinic and raise funds for it. The facilities are solely responsible for the wellness clinics. All the facilities have registers that they use for data entry. Again, they all said they compile their reports monthly but only 1 (33.3%) of the facilities enter on the District Health Information Management System. (DHIMS). The data entry is done by the Health Information Officer.

Table 6: Human resource capacity and funding for the wellness clinics

Characteristic	Kaneshie	Mamprobi	Ussher	Total (%)
Type of health care provider				
Doctor	0	0	0	0
Nurse	0	1	1	25
Midwife	1	0	0	25
Enrolled nurse	2	1	0	50
Total	3	2	1	100
Funding				
IGF	1	1	1	42.9
NHIS	0	0	1	14.3
Donations	1	0	0	14.3

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Out-of-pocket payment	0	1	1	28.5
Total	2	2	3	100
Budgeting				
Yes	1	1	0	66.7
No	1	0	0	33.3
Total	2	1	0	100
Fundraising				
Yes	1	0	0	33.3
No	0	1	1	66.7
Total	1	1	1	99.9
Data collection register				
Yes	1	1	1	Total
No of times report is compiled				
Monthly	1	1	1	100
Designated person for data entry?				
Yes	0	1	0	33.3
No	1	0	1	66.7
Total	1	1	1	100
Responsible person for data entry				
Data manager	0	1	0	100

5.5 Challenges / Barriers in the wellness clinic

5.5.1 Lack of understanding of the wellness clinic

INTEGRI PROCEDAMUS

A good understanding of the services provided at the clinic is important to encourage people to visit the clinic. It is necessary that people become aware of the services as well as the importance of the services provided at the clinic. For example, the education, counselling and screening

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services need to be well explained to people. Poor understanding will increase unwillingness to patronage the services. The health care worker accounted that:

Some of our clients don't know or understand why they should come for the screening when they are not ill but we have been trying our best to educate them ***(DDNS Supervisor female).***

You have to talk to them before they come and check the bp. They will tell you, if they don't know what is going on with them, they don't have a problem with it but when they check and is high, it will be giving them problems. They will be thinking about it. So, you have to convince them before they come; especially the men. You have to convince them before they will come and check ***(Senior Mental Health Nurse, female).***

5.5.2 Lack of Private space

Patient privacy is one of the important components of patient care. It entails several aspects including personal space (physical privacy), personal information and personal choices. In all circumstances, healthcare professionals must make every effort to respect patient's privacy. Health workers need to be mindful that certain patients may have unique privacy issues in their quest to seek care. Lack of Privacy was seen as a challenge in accessing care at the wellness clinic.

The place (wellness clinic) is an open area, so whenever people are passing by, they see everything that is happening; we have equipment to use but that there is no privacy for patients ***(Staff nurse, female).***

5.5.3 Lack of spacious working area

According to the DDNS in one of the facilities, the room allocated to the wellness clinic is very small as a result, they are unable to attend to more than one client at a time. This can result in a

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delay in receiving health care. Again, it makes it very difficult for health workers to move between patients to deliver care. This serves as an uncomfortable environment for clients and underscores the quality of services provided.

We have a small room that's a very big challenge for us and because of that, you can't see more than two people at a time. You have to see one person at a time, the other person leaves before another one ***(DDNS Supervisor female).***

5.5.4 The absence of protocols.

The purpose of protocols is to provide a collection of guidelines that explain the proper conduct and procures to be followed in formal settings. According to the facilities, they do have these protocols. They only rely on the knowledge they have as nurses to provide health care services and that is the challenge for them. Lack of protocol reduces the effectiveness and efficiency of the service provided. The health workers relying on their ideas to practice can lead to inadequate service delivery.

the absence of the protocol is what I will say is a greater challenge. ***(Senior Mental Health Nurse female)***

5.5.5 Community involvement

Community involvement is an important factor to consider in the management of the wellness clinic. Stakeholders' involvement makes the community accept the project as their own and fully support it. Unfortunately, when they are not given money at the end of the previous meeting, they reportedly refused to attend the following organized sessions. This could impede the wellness clinic's advancement.

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Mary, they rather want it from us. When you organize a community durbar and you don't give them money, the next time you organize, they won't come. The stakeholder, the assemblymen, the market queens and other reps. If you organize and you don't give them money; something like their TnT, the next time, they will not come ***(DDNS, Supervisor female).***

One facility is privileged. From the DDNS they get support from the surrounding banks, industries, members of Parliament in the Okaikoi South and the market women during their outreaches. They just give them a letter prior to the wellness outreach days they just come in and support. The market women mobilize the people and the banks and industries sponsors.

*So, the MP is involved, the banks are also involved, you know we live in an industrial area so they are also involved. Normally they are involved in a way and a way our market women, we round and they also go around to organize the market women when we are having the program in the market. the market women themselves, the leaders organize clients for us to work on and for sponsorship we also include the bank just as I said, the industries. So, they sponsorship they sponsor our wellness clinics. We send letters around and they come. Others take the opportunity to air their product during that time so they sponsor, basically, they do. (**DDNS Supervisor, Female**)*

5.6 Limited staff capacity.

From the findings in Table 6, there are only a few nurses allocated to the wellness clinics in each of the three facilities. No doctor nor NCD specialist is assigned. Also, from the interview (stated below), no official training on wellness clinics has been given to the nurses allocated, according to staff and their supervisors. The training can give them the requisite knowledge and skill to have the competency to give quality care to NCD cases that visits the wellness clinic. Therefore, the absence can lead to poor service provision.

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So far there hasn't been any national training or staff training on wellness clinic. Normally, we take it upon ourselves to train them on what to do but organizing workshop for them, I haven't seen that. So, it all balls down on us. What we know already. ***(DDNS Supervisor, Female)***

Before we started, we all met here and I orientated them for wellness clinic and for now this is what we can do because our room is too small this is what we can do we here, this is time we will come to work and this is how we are going to handle emergencies. So, we discussed it. ***(DDNS Supervisor, Female)***

5.7 Inadequate resources and capacities

Resources are very important in health caregiving. As a result, it is expected that every department including the wellness clinic will have adequate services delivery. According the staffs and supervisors in the wellness clinic, even though they have some resources to work with, some said what they are not enough. They only have one for each service therefore if there is a breakdown, they have to be repairing over and over again and sometimes rely on other unit which is not helping. This situation can interrupt with the delivery in the wellness clinic.

Is never enough, we need more. Now we have one, so I breakdown, we have to send it for repairs continues, we have to fall on other units, and then the faulty ones. Probably, if we get more than 2, so that in case one breaks down, we can easily change over. And then, with the BMI thing, you know, there is a scale for checking them and we don't have so we use the normal one and we translate it. Those are the problems. ***(DDNS Supervisor, wellness clinic)***

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CHAPTER SIX

6.0 DISCUSSION

6.1 Introduction

The study sought to evaluate the Wellness Clinics in 3 selected facilities (Kaneshie Polyclinic, Mamprobi Hospital and Ussher Hospital) in the Greater Accra Region to determine its effectiveness. It highlights the results of baseline assessments targeting on; categories of NCD cases presented at the GHS Wellness clinic, types and scopes of NCD services provided at the wellness clinic, **the views of service users on NCD care access (challenges and barriers) at the wellness clinic and the perspective and views of the health workers and managers on the barriers/challenges affecting the implementation of the wellness clinics.**

6.2 Overview of findings in relation to previous literature

Diabetes, cancer, chronic respiratory conditions, and cardiovascular illnesses are among the most common non-communicable diseases in low- and middle-income nations. Due to their increasing incidence and role in causing early mortality, they have grown to be a major concern (Jailobaeva et al., 2021). This is why the wellness clinic has been adopted as a primary health care strategy to help reduced NCD in Ghana. As part of the objectives of this study, it soughed to know the NCD services rendered in the study facilities to know if they are really working according to standard. From the findings, although, the facilities have active Wellness Clinics, they do not operate as intended. Kaneshie Polyclinic solely offers hypertensive services and the two other Health Care Institutions provide services for both diabetes and hypertension. As a result, the Wellness Clinic is unable to fulfil its obligations under the NCD policy because the services are incomplete. This is similar to a study done by Mudie et al. where Only hypertension, diabetes, and obesity were the statistics that were currently accessible for NDC services (Mudie, Jin, Kendall, et al., 2019). The

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above is an indication that, the health facilities mostly focus on hypertension and diabetes leaving the rest out. This can result in the inability to achieve the aim of reducing all non-communicable diseases as planned.

Again, one of the challenges mentioned by the health provider was, only a few nurses are allocated to the Wellness Clinics in all the three facilities. No official training nor protocols on Wellness Clinic were given. The staff rely on their existing knowledge on NCD to manage clients. This outcome is not different from the study done by Juma et al. (2018) which also identified the lack of resources and lack of knowledge about the role played by different sectors in the development of NCD policy as the main obstacles in addressing NCDs. This can be an evidence that, NCD is not actually RECEIVING the necessary attention and backing needed as perceived.

Another common challenge faced by all the three health facilities is lack of support from the policy makers. According to the managers, they use the internally generated funds (IGF) to maintain the Wellness Clinic. Only Kaneshie Polyclinic mentioned that they receive some donations from surrounding industries during their wellness outreaches. The IGF obviously is not so much to fund the Wellness Clinic as stated by one of the supervisors. This result is in line with another study which states that, "NCD care appears to be the most neglected aspect of the PHC sector as comprehensive NCD care is omitted from the Minimum Package of Health Services that will be funded by the Basic Health Care Provision Fund. This may partly be due to the fact that the WHO was established to align with Millennium Development Goals which largely omitted NCDs as it was perceived to contribute towards a proportionately smaller burden of disease at that time. It may also be because most government and development partners' interventions to strengthen PHC are focused mainly on maternal, child and reproductive health as well as infectious diseases still aligning with the primary reason for establishing PHC systems especially in the 1980s" (Haque et

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al., 2020). Oladepo et al also indicated similar barrier in their 2018 study which stated that, insufficient finance and conflicts of interest were the main obstacles to the policy-making process (regarding the protection of people from tobacco smoke to the economic contribution of the industry) (Oladepo et al, 2018). Even though the National Policy on NCD 2022, which was recently introduced, aims to prioritize funding for NCD prevention and control in Ghana after earlier policy implementations, the Wellness Clinic still faces financial challenges.

Again, NCD clients who mostly visit the wellness clinic are those with hypertension and diabetes from the findings. The only service that they receive free is checking of blood pressure. Clients have to pay for glucose tests because the facilities cannot offer it free. Therefore, even if a diabetic client enters the wellness clinic and has no money, they can only access blood pressure and not random/fasting blood sugar test. In addition, when any abnormality is detected, client pay for requested laboratory investigations and scans. NCD clients without health insurance nor funds are unable to receive totally care based on the study. Form this, we can we can say that, the Wellness Clinic is not very free as perceived. If an average client is encouraged to access the wellness clinic free and will later have to pay these amounts of money, coming back will obviously be a challenge and they will end up coming in deteriorative state. This is no different from what was said in Kamvura et al study. Systematic institutional issues, such as poor policy execution, inadequate community participation, limited access to, and poorly integrated NCD care, have also had an impact on the integration of NCDs management into primary health care. At the patient level, obstacles including perceived risk, fear, a lack of motivation, anxiety, price, and hopelessness have a detrimental impact on how often patients use the services that are already available. (Kamvura and others, 2022). Although consumers acknowledged that the wellness clinic was easily accessible, they also acknowledged that the expense of other related services presented a challenge.

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Based on the study, most of the client have not heard of the wellness clinic. This means, public needs to be sensitized on the importance of the Wellness Clinic. The study findings show that sensitization is actually done in all the 3 facilities. According to the providers and managers, sensitization is done daily to caregivers who bring their relatives to the facility. Also, is done in the communities before every wellness outreach is organized yet, staffs and supervisors of the Wellness Clinic think there is a lack of understanding of the Wellness Clinic among the community members. This denotes that, wellness clinic sensitization is not sufficient. Other areas like the media, community forums, schools, public gatherings, churches among others can be involved to intensify the sensitization to increase the awareness of the existence of the Wellness Clinic as the MOH proposed in 2022.

Some facilities have come out with strategies to reach out to the members with NCDs in the community since is difficult getting them at the facility level. Mamprobi and Ussher hospitals lunched involvement of the community nurses. As part of their work, they will be checking blood pressure and glucose level to identify the NCD cases living in the communities.

Finally, only Mamprobi Hospital enter data on DHIMS2. This make it impossible for effective monitoring and evaluation of NCD in the Wellness Clinic. Again, since the fight against the burden of NCD is worldwide, there should be a monitoring tool to assess the performance and know the impact of the implementation of the Wellness Clinic by the country. This in relation to an NCD study done in Kenya, South Africa, Nigeria, Cameroon, and Malawi. Based on their findings, the only nation that was determined to have achieved progress in the formulation of nutrition strategies was South Africa and this was because of the availability of local information for monitoring impacts (Juma et al. 2018).

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CHAPTER SEVEN

7.0 CONCLUSION AND RECOMMENDATIONS

Throughout the study, comparatively among the 3 facilities indicates that, the wellness clinic is not well established as planned. Findings specifies that, the health facilities were given directive to start the clinic without any support. The health facilities lacks support yet, they are putting in much effort to ensure that daily activities in the wellness clinic are done to achieve its aim. Even though, the health facilities are operating the wellness clinic, there are some key areas that need to be worked on to enable it function effectively.

7.1 Conclusion

- **Awareness on Wellness Clinic**

  The Wellness Clinic serves as a preventive strategy for NCDs. Clients are to walk in for screening, healthy lifestyle promotion and early detection of NCDs to prevent complications. On the contrary, majority of the client who received care from the Wellness Clinic are caregivers (people whose relatives are on admission). The nurses go round every morning to educate them to access the Wellness Clinic. This means those who do not visit the Health Facilities lack the awareness of the Wellness Clinic. Even though sensitization is done by the Health Facilities with their Van during community outreaches, that alone is not enough for most people to know about the existence of the Wellness Clinic. This can lead to the Wellness Clinic not achieving its purpose.

- **Funding in the Wellness Clinic**

  All the 3 facilities stated that, they use their internally generated fund to support their static (walk-in) Wellness Clinics. These monies are obviously not enough and from the interview, it was mentioned that, the NHIS payment is a challenge. Therefore, there no

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enough funds to running the programme effectively and this can result in poor progress of the Wellness Clinic.

- **Inadequate support from the policymakers**

  From the study, the Wellness Clinic is not getting the required support as expected. Perhaps, because the wellness clinic don't provide enough revenue to support the facilities. The Facility Heads were tasked to set up a Wellness Clinic in their health facilities without any orientation. They are operating based on their knowledge and capabilities. This can lead to diverse ways of rendering service in the wellness clinic and affect the progress as well.

- **Limited services and inadequate resources in the Wellness Clinic** The Wellness Clinic in all the health facilities only provides hypertension and diabetes services. Other service like breast screening, cervical screening and mental disorder among others are not done because of inadequate space and non-availability of needed resource. Even with the services provided, it is not totally free as the programme stated. The clients pay for the glucose strips because the health facility cannot afford. People who do not have money cannot be screened and the facilities will end up missing lots of pre-diabetic cases even though they come to the wellness clinic for screening. The purpose of reducing NCDs might not be achieved even though the Wellness Clinic is actively operating (the burden of Diabetes will keep increasing).

- **Monitoring of the Wellness Clinic**

  Majority of the health facilities do not enter data on the DHIMS2. Without this, it will be impossible for the performance of Wellness Clinic to be tracked and evaluated by the

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district and national levels. The facilities might not attach so much seriousness and can lead to the collapse of the Wellness Clinic.

7.2 Recommendations

7.2.1 Recommendation for policies

- Policy makers should involve the media (television, radio, social media, new papers) information centers and other public gatherings to increase awareness. Lot of people use these instruments more as their source of information. Educating people through this means will help people understand the need to walk into the Wellness Clinic for screening. This can help the Wellness Clinic to achieve its purpose.
- Again, policy makers should try and raise funds to support the Wellness Clinic. For NCD, concentration is more on the curative than the preventive. Lots of money goes into curative as compared to the preventive per the study thus, curative is more expensive. Therefore, if more investment is made into the preventive, lots of money will be saved to support other projects in the country.
- Policy makers should integrate the NHIS into the Wellness Clinic to cover some services like glucose testing and cervical screening. This will also help people to patronize the Wellness Clinic.

7.2.2 Recommendation for Practice

- The community leaders should support the health care workers to reach the community members though mobilization to help the Wellness Clinic work effectively.
- Facility managers should insist on training of staffs in the Wellness Clinic and protocols for staff assigned to the Wellness Clinic to enable them render quality care.

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- Staff should educate client to understand the burden of NCDs and the effect it can have on them, the community and the nation.

7.2.3 Recommendation for future research

- Since only 3 facilities in Accra Metropolitan were examined, further research on the Wellness Clinic can be conducted to back up this study.

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APPENDIX I: QUESTIONNAIRE

My name is Mary Sissuh, am working with a research team from the Health Policy Planning and Management department in university of Ghana. the research is a Master's thesis that seeks evaluating the Ghana Health Service Wellness Clinic in the prevention and control on non-communicable diseases in selected facilities in Greater Accra.

This is hoped to provide information on the effectiveness, availability of the needed resources, identify the challenges and provide possible recommendations to help strengthening the wellness clinics in Greater Accra.

We assure you that any information collected will be kept confidential. Findings from this research will be analyzed anonymously and published in a research Journal without any identification if possible. Importantly, no personal or identifiable information will be present in the research findings. The questionnaire will ask about the state of the non-communicable diseases including how it was acquired, diagnosed, and how you manage and cope with the disease and your lifestyle. Also, your knowledge on wellness clinic, how you heard about it and the care given at the unit will be needeed to help in given quality of care.

This questionnaire is expected to last for about 15 minutes and will be conducted in a language you understand. You are free to ask for any clarification about this research. Your response to each question is voluntary (you are not obliged to answer all questions) and you are free to pause or withdraw from the interview at any point without explanation. We assure you that your withdrawal will not affect the treatment or benefit you receive at the health facility. Thank you for your time and support for this research

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SECTION A: SOCIO- DEMOGRAPHIC CHARACTERISTICS

Kindly circle the number corresponding to the responses where appropriate

I.	Sex of participant	Male Female	1 2
II.	What is your age (years) at your last birthday?	Age in years ________	
III.	What is your marital status?	Never married Married/Cohabiting Divorced/Separated Widowed	1 2 3 4
IV.	Which ethnic group do you belong to?	Akan Ga/Dangme Ewe Guan Mole-Dagbani Other (Specify)	1 2 3 4 5 6
V.	What is your religion?	Christian Muslim Traditional Other (Specify) None	1 2 3 4 5
VI.	What is your current educational qualification?	None Primary JHS SHS Tertiary	1 2 3 4 5
VII.	What is your occupation?	Employed Unemployed Student Other, (specify)	1 2 3 4
VIII.	Do you have Health Insurance?	Yes No	1 2
IX.	Do you own a mobile phone?	Yes No	1 2
X.	Are you currently ill?	Yes No	1 2
XI.	If yes, what do you think is wrong with you?	…………………….	

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SECTION B – NCD AND OTHER CHARACTERISTICS ASSESSMENT

Question	Response	Code
1. Have you heard of NCDs?	Yes No	1 2
2. If yes, where did you hear it from?	……………………………………… ……………………………………… ……………………………………… ……………………………………..	
3. Do you have any NCD?	Yes No	1 2
4. Which NCD do you have?	Hypertension Diabetes Cancer Asthma Chronic lung diseases Mental health Other (specify)……………………	1 2 3 4 5
5. At what age were you diagnosed of NCD?	....	
6. Where were you diagnosed of NCD	In this facility Another facility	1 2
7. Are you on medication?	Yes No	1 2
8. How long have you been on NCD treatment?	In Months ________ In Years__________ Don't remember …….	1 2 3
9. Do you have difficulty in assessing NCD care	Yes No	1 2
10. Is the NCD treatment costly?	Yes No	1 2
11. Apart from NCD, are you taking any other medication to treat?	Yes No	1 2
12. Have you ever used traditional therapies for treatment?	Yes No	1 2
13. Have you missed any NCD dose in the last 30 days?	Yes No	1 2
14. If yes, what was the cause?	……………	
15. Have you ever had any side effect of NCD medications?	Yes No Don't know	1 2 3

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16. Do you know of any family member who has or had?	Yes No Don't know	1 2 3
17. If yes please specify.	………………….	
18. Is your family aware of your condition?	Yes No	1 2
19. If yes, to whom?	…………..	
20. How do you currently perceive your health status since initiation of NCD medications.	Worse ……………… Stable ……………… Better ………………	1 2 3
21. Do you exercise?	Yes No	1 2
22. If yes, how often?		
23. Do like fruits and vegetable?	Yes No	1 2
24. How often do you eat them	Yes No	1 2
25. How many hours do normally sleep in a day?	…………………………	
26. Do you currently take Alcohol?	Yes No	1 2
27. Have you ever taken alcohol?	Yes No	1 2
28. Do you currently smoke?	Yes No	1 2
29. Have you ever smoked?	Yes No	1 2
30. Have you ever or recently experienced any illness in the mind?	Yes No	1 2
31. If yes, pls specify	…………………….	

SECTION C- KNOWLEDGE ON WELLNESS CLINIC AND CARE GIVEN

1. Have you heard of wellness clinic	Yes No	1 2
2. If yes, how did you know about it?	Health facility Van announcement Media Others (Specify)……………………	1 2 3 4
3. What is your purpose of visiting the wellness clinic?	Screening Enquires Others (specify)…………..	1 2 3

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4. Did you get the required care in the unit?	Yes No	1 2
5. If no, what was the reason given?	Unavailability Lack of staff Others (specify)…………….	1 2 3
6. Were you sent to other unit to continue the care?	Yes No	1 2
7. Were you given any education on NCDs.	Yes No	1 2
8. If yes, can you please mention some of the education given?		
9. Were you satisfied with the care given?	Yes No	1 2
10. Did you had any challenge in the care given?	Yes No	1 2
11. Please state if there was any.	……………………………………………...	

THANK YOU.

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APPENDIX II: CHECKLIST

Observation	Yes	No	N/A	Comments
1. Are staffs trained on wellness clinic				
2. Have staffs been trained on screening on cervical and breast cancer				
3. Have staffs recently attended workshop on wellness clinic				
4. Do they have planned activities for health promotion and routine screening for wellness clinic				
5. Have staffs recently attended workshop on wellness clinic				
6. Are they following the protocol if there is any				
7. Do they offer all the routine cares (BP, blood glucose, urine stick check, pap smear, breast examination)				
8. Do they have instruments for data collection				
9. Is there availability of essential NCD medicines				
10. Are there mental health medicines				
11. Is wellness included in NHIS benefit package				
12. Do they have evaluation plan for wellness clinic				
13. Is any of annual report for wellness clinic				
14. Is the community involved in the wellness programme				
15. Do they organize meetings with the stakeholder on wellness programme				
16. Do they have support groups for people with NCD.				
17. Has wellness sensitization been held in this year				
18. Do they raise funds for NCD related activities				
19. Do they have budgets on wellness clinic				
20. Is wellness integrated into the planning and budget process				

Recommendation/Additional Comments…………………………………………….

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APPENDIX III: INTERVIEW GUIDE

Topic: : Evaluating the Implementation of the Ghana Health Service Wellness Clinic in the Prevention and Control of Non-Communicable Diseases in selected facilities in Greater Accra.

Introduction:

- Welcome participant and briefly describe the objectives of study.
- Review study information sheet and provide a copy of consent form for signature.
- Outline the format of the interview.

Background Information of Participant:

ID Number: ……………………..

Position/role: ……………………

Length of Service at unit: ……………………………..

(A) To assess how the wellness clinic is a Primary prevention of NCDs and implemented activities carried out in the Ghana Health Service.

Q1. What are the specific activities carried out with regards to NCD prevention?

Q2. Which equipment available in managing the wellness clinic? Are they enough?

Q3. How many clients do they attend to in a day?

Q4. What age category do they normally attend to?

Q5. Which gender normally visit the wellness clinic

Q6. How do they manage NCD client when detected

Q5. What is the protocol used in the wellness clinic

Q6. What instrument do they use in collecting client's data?

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Q7. What are some of the information required in data collection

Q8. Are staffs trained on data collection.

Q8. How often do they have an orientation for staffs on wellness

Q9. How many wellnesses activities were planned and how many have organized in the year?

Q10. Ask staff to talk about how the sensitization is done wellness wellness clinic.

Q11. How are the communities involved in the wellness programme?

Q12. How are they supported financially with the management of wellness clinic.

Q13. How do they intend to include the care of NCDs in NHIS.

Q15. Explain how they have integrated metal health into NCD in the wellness unit.

Q16. What are the challenges currently faced with regards to the NCD care at the unit

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APPENDIX IV: GHANA HEALTH SERVICE EHICAL APPROVAL LETTER

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Digital Address: GA-050-3303
Mob: +233-50-3539896
Tel: +233-302-681109
Email: ethics.research@ghs.gov.gh
27th March, 2023

*My Ref. GHS/RDD/ERC/Admin/App/*23/188
Your Ref. No.

Mary Sissuh
Kaneshie Polyclinic
PMB North - Kaneshie.

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	**GHS-ERC: 023/02/23**
Study Title	Evaluation of the implementation of the Ghana Health Service Wellness Clinic in the prevention and control of non-communicable diseases in selected facilities in Greater Accra
Approval Date	27th March, 2023
Expiry Date	26th March, 2024
GHS-ERC Decision	**Approved**

This approval requires the following from the Principal Investigator

- Submission of a yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months.
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why.
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

You are kindly advised to adhere to the national guidelines or protocols on the prevention of COVID -19

Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED……[signature]……
Dr. Naa-Korkor Allotey
(Ag. Head, Ethics & Research Management Department)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

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