Chapter One

Introduction

1.1 Background to the Study

It has become a global public health issue that non-communicable diseases (NCDs) such diabetes mellitus, hypertension, and heart disease are becoming more prevalent and more common among the general population[1]. In most developing nations, non-communicable diseases (NCDs) are now the main cause of death among young people and members of the working class. Inactivity, dangerous alcohol use, bad diets, and tobacco use all rise the danger of an NCD causing death[2]. Because it stresses the active role that individuals play in sustaining their own welfare, self-care is seen as an important and desirable notion. The idea and practice of self-care are currently receiving renewed attention as a vital part of health promotion to enhance people's health, wellness, and welfare as well as a tactic to lower the high costs of medical services[1].

The characteristics of a person's, group's, or culture's way of life are referred to as their lifestyle. A person's or a group's lifestyle includes both how they live and how they work. A healthy lifestyle results in a person being fit, active, and at a lower risk for diseases based on the choices they make regarding their daily routines. The cornerstones for keeping your health include a balanced diet, regular exercise, and enough sleep. At the hormonal level, reducing wear and tear on the body by managing stress constructively as opposed to drinking alcohol or smoking. To live a longer and more comfortable life, one should create multiple healthy living strategies and follow them[2].

A healthy lifestyle affects self-awareness and self-care, and it's essential to maintaining great health and a full life. It's a way of living that consists of activities that help someone rediscover their inner motivation and grow as a person[3]. Residents who adopt a healthy lifestyle in an environment that supports them are more numerous. A healthy lifestyle

is a framework that people can use in a number of different ways to help them organize, comprehend, and strike a balance with their own personal development and growth. Residents can build a fulfilling and productive life within the framework of a healthy lifestyle, much of which takes place within the parameters of their educational experience.

Personal characteristics include affective and emotional states and qualities; personality features include beliefs, expectations, intentions, values, perceptions, and other cognitive components; and overt behavior patterns, activities, and habits that pertain to health maintenance, restoration, and improvement[4]. Simply expressed, it refers to any action taken by an individual that has an effect on their health status, both good and bad. These actions can either improve (become more health-oriented) or deteriorate (become more health-threatening) a person's potential for good health. A few examples of health-promoting behaviors are having the right food habits, getting enough exercise, and being able to handle stress. The use of psychoactive drugs (such as tobacco, alcohol, and drug misuse), excessive non-prescription drug usage, and risky sexual activity (such as having several partners and unprotected sex) are all considered health-threatening practices[5].

Healthy lifestyle habits are a key factor in determining general health condition. Adopting healthy lifestyles that promote good health has the potential to stop chronic diseases from developing and progressing as well as provide people more control over their health. A healthy lifestyle places an emphasis on actions that enhance one's quality of life, including regular exercise, eating wholesome meals, managing stress, avoiding risky behavior, fostering fulfilling friendships, and setting and achieving goals[6].

In order to promote better health and a healthy lifestyle, Pender's health promotion theory promotes healthy behaviors, helps people understand their own healthy lifestyles, corrects bad behaviors, and enhances possibilities for communication. When a well-designed health education program is effectively presented to them, people can change their attitudes,

beliefs, knowledge, and habits in order to eat better and increase their well-being. People's awareness of health risks is obscured by poor health information, attitudes, beliefs, and practices brought on by a lack of healthy education programs[7].

Around the world, bad lifestyle choices and habits are seen as two of the main causes of death. The importance of health-promoting activities has emerged as a key component of the healthcare system as the concept of providing healthcare services has changed from the treatment of diseases to the prevention and promotion of health[8]. As a result, it is regarded as the most crucial tactic for promoting community health. A broad concept, "health promotion" includes social, physical, mental, and spiritual components. It describes any sort of deliberate planning and action that strives to enhance well-being, ward off illness, avoid undesirable outcomes, boost output, and realize both individual and group self-actualization[9].

Recently, research by both national and international health stakeholders has focused on the unhealthy life styles of individuals resulting from their individual health care seeking behavior. This is so because the health sector accounts for around 60% of a person's overall health. The health sectors go on to say that relying on people's healthcare seeking behavior toward healthy lifestyles contributes to around 50% of the worldwide concern for people's health status in both developed and developing countries of the world[10]. It appears that when it comes to selecting or rejecting the sort of health care offered at a specific period, the accessible health services in developing nations like Nigeria are not left out. Therefore, it is essential that individuals' health care-seeking behaviors be modified in order for them to contribute to the expansion and advancement of a country[11]. Each household receives far too little in the way of health care. Additionally, different attitudes toward accepting or rejecting the community's accessible health services contribute to people's reluctance to seek out a particular health service in Nigeria.

Adopting healthy lifestyles that put people at risk for illness and the onset of chronic degenerative diseases, such as obesity, protein energy deficiency, and coronary artery disease. A person's ability to accept or reject specific health services depends on a wide range of factors, and leading a healthy lifestyle is a real indicator of their health status in society[12]. Recently, research by both national and international health stakeholders has focused on the unhealthy life styles of individuals resulting from their individual health care seeking behavior. Particularly clinical science residents are thought to be more likely to have healthier lifestyles and enjoy higher levels of satisfaction of life.

The World Health Organization (WHO) defines healthy life styles as an individual's perspective of their place in life in relation to their objectives, expectations, standards, and concerns, as well as the culture and value systems in which they live. The value that a person sets on their health serves as a powerful motivator for healthy habits that support the maintenance of favorable health conditions. These include residents, the majority of whom are young people (18-35 years old), who make up around 37.3% of the population of Nigeria[12].

A healthy lifestyle encompasses both the physical and socio-emotional facets of a person's existence, making it an important multi-component concept. It is frequently used to assess health status, track health outcomes, and evaluate the effectiveness of therapies for a variety of chronic conditions, including diabetes[13]. Reduced healthy lifestyle negatively affects people's happiness and contentment, as well as their participation in socioeconomic activities and compliance with management[14]. Age, the usage of insulin, inadequate sleep, psychosocial problems, and other things may interfere with a person's ability to lead a healthy lifestyle. Physical activity and healthy lifestyle are known to be associated, and those who are physically active typically score higher on the healthy lifestyle scale than those who are inactive[15].

In the context of Eti-Osa East Local Council Development Area (LCDA) in Lagos State, Nigeria, assessing the healthy lifestyles of its residents is crucial for several reasons. Eti-Osa East LCDA, like many other urban areas, experiences rapid urbanization, lifestyle changes, and shifting socioeconomic patterns. These changes can have significant implications for the health and well-being of the local population.

Lagos State, including Eti-Osa East LCDA, faces numerous health challenges such as high prevalence rates of non-communicable diseases (NCDs) like obesity, hypertension, diabetes, and cardiovascular diseases. Unhealthy lifestyle practices, including sedentary behavior, unhealthy dietary patterns, and substance abuse, contribute to the burden of these diseases.

Understanding the current state of healthy living practices among residents of Eti-Osa East LCDA is crucial for formulating targeted interventions and policies to address the identified gaps and promote healthier behaviors. By conducting an assessment, policymakers, healthcare providers, and community stakeholders can gain insights into the prevailing behaviors, identify areas for improvement, and develop evidence-based strategies to encourage and support healthier lifestyle choices.

Previous studies on healthy lifestyles in Nigeria have primarily focused on national or regional levels, lacking a localized perspective. Conducting a specific assessment in Eti-Osa East LCDA will provide valuable information about the unique context, challenges, and opportunities for promoting healthy living practices within this particular community.

At least in metropolitan parts of Nigeria, NCDs are now the main causes of medical admissions. Due to a lack of resources, Nigeria's rising incidence of NCDs has the potential to deplete household funds and trap people in poverty. The goal of this study is to ascertain how residents of ETI-OSA EAST LCDA, Lagos State, live variously healthy lifestyles.

1.2 Statement of the Problem

Although communicable diseases continue to be the largest cause of death in Nigeria, the burden of non-communicable diseases (NCDs) is increasing, with premature mortality from NCDs estimated at 22%. According to the 2020 WHO national profile, an estimated 24% of all deaths in Nigeria were attributed to NCDs.

According to a study of the research, the prevalence of NCDs in Nigeria denotes a stage of experimentation, the formation of a personal identity, as well as a time when enduring behavioral habits take root. Therefore, interventions that deal with the social and economic factors that increase the risk of NCDs, promote a positive attitude toward health, and counteract a negative one, can significantly alter the expected impact of NCDs in Nigeria. Healthy diet, moderate alcohol drinking, and regular physical activity are all positive behaviors that humans have developed over time that can help prevent health problems. On the other hand, failing to act quickly to stop NCDs will put further strain on already overburdened health systems.

Unhealthy lifestyle practices are major contributors to the burden of NCDs. Sedentary behavior, characterized by prolonged periods of sitting or physical inactivity, has become pervasive in Eti-Osa East LCDA. Many residents spend substantial amounts of time engaged in sedentary activities such as working at desks, watching television, or using electronic devices. This lack of physical activity is a major concern as it is associated with increased risks of obesity, cardiovascular problems, and other health complications[3].

Another issue is the prevalence of unhealthy dietary patterns among residents. Changes in dietary habits, influenced by urbanization, increased availability of processed foods, and shifting cultural preferences, have led to a rise in the consumption of calorie-dense and nutritionally poor food choices. These diets, high in sugar, unhealthy fats, and processed

ingredients, contribute to weight gain, nutrient deficiencies, and the development of chronic diseases.

Tobacco and alcohol use are additional areas of concern. The prevalence of tobacco smoking and excessive alcohol consumption remains significant within the community. These behaviors pose substantial health risks, including an increased likelihood of developing respiratory diseases, cancer, liver problems, and other related complications. Addressing these risky behaviors is crucial for improving the overall health outcomes of the residents[4].

Furthermore, stress management and mental well-being play a significant role in healthy living practices. High levels of stress, often resulting from work pressures, financial challenges, and other life stressors, can negatively impact individuals' health. Without adequate coping mechanisms and stress management strategies, residents may resort to unhealthy behaviors such as overeating, substance abuse, or neglecting self-care practices.

In addition to individual behaviors, the availability and accessibility of resources and facilities that support healthy living practices are important considerations. The presence of recreational spaces, parks, gyms, and healthcare facilities can influence residents' ability to engage in physical activity, adopt healthy diets, and access preventive healthcare services. Understanding the extent and quality of these resources within Eti-Osa East LCDA is essential for addressing potential barriers and enhancing the overall health-supportive environment.

1.3 Justification of the Study

A healthy lifestyle must include regular exercise, a balanced diet, enough sleep, and effective stress management. It is impossible to overstate the value of a healthy environment for any

society or individual, and researchers in the field of healthy are making significant attempts to encourage people in general to lead healthier lives. All levels of residents deal with a variety of professional obligations and disregard their health. A health education program helps to change dietary attitudes, beliefs, and habits that may be harmful to one's health in addition to increasing knowledge. Helping people apply their nutritional knowledge and alter their eating habits in order to achieve optimal nutritional status is a key objective of health promotion.

Given the level of various academic activities and health care, residents' lives can be both thrilling and demanding. Residents must make an effort to fit in with academic pursuits, social networks, and the neighborhood. Residents at various levels are at an intriguing point in their lives where they can choose and establish their health behaviors because they have more personal flexibility to make decisions than they did earlier or later in life and can experiment with various lifestyle options. Thus, this interest has increased the demand for health promotion programs to educate residents at various levels about how to manage their academic obligations and health state (stress) during their stay and after.

1.4 Aims and Objectives of the Study

The study aimed to assess the healthy lifestyles among residents of Eti Osa East LCDA, Lagos.

Specific Objectives

i. To assess the level of physical activities of residents of EtiOsa East LCDA, Lagos;

ii. To examine the dietary pattern and eating habits of residents of Eti Osa East LCDA,Lagos

iii. To describe various lifestyle and sleeping habits of residents of Eti Osa East LCDA,Lagos

iv. To identify the factors associated with unhealthy lifestyles among residents of Eti Osa East LCDA,Lagos

1.5 Research Questions

1. What is the level of physical activities of residents of EtiOsa East LCDA, Lagos?
2. What is the dietary pattern and eating habits of residents of Eti Osa East LCDA,Lagos?
3. What are the various lifestyle and sleeping habits of residents of Eti Osa East LCDA,Lagos?
4. What are the factors associated with unhealthy lifestyles among residents of Eti Osa East LCDA,Lagos?

1.6 Significance of the Study

Nigeria's population situation demonstrates that baby and child mortality, in particular, is still at an elevated level. This study is thus relevant from both a theoretical and a practical standpoint. Theoretically, this study has the potential to add to the body of knowledge already available on the evaluation of healthy lifestyles in Lagos State, Nigeria, and other developing nations. The findings of this study will serve as a solid foundation or guide for future research on citizen health and will also inspire additional research in this area, which calls for due attention. Additionally, this study will offer pertinent data on the variables influencing mortality, lifestyle, and particularly underutilization of healthcare services.

In order to evaluate the applicability of some of the current ideas on human health in Lagos State and Nigeria in general, the study will present empirical data. The study's conclusions and recommendations will also be useful to the government, those who set policies, those who supply health information, and those who provide orientation to help residents and citizens adopt healthy lifestyles, which will enhance their productivity.

The results of this study will also inspire everyone to build a pleasant, healthy lifestyle that will improve their quality of life and productivity. Based on each participant's own grade points, the study's findings will establish the relationship and influence between their performance and lifestyle.

Finally, the study would be a helpful tool for locals and other citizens who wanted to learn more about how to be extremely productive in their daily lives.

1.6 Scope of the Study

Residents of Eti-Osa East LCDA in Lagos State will be chosen at random for the study. The evaluation of healthy lifestyles among people of Eti-Osa East LCDA, Lagos State, would be the focus of the study.

A questionnaire was used as the research tool to define the study's scope and focus. It asked respondents questions about their age, sex, income level, and other personal information. The questionnaire's part "B" asked questions about how residents' health productivity and performance were affected by leading healthy living practices.

1.7 Limitation of Study

While conducting is study the data collection for this study relied on self-reported information obtained through structured questionnaires. Self-reported data was subject to recall bias or social desirability bias. Participants provide responses that they perceive as socially

acceptable or may not accurately recall their behaviors, leading to potential inaccuracies in the data.

The findings of this study were specific to the population of Eti-Osa East LCDA and may not be directly generalizable to other communities or regions. The unique demographic, cultural, and socioeconomic characteristics of Eti-Osa East LCDA may limit the generalizability of the study's results.

The assessments of healthy lifestyles were not covering all aspects comprehensively. Due to resource constraints and time limitations, certain aspects such as mental health, specific dietary components, or occupational health may not be thoroughly explored. Therefore, the study's findings may not provide a comprehensive picture of all dimensions of healthy living practices in the community. Participants' responses may be influenced by factors such as social desirability, cultural norms, or the perceived expectations of the researchers. This response bias may affect the accuracy and validity of the data collected.

1.8 Operational Definition of Terms

NCDs (Non-Communicable Diseases): A non-communicable disease (NCD) is one that cannot be spread from one person to another by direct contact.

Influence: The ability of a force, person, or object to exert pressure on or have positive impacts on actions, behavior, or opinions. Therefore, in general, it is the slow process of bringing about a physical or moral result.

Lifestyle: This is the personal customs or habit of an individual or group of individuals.

Healthy: This entails exhibiting or being supportive of moral or psychological soundness while also being in good bodily or mental health.

Nutrition: The procedure through which nutrients are taken in from food and used by the body to maintain or increase health.

Healthy Life: is a probability that is also connected to SES. Based on current mortality rates and the prevalence of good or very good health, healthy life expectancy is the average number of years that a person can anticipate to live in a condition of self-assessed good or very good health. For the population, the proportion of years spent in poor health is increasing since the number of years of healthy life expectancy does not keep up with overall life expectancy.

Illness: A state of bad health, that is a state of physically or mentally ill, when there is a presence of a disease, sickness or disposition in a human being.

Undernourished: In a bad health because of lack of food or lack of the right type of food.

Productivity: The outcome of performance, the extent to which a residents or citizens has achieved their healthy goals. Healthy productivity is commonly measured by healthy performance or continuous assessments of good healthy life style.

Health Promotion: is the implementation arm of public health and it is of more recent origin.

Exercise: This connotes physical activity and movements, especially when intended to keep a person or animal fit and healthy.

Stress: This is mental, emotional or physical strain caused by anxiety or overwork, it may cause seen symptoms as raised blood pressure or depression.

Endnotes

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Chapter Two

Literature Review

This chapter reviews relevant literature under the headings of theoretical and conceptual frameworks, review of empirical investigations, and literature evaluation.

2.1 Conceptual Review

2.1.1 Concept of Health

A wide range of meanings, from the purely technical to the all-encompassing moral or philosophical, can be embodied by the broad concept of health. With such a broad definition, it is possible to chart the development of our understanding of health. The biomedical theory of health, which predominated in the 20th century, continues to have an impact on our understanding of health today[1]. This idea holds that health is defined negatively as the absence of disease and that illnesses, together with their signs and symptoms, are the result of bodily irregularities. It is the patient's responsibility to participate with the therapy provided by medical professionals even though they are the victims of their circumstances. The biomedical view holds that medical professionals, whose job it is to make people well again when they get ill, are in charge of people's health[1]. In this situation, the person, or "patient," is not taken seriously and their expertise is not recognized.

The biological perspective, which holds that sickness can be cured by medical therapy and that health is the absence of disease, has come under fire. The biological perspective, which focuses on particular ailments and diseases, misses the Old English word "hael," which means "whole," which indicates that health should be about the full individual rather than specific portions that are malfunctioning. The World Health Organization (WHO) defined health as "a condition of complete physical, mental, and social well-being, and not only the absence of disease or infirmity" in 1948 (and has not since modified this definition).This concept departs from the biological paradigm in two significant ways: first, it acknowledges that social and environmental factors have an impact on health rather than viewing health just as the absence of disease or infirmity. The World Health Organization (WHO), in contrast to the biomedical

theory of health, states in the preamble of its constitution that "Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people". This shifts responsibility for health, in part, from the medical profession to the general public.

Since the WHO definition was published, the influence of social and environmental variables on health has become more widely acknowledged. As mentioned in the introduction to this thesis, the widely cited Ottawa Charter for Health Promotion from 1986 expands on the significance of non-disease health variables and integrates the ideas of social justice and fairness into the definition of health[2]. The Charter specifies the implementation of fiscal and social policies to reduce inequality in order to promote health and lists eight prerequisites for health, none of which deal with disease or its treatment, including social justice and equity as well as peace, shelter, education, food, and income.[3]

The WHO definition of health as "a state of complete physical, mental and social well-being" has come under fire for not being relevant for the twenty-first century, despite its length and development by other agencies. Two significant areas of criticism exist, the first of which is medicalization. Since many people in the population cannot be considered fully healthy, the word "complete" makes medical treatments more likely, and more people are likely to undergo medical interventions even if their illness is mild[2]. The second topic of criticism focuses on the evolving disease patterns and the definition's inadequacy for ailments of the twenty-first century. At the time the WHO definition was released, infectious diseases were a significant cause of illness. Since environmental and behavioral impacts on health are now well established to play a significant role in NCDs, the exclusion of these elements from the definition of health appears to relieve those responsible for these influences on health of the obligation to address them[4].

However, the medical community has long recognized the impact of the environment on health, and since the 19th century, a distinct field of study called public health has focused on these areas[2]. The existence of the medical specialty in public health has stoked conflict between two opposing perspectives on health. Early public health practitioners used social and environmental interventions in addition to the biological idea of health to prevent disease from arising. The quality of the water, sewage, air, and living circumstances all improved throughout this time[5]. As the field of study evolved, the emphasis shifted to include more medical measures to prevent disease, such as immunization. Social interventions are the focus of public health. The relative contributions of medical treatments and social change to the improvement in public health have been the subject of debate between the two branches of the medical profession, with some authorities placing the contribution of medical services as low as 17%[5]. Even though this is a low estimate, the 2013 transfer of responsibility for public health from the NHS to Local Authorities in England was clear evidence of the shifting priorities and increasing understanding of the wide range of factors and services affecting health[6].

Further attempts to define and clarify the meaning of health have been motivated by the conflict between the medical and public health perspectives on health. Health was defined as "the ability to adapt and to self-manage" at a meeting in the Netherlands that was reported in the British Medical Journal (BMJ) and frequently cited in the literature (over 100 citations in Pub Med as of 27th January 2018). The biomedical definition of health, which omits any reference of disease, is obviously significantly different from this inclusive definition. It emphasizes the importance of people taking charge of their own health. The definition makes the environment's function implicit. However, it was criticized by BMJ correspondents for failing to take socioeconomic issues into account and for defining survival as health, which ignores the long-term effects of chronic conditions on an individual. In addition, the WHO's

aim of total wellbeing has lost its optimism. A modified definition of health states "Health is created when individuals, families, and communities are afforded the income, education, and power to control their lives; and their needs and rights are supported by systems, environments, and policies that are enabling and conducive to better health"[7].

Supports older social notions of health and has the backing of public health professionals. For instance, a Wakefield initiative to enhance health in an underprivileged neighborhood described health as "a state of wellbeing. People who are healthy feel well, have their fundamental needs addressed, can realize their potential, and interact with others in a positive way.These social conceptions of health have served as the basis for the Shaping Health research, despite the fact that there are numerous ways to interpret what health means. They recognise the significance of social, economic, and environmental aspects in determining health as well as the necessity of supporting health on many different levels. Although the individual is significant and has agency to manage their health, they are positioned in a setting that may either support or limit that agency[8].

Even the way the general public views health demonstrates this complexity. People naturally recognize that being healthy is more complicated than simply being free of disease. While people have a traditional biomedical concept of health, according to Herzlich's field research in France, they also regard health as a reserve maintained by individuals to deal with hardship, to battle or manage with disease[9]. The study's participants acknowledged that factors outside of the individual can affect health by viewing good health as inherent to the individual but susceptible to disruption by the environment. The lay concept of health has a social class component, with high SES groups viewing health in a positive light associated with an active and full life and low SES groups viewing health in a functional context, providing what is required to get through life. Even while those without medical training can discuss health in terms of diseases and treatments and comprehend the scientific theory of

health, their deeply held beliefs connect health to their own experiences[10]. The experience of people with chronic illnesses has been a major focus of more recent research on the lay understanding of health, and this work has significantly advanced medical knowledge of these problems. This does not imply that the idea of the lay expert has not been criticized on the grounds that patients may have knowledge of their own problems but are not qualified to make medical decisions.

These changes in the definition and understanding of health, especially whether it is thought of as the absence of disease as in the biomedical theory or as the wellbeing of a person residing in an environment as in the adaptive theory, have implications for both health promotion and public health interventions. According to a biological hypothesis, the goal of health promotion is to decrease both the incidence of disease in an individual and the possibility that it will occur by promoting healthy behaviors and removing disease risk factors. Healthcare experts counsel and encourage the patient to adopt and maintain a healthy lifestyle. The social theory adds to these activities rather than dismissing them by acknowledging that an individual's behaviors do not happen in a vacuum. People are a part of the community in which they reside, and this community has an impact on health. The socioecological theory of health is founded on this view of health.[11]

Ecology, a phrase adapted from biology to explain how individuals relate to and engage with their physical and social environments, is used to describe the health idea. Intrapersonal, interpersonal, organizational, community, and policy are the five levels that the theory should focus on because they are the ones that are most frequently mentioned in the literature, though other levels, such as behavioural, learning, and life course processes, are also advised in order to fully capture all facets of the socioecological environment[12]. The complexity of the theory and the interactions between its levels, as well as the idea that benefits will accrue if interventions at various levels of the theory can be designed to support

one another, in particular if population-based public health strategies can be linked to biomedical, individual patient treatment programs, are all equally important. The theory was chosen as the theoretical foundation for the Shaping Health project because its application to public health necessitates an analysis of both individual lifestyle behaviors and the environment in which those behaviors take place. This choice was made with the knowledge that, compared to single level interventions, public health interventions based on the socioecological theory of health are more expensive, complex, and time-consuming to implement. However, there has been a rise in the number of interventions focused on increasing physical activity and, to a lesser extent, diet-based interventions that function at higher and/or more advanced levels of the theory[13].

Health is influenced by where individuals live and their socioeconomic status (SES) as a result of the recognition of the impact that social and environmental factors have in health. These factors have a major effect, and the next section, which is introduced with a brief study of the disorders that contribute to poor health today, will be concerned with the magnitude of the effect as well as potential theories for why it occurs[14].

2.1.2 Concept of Healthcare Seeking Behaviour

A concept known as "healthcare seeking behavior" refers to the actions people take when deciding for themselves what kind of healthcare services they want to get. Many social elements, including culture, attitude, awareness, and accessibility to health seeking, influence an individual's choice of a particular health service[15]. The phenomena of decision-making is a necessary component in selecting a healthcare provider. However, the term "health care seeking behavior" refers to a wide notion that includes the actions that people or patients take to seek out healthcare services from a healthcare provider in order to preserve, protect, and advance their own health[15]. Three viewpoints on the habit of seeking medical care. He emphasized that the theories underlying these healthcare services typically result in an

ongoing process of seeking medical attention. These theories of getting medical care could take the shape of conventional basic care, enhanced medical care from primary health clinics, or comprehensive medical care from a particular medical facility[16].

However, healthcare services are typically given to people in hospitals or other healthcare facilities. The importance of healthcare seeking behavior has been acknowledged, as has the knowledge of how and why specific methods are used when a healthcare need is identified. It should be noted that because healthcare seeking behavior is a conditioned behavior or circumstance that may lead a person to seek healthcare, only a deeper understanding of the indices determining an individual's behavioural practices can be successfully implemented into the realities of an individual's life and lead to changes in health behavior. The notion of health belief theory (HBM) states that healthcare seeking behavior depends on the subjective value of an outcome and the subjective likelihood that an expectation will be realized[17]. The health belief theory is predicated on the notion that people are more likely to alter their behavior and adhere to medical treatment only if they feel vulnerability. This idea of health behavior formalized this notion. Additionally, if they believe the disease will have a negative outcome (perceived severity), if they believe the suggested health behavior will be useful and effective for them (perceived benefits), in a similar situation, if they believe the obstacles to adopting the behavior will be minimal (perceive barriers), or if they believe they are capable of applying and engaging in the suggested behavior (perceived competence) (cues to action).

2.1.3 Concept of Healthy Lifestyle

The term "lifestyle" refers to a phenomenon that describes the individual or group's personal traditions or routines. It alludes to their active adjustment to the social environment, which emerges as a result of their demand for socialization and integration . Lifestyle in terms of health includes dietary practices, physical exercise routines, social use of drugs like alcohol and tobacco, as well as exposure to other harmful behaviors. Along with the previously

mentioned physical and mental variables, physical activity, health, and physical fitness, as well as stress, drugs, and alcohol, there are other factors that have an impact on the status of a healthy lifestyle. Each of these activities influences a person's lifestyle decisions in one way or another[18].

However, a person who adopts a bad lifestyle should be prepared to deal with the dangers of chronic diseases that share risk factors such unhealthy eating habits, smoking, inactivity, sedentary behavior, and life stress[19]. These lead to underachievement or failure to meet set goals, life aims, and objectives, whether in our work place, academic pursuits, or whatever goals a person sets in life, in addition to disease processes that result in high morbidity and mortality due to cardiovascular and cerebrovascular diseases, diabetes, nicotine- and nutrition-induced cancers, chronic bronchitis, and emphysema[19].

It has been established that people's lifestyle choices have a significant impact on their health and lifespan, making lifestyle adjustment essential at all levels of prevention. Numerous factors are taken into account when determining a person's lifestyle, including their diet, level of exercise, level of self-control, use of tobacco and alcohol, social connections, and stress management. According to WHO, improving one's lifestyle can help one avoid contracting diseases. Physical activity has been shown to significantly improve health by preventing or delaying the onset of chronic diseases and lowering the death rate. Additionally, there is some evidence to support the notion that engaging in regular physical activity enhances mental health, lowers levels of anxiety or depression, and improves quality of life[20].

2.1.3.1 Physical Activity as a component of Healthy lifestyle that Influences Productivity

The term "physical activity" refers to any skeletal muscle-driven motions that involve the body and include an energy expenditure. Kilocalories are the unit used to measure energy expenditure. Daily physical activity can be broken down into occupational, sporting,

conditioning, domestic, and other activities. Exercise is a subset of physical activity with a final or intermediate goal of improving or maintaining physical fitness. The negative impacts of residents' physical inactivity have serious implications for their personal health as well as decreased productivity. Physical activity has been positively connected with academic success when included in university students' educational programs, in addition to the health benefits it provides[20].

For residents to succeed in the modern world where technical advancements expand at exponential rates, they must acquire fundamental academic skills. Residents can use their academic talents to expand their knowledge in these and other academic fields if they have a strong academic foundation. The modern world has benefited much from technology, but there have also been significant drawbacks in areas where it has given people more freedom. In a rather paradoxical way, it has also led to the production of virtually total dependence on technology. For instance, the increase in global economic output, which has raised practically everyone's standard of living, has also led to an epidemic of inactive lifestyles. Modern culture demands that mobile mobility is the first and frequently the necessary option rather than relying on intrinsic motor ability with the attendant health producing effects[21,22].

Although physical inactivity is partially attributed to negative physiological effects, such as obesity, it is a valid theory that as residents become more sedentary and lose physical fitness, achievement suffers. If this is true, it stands to reason that when physical activity is incorporated into residents' activities, standing improves. Additionally, studies have shown that physical inactivity has a negative impact on productivity[23]. Academic performance is higher for residents who are physically active than for individuals who are not. Both physiological and psychological processes may contribute to the link between physical activity and productivity[24].

Physical activity boosts cerebral development, according to studies conducted on animals. The association between exercise and cognitive performance in high- and low-fat teenage university students (mean age: 18.6 years). According to their research, physical fitness was linked favorably to working memory and attention neuroelectric indices. Physically active residents pay better attention in class than sedentary residents, on average. From a psychological standpoint, those who are physically active report higher sense of self-worth and reduced levels of anxiety, which have been linked to better academic performance[25].

2.1.3.2 Family Economic Status as a Component of Healthy lifestyle

A large number of locals were raised in houses with plenty of financial and material resources. However, not all do; it was estimated that over 100 million Nigerians lived below the statutory poverty limit of $1 per day as of 2011. About 60% of Nigeria's population, or those between the ages of 18 and 40, is made up of young people. Over 90% of the country's residents fall into this age group, which makes up the majority of communities and accounts for 60% of the country's poorest residents. More specifically, Nigeria, the most populous African country with an abundance of resources, was listed as one of the world's poorest countries in 2018[26].

Poverty has an impact on how well university students do in their communities. Low-income residents are twice as likely to have a low cumulative grade point (C.G.P.), get suspended, be expelled, or leave the town as their more affluent counterparts. More than half of poor families in Nigeria are headed by pensioner parents, or retired parents, or single parents, either men or women, but mostly unmarried or divorced women or widows, who must balance employment issues. These women are frequently trapped in low-wage jobs while also taking care of their children and other responsibilities[27].

Residents from more economically prosperous homes, however, have an advantage in many aspects of life, such as productivity and education. The level of care residents receive at home lays the groundwork for their future academic performance, according to studies on the effects of family economic position and education. In comparison to residents receiving low-quality care, those exposed to high-quality parental care environments that are tailored to their social, emotional, and intellectual development demonstrate better language and academic skills, better cognitive, social skills, and better relationships with classmates. It has been demonstrated that the type of a family's quality care has long-lasting effects, particularly on children's academic performance. Residents who grew up in high-quality environments are less likely than residents in low-quality care settings to have low grades, drop out of school, or run into legal issues in the future. For many families, the care for their people is centered around two main concerns: cost and access. Numerous families cannot afford appropriate care even when it is offered because of financial constraints. And due to financial constraints, quality care is just unavailable for many families, which has negatively impacted the productivity of many Nigerian citizens[28]. The quality of a person's psychological, emotional, social, and financial well-being is greatly influenced by their residence. Because parents are the first socializing influences in a person's life, the home has an impact on them. This is so because a person's upbringing and environment have an impact on how he responds to challenges in life and how well he performs. Although the community is in charge of the events that shape each person's life at communal times, parents and the experiences each person has at home have a significant impact on how each person develops his or her personality and becomes who they are. The environment that a resident comes from can have a big impact on how well he does in the community. The family or home atmosphere, on the other hand, has been acknowledged as having a significant impact on inhabitants' productivity. Previous research has mostly focused on the socioeconomic level of the parents. It has also

been noted that the frequent conflict between parents has an emotional impact on each resident and may reduce communal productivity[29].

2.1.3.3 Stress as a Component of Healthy lifestyle that Influences Productivity

Stress is described as pressure or worry brought on by issues in someone's life by the Advanced Learners Dictionary and Encarta Encyclopedia, respectively. Stress is an unpleasant state of emotional and physiological arousal that people experience in circumstances that they perceive as dangerous or threatening to their wellbeing. The term "stress" can imply different things to different individuals. For some people, stress is defined as occurrences or situations that make them feel pressure, tension, or negative emotions like anxiety and rage. Some people think that stress is a reaction to these circumstances. This reaction involves both emotional and behavioral changes in addition to physiological changes such an elevated heart rate and tightened muscles. However, the majority of psychologists see stress as a process including a person's perception and reaction to dangerous situations[30].

The level of productivity of an individual can be impacted by stress. Residents must overcome numerous challenges in order to work as productively as possible. To succeed in college, you need to put in a lot more effort than just studying. A person's productivity may be threatened by a variety of pressures, including time management, money issues, insomnia, social activities, and for some residents, even having children. Utilizing the grade point average ordinal scale, productivity is quantified (well-being). Numerous studies have been conducted to examine the effects of stress factors, also known as academic situational limitations, on residents as well as their ability to be corrected. His research considered a range of elements that may reduce an individual's productivity. Fraternity or sorority activities, work obligations, or having a collegiate relationship that takes up valuable time are just a few

examples of factors that might induce stress and have an impact on productivity. The fact that residents of most colleges who participate in extracurricular activities like fraternities or sororities and athletics must maintain a level of acceptable (well-being) was one extraneous factor that was taken into account. This element alone might explain why these inhabitants' wellbeing is higher than that of typical residents[31].

Many locals cope with another significant stressor, particularly those who have families and children to care for. Nowadays, a growing number of people are choosing to go back to school after taking a break to work. Returning to school puts a lot of pressure on older adults, especially those who may already have kids and a profession or occupation. The reality that residents may be less productive due to having a family, a job, or another obligation[32].

Some studies have demonstrated that the level of social support from the institution and the outside world has a significant impact on a person's academic success. The effects of perceived social support are varied, but it has been found to lessen residents' stress. Support in the form of emotional, academic, and financial assistance is crucial to residents' success. Having your family, friends, and the community there during the years of intense activity can be a challenging and life-changing experience. The support of everyone is required much more if the person has a family that includes his or her own children in order to fulfill the objective of a successful and exciting graduation[33].

2.1.3.4 Drugs and Alcohol as a Component of Healthy lifestyle that Influence

Drugs are substances whose chemical makeup alters how biological systems in the body work. The biological systems include respiration, growth, excretion, movement, and reproduction, among others. When pharmaceuticals often referred to as medicines, such as Panadol, antibiotics, cough mixtures, and so forth, are administered as directed by a doctor,

positive results may result. They added that alcohol is a chemical substance that is colorless, euphoric, and inflammable that is produced commercially by distilling wine or other fermented alcoholic beverages. Drug is also described as a psychoactive chemical that lowers the activity of the brain's nerve cells. It has been discovered that some medications can have side effects that are detrimental rather than helpful. Drug abuse only refers to situations in which individuals use drugs solely to alter their mood and then report decreased behavior or social functioning as a result[34].

Alcohol, caffeine, nicotine, marijuana, Librium, valium, dexamphetamine, mandrax, ginseng, and cocaine are among the drugs that students in Nigerian institutions abuse. Residents use drugs to feel good, stay awake, sleep, or to improve sexual performance. Drug and alcohol use on university campuses is widespread, and residents give a variety of justifications for their usage. However, most do not think about the long-term effects of their choices. One survey found that 90% of kids admitted to using alcohol, over 50% admitted to using marijuana, 17% admitted to using cocaine, and 13% admitted to using some sort of hallucinogen. Drug usage has been identified as a significant issue for Nigerian citizens as early as senior secondary communities, i.e. (S.S.I). The prevalence of substance abuse on Nigerian university campuses, where many young adults are suddenly unsupervised for the first time in their lives, is not surprising. In Nigeria, drug and alcohol abuse are responsible for over 10,000 deaths annually. In Nigerian universities, it accounts for more than 50% of all suicides, violent crimes, emergency room visits, traffic accidents, subpar work output, industrial accidents, and low productivity. To be more precise, it accounts for 80% of all domestic incidences. Drugs and alcohol can also negatively impact healthy, young residents. The following statistics will show you how:

- The leading cause of death for people between the ages of 15 and 24 is drug and alcohol misuse.
- • Alcohol and marijuana use are factors in 95% of all incidents of violence on university campuses in Nigeria.
- • According to statistics, 28% of all university dropouts are alcoholics, 40% of university dropouts are alcoholics, and 40% of residents have scholastic difficulties and abuse alcohol and other substances.
- • More than 60% of all college women who contracted STDs did so while under the influence of alcohol.

Residents continue to drink alcohol and use drugs because some of them feel pressured to do so at social gatherings, either because it seems like everyone else is doing it or because they think it's cool. Other people think that abusing drugs or alcohol is a way to escape from community work-related stress, financial worries, or relationship issues. Some locals believe that using drugs or alcohol can help them deal with their shyness or low self-esteem. The use of alcohol and drugs can occasionally be for respect. These drugs and alcohol can occasionally be used as a stand-in for fulfilling relationships, academic success, or personal contentment[35].

Residents' drug and alcohol addiction can cause a rapid fall in productivity, an increase in truancy reports, and withdrawal from or expulsion from the community. Abusing drugs and alcohol can lead to long-term addiction and possibly drain a person's bank account. Judgment is frequently the first quality to be impacted by drug and alcohol use, however they have a range of other effects on the entire body, including the brain. Making wise decisions, doing so promptly, or doing so realistically may be challenging for the person. All of a sudden, the student waits until the very last minute to "cram" for examinations or "crack" that paper, which is exam misconduct involving looking for questions beforehand[36].

A further effect of drug and alcohol addiction is that residents experience attention and concentration problems, especially when in class or trying to study. Long-term or chronic drug and alcohol use can cause nutritional deficiencies. These deficiencies can damage a resident's attention, concentration, and interpersonal skills as well as cause memory loss and make it difficult for them to handle stress on a daily basis. Although drug and alcohol misuse is a significant issue that can have a detrimental impact on a person's academic, personal, and professional lives, it is also a problem that can be resolved.[16]There are many resources available to help residents. Counseling and psychological services offered in a university setting, Alcoholics Anonymous, a local spiritual leader, or a family doctor can give residents the information they need to get the services they need to live drug-free lives and be more productive in their communities[37].

2.1.3.5 Nutrition as a Component of Healthy lifestyle that Influences Productivity

The process of collecting nutrients from meals and processing them in the body to maintain or promote growth is called nutrition. Food is necessary for humans to develop, reproduce, and sustain their health. The chemical components in our diet known as nutrients are what enable eating the appropriate foods to prevent some diseases or hasten our recovery from illness. The six main dietary components carbohydrates, lipids, proteins, vitamins, minerals, and water must be present in the selected meal for it to be considered adequate in order for it to be of any nutritional value. An proper meal helps to maintain the delicate balance that makes up a healthy body, which is an ecosystem. Nutrition is defined as the process through which living creatures obtain the food they need to grow and maintain their health in the 17th edition of the Oxford Advanced Learner's Dictionary. Humans benefit from consistent development and wellness in all areas of their lives, including their relationships, careers, and academics[38].

Over the past few decades, it has become clear that one of the main causes of the

increased incidence of overweight and obesity among locals is poor nutrition, which is characterized by an excessive intake of fats and processed carbohydrates and a deficiency in fruits, vegetables, and whole grains. Public health attention has once again been brought to the impact of nutrition on productivity and long-term health due to the declining quality of diet and rising body weight among residents in Nigerian colleges. Hunger, malnutrition, and a lack of certain micronutrients have traditionally been the main topics of studies on the links between nutrition and productivity. Those who are undernourished exhibit lower levels of attendance, attention, and productivity as well as more health issues than residents who are properly fed. Recent research have looked at how breakfast affects residents' productivity, behavior, and cognition[39].

On the accomplishment of particular cognitive activities, breakfast has been shown to have favorable impacts. There is a gap in the literature, nevertheless, about how age, sex, and nutritional status affect the long-term effects of breakfast on cognition. The straightforward study, which was not just limited to breakfast, showed a link between regular meal eating and civic achievement. The most common methods for analyzing clients have centered on the importance of how people consume combinations of foods rather than just one vitamin. Studies on the relationship between nutrition and health have looked at the impacts of overall diet quality utilizing summary measures of food and nutrient intake in acknowledgement of the multidimensional nature of the client.

It is useful to identify which particular aspects of diet quality are most crucial to productivity in addition to looking at the relationship between diet quality overall and productivity. The DQI-I (Diet Quality Index - International) was chosen because it includes ratings for each of the factors that make up a high-quality diet: sufficiency, diversity, balance, and moderation. The DQI - I's dietary adequacy component measures how much food and nutrients such as fruits, vegetables, grains, dietary fiber, proteins, iron, calcium, and vitamins

are consumed daily. Consumption of less healthy dietary ingredients including saturated fat, salt, empty calorie items, carbs, increased intake of fruits and vegetables, and moderate fat intake are likely to promote cognitive thinking, which will have a beneficial impact on residents' productivity[40]. Most of these items are difficult to get and pricey for the ordinary person to routinely consume. The majority of foods in our surroundings are carbohydrate-based, but fruits and protein-rich foods are more expensive and difficult for the average Nigerian to consistently eat. This aspect has also had a negative impact on Nigerian citizens' productivity[41].

As proper growth and development, positive cognitive functioning, and a stable and healthy state of mind will result from good nutrition, so too will poor nutrition result in an unstable mind, reduced cognitive functioning, unneeded stress, and improper growth and development, which will cause underachievement in life, work, and productivity[42].

2.1.4 Healthy Life Style for National Growth

A healthy lifestyle is one that enables a person to maintain and improve their current state of health. Additionally, it includes a balanced diet, regular exercise, and 6 to 8 minutes of sleep per day. To maintain a healthy lifestyle, a person should refrain from using tobacco and alcohol, take frequent breaks outside, and take care of their own health[43]. In the entire world, cardiovascular disorders are the main cause of death. The most important lifestyle-related risk factors, such as using nicotine and alcohol, being inactive, eating poorly, and a plethora of other factors, all considerably lower or avoid cardiovascular illnesses. In a related developed, an individual's personal health also determines whether they lead a healthy lifestyle or not.[17]For instance, a person's wellbeing is severely impacted by their views and actions toward themselves and other members of society[44].

Community health initiatives are important for promoting healthy lifestyles in individuals. Community health is a concept in medicine that refers to the state of people's health in a

certain area or community. An individual must accept or reject the specific health services that can promote, sustain, promote, and fully assist in restoring poor health behaviors with the explicit goal of preventing diseases in the community in order to actively participate[45].

2.1.5 Impact of Cultural Affiliation and Healthcare System.

To make HBM components more pertinent to the comprehension of the cultural and behavioural aspects of health-seeking behaviour for any disease state, the notion of cultural affiliation was incorporated in the study. The core tenet of the concept of cultural affiliation and health behaviour is that cultural environment directly influences people's perceptions and decision-making. In other words, people's lives take place in the surroundings that shape their behaviour and affect their capacity to accept or reject what they want. According to anthropologists, a society's cultural meaning system is made up of the cultural schemas that drive people's behaviour and the responses they have to their circumstances[46]. Therefore, if culture is allowed to govern health services, these schemas serve to define human reality and provide insight into possible and desirable world situations.

The four primary purposes of cultural schemas are directly related to the cultural meaning systems. The following are some of these functions: I representational functions, which define knowledge and beliefs about the world; (ii) constructive functions, which create the cultural entities to which people adhere; (iii) the evocative function, which arouses certain emotions; and (iv) directive functions, which are used to shape intrinsic motivations to conform through social pressure and external punishment. In this study, we claim that people's thoughts, beliefs, perceptions, and attitudes concerning malaria and diabetes are influenced by the cultural meaning systems and schemas of their communities, which in turn describe and inspire individual reactions in terms of health seeking behavior. The conceptual framework of the study was built using the HBM and the Cultural Schemas idea, with a focus on healthcare services[47].

The socio-cultural determinants of health care seeking behavior include things like a person's belief system and choice to look for a specific health care system in the community. Diverse ethnic groups make up society, and these groups all hold different sociocultural beliefs on how to access the healthcare system. Some cultures may not encourage getting Orthodox medical care, while others firmly believe that traditional medical care is more important in terms of providing them with a health care system. People's decision-making processes have a big impact on the healthcare they choose. Some people believe that traditional healers may treat illness through supernatural intervention[48].

The introduction of high medical fees by traditional healers is another important factor in determining how people behave when seeking medical attention. This suggests that the introduction of high medical fees in the public and private health sectors has altered the foundational elements of Nigeria's health policy[49].

2.1.6 Socio-Economic Status as Determinants of Healthcare Seeking Behaviour

Every country in the globe should pay close attention to the issues surrounding how people use healthcare, with a focus on societal development and growth. The ultimate goal of every person in society is to be healthy, but this can only happen if they are financially able to pay for quality medical treatment. Health encompasses an individual's social, psychological, and economic well-being in addition to the lack of sickness and infirmity. In other words, health care services are a financial burden, creating private obstacles to evaluating health care services in society, and the current pattern of health care seeking behavior is heavily influenced by an individual's financial situation[50].

People from the poorest households are less likely than those from more affluent households to seek medical attention, and they spend a larger percentage of their monthly income on health care. The majority of people, however, have developed a variety of

techniques to get around these financial limitations, but these strategies are probably making things worse in terms of both health outcomes and the economy as a whole[51].

The degree to which people seek medical attention is strongly influenced by their socio-demographic characteristics, which include their age and gender. Age and gender disparities in intentions to seek professional psychological treatment, as well as whether views in society negatively affect intentions among older adults and men, are investigated[52]. Age, gender, and whether a person is male or female are socio-demographic characteristics that are linked to more favorable or unfavorable aspects of healthcare.

Due to their more accepting attitudes toward psychological openness, women showed more favorable intentions to seek medical assistance from specialists than males. Similar to younger persons, older adults demonstrated higher favorable intentions to seek medical assistance from primary health practitioners[53].

2.1.7 Healthcare Seeking Behaviour for National Development and Healthy Lifestyles

Understanding how people used the healthcare systems in their particular socio-cultural, economic, and demographic contexts has finally been made possible by the concept of analyzing health care seeking behaviors, which has developed over time. All of these actions genuinely define the social position of health that is necessary to investigate the effects of all factors, including ethnicity, mother's education level, child's gender, lifestyle choices, and community economy. However, improved health cannot be ensured by biomedical knowledge alone. When providing services, creating interventions for health promotion, and creating policies, health practitioners, managers, and policy makers should include socioeconomic factors. Understanding health seeking behaviors is crucial for creating a responsive health system because only then can health outcomes be expected to improve[54].

The social and economic factors that most health systems have not been able to connect with the health of their populations are among the social and economic determinants

of health that go beyond health treatment. To solve the complicated health concerns, systematic knowledge that transcends the health sector is required. A variety of social science fields collaborate with the medical professions to create this knowledge. For instance, the cost of medical treatment is a significant worry for the world's poor[55]. As a result, health status is determined by poverty and livelihood vulnerability, and vice versa. Little rational information exists regarding how people's lifestyles are impacted when a member of a family experiences a significant health issue, or regarding how family, community, or other social networks assist the family in overcoming difficult circumstances. Moreover, what are the trends in a given society for women seeking healthcare. Common social and behavioral factors of some risks.[18]The majority of undernourished people, people who utilize unsafe water sources, and people who are exposed to indoor smoke from solid fuels live in impoverished homes in rural areas. Because of these epidemiological and social aspects of risk factor exposure and hazard, a policy-relevant analysis should evaluate the health advantages of concurrently reducing several hazards[56].

The decision to seek medical attention is not solely influenced by an individual's preferences or life circumstances; rather, it is greatly influenced by the dynamics of the communities in which the people live. Understanding how people use health care systems in their specific socio-cultural, economic, and demographic contexts has eventually been made possible by the idea of analyzing health care seeking behavior[57].

At different institutional levels, including the family, community, health care providers, and the state, different patterns of health care seeking can be identified. Utilizing the social and behavioral sciences in applications for a better understanding of the illness process is one of the fundamental roles of public health. Studies on the social determinants of health have used socioeconomic status as a gauge for selecting healthcare providers. Therefore, it is crucial to research the effects of all these related characteristics, such as

ethnicity, mother's education level, people's gender, lifestyles, or local economy. Regrettably, there is not enough time for policymakers and health professionals to consider social factors when formulating policies. However, biomedical knowledge cannot ensure greater health on its own[58].

The social and economic factors that most health systems have not been able to connect with the health of their populations are among the social and economic determinants of health that go beyond health treatment. The complicated nature of health concerns calls for systematic understanding that beyond the realm of medicine. A variety of social science fields collaborate with the medical professions to create this knowledge. Poor people all throughout the world are very concerned about the cost of medical care. Therefore, health status is determined by poverty and livelihood vulnerability, and vice versa[59].

The improvement of healthcare services requires a solid foundation in the fundamental needs, such as social justice, equity, peace, housing, education, food, and money. In Adelaide, all the member states agreed that in order to achieve healthy public policy, the government's departments in charge of agriculture, trade, education, industry, and communications must consider health as a crucial consideration when drafting legislation. In addition, the Sundsvall declaration on health in Sweden noted that the health of millions of people living in severely deteriorated environments is threatened by poverty and deprivation. Another confirmation of this was seen in Jakarta, where the biggest risks to the healthcare system are once again poverty, the low position of women, and both domestic and public violence[60].

2.1.7 Development of Healthcare Seeking Behaviour in the 21st Century

Since the American era, numerous public health efforts have supported the growth of the healthcare delivery system. Promoting physical activity as one of the main topics in the offices was referred to as promoting a "healthy condition," which was developed during office activities. Prior to the middle of the 1800s, however, attempts to bring healthcare and other

physical activity programs into the workplace were sporadic. It was not until Rhode Island approved the first law requiring public officials to have health insurance that other states quickly embraced this idea of complete health care services[61].

Due to this context, public health programs received significant attention as a way to advance healthcare for the general public and prevent disease. Most industrialized country governments began adopting health care delivery programs in most of their public institutions in the 1970s. The care of public servants, the prevention of communicable diseases, and health education were the main focuses of one of the earliest health care initiatives in Asia, which was founded in Kalatura, Ceylon, in 1926. The Rock Feller Foundation provided support for these services. Precisely in 1975, there was a significant improvement in the nutritional and health status of people in Nigerian society, which included specific action plans for addressing and controlling the health issue of people. However, health care is intended to cover communicable disease detection and treatment, mother and child health first aid, nutrition, health education initiatives, socio-religious aspects of health, and community health problems[62].

A significant issue in Africa is the inability of health care services to keep up with the health state of the population; this phenomenon is the result of many influencing concepts. However, the amount and caliber of the medical staff in most offices is severely inadequate given the current state of health. The majority of African nations have struggled to offer acceptable healthcare environments and help in varied degrees with issues like food, housing, recreation, and personal issues. A effective health care program is viewed from three different angles, namely the relationships in the community, the health services, and the health instruction. Against this backdrop, it is now imperative to view health care services as a crucial tool in promoting people's health, and in order to meet this goal, it is primarily the role of health agencies working in the community and in an office setting to advance people's

health status. The process of offering employment opportunities that positively impact knowledge, attitudes, and behaviors regarding the selection of healthcare for an individual's and a community's health is viewed as determining the health care system[63].

According to the World Health Organization, individual health care is a component of health programs that entails deliberate efforts to alter community and individual behaviors in order to support curative, preventative, rehabilitative, and promotion of health. Individual health care should offer a structured program to help people acquire positive behaviors, attitudes, concepts, and knowledge about their own and the health of their communities. Individual health care should also offer a variety of learning opportunities, such as discussions, problem-solving exercises, and hands-on training[64].

"The majority of morbidity and mortality in our community are caused by communicable diseases, most of which can be prevented or treated readily, such as malaria, dysentery, pneumonia, tetanus, tuberculosis, cholera, and others," and with the active involvement of health personnel in a well-planned health care services, which will eventually lead to an improvement in personal hygiene among civil servants and a resulting decrease in related morbidities. The majority of people are typically affected by environmentally related diseases such as malaria, typhoid, diarrhea, and dysentery, which are a constant threat to life. Poor health practices and inadequate sanitation systems are often the cause of morbidity and mortality in many developing countries[65]. Diseases linked to unhygienic face-and-residue disposal and lack of excellent health education programs in society are particularly prevalent in the environment, which is why there is a lack of a decent portable drinking water supply and inadequate environmental sanitation[66]. Diarrhea and intestinal worm infections, which make up more than 10% of all diseases in the majority of our environment, are the most significant illness incidences as a result of poor environmental conditions and a lack of health knowledge[67]. More significantly, a lack of portable water raises the risk of skin infections,

guinea worms, and schistosomiasis. Through increased environmental cleanliness in society and good health practices such as seeking medical attention, it is possible to regulate and prevent diseases that are related to the environment. Through healthy nutrition and health education programs, proper and well-planned health care promotion/heath education programs often attempt to increase an individual's capacity to tolerate any stress in any setting[68].

An individual's better health standard should not only be based on receiving therapeutic services but also on learning scientific knowledge. Health education could be used to provide social and fundamental understanding of hygiene science as part of a health plan, enabling people to live in harmony with their surroundings. In other words, through a variety of health care services, people will learn the value of maintaining a clean and organized environment as well as some preventative medicine guidelines for good health[69].

2.1.8 Health and Health Inequalities

The late 20th and early 21st centuries saw notable advances in health, as evidenced by longer life expectancies. For instance, England saw a 6.4-year rise in life expectancy at birth between 1990 and 2013[70]. Male life expectancy increased from 70.81 years in the period 1980–1982 to 79.18 years in the period 2015–2017, while female life expectancy increased from 76.80 years to 82.86 years over the same period, according to the Office for National Statistics (ONS), the executive office of the UK Statistics Authority[71]. The rate of development in life expectancy, which has been such a success story, is slowing, according to the ONS data for the end of the study period. Sub-Saharan Africa continues to be the world's poorest region, with over half of its population surviving on less than $1 per day. With high rates of undernutrition, 50% of maternal and infant deaths, and a heavy load of infectious diseases including HIV and AIDS, malaria, and tuberculosis, Sub-Saharan Africa also bears the weight of the world's health disparities[72].

This broad view of increased life expectancy conceals two crucial aspects. The first of them is that SES is correlated with life expectancy, with people with high SES living longer than those with low SES. According to estimates, the average life expectancy in England in 2018 was 83.2 years for women and 79.6 years for men, although there was a 9.3 year gap in life expectancy between the least and most deprived districts during this time. Cardiovascular disease and cancer deaths are four times more likely to occur in the most poor areas than in the least deprived areas for residents. In the past 13 years, the difference in life expectancy between men and women has grown while being constant for men[73]. According to the most recent Public Health England data, life expectancy is actually decreasing in the most deprived groups while it is still increasing in the least deprived groups. This indicates that the impact of SES on life expectancy is growing, which is consistent with the overall decline in the growth rate for life expectancy. This social gradient in health does not only exist in England; it exists globally, both within and between nations[74].

The second characteristic is a similar one: a healthy life expectancy that is also correlated with SES. Based on current mortality rates and the prevalence of good or very good health, Public Health England defines healthy life expectancy as "the average number of years that an individual is projected to live in a condition of self-assessed good or very good health." For the population, the proportion of years spent in poor health is increasing since the number of years of healthy life expectancy does not keep up with overall life expectancy. Greater than the social gradient in overall life expectancy is the gradient in healthy life expectancy. Between 2014 and 2016, there was a 19-year difference in healthy life expectancy for both men and women living in the least and most impoverished districts, greater than a twofold difference in actual life expectancy.

Males and females in the population may expect to live healthy lives for 63.4 and 64.1 years, respectively, from 2013 to 2015. This suggests that most people end up in poor health

at the conclusion of their working lives. The healthy life expectancy for women in the worst four deciles of deprivation is lower than the current state pension age[74]. Because of their bad health, low SES households may have a harder time making ends meet because family members may end up taking on additional caregiving duties. These statistics aim to highlight how low SES families bear a heavier morbidity burden than high SES households.

The types of illness that people experience have evolved over time. Infectious diseases used to be the primary cause of sickness and death, but NCDs are now the leading cause. The major NCDs, according to the World Health Organization (WHO), include chronic lung illnesses, malignancies, diabetes, and cardiovascular diseases[75]. In the UK, malignancies account for 29% of deaths whereas cardiovascular disorders account for 31%. The main causes of the observed decreased life expectancy in lower SES groups are cardiovascular disease, cancer, and respiratory illness, and food and exercise have an impact on the incidence and severity of all these NCDs. Diet and physical inactivity have a significant impact on cancer survivorship and are linked to the occurrence of certain malignancies, including as breast cancer and colorectal cancer, and they also have a major impact on the likelihood of acquiring cardiovascular disease and the related mortality. Additionally, there is a connection between the prevalence of respiratory illnesses and diets low in fiber and physical inactivity, which harms lung function[76]. A greater variety of NCDs are the root cause of morbidity. The main causes of morbidity in the UK are musculoskeletal diseases, particularly back and neck pain, skin conditions, and depression, for both men and women. Although not among the top three causes of morbidity, type 2 diabetes has a significant impact on morbidity in the community and is important for this study because of its link to unhealthy lifestyle choices. High body mass index is one of the primary risk factors for ill health, according to Public Health England (BMI) further demonstrating the significance of comprehending these lifestyle behaviors is the relationship between diet and physical inactivity and high blood

glucose, two risk factors that are significantly influenced by these two factors[77].

nal levels.

2.1.9 Understanding Health Inequalities

We need to comprehend why low SES groups are more exposed to the major risk factors for NCDs than high SES groups in order to enhance health and reduce health disparities. Low SES groups are believed to face a mix of poor life style behaviors, which has a disproportionate impact on all-cause mortality and cardiovascular disease mortality in these groups. However, lifestyle choices are influenced by elements beyond an individual's control in addition to their immediate and conscious behaviors and decisions[79].

The Shaping Health study makes use of a variety of data on health disparities. Since the publishing of the Black Report "Inequalities in Health," which was commissioned by the Department of Health and Social Security, health inequalities have been the focus of much research. They were first formally acknowledged in policy in England. Marmot's recent review of the available research in this area identifies two key aspects: the fact that health disparities are the result of the interaction of four different factor categories (structural factors, behavioral factors, psychosocial factors, and biomedical factors), and the fact that the harm they cause builds up over the course of a person's life[80].

It is challenging to distinguish between the individual and societal components of the four groups of characteristics that Marmot outlined. So, for instance, it is evident that a person's health is influenced by both their genes and the medical care they receive. However, the consequences of a person's genetic make-up and medical therapy will be affected differently depending on their environment, food, level of physical activity, and other lifestyle choices. These factors may start to have an impact as soon as the moment of conception. Some of these elements can be controlled by an adult individually, but others such as the area in which they reside, where they work, how they get there and back from there, and where they spend their free time are more difficult to manage. Furthermore, it can be challenging to undo some aspects of childhood deprivation. Another illustration is how poor earnings, which directly contribute to health inequalities by making it difficult to access healthy lifestyles like a balanced diet and frequent exercise, have an impact on an individual's health. Economic hardship can have a negative influence on health indirectly by creating unsafe working conditions, a high risk of unemployment, a reliance on welfare benefits, and subpar housing. Additionally, the stress brought on by the uncertainty brought on by low income has a bad impact on health[81]. A further layer of complication is added by psychosocial variables, which also have negative effects on health due to the loss of self-esteem brought on by unemployment and the sense of powerlessness brought on by low status or income.

These functional factors' contributions to health inequalities, including their individual and societal components, are more thoroughly examined in the literature review, but they are briefly discussed here to illustrate how complex the issue is in terms of the variety of factors involved and how they interact, and to highlight the need for collecting in-depth contextual data in order to comprehend the lifestyle choices of low SES groups. The government's

response to health disparities and programs to promote population health are fundamentally understood by the same functional elements[82]. These functional aspects have to be thoroughly understood in order for the Shaping Health research, which aims to comprehend lifestyle behaviors and ultimately affect them, to be successful.

Based on the three tiers of government local, state, and federal Nigeria has a three-tiered health system: primary, secondary, and tertiary. There are more healthcare providers in the southern than in the northern states of Nigeria due to the greater prevalence of poverty in the northern than in the southern states, but there are other important issues as well. For instance, less than 20% of healthcare facilities in the nation provide emergency obstetric care. There are significant discrepancies between the northern and southern regions of the country as well as between the geopolitical zones in terms of socioeconomic development levels. Nigerians have a poverty rate of about 62%, with the largest percentages seen in the country's northern geographic zones[83].

2.1.10 Improving Public Health and Addressing Health Inequalities

Public health, as defined by the World Health Organization as "to prevent disease, promote health, and lengthen life among the population as a whole," is the practice of attempting to maintain and improve the health of the population[84]. The 1848 Public Health Act, which was implemented in reaction to frequent outbreaks of cholera (a water-borne disease) in urban areas, is where the concept of public health in England first emerged. In order to lower the prevalence of infectious diseases in the population, public health initiatives during the 19th and early 20th century concentrated on the environment (hygiene, air quality, and housing conditions). The focus of public health has, however, shifted in recent years. The goal of

disease prevention has not changed, but the focus has shifted from infectious diseases to non-communicable diseases (NCDs).

The expansion of public health initiatives to address NCDs reflects an understanding that the goal of public health must go beyond lowering mortality to encompass raising quality of life. An acknowledgment of the critical role played by the environment in which the individual or population lives is a common element of all public health programs, regardless of whether they are intended to reduce mortality, reduce morbidity, or improve the quality of life. This understanding that the environment has a significant impact on an individual introduces inequality into the field of public health. The Shaping Health study, which aims to comprehend the lifestyle choices of people from disadvantaged socioeconomic backgrounds, emphasizes the demand that public health practitioners take material disparity into account.[19]

The branch of public health implementation that is more recent is known as health promotion. The 1986 Ottawa Charter for Health Promotion, which recognizes the significance of health inequalities and promotes the ideas of social justice and equity, is a crucial document. The Charter emphasizes the role of government in promoting a healthy living environment and developing people so they can make healthy choices, along with the proposal that healthcare resources should be refocused on prevention of disease rather than treating illness. To advance health, the Charter calls for "health, income, and social measures that support greater justice". Because it acknowledges that health is influenced by a variety of factors, including the effect that structural disparities have on people's day-to-day living conditions, the Shaping Health study is supportive of the Charter's objectives.

The socioecological theory of health effectively captures the relevance of the influence that

society as a whole has on health. According to this idea, there are five levels of impact, beginning with the individual and spreading outward to include interpersonal influences, institutional characteristics, community characteristics, and policy. Similar theories also try to account for the same factors. These ideas contend that each of these levels of influence needs to be taken into account for effective health promotion. However, in actuality, this is rarely accomplished. Interventions in public health continue to be more concerned with the individual than with other spheres of impact. Influences beyond the person are only attained when interventions are deliberately created to attack various layers of the theory[85].

Although researchers, policymakers, and public health practitioners generally accept the socioecological theory of health, governments frequently invest in individual-focused public health interventions, such as education programs, because they are less expensive and have the potential to have a significant positive impact on both the state and the population if the recommended changes are implemented. It is more difficult and expensive to intervene at other levels of the socioecological theory of health. However, failing to include the difficulty and expense of interventions at levels of the theory above the person is likely to result in a failure overall since people cannot modify their behavior or gain from it if the underlying structural problems in the environment are not addressed. Therefore, even though cultural influences and individual traits also play a role, people without financial resources are unable to afford a healthy lifestyle and independence from the physical risks and psychosocial stress caused by a lack of material resources[86].

There is uncertainty about where to allocate resources for public health due to the numerous ways that the structural determinants of health and the five levels of the socioecological theory of health can be influenced. Public health initiatives that promote change through individual agency and those that recognize the broader environmental influence coexist in conflict. Education-based interventions are very apparent in their focus on

the individual's behavior change, but they may overlook other issues[87]. Although this sort of intervention typically acknowledges the larger socioeconomic determinants of health, environment-based therapies may also target the individual.

Despite acknowledging the impact of material adversity on lifestyle choices, this study makes no attempt to directly address it. Instead, the emphasis is on comprehending the difficulty of attempting to change one's behavior while residing in a low SES community with its associated structural challenges from the perspective of those who will be receiving public health advice and interventions.

2.1.11 Promoting a Healthy Diet and Physical Activity to Improve Public Health

Public health guidelines with specific suggestions of behaviors for people to adopt have been produced in the UK and other high-income nations as a response to the body of research on the impact of food and physical activity in the development of NCDs. These recommendations are based on a similar body of research, and while there are national variations, the fundamental ideas remain the same. National recommendations for physical exercise often follow WHO recommendations to engage in 150 minutes of moderate activity per week in addition to strength training[85].

Although the specifics vary by country, dietary recommendations generally encourage the eating of fruit and vegetables, discourage the consumption of fat and sugar, and advocate nutrient-rich foods and a reasonable calorie intake. Governments work to promote adherence to the recommendations through a variety of educational initiatives, such as PHE's Eatwell Guide, which aims to assist people in choosing the appropriate type and quantity of food from each food group, PHE's Five a Day campaign, which promotes eating at least five portions of a variety of fruits and vegetables each day, and PHE's physical activity infographics[86].

There is some recognition in policy of the impact of the environment on health

behaviors and the necessity to offer an environment that encourages behavior change in addition to these education programs focused at achieving behavior change. The introduction of the soft drinks levy to cut down on the amount of sugar eaten in soft drinks is a relevant example from the UK. A consultation on mandatory calorie labeling for restaurant meals was announced by the UK government in 2018 with the goal of assisting consumers in making healthier decisions[87]. Other environment-based interventions are also being investigated. Both the mandated calorie labeling and the soft drink tax are policy-based, therefore they can be viewed as working at the environmental level of the socioecological theory of health. But the goal is to have an impact on the person and modify their behavior[88].

The article "Why health communication is crucial in public health" asserts that a lot of the dangers to the health of everyone on the planet (through illnesses and natural disasters) have their roots in human behavior. In order to choreograph a response to a public health crisis, effective communication is essential. When we talk about communication, we're talking about how people react to one another's symbolic conduct. Health communication is the study and practice of communicating promotional health information, such as in public health campaigns, health education, and between a doctor and patient. The three major components of communication that it is human, that it is a process, and that it is symbolic are highlighted. By enhancing health literacy, the objective of providing health information is to affect individual health decisions. The National Cancer Institute and the Centers for Disease Control define health communication as "the study and use of communication strategies to inform and influence individual decisions that enhance health" in the same sentence[89]. Contrarily, these education- and behavior-based initiatives are causing a rise in health disparities. This results from two linked aspects. First, low SES groups are more susceptible

to unhealthy lifestyle choices than higher SES groups, which indicates that public health interventions must be aimed specifically at low SES groups in order to reduce inequities. Second, higher SES groups disproportionally choose public health initiatives, which often do not have a tailored approach, exacerbating the disparity between the groups[90]. The obvious explanation is that the current guidance ignores the challenges low SES groups have when interacting with it, especially if it is provided in a manner that does not correspond to their actual experiences[90]. In order to promote the creation of more effective public health interventions, the Shaping Health research acknowledges the paradoxical effect of current public health recommendations and aims to give the required comprehension of the lived experience of one group of low SES mothers. Low SES groups are not being reached by current programs, or if they are, they are not being heard. Or perhaps the messages are being heard, but obstacles make reacting too challenging[91].

2.2 Theoretical Review

Theories are essential from a theoretical perspective because they enable a field to organize knowledge and to plan, conduct, and interpret research. This is why Doka stressed that theories serve as helpful manuals for practice while discussing the value of theories. Theories should be founded on theoretical hypotheses that identify the causes of beliefs and attitude change since they assist treatments to promote behavior change for lowering the risk of future illness. Numerous theories emphasize the significance of socio-cognitive variables in both curative and preventative health, of which nutrition education is a crucial component. Self-efficacy theory, health belief theory, transtheoretical theory, and cognitive dissonance theory are a few examples of these[92].

2.2.1 Self-efficacy Theory

It has been discovered that the self-efficacy theory is a powerful correlate and predictor of involvement in numerous health behaviors, such as physical activity and quitting smoking[93]. It has been demonstrated that self-efficacy is correlated with the stages of transformation and tends to rise linearly from precontemplation to maintenance.

The rewards and hurdles involved with changing a behavior are two key dimensions that people weigh when making a decision, according to research based on the decisional balance theory. From precomplection to maintenance, the perceived drawbacks of changing a health behavior (such as increasing physical activity or quitting smoking) tend to decline linearly, while the benefits of the same change tend to rise[94].

According to the idea, depending on the behavior in question, perceived benefits and drawbacks of engaging in a given behavior "cross over" either in the contemplation or preparation stage. That is, at some point throughout the process of change, a person's view of the advantages of altering his or her behavior starts to outweigh the disadvantages. At that time, the person is prepared to take action. The theory examines the fundamental factors influencing healthy lifestyle behaviors as described by the health belief theory. It also examines the several stages of behavior change as described by the transtheoretical theory. However, the theory could not be favored as a strong theory that supported the current investigation because it neither criticized the postulates of the health belief theory nor those of the transtheoretical theory. The present study, however, could not ignore a portion of this notion as it could explain people's dietary habits[95].

2.2.2 Health belief Theory

In the 1950s, Hochbaum, Kegeles, Leventhal, and Rosenstock created the health belief hypothesis. As its name suggests, it was created especially to forecast changes in health behavior as a result of one's views about their health. The notion was created in an effort to

explain why so many people refuse to take part in programs that are designed to prevent or detect sickness[96].

The health belief theory has been applied in a number of settings to explain the development and maintenance of healthy behaviors as well as to serve as a model for actions in health promotion and education. When value expectancy theories are considered from the perspective of health-related behavior, two key facts emerge: the desire to avoid sickness, which is a value, and the belief that a certain health action that the person is capable of taking can prevent illness, which is an expectation[97].

Perceived susceptibility, perceived severity, perceived advantages, and perceived barriers were the four main parts of the belief theory's initial structure. The term "perceived susceptibility" refers to a person's introspective assessment of their own risk of contracting a specific medical disease (e.g. Lung cancer). A person's assessment of how bad a condition is depends on their perception of its severity. The two components of the health hypothesis have frequently been integrated into a single dimension that is known as perceived threat or perceived susceptibility. According to the hypothesis, a person will be more motivated to take action to lessen the threat if they believe it to be higher or if they feel more vulnerable[98].

Perceived advantages are beliefs about how well certain health activities are working to lessen the perceived threat from the condition. The person must think that taking the advised health measure would be beneficial to them. For instance, adopting a low-fat diet will be more likely if one believes that doing so will help prevent obesity or overweight[99].

Perceived barriers are the perceived drawbacks of the advised course of action that could prevent people from fully appreciating the recommended health lifestyle behaviors. The person examines the whole cost versus the notion that it might be costly, inconvenient, harmful, humiliating, unpleasant, time-consuming, or challenging through an unconscious

review, or assessment. A person may be less inclined to follow a low-fat diet if they find it intolerable to do so.

The health belief theory is backed by a large body of empirical evidence. Among the four components of the health belief theory, the component of perceived barrier consistently ranks as the most potent predictor variable for all health-related behaviors. Perceived advantages and susceptibility are significant overall predictive variables. Compared to sick-role behaviors, perceived susceptibility is a better predictor of preventive health lifestyle choices. As opposed to preventative health lifestyle behaviors, perceived advantage is a better predictor of sick-role behavior. Perceived severity is generally the health belief theory's weakest predictor[100].

Although the core of the health belief theory consists of these four perceptual aspects (or beliefs), other components have been added over time. One of these "signals to action" relates to environmental factors, such as internal cues, that cause people to engage in advised health behaviors. For instance, the NAFDAC Director recently released a new research tying heavy alcohol consumption to liver cirrhosis, which may be the same thing that motivates a drinker to start the process of stopping[101].

A person's perceived susceptibility to hazards is a threat to their health. Threats' perceived seriousness and the trade-offs between costs and rewards are what lead people to adopt certain mindsets. He continued by saying that people are drawn toward influences in life that are favorably valued and away from those that are not[102].

In conclusion, this hypothesis holds that one would be more motivated to start eating low-fat and low-sugar meals if they were more vulnerable to, say, obesity, diabetes, and hypertension resulting from poor nutrition and believed that these were life-threatening. Positivity in nutrition may enhance the likelihood of adopting positive nutritional attitudes, beliefs, and practices of eating low fat meals. This is because eating low fat foods is thought

to be effective in reducing obesity. In contrast to self efficacy, this notion has stood the test of time and has not received any criticism. In light of the foregoing, this notion served as a major foundation for the current investigation. Based on this notion, it was sought to determine how NEP affected women's nutritional attitudes, beliefs, and practices.

2.2.3 Transtheoretical Theory

One of the important theories of health behavior modification created by James Prochaska and Diclemente is transtheoretical or transactional theory. Health educators are aware that, among other things, the health belief systems, causal attribution, values, expertise, and interests of their target audiences are typically diverse. According to Owie, a thorough examination of a target demographic would frequently reveal that a large portion of the community is uninformed and indifferent about a specific pertinent health issue. He added that some of them are thinking about engaging in problematic behavior related to the problem, while others are already experimenting with it, and yet others are doing it more frequently.

Before engaging in healthy behaviors, people appear to go through a rational series of decision-making processes. According to the theory, there are six dynamic stages that lead to a change in health behavior: precontemplation, contemplation, preparation, action, maintenance, and termination. It should be highlighted that time is a key element of the theory. Precontemplation is the period of time when someone is not thinking about changing anything. Either the person is not conscious of having a problem or is not fully aware of it. Additionally, it is a moment when a person is resistant to attempts to change their behavior. A well-planned health education program may be able to save them[104].

When a person is at the contemplation stage, they are aware that an issue exists and are actively considering taking action to address it. There isn't any promise of change in the near future, though. People in this position frequently concentrate on the reasons why it would be challenging to change. The preparation stage refers to the moment when someone decides

to take action, frequently within the following 30 days. Information on alternatives to the planned course of action is typically helpful. The person makes the decision to change because they are convinced they want to. Small behavioral adjustments may already be occurring at this level. The individual formulates a practical strategy for putting the change into practice[105]. This could include informing friends about the proposed course of action, enlisting their support, and developing a schedule with deadlines.

According to Sigman-Grant, the busiest time is during the action stage. The intended behavior is being changed with apparent effort. In favor of the new behavior, the old behavior, as well as the social and environmental elements that support it, are purposefully ignored. Plans for overcoming obstacles to action are put into practice and reinforced. The maintenance stage, also known as recycling, backsliding, or slips, is the time when someone strives to stabilize the behavior change and prevent relapses. The person understands that there may occasionally be a temptation to give up and quit, but they view these moments as brief setbacks rather than failures. To help prevent relapse, the person reminds themselves of the many benefits included in the new behavior. When behavior has been sustained for at least six months, a person is regarded to be in the maintenance stage.

When there is no longer any motivation to resume the previous behavior, the termination stage is reached. The old behavior has been permanently replaced with the new one, and it is unlikely to recur. A person at the termination stage conveys complete assurance that the previous behavior will not be picked up again under any circumstances. The first five phases of dietary behavior transformation are outlined. The stages of change for nutritional issue behavior have been generalized from transtheoretical theory. These nutritional behavior issues are expressly incorporated into the Dietary Guidelines, which also call for exercise, weight management, and reducing high-fat meals. Professionals in the fields of nutrition and health may find this idea valuable in both clinical and community settings[107].

In conclusion, the theory has been expanded to include the stages of behavior modification for a healthy lifestyle. The dietary recommendations, which include weight management and exercise, specifically cover these stages of a healthy lifestyle shift in attitudes and practices. The theory holds that when a person enters the action stage of changing, say, poor dieting that leads to eating disorders like anorexia nervosa and bulimia nervosa in order to lose weight, there would be noticeable effort to change the targeted behavior upon realizing the effect of such healthy lifestyle practices on the body. In favor of the new behavior, the old behavior (refusing to eat out of fear of gaining weight, self-inflicted vomiting, and laxative use to purge) and the social and environmental elements that support it are purposefully avoided (eating foods in their right quantities and combinations and avoiding vomiting).According to the hypothesis, a person in the termination stage exhibits complete assurance that the previous behaviors, such as refusing to eat, inducing vomiting on oneself, and purging after eating, won't return under any circumstances. This theory has not been shown to be flawed by the healthy lifestyle belief theory or the cognitive dissonance theory, so the current study has taken inspiration from it in order to take into account the nutritional attitudes and practices of eating disorders associated with weight control among adolescent girls who adopt dieting behaviors in order to maintain body figure[108].

2.2.4 Cognitive Dissonant Theory

According to cognitive dissonance theory, inconsistencies in one's beliefs, perceptions, knowledge, and attitudes often lead to uncomfortable states that modify one's cognition, behavior, or both . According to the theory, if a person has beliefs about himself, his actions, and the environment that are not compatible, they will attempt to change these beliefs. Sometimes this will involve changing one's behavior, as when a heavy smoker finds it cognitively dissonant to continue smoking while appreciating a long life and good health.

Consistency in information, attitudes, and behavior is preferred by people. Dissonance between knowledge, attitudes, and behaviors caused by new information can lead to psychological suffering. The individual must resolve the contradictions or dissonances among his or her information, attitudes, and behaviors in order to lessen the degree of physiological pain[109].

The theory calls for the health educator to disseminate reliable health information through traditional educational channels as long as the material is tied to experience in the direction of an intended health behavioral objective. Gaining information is anticipated to prompt desired adjustments in attitudes and associated behaviors[110]. The cognitive dissonance theory has a lot of issues. There is definitely someone in your community who is aware of the proper course of action yet constantly chooses to act in a way that is against the law. Although the cognitive dissonance theory is appealing and probably plausible in some situations, such as when information does not lead to knowledge and a person has a high tolerance for and ability to retain contradictory pieces of information and interprets those pieces of information in accordance with their own personal value system. People are still free to interpret their knowledge in accordance with their values when education succeeds in increasing knowledge.

In conclusion, the cognitive dissonance theory puts forth the hypothesis that inconsistent mental processes, such as those involving perception, knowledge, and attitudes, have a propensity to cause unpleasant change that alters cognition, behavior, or both. When a woman learns about, let's say, the impact of bad nutrition on people's health, it is expected that this information will prompt the necessary adjustments in people's attitudes and behaviors around nutrition. Neither the health belief theory nor the transtheoreticaltheory were flawed by this hypothesis. Based on this, the theory was used in this study to examine how knowledge of a healthy lifestyle, when properly applied, could alter attitudes, beliefs, and behaviors related to it.

Self-efficacy is a predictor of engagement in a variety of healthy lifestyle behaviors, including quitting smoking and engaging in physical activity to maintain fitness and control weight. It typically increases linearly. The health belief hypothesis seems to be the explanation that best justifies the development of NEP in terms of nutritional attitudes, beliefs, and behaviors. Transtheoretical theory serves as the foundation for determining how willing a participant is to alter their attitudes and behaviors toward leading a healthy lifestyle. On the other side, the basis for knowledge-driven change in healthy attitudes and behaviors is provided by cognitive dissonance theory. Therefore, in this investigation, these three theories were used[111].

2.3 Empirical Review

Individual barriers to changing one's lifestyle, according to a study, include a lack of understanding about diet and physical activity in particular, a refusal to accept behavior change, a lack of self-motivation, and finally, physical and socioeconomic constraints. A total of 777 personnel working at various professional levels were enrolled in this prospective, questionnaire-based study, which was carried out at a tertiary care hospital between May and August of 2019. The mean age of the study group was 37.38 9.74 years (range: 17-68 years), and all the recruited personnel were exposed to a thorough questionnaire that included questions about physical health, emotional health, social health, spiritual health, and intellectual health.42.1% of participants are men, while 57.9% are women. The majority of study participants (67.6%) engage in moderate physical exercise. There are 2.1% and 9.3% current smokers and drinkers, respectively. 7.3% of people had diabetes, while 9.7% had

hypertension. According to the staff's overall wellness survey, 40.8% of them are in good health, while 31.5% are at risk for health problems. Only 4.8% of people indicated substantial health risks associated with their wellbeing, whereas 22.9% of people had excellent wellbeing scores. In general, the health of the medical personnel at our tertiary care hospital is good. The majority of the workers are putting their physical welfare at danger due to poor exercise habits and irregular eating habits. Joint family systems have been linked to improved mental health and wellbeing among healthcare workers. Exercise, meditation, yoga, and regulating aberrant food intake all contribute to a greater sense of wellbeing[112].

The combination of self-care behaviors and confinement are techniques to reduce the risk of infection and maintain health in a situation where there is no cure for the present COVID-19 virus. However, there are no self-care metrics to monitor general population self-care behaviors that may be quick in a lockdown situation. This study seeks to develop and evaluate a psychometric measure to test broad population self-care behaviors. First, a sample of 226 participants underwent an exploratory factor analysis to identify the underlying factorial structure and to narrow the number of items in the original tool into a statistically meaningful pool of self-care-related items.Later, a confirmatory factor analysis with a new sample of 261 people was carried out to evaluate the accuracy and quality of factor solutions. On this sample, internal validity, reliability, and convergent validity between its score and measures of psychological well-being and perceived stress were studied. The exploratory analyses proposed a four-factor solution that included health consciousness, diet and exercise, sleep, and intrapersonal and interpersonal coping mechanisms (14 items). The four-factor structure was subsequently endorsed as the most effective conceptual ft for self-care practices. The instrument showed high levels of validity for well-being and perceived stress, as well as good reliability and predictive validity of people's perceptions of coping with COVID-19 lockout. This screening test may be beneficial for addressing upcoming assessments and

interventions to encourage healthy behavior. In a scaled environment, this tool can also be tailored to meet the demands of a particular demographic in terms of self-care[113].

Many low-income nations continue to struggle with maternal mortality, particularly those in Africa and Nigeria. This study looks at the geographic and socioeconomic disparities in maternal healthcare utilization in Nigeria between 2003 and 2017. Methods: The study used data from four rounds of the Nigeria Demographic Health Surveys (DHS), which were conducted for women between the ages of 15 and 49 in 2003, 2008, 2013, and 2018. The utilization of the three maternal healthcare services—antenatal care (ANC), facility-based delivery (FBD), and skilled birth attendance—was compared in urban and rural locations using the rate ratios and differences (RR and RD) (SBA). In order to assess relative and absolute disparities in the consumption of maternal healthcare among Nigeria's six geographic zones, the Theil index (T) and between group variance (BGV) were utilized. The RD demonstrates that the disparity in the utilization of FBD between urban and rural areas significantly increased by 0.3% per year over the study period. The relative and absolute concentration index (RC and AC) were used to measure education- and wealth-related inequalities in the utilization of maternal healthcare services. According to the Theil index, there should be a 7. and 1.8% annual drop in relative inequalities in ANC and FBD across the six geopolitical zones, respectively. The BGV findings do not point to any changes in the absolute disparities in ANC, FBD, and SBA utilization over time among the geopolitical zones. The RC and AC findings point to a consistently larger concentration of well-educated and wealthy mothers in Nigeria using maternal healthcare during the course of the study. We discovered that women who are poorer and less educated, as well as those who reside in rural areas and the North West and North East geopolitical zones, use maternity healthcare less frequently. Implementing methods to promote these groups' use of maternal healthcare services should therefore be the main goal[114].

The purpose of our study was to evaluate the significance of leading a healthy lifestyle and any potential links to medical students' wellbeing. Study in Cross Section. Aziz Fatima Medical and Dental College in Faisalabad is the location. June through July 2020. Materials and Methods: The English version of the WHO-5 Well-Being Index and the Health Promoting Lifestyle Profile were utilized in our study. Results: 205 medical students participated in the study. It includes 103 (50.2%) from the 5-year class and 102 (49.8%) from the 4-year class. The table shows that the average age of all participants was 22.45 (plus or minus 1.03) years. The mean score for a health-promoting lifestyle among the participants was 133.36 18.90, which is considered to be moderate. Although the lifestyle mean score is higher in the fifth-year class compared to the fourth-year class, there was no statistically significant difference because the p value was more than 0.05, indicating a significant correlation between wellbeing and a healthy lifestyle. The lifestyles of the students were influenced by their age and gender. An independent t test is utilized to compare the mean difference between gender and MBBS class. The MBBS class, gender, and significant connection between well-being categories are determined using the Chisquare test. The association between well-being and healthy lifestyles is measured using the Pearson correlation coefficient approach. Students in this study led a moderately health-promoting lifestyle, but they did not engage in an adequate amount of physical exercise. The curriculum for medical students has to be updated to promote healthy lives[115].

A healthy lifestyle is a real indicator of someone's health status in society, and the decision to accept or reject a given health service depends on a wide range of factors. The study's main focus is on the relationship between healthcare seeking behavior and healthy lifestyle choices: the pursuit of long-term national growth. The notion of healthcare seeking behavior, the effects of individuals' socioeconomic status, and the influence of cultural affiliation on health status were all critically investigated in this research. The use of

healthcare services, the evolution of healthcare seeking behavior in the twenty-first century, and individual healthcare seeking behavior were all extensively covered in the study. The study came to the conclusion that an individual's socioeconomic level and cultural background have a big impact on how they seek medical care. In light of this, the paper made several recommendations, including that healthcare providers should make their medical bills reasonable so that patients can afford to pay them, and that people be encouraged to avoid letting culture play a significant role in deciding whether or not to use healthcare services[116].

A study guided by cognitive theory, this study tested an explanatory model for adolescents' beliefs, feelings, and healthy lifestyle behaviors and sex differences in these relationships. Structural equation modeling evaluated cross-sectional data from a healthy lifestyle program from 779 adolescents 14 through 17 years old. Theoretical relationships among thoughts, feelings, and behaviors were confirmed and sex differences identified. Thoughts had a direct effect on feelings and an indirect effect through feelings on healthy behaviors for both sexes. A direct effect from thoughts to behaviors existed for males only. Findings provide strong support for the thinking–feeling–behaving triangle for adolescents. To promote healthy lifestyle behaviors in adolescents, interventions should incorporate cognitive behavioral skills–building activities, strengthening healthy lifestyle beliefs, and enhancing positive health behaviors. Understanding factors that contribute to healthy lifestyle behaviors in adolescents is critical to the development of interventions needed to promote positive behaviors that can prevent negative physical and mental health outcomes, which may have lifelong implications. Cognitive theory is a model linking a person's thoughts to emotions and behaviors. Baseline measures from a longitudinal randomized controlled trial titled “Creating Opportunities for Personal Empowerment (COPE)” were used for this study. Urban and suburban high school teens (N = 779) from 11 schools in two school districts from the Southwestern. The sample

was 52% female, and the majority were of Latino ethnicity (68%), followed by White (14%), Black (10%), Asian (4%), and Native American (4%). Most of the sample (76%) reported receiving public assistance. The mean age was 14.7 years (standard deviation = 0.73). The Table presents the descriptive statistics for the observed indicators of the latent variables for thoughts, feelings, and healthy lifestyle behaviors for the whole sample and differences by sex. For the latent variable . The need to enhance healthy lifestyle behaviors in adolescents to prevent health behavior–related chronic conditions and long-term deleterious health outcomes have become a national imperative. Evidence reviews have indicated that self-efficacy, or the belief that one can affect change, and outcome expectations can act as mediators for increasing healthy lifestyle behaviors in children and adolescents. To increase engagement in healthy lifestyle behaviors, our results suggest screening and targeting adolescents' cognitive beliefs about engaging in healthy lifestyle behaviors. Brief, valid, and reliable measures can be implemented in primary care and in schools to identify adolescents at risk for negative mental and physical health outcomes[117].

A study was conducted to determine healthy lifestyle behaviors of university students and related factors. Designed to use the descriptive and stratified sampling method, the study included 2100 students studying in the departments of Health Sciences, Science, Social Sciences, and Educational Sciences at Sakarya University, Turkey. The study was conducted between May 2015 and December 2015. Data including socio-demographic characteristics and Health-Promoting Lifestyle Profile II (HPLP II) were collected. The Mann Whitney U test, Kruskal-Wallis test, and Spearman's rank correlation were used for data analysis. The median score of the students on the HLBS II was 2.42 and for the sub-dimensions, the median score was 2.22 for the health responsibility (HR), 2.12 for physical activity (PA), 2.22 for

nutrition (N), 2.77 for spiritual development (SD), 2.77 for interpersonal relationships (IR), and 2.37 for stress management (SM). It was observed that gender, age, income, grade level, smoking, nutritional habits, body mass index, attending courses related to health effect healthy lifestyle behaviors. It was observed that students showed the least responsible behaviors with regards to physical activity, health responsibility, and nutritional habits. In order to protect and improve the health of students, it may be useful to make health promotion courses compulsory in the curriculum of all departments in the university[118].

A tripling in the number of overweight adolescents has occurred during the past two decades, with type 2 diabetes reaching epidemic proportions. Although obesity has been identified as a correlate of depression and low selfesteem in adolescents, the relationships among key cognitive/mental health variables and healthy attitudes, beliefs, choices, and behaviors in overweight teens have yet to be explored. Therefore, the aim of this study was to describe these relationships so that an effective intervention program to promote and sustain healthy lifestyle behaviors could be implemented. A descriptive correlational study was conducted with 23 overweight teens. Key variables measured included depressive symptoms, state and trait anxiety, self-esteem, beliefs/ confidence about engaging in a healthy lifestyle, perceived difficulty in leading a healthy lifestyle, and healthy attitudes, choices, and behaviors. Teens with higher state and trait anxiety as well as depressive symptoms had less healthy lifestyle beliefs, and teens with higher self-esteem had stronger beliefs about their ability to engage in a healthy lifestyle. Stronger beliefs about the ability to engage in healthy lifestyles were related to healthier living attitudes and healthier lifestyle choices. Teens who perceived healthy lifestyles as more difficult had less healthy attitudes and reported less healthier choices and behaviors. Including a strong cognitive behavioral skills building component into clinical interventions with overweight teens may be key in boosting their beliefs/confidence

about being able to engage in healthy behaviors and lessening their perceived difficulty in performing them, which should result in healthier choices and lifestyle behaviors[119].

Getting insight into pubescent health behaviors and related aspects is the initial step in improving lifelong health. The purpose of this study was to examine the relationship among physical activity levels (PALs), body mass index (BMI) and healthy lifestyle behaviors (HLBs) in adolescents in one of the rural districts of Turkey. Participants were 749 14-18-year-old Turkish girls and boys in one of the rural districts of Turkey. Their physical characteristics like body weight (kg), height (cm) and BMI were determined. Participants completed the Physical Activity Assessment Questionnaire (PAAQ) and the Adolescent Lifestyle Profile Scale (ALP) for determination of physical activity level (PAL) and HLBs, respectively. Results: The physical characteristics and BMI of girls and boys revealed gender related differences (p0.05). The total health behavior scores of adolescents were found as above the average (111.77 (SD=11.81)). Results also indicated correlations, from low to moderate, between PAL and health responsibility, physical activity, positive life perspective, stress management, spiritual health subscales and total profiles (p0.05). Moreover, there was no relationship between BMI and PAL, BMI and healthy life style profiles (p>0.05). It was concluded that adolescents had gender related BMI differences as expected but did not have sufficient levels of PA and gender related changes in PALs and healthy life style choices were not different. In addition, we found no relationship among BMI, PAL & HLBs whereas PAL and ALP subscales and total profile were associated within the range of weak to moderate in boys, girls and total sample[120].

A study was conducted to examine the effect of healthy lifestyle beliefs on their attitudes toward physical activity, nutrition, exercise, and weight-related self-efficacy lifestyles in

Turkish adolescents. This study used a methodological and descriptive design. The study was conducted with 445 adolescents aged 13–18 years. The data were collected using a Descriptive Information Form, the Healthy Lifestyle Beliefs Scale for Adolescents, the Nutrition Exercise Attitudes Scale, and the Attitudes toward Physical Activity Scale. Mean and percentage values, ***t***-test, ANOVA test, and linear regression analysis were used in the analysis of the research data. A statistically significant difference was found between adolescents' obesity status, paternal educational level, maternal educational level, income status, and the mean scores obtained for healthy lifestyle beliefs, nutrition and exercise attitudes, physical activity attitudes, and weight-related self-efficacy, as well as between sex and mean scores for attitudes toward nutrition, exercise, and physical activity. In the model created with regression analysis, it was found that the adolescents' healthy lifestyle beliefs and sociodemographic variables explained 96.3% of their attitudes toward nutrition and exercise, 93.6% of physical activity attitudes, and 96.5% of weight-related self-efficacy levels, with statistical significance. According to the results of the study, healthy lifestyle beliefs are an important predictor of adolescents' attitudes toward nutrition, exercise, and physical activity as well as their weight-related self-efficacy. We recommend that school nurses consider healthy lifestyle beliefs when creating intervention programs for adolescents[121].

Peers and siblings are considered an important influence on children's and adolescents' food choice. However, there is a lack of studies examining how peer and sibling impact is related to children's and adolescents' eating behavior. The purpose of this study was to analyze peers' and siblings' impact on children's and adolescents' healthy eating behavior identified from a literature review, summarize the results, and discuss potential social factors that may predict these associations. A systematic literature review. Findings of the systematic literature review show that peers, and to a lesser extent siblings' influence on children's and adolescents'

healthy eating behavior more often is negative than positive, although in some studies, no significant effect was found. However, empirical research of which social factors related to relationships with siblings and peers may explain and predict peers' and siblings' influence on children's and adolescents' healthy eating behavior is limited. Peers' influence on children's and adolescents' healthy eating behavior is often found to be negative by the increase in consumption of energy-dense and low-nutrition value foods. However, in some cases, this influence can also be a positive one, and there is a need to find effective ways of how it could be used in encouraging healthy eating behavior of children and adolescents. Studies exploring siblings' impact on children's and adolescents' eating behavior are scarce. In addition, factors related to social interaction that may explain peers' and siblings' influence on children's and adolescents' healthy eating behavior are ambiguous. Therefore, more research in this area is needed[122].

A study examine associations between academic performance and moderate-vigorous physical activity, strength training, fruit and vegetable intake, and sleep. Cross-sectional observational study. Forty U.S. colleges and universities participating in the Fall 2008 National College Health Assessment-II (NCHA-II) (median response, 27%). A total of 16,095 undergraduate students (18–24 years; 703% female). Self-reported lifestyle variables from the NCHA-II questions were dichotomized as meeting or not meeting public health recommendations. Grade average ranged from 1.00 to 4.00 points. Linear regression, adjusting for sociodemographic and health-related variables. The prevalence of meeting public health recommendations was as follows: moderate-vigorous physical activity, 41.9%; strength training, 32.4%; fruit and vegetable intake, 4.6%; and sleep, 23.6%. Grade average was higher in students meeting moderate-vigorous physical activity, fruit and vegetable intake, and sleep recommendations ($p \leq .019$). If moderate-vigorous physical activity was met, grade

average was higher by .03 points, .15 points higher when meeting fruit and vegetable intake recommendations, and .06 points higher for sleep. There was no significant change in grade average in those meeting strength-training recommendations. College students who adhere to public health recommendations for lifestyle behaviors have modestly higher grade averages after adjusting for sociodemographic and negative health behaviors[123].

Graduate and professional students are reported to have higher than average rates of depression compared to age- and gender-matched populations. Further, more than half of student health visits are due to anxiety, yet little is known about the relationships among depression, anxiety, and healthy lifestyle behaviors in this population as well as what factors predict depression and anxiety.The purposes of this study were as follows: (a) to examine the prevalence of depression, anxiety, stress, physical health, healthy beliefs, and lifestyle behaviors in incoming first-year health sciences professional students; (b) to describe the relationships among these variables; and (c) to determine predictors of depression and anxiety. A descriptive correlational study design was used with baseline data collected from first-year graduate health sciences students from seven health professions colleges who were participating in a wellness onboarding intervention program, including Dentistry, Medicine, Nursing, Optometry, Pharmacy, Social Work, and Veterinary Medicine. Seventeen percent of incoming students reported moderate-to-severe depressive symptoms with 6% reporting suicidal ideation. In addition, 14% of the participating students reported moderate-to-severe anxiety. Factors that predicted depression and anxiety included having less than 7 hr of sleep per night, worse general health, lower healthy lifestyle beliefs, lower healthy lifestyle behaviors, higher stress, and a perceived lack of control. These findings highlight the need to routinely screen incoming health sciences students for depression and anxiety upon entrance into their academic programs so that evidence-based interventions can be delivered and

students who report severe depression or suicidal ideation can be immediately triaged for further evaluation and treatment. Providing cultures of well-being and emphasizing self-care throughout academic programs also are essential for students to engage in healthy lifestyles[124].

2.4 Theoretical Framework

An Ecological Model of Factors Influencing Diet and Physical Activity. (The arrow extending across the four levels suggests that factors or barriers extend into and interact across various levels.)

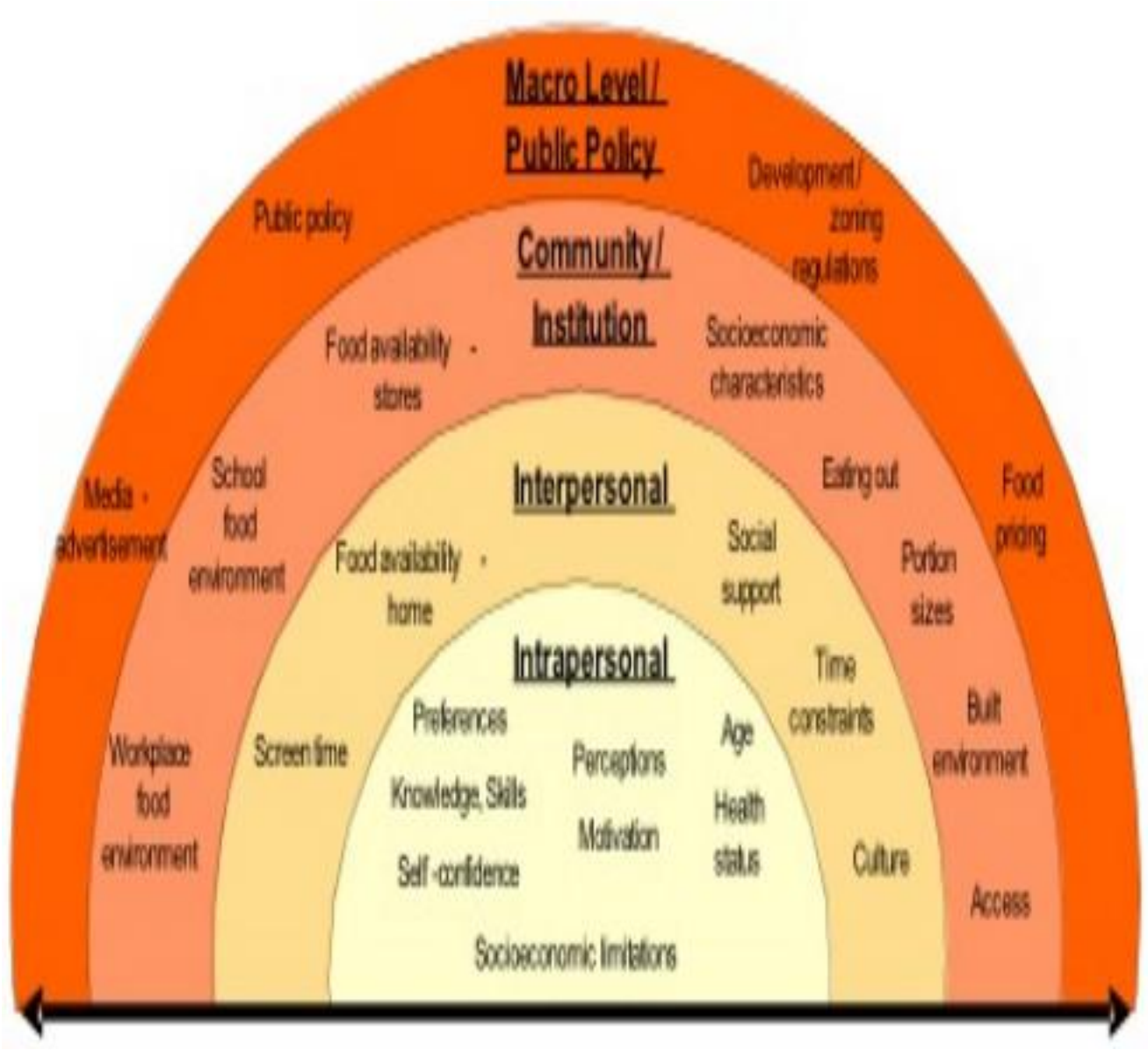

Figure 2.1: The Ecological Model

Intrapersonal Level

The intrapersonal level factors are mostly situated within the control of an individual. At this level, taste preferences (e.g., for fast foods) and lack of nutrition knowledge and skills, can be barriers to choosing a healthful diet. Low nutrition knowledge and inadequate cooking skills have been reported as barriers to fruit and vegetable intake. Food label (Nutrition Facts) use, a nutrition-related skill, is also positively related to nutrition knowledge and intakes of fruits and vegetables.

Among the intrapersonal level barriers to physical activity, physical limitations (painful joints, shortness of breath, etc.), perceptions of already being fit, and lack of interest have been reported for older people. For youth, intrapersonal level barriers include lack of self-confidence and motivation, and lack of knowledge about the health benefits of being physically active . Extension programs to increase awareness, knowledge, skills, motivation, and confidence would be best suited for overcoming these barriers[125].

Interpersonal Level

Interpersonal level factors involve the primary social relationships surrounding an individual (friends, family, coworkers, etc.). Studies show that children's food intake is related to their parents' nutrition knowledge and food intake , and it is also influenced by their peers.

Young people tend to associate healthy foods with parents and fast food with pleasure, friendship, and socializing , and they expect negative reactions from their peers about eating healthier foods. Education programs that increase nutrition knowledge and peer support for healthful choices may help to overcome these barriers. Lack of social support is also an interpersonal level barrier for physical activity, and Extension programs that encourage group participation (e.g., walking groups, inclusion of friends/family) would be most suitable to target this barrier.

Acculturation, the process by which a racial or ethnic group adopts the cultural patterns of the dominant/host group, can be a barrier at the interpersonal and community/institution levels, because culture can be viewed as a part of the social environment primarily within the family and the community. For example, greater acculturation is related to lower intakes of fruits, vegetables, vitamins, and minerals, and higher fat consumption among Latinos. Conversely, highly acculturated Latinos are more likely to engage in leisure-time physical activity compared to their less-acculturated counterparts. Hence, when designing Extension programs, it is important to recognize and encourage the retention of healthy lifestyle patterns within the primary culture while promoting the adoption of healthful behaviors from the host culture.

Socioeconomic factors also influence lifestyle behaviors. Lower frequency of weekly family meals has been reported among children whose mothers worked full-time (versus those who were not employed).This association might be the result of increased time constraints due to employment and/or the convenience and affordability of meals prepared outside of the home. Because availability of healthier food options at home and having family meals are related to eating healthful diets, this can be a useful strategy for Extension educators. Considering that lack of time is a barrier both for healthful eating and physical activity, tips for planning economical and healthful food shopping, easily prepared family meals, and time management skills can be incorporated into the Extension programs[126].

Television viewing or computer use (screen time) can be intra- or interpersonal level barriers as they can apply to an individual or to the entire family, but they are also influenced by the public policy level factors such as food advertisement and media regulations. Greater screen time is associated with children's requests for advertised foods; consuming foods like candy, fast food, and sugar-sweetened drinks; and increased sedentary behaviors. Therefore, emphasizing the replacement of screen time with more active pursuits and helping parents to

establish strategies to control the amount of screen time and the influence of advertisements is essential in promoting a healthy lifestyle for families[127].

Community/Institution Level

This level includes institutional or organizational relationships and characteristics such as neighborhoods, work sites, and schools. Independently of individual level socioeconomic status, socioeconomic characteristics of the environment (e.g., neighborhood) influence eating behaviors. Underlying reasons could be limited food availability such as existence of fewer stores carrying healthier foods and more fast food restaurants in poorer neighborhoods. Oftentimes, limited access to private transportation further limits the residents' access to stores with better food selections. Furthermore, frequent eating at restaurants is related to suboptimal dietary patterns characterized by larger portions and foods high in calories, fat, and sodium. Hence, Extension programs focusing on economical ways of preparing quick and healthy meals and selecting healthier foods when eating out would be beneficial for individuals.

Socioeconomic characteristics of neighborhoods and built environment can be barriers to physical activity as well. Neighborhood safety, urban sprawl, lower residential density, and perceived characteristics of the built environment, such as lack of attractiveness and difficulty getting to businesses and shopping areas (land use mix) have been reported as barriers. Community partnerships and policy level interventions such as parks, zoning, and development regulations would be suitable to overcome these barriers[128].

Macro/Public Policy Level

The macro/public policy level factors involve local, state, and federal policies. However, individuals with limited English or literacy levels are likely to experience obstacles in utilizing this resource. A cyclic eating pattern, characterized by excessive eating when there is

adequate food potentially through the Food Stamp Program and not eating enough at other times, can also be a barrier to a healthful diet.

Policies that influence food pricing also affect individuals' food intake patterns because healthful foods are reported to cost more than less nutrient-dense foods, and price is a strong determinant of food choice.

These barriers can be addressed both at individual and policy levels. Extension educators can help limited-resource individuals learn how to select more healthful foods and stretch their dollars throughout the month. Educators can also support community partnerships and policies (e.g., farmers market vouchers) promoting easy access to healthier food options. Examples of local partnerships include farmers markets, city gardens, and farm-to-school projects. Because limited availability of healthful foods is also a barrier to healthful eating in schools and workplaces, Extension educators can also take an active part in the School Wellness policies or collaborate with local businesses to promote wellness in worksites.

Increasing portion sizes can be seen as a macro level barrier due to the nationwide acceptance, but it may be more feasible for Extension educators to target this barrier at the community, inter- and intra-individual levels through establishing partnerships with local restaurants and other community organizations, and educating public about portion control.

As mentioned earlier, it is also important for Extension educators to be aware of the food-related advertisement trends and regulations at the state and national level to be able to help families more effectively[129].

2.5 Appraisal of Literature Review

The goal of this chapter was to study academic writings on the idea of a healthy lifestyle as it relates to productivity. We also looked at how effectively residents' families distributed resources to them and how to preserve family effort to ensure residents' successful productivity. The impact of nutrition, drugs, and alcohol as parts of a healthy lifestyle on how it impacts inhabitants' productivity was also looked at. Additionally, the impact of religion as a component of a healthy lifestyle on productivity was also studied. Off-campus and on-campus housing were both reviewed as components of a healthy lifestyle that influence productivity.

Lifestyle, as defined in this chapter, is a person's or a group of people's individual or collective personal conventions or habits. It relates to their deliberate adjustment to social surroundings, which results from desire for socialization and integration. Lifestyle in terms of health refers to dietary practices, exercise routines, the social consumption of drugs like alcohol and nicotine, as well as exposure to other harmful behaviors. Additionally, other aspects that were highlighted that have an impact on an individual's healthy lifestyles include physical activity, health and fitness, good nutrition and diet, stress, drugs, and alcohol, to name a few. All of these elements affected a person's lifestyle choices, either favorably or unfavorably. A healthy lifestyle has an impact on productivity because of the lifestyle decisions people make and how those decisions affect their productivity, both positively and adversely[130].

The literature review also covered in depth how physical activity affects productivity and a healthy lifestyle. The definition of physical activity was any bodily movements produced by the skeletal muscles, which leads to energy use. Additionally, it was addressed how a lack of physical activity makes residents more sedentary, which can lead to lower

productivity. Residents who are physically inactive suffer grave implications for their personal health as well as lower production, as was already mentioned. When included in educational programs for residents, physical activity has been linked favorably to productivity in addition to its health benefits .

Family economic position was another aspect of a healthy lifestyle that the research examined as influencing productivity. Many locals, it was learned, grow up in houses with plenty of financial and material riches. Additionally, it was estimated that well over 100 million Nigerians lived below the statutory poverty limit of $ 1 per day . Additionally, it was demonstrated that the bulk of communities in Nigeria are made up of young people, who make up around 60% of the country's population. As a result, poverty has an impact on the performance of the individual in the community. Low-income residents are twice as likely to have a low cumulative grade point (C.G.P.) or be suspended, expelled, or leave the neighborhood than their more affluent counterparts. However, it has been established that a significant factor affecting inhabitants' productivity is their family or home environment.

Stress was also extensively highlighted as a healthy lifestyle factor that affects productivity. While the Encarta Encyclopedia defined stress as a mental, emotional, or physical strain brought on by anxiety or overwork, the 7th edition of the Oxford Advanced Learners Dictionary defined stress as pressure or worry produced by the problems in someone's life. According to the research, stress is a distressing mental and physiological state of arousal that people experience when they are in circumstances that they regard as dangerous or harmful to their well-being. As was previously mentioned, stress has a significant negative affect on people, and the amount of outside and community support that people receive has a significant positive impact on their achievement. Supports like emotional support play a

major role in residents' success[131].

However, when analyzing the literature review, the impact of drugs and alcohol as a healthy lifestyle element that affects productivity was explored. Drugs are substances that alter how the biological systems of the body function due to their chemical makeup. As previously established, these impacts may be advantageous or detrimental. Drug usage among university students in Nigeria includes alcohol, caffeine, nicotine, marijuana, Librium, valium, dexamphetamine, mandrax, ginseng, and cocaine. It was discovered that locals utilize drugs to feel grovel, stay awake, fall asleep, or improve sex. According to the research, drugs and alcohol also play a role in individual accidents, subpar work performance, violent crimes, emergency room visits, traffic accidents, and low productivity in Nigerian colleges. It was determined that counseling and psychiatric services offered on campus can assist students in maintaining a drug-free lifestyle and increasing their community's productivity.

The literature also explored nutrition as a healthy lifestyle factor that affects productivity. According to Encarta Encyclopedia, nutrition is the process of absorbing nutrients from meals and processing them in the body in order to stay healthy or grow. It was outlined that healthy eating will promote normal growth and development, good cognitive functioning, and a stable mind, all of which will lead to positive success in life, job, and academics[132].

It was revealed by that on campus residents frequently have an increased level of accessibility to public safety and security resources, thus lessening safety concerns alone on campus residential residents enjoy a quick response from approachable and accessible maintenance and custody staff and or 24 hours live in staff further enhancing custodial services. It was claimed that religion is a complicated idea that includes a variety of features of beliefs, behavior, and intelligence. According to the findings, practicing religion regularly promotes

the assimilation of traditional norms and values. Additionally, consistent religious attendance raises family expectations of greater academic success[133].

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Chapter Three

Methodology

The procedures used to gather and analyze the study's data are described in this chapter. It includes the research design, the study population, the sample size and technique, the research instruments, instrument administration, and data processing method.

3.1 Research Design

The study adopted a cross-sectional study design.

Study Area

Eti-Osa East LCDA (Local Council Development Area) is a local administrative unit in Lagos State, Nigeria. LCDA is a local government structure created by the Lagos State government to bring governance and development closer to the grassroots level. Eti-Osa East is a local council development area in Nigeria. It was split off from Eti-Osa Local Government Area in 2003. Eti-Osa East Local Council Development Area is a locality in Lagos State. Eti-Osa East Local Council Development Area is situated southeast of Ajah, and west of Ogombo.

Eti-Osa East LCDA is located in the Eti-Osa Local Government Area, which is one of the 20 Local Government Areas in Lagos State. It is situated in the southern part of Lagos and shares boundaries with other local government areas such as Eti-Osa West, Ibeju-Lekki, and Lagos Island. The LCDA is governed by an elected chairman who oversees the administration and provision of basic services within the area. The council is responsible for various functions, including but not limited to healthcare delivery, education, infrastructure development, waste management, revenue generation, and maintaining law and order. Eti-Osa East LCDA, like other areas in Lagos State, faces several developmental challenges, including population

growth, urbanization, inadequate infrastructure, and socio-economic disparities. Efforts are being made by the local government authorities to address these challenges and improve the overall well-being of residents.

3.2 Study Population

The study population consists all residents of Eti-Osa East LCDA, Lagos State

3.3 Sample Size and Sampling Technique

Sample Size

The minimum sample size was determined using the Fishers' formula[1] for the determination of sample size for descriptive studies that have a population greater than 10,000. The sample size for this study was determined considering the following factors:

- Estimated proportion of lack of physical activity 50.3%[2]
- A standard normal deviate of 1.96,
- 95% confidence interval
- Acceptable margin of error 5%.

Based on the Fisher's formula, that is

$$n = \frac{Z^2 p (1 - p)}{d^2}$$

Where: n - minimum sample size required

d - Is margin of error 5%

z - Confidence level 95%

$$n = (1.96)^2 * 0.503(1- 0.503)$$

$$n = \frac{3.8416 * 0.503*0.497}{(0.052)^2}$$

$$n = \frac{0.960}{0.0025}$$

n = 384

Correcting for a possible non- response rate of 10%, the final calculation was 384/0.9 = **427**

So a total of 448 residents of Eti-Osa East LCDA were interviewed.

Sampling Techniques

A simple random sampling method was used to select participants in the 5 wards of the LCDA. A cluster sampling technique was used to select the study participants from the selected wards.

The selected wards include:

1. Addo Ward
2. Sangotedo Ward
3. Oke-Ira Ward
4. Badore Ward
5. Langbasa Ward

3.4 Research Instrument

The study adopts self-administered questionnaires to collect data required to answer the research question and sub-research questions.

The self-administered questionnaire adopted in this study consists of two parts (Section A and Section B). Section A of the questionnaire focuses on demographic factors such as age, gender, and occupation and socio-economic characteristics such as level of income.

Section B of the questionnaire assessed attitudes towards healthy eating, a healthy lifestyle and physical activity, and enabling and barrier factors to following a healthy diet, a healthy lifestyle, and physical activity. The attitude sections of the questionnaire make use of 5-point-Likert scales, which is highly recommended for attitudinal studies[3].

3.5 Validation and Reliability of the Instrument

The validity and realibility of the instruments that was utilized for this study for clarity, appropriateness of the language of expression and accuracy of word, was done or validated by my research supervisor. My supervisor ensures necessary comments and corrections in other to improve face, content and construct validity of the instrument.

3.6 Method for Data Collection

Upon getting necessary approvals to conduct the research. Two research assistants was recruited to help in collecting the data and various strategic places (health facilities, playground, community hall e.t.c) was mapped out so the residents can be captured for the study.

An introduction of the study was made to the all the participating for completing the instruments. They were assured that a strict measure of confidentially would be ensured. Upon the completion of questionnaires by the participants, all the questionnaires were thoroughly checked to see if they will all be completed. The well filled or completed questionnaires was then be subjected to data analysis.

Assessment of healthy living practices

Inquiry on tobacco smoking included smoking status (never, former, or current smoker); Do you currently smoke, have you ever smoked and If yes, when did you quit smoking

Questions about alcohol intake included are you a regular consumer of alcohol (more than one glass of wine or beer with the meals) and have you ever been a regular consumer of alcoholic drinks?

Information on physical activity was obtained by asking participants about their usual type and duration of activities in each of the four domains (occupational, commuting, domestic, and leisure-time) in the past 1months. We calculated the total physical activity level by multiplying the metabolic equivalent tasks (METs) value for each activity by hours spent on that activity per day and summing the MET-hours for all activities. The physical activities was categorized in (intense, moderate and poor)

Habitual dietary intakes during the one week were assessed via a validated qualitative food frequency questionnaire, which covered 10 major food groups using a short qualitative food frequency questionnaire. Each food group was provided with five frequency categories to choose from (never/ rarely, monthly, 1–3 days/week, 4–6 days/week, or daily). The eating habit was categorized into healthy and unhealthy.

Questions on sleeping habits included; Do you sleep well, how many hours per night, how often do you wake up at night, do you wake up feeling tired and do you take sleeping pills.

Physical Assessment of Participants

Trained research assistants measured weight, height, circumferences of waist and hip and blood pressure using calibrated instruments. We calculated BMI as weight in kilograms divided by height in metres squared. Waist-to-hip ratio (WHR) was the ratio of waist circumference to hip circumference.

Physical assessment of participant was performed to obtain weight and height measurements which were used to calculate body mass index (BMI). BMI is a measurement of a person's weight with respect to his or her height and acts as an indicator of a person's total body fat. It indicates whether one is underweight (BMI < 18.5), of normal weight (BMI between 18.5 and 24.9), overweight (BMI between 25 and29.9) or obese (BMI >30). A single weight and height measurement was performed by the study principal investigator and by the research assistant. Weight was measured using a calibrated scale, the weighing scale did not require any zeroing before taking measurement. Participants were instructed to remove shoes and heavy outer clothing before being weighed.

Height was measured using a wall mounted stadiometer (model not known) whilst the patient still had their shoes off.

Waist to hip ratio was also measured. WHR is a measurements of a person's waist circumference with respect with the persons hip circumference, it acts an an indicator for excess weight. Its indicates whether one:

Health Risk	Women	Men
Low	≤0.80	≤0.95
Moderate	0.81 to 0.85	0.96 to 1.0
High	≥0.86	≥ 1.0

Waist circumference was measured using measuring tape. The participant's stands and the tape in a horizontal way were placed around middle just above the hipbones.

Hip circumference was also measured at its widest portion of the buttocks at left with the tape parallel to the floor.

Blood pressure was measured using a sphygmomanometer. Blood pressure measurement is the only way to know if you have high blood pressure. The participants were asked to sit comfortably on a chair, putting both feet on the ground and resting their arm on the table that is up to their chest height.

These are the indicators of blood pressure measurement

Blood pressure category	Systolic (mmHg)	Diastolic (mmHg)
Normal	less than 120	Less than 80
Elevated (Prehypertension)	120-139	80-89
High blood pressure (Hypertensive)	140 or higher	90 or higher

Source: American Heart Association

3.7 Method of Data Analysis

Following the completion of the data collection, the test scores was coded, scored. Statistical Package for Social Sciences (SPSS) software programme 25 was used.

Descriptive statistics was conducted for socio-demographic and lifestyle factors, Physical Activity, healthy eating, smoking habits, alcohol consumption and sleeping duration. The categorical variables were expressed as proportions and percentages accordingly. Descriptive cross-tabulations were conducted to describe differences in attitude regarding physical Activity, healthy eating, smoking habits, alcohol consumption and sleeping duration between different variables.

The healthy eating habit was characterized by a high intake of fruits, nuts, vegetables, legumes, cereals, fish, and poultry while In contrast, the unhealthy eating habit was distinguished by a high intake of red meat fried foods, sweets and soft drinks, and a very low

intake of vegetables and fruits. This variable was determined by subtracting the total recommended daily intake for each food group from the total daily intake score for all food groups. The obtained results were divided into two categories based on two percentile cutoffs. Negative values were classified as "unhealthy", and the most positive values were classified as "healthy".

The total physical activity level was calculated by multiplying the metabolic equivalent tasks (METs) value for each activity by hours spent on that activity per day and summing the MET-hours for all activities. The physical activities was categorized in intense (≥ 30 MET-hours), moderate (15-29.9 MET-hours) and poor (<15 MET-hours).

Healthy living practices was categorized as participants who do not smoke, do not consume alcohol,have adequate sleep, have good eating habit and have moderate physical activities.

3.8 Ethical Considerations

Ethical approval was obtained from

- Lagos State University research ethics committee
- Lead City University Health Research and Ethics Committee.

Written informed consent was obtained from the respondents after details about the study would have been explained to them, and strict confidentiality of all information obtained from respondents was maintained throughout the course of the study

The following ethical principles were addressed:

Confidentiality

The confidentiality of the participants was maintained at all times during the entire study. All the subjects were assigned identification code numbers that were used at all times. Anonymity was ensured by not using names when entering data. Data generated from the study was

passworded on the laptop, and the identification codes were stored in a manner that maintains subjects' confidentiality.

Autonomy

Autonomy was addressed by ensuring the provision of written informed consent together with a participant information sheet to all subjects before commencing with the study (See Appendix). No subjects were forced to participate in the study; if the subject said they were not interested in participating in the study, they were not forced, and no incentive was used to entice participants into participating in the study.

Non-maleficence

The study had no intention to inflict any harm on any subject. The study posed minimal risks for the subjects as it was questionnaire-based. However, all human interactions that involve talking about self carry some amount of risks.

Beneficence

Although the study did not benefit the subjects immediately, the results will assist with planning and amending residents health and wellness programmes, which will benefit them directly. Feedback sessions regarding study findings will be offered, and any questions regarding healthy eating, a healthy lifestyle, and physical activity will also be addressed in this session.

Endnotes

[1]Scholz, Mirjam Lisa, HelleCollatz-Christensen, StigNikolajFasmerBlomberg, Simone Boebel, JeskeVerhoeven, and Thomas Krafft. "*Artificial Intelligence in Emergency Medical Services Dispatching: Assessing the Potential Impact of Automatic Speech Recognition Software on Stroke Detection Taking the Capital Region of Denmark as Case In Point.*" **Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine** 30, no. 1 2022: 1-17.

[2] O.A Eyo, N. O. Ekpenyong, O. E. Omoronyia, N. E. Mkpanam, and D. Nwoha. "*Unhealthy Lifestyle and Poor Healthcare Access*: **A Cross-Sectional Study in Rural Cross River State, Niger Delta Region, Nigeria.**

Chapter Four

Results and Discussion of Findings

4.1 Demographic Data Analysis

Socio Demographic Characteristics of Respondents

Table 4.1 below shows the socio demographic characteristics of the respondents. The mean age of the respondent was 46.69 standard deviation of ± 18.308. Most of the respondents are married (39.7%) and had tertiary education (43.5%). Most of the respondents are self-employed (35.9%).

Table 4.1: Socio Demographic Characteristics of Respondents

Variables	Frequency	Percent (%)
Age	46.69± 18.308	
≤24	30	6.7
25-34	179	40
35-49	115	25.7
>49	124	27.7
Sex		
Male	217	48.4
Female	231	51.6
Marital Status		
Single	123	27.5
Married	178	39.7
Divorced	48	10.7
Separated	43	9.6
Widowed	56	12.5
Level of Education		
None	64	14.3
Primary	59	13.2
Secondary	130	29
Tertiary	195	43.5
Employment Status		
Unemployed	118	26.3
Self- employed	161	35.9
Fully employed	85	19
Student	28	6.3
Full House Wife	58	12.5

Source: Field Survey 2022

Physical Assessment of Respondents

Table 4.1.1 shows the physical assessment of the respondents 48.9 % of the respondents have normal body mass index. Majority of the respondents have normal blood pressure among the male respondents most of them have low waist circumference (43.8%) and among the female respondents most of them have high waist circumference (71.9%)

Table 4.1.1: Physical Assessment of Respondents

Variables	Frequency	Percent (%)
Body Mass Index (kg/m^2)		
Normal(18.5-24.9)	219	48.9
Obese(≥30.0)	42	9.4
Overweight(25.0-29.9)	124	27.7
Underweight (<18.5)	63	14.1
Blood Pressure		
Hypertensive (≥ 140/90mmHg)	78	17.4
Normal (<120/80mmHg)	329	73.4
Prehypertension (120-139/80-89mmHg)	41	9.2
Male WHR (217)		
High	66	30.4
Low	95	43.8
Normal (<0.90)	58	25.8
Female WHR (n=231)		
High	166	71.9
Low(	18	7.8
Normal (<0.85)	47	20.3

Source: Field Survey 2022

4.2 Presentation of Data

Research Question Two: Level of physical activities of residents of EtiOsa East LCDA, Lagos

Table 4.2 below shows the level of physical activity among the participants, reveals that participation in sitting activities like clubs, discussion groups, and religious meetings varies among respondents, with 22.1% never engaging in them, 43.1% doing so seldomly (1-2 days per week), and 37.3% participating sometimes (3-4 days per week) for 1-2 hours daily. Also, walking outside for various reasons is a popular activity, with 39.5% of individuals doing it often (5-7 days per week) and 39.1% spending 1-2 hours per day on it, while only 4.2% seldom walk for less than 1 hour daily. Light activities like fishing and bowling are frequently undertaken, with 51.3% engaging often, and 51.8% spending 1-2 hours daily. Similarly, moderate and strenuous activities are participated in sometimes, with 30.1% and 26.3% respectively dedicating 1-2 hours per day. The majority of partcipants perform muscle-strengthening exercises (57.6%) often, and flexible activities (46%) are also quite common, with 29.5% doing them for 1-2 hours daily. Housework, both light and moderate, is regularly performed, with 34.2% and 35.5% respectively spending 1-2 hours daily. Heavy housework is done by the majority (55.8%) often, with 54.5% allocating 1-2 hours daily.

Table 4.2: Questions on Level of Physical Activities of Residents of EtiOsa East LCDA, Lagos

Type of Activity	How many days per week?				How many hours per day?			
	Never (0days)	Seldom (1-2days)	Sometimes (3-4days)	Often (5-7days)	0	<1hr	1-2hrs	>2hrs
Participate in sitting activity such as clubs, discussion group, religious meeting	99(22.1)	193(43.1)	95(21.2)	61(13.6)	94(21)	145(32.4)	167(37.3)	42(9.4)
Walking outside for any reason such as exercise, walking with dog, in a mall	177(39.5)	151(33.7)	101(22.5)	19(4.2)	175(39.1)	135(30.1)	114(25.4)	24(5.4)
Engage in light activities such as fishing, bowling	230(51.3)	99(22.1)	63(14.1)	56(12.5)	232(51.8)	85(19)	97(21.7)	34(7.6)
Engage in moderate activities such as dancing, skating, skipping ropes	144(32.1)	153(34.2)	113(25.2)	38(8.5)	143(31.9)	135(30.1)	131(29.2)	39(8.7)
Engage in strenuous activities such as jogging, swimming, cycling, climbing stair for exercise	125(27.9)	137(30.6)	92(20.5)	94(21)	123(27.5)	118(26.3)	139(31)	68(15,2)
Any exercise to increase muscle strength such as lifting weights, pushups, pull-ups	258(57.6)	127(28.3)	41(9.2)	22(4.9)	254(56.7)	84(18.8)	85(19)	25(5.6)
Engage in flexible activities	206(46)	144(32.1)	71(15.8)	27(6)	199(44.4)	132(29.5)	98(21.9)	19(4.2)

such as stretching, yoga								
Any light housework such as washing dishes, mopping floors, ironing	73(16.3)	128(28.6)	126(28.1)	121(27)	71(15.8)	153(34.2)	154(34.4)	70(15.6)
Any moderate housework such as laundry, scrubbing floor	80(17.9)	154(34.4)	135(30.1)	79(17.6)	81(18.1)	159(35.5)	149(33.3)	59(13.2)
Any heavy housework such cutting grass, moving furniture	250(55.8)	99(22.1)	55(12.3)	44(9.8)	244(54.5)	99(22.1)	74(16.5)	31(6.9)

Source: Field Survey 2022

Grading of Physical Activity among the Respondents

The table 4.2.1 below show the level of physical activity among the respondents and 56.2% of the respondents shows moderate level of physical activity.

Table 4.2.1 Level of Physical Activity among the Respondents

Physical Activity	**Frequency**	**Percent (%)**
Inactivity	188	42
Moderate	252	56.2
Intense	8	1.8

Source: Field Survey 2022

Cross Tabulation of Level of Residents towards Physical Activities by Socio-Demographic Characteristics

Table 4.2.2 reveals significant patterns regarding physical activity across different demographic variables. Among age groups, individuals aged 20-29 exhibit the highest intensity in physical activity at 60%, while those aged 30-69 engage in moderate physical activity, with percentages ranging from 52.6% to 56.9%. The p-value of 0.041 suggests a statistically significant relationship between age and physical activity levels. In terms of gender, there is no significant difference in physical activity, with both males and females having low engagement in intense physical activity (2.3% and 1.3%, respectively), and high levels of physical inactivity. Similarly, marital status and level of education do not appear to influence physical activity significantly, as indicated by p-values of 0.201 and 0.248, respectively. Employment status also does not show a significant association with physical activity levels, with percentages and p-value (0.329) suggesting no substantial relationship.

Table 4.2.2: Cross Tabulation of Level of Residents towards Physical Activities by Sociodemographic Characteristics

Variables	Intense	Moderate	Physical Inactivity	P value
Age				0.041*
<19	0(0)	3(60)	2(40)	
20-29	4(4.5)	62(70.5)	22(25)	
30-39	3(3.1)	51(52.6)	43(44.3)	
40-49	1(1.3)	41(51.9)	37(46.8)	
50-59	0(0)	37(56.9)	28(43.1)	
60-69	0(0)	30(56.9)	23(43.4)	
>69	0(0)	28(45.9)	33(54.1)	
Sex				0.720
Male	5(2.3)	122(56.2)	90(41.5)	
Female	3(1.3)	130(56.3)	98(42.4)	
Marital Status				0.201
Single	3(2.4)	78(63.4)	42(34.1)	
Married	4(2.2)	96(53.9)	78(43.8)	
Divorced	1(2.1)	31(64.6)	16(33.3)	
Separated	0(0)	21(48.8)	22(51.2)	
Widowed	0(0)	26(46.4)	30(53.6)	
Level of Education				0.248
None	2(3.1)	34(53.1)	28(43.8)	
Primary	0(0)	36(61)	23(39)	
Secondary	0(0)	69(53.1)	61(46.9)	
Tertiary	6(3.1)	113(57.9)	76(39)	
Employment Status				0.329
Unemployed	2(1.7)	57(48.3)	59(50)	
Self employed	2(1.2)	102(63.4)	57(35.4)	
Fully employed	2(2.4)	43(50.6)	40(47.1)	
Student	1(3.6)	18(64.3)	9(32.1)	
Full house wife	1(1.8)	32(57.1)	23(41.1)	

Source: Field Survey 2022

Research Question Three:

The dietary pattern and eating habits of residents of Eti Osa East LCDA, Lagos

Table 4.3 reveals diverse dietary habits among the surveyed individuals. While 33% of respondents consume fruits once or more per day, 34.2% opt for vegetables at a similar frequency. Also, 10.7% never consume fruits, and 23% never consume vegetables. Milk consumption primarily falls in the 4-6 times per week category (41.1%), with only 6.5% abstaining. Protein sources like fish, meat, and eggs are consumed moderately, with 27.7% doing so once or more daily and 22.8% less than once a week. Bread, pasta, and cereal are consumed most frequently 1-3 times per week (31.7%), while only 10.9% never consume them. Grains like rice see significant consumption 1-3 times per week (34.2%), with a small portion (3.8%) never consuming them. Legumes, fried foods, sweets, and soft drinks vary in consumption patterns, with substantial percentages consuming them 1-3 times per week and some individuals abstaining entirely or consuming them more frequently.

Table 4.3: Eating pattern of residents of Eti Osa East LCDA, Lagos

Food/Drink	Never	<1 time per week	1-3 times per week	4-6 times/ per week	Once or more/day
Vegetables	29(6.5)	103(23)	153(34.2)	86(19.2)	77(17.2)
Fruit	13(2.9)	101(22.5)	138(30.8)	148(33)	48(10.7)
Milk	42(9.4)	116(25.9)	184(41.1)	77(17.2)	29(6.5)
Fish, Meat and Eggs	22(4.9)	102(22.8)	128(28.6)	124(27.7)	72(16.1)
Bread, Pasta, Cereal	49(10.9)	112(25)	142(31.7)	71(15.8)	74(16.5)
Grains such as rice	17(3.8)	105(23.4)	153(34.2)	114(25.4)	59(13.2)
Legumes such as Beans	24(5.4)	128(28.6)	157(35)	79(17.6)	60(13.4)
Fried foods	67(15)	143(31.9)	122(27.2)	68(15.2)	48(10.7)
Sweets such cake or cookies	121(27)	141(31.5)	68(15.2)	58(12.9)	60(13.4)
Soft drinks	96(21.4)	121(27)	75(16.7)	84(18.8)	72(16.1)

Source: Field Survey 2022

Figure 4.1 shows that 55.8 % of the participants showed had healthy eating habits. Health eating showed significant association to marital status ($p<0.005$)

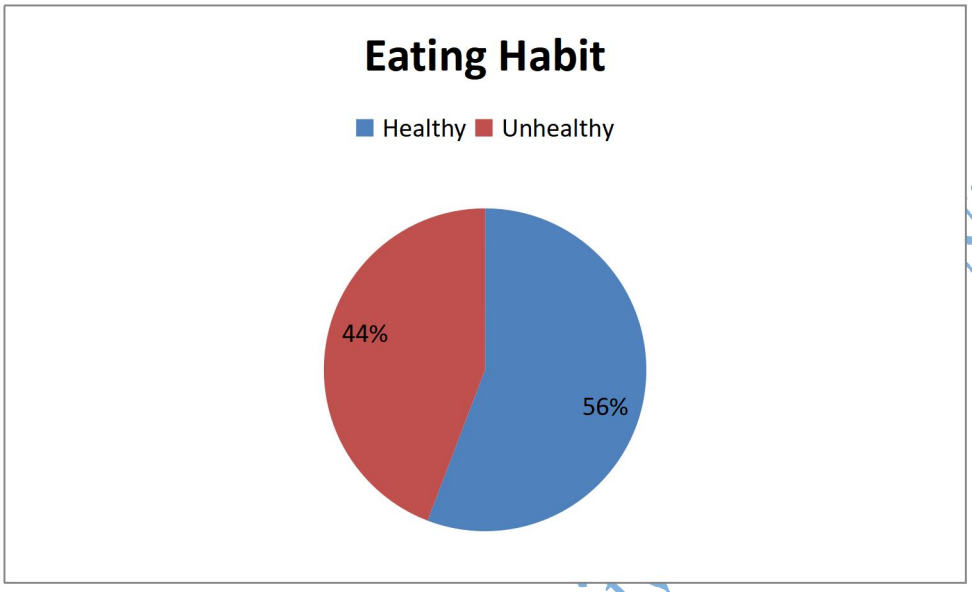

Figure 4.1: Eating Habits of Residents of Eti Osa East LCDA,Lagos

Source: Field Survey 2022

Cross Tabulation of Health Eating among Respondents by Socio Demographic Characteritics

Table 4.3.1 presents an analysis of demographic factors and their association with health status. Age groups exhibit a significant relationship with health, where older individuals are more likely to be categorized as unhealthy. In contrast, gender, education level, and employment status do not show statistically significant associations with health status. However, marital status is linked to health status, with married individuals being more likely to be categorized as healthy compared to other marital statuses. These findings emphasize the importance of age and marital status in understanding health disparities within the study population, while other factors like gender, education, and employment status do not appear to play a significant role in determining health status.

Table 4.3.1: Cross tabulation of attitudes of residents towards health eating by socio demographic Characteritics

Variables	Healthy	Unhealthy	P value
Age			0.005*
<19	3(60)	2(40)	
20-29	65(73.9)	23(26.1)	
30-39	55(56.7)	42(43.3)	
40-49	38(48.1)	41(51.9)	
50-59	37(56.9)	28(43.1)	
60-69	25(47.2)	28(52.8)	
>69	27(44.3)	34(55.7)	
Sex			0.835
Male	120(55.3)	97(44.7)	
Female	130(56.3)	101(43.7)	
Marital Status			0.005*
Single	83(67.5)	40(32.5)	
Married	98(55.1)	80(44.9)	
Divorced	22(45.8)	26(54.2)	
Separated	25(58.1)	18(41.9)	
Widowed	22(39.3)	34(60.7)	
Level of Education			0.658
None	32(50)	32(50)	
Primary	36(61)	23(39)	
Secondary	74(56.9)	56(43.1)	
Tertiary	108(55.4)	87(44.6)	
Employment Status			0.384
Unemployed	58(49.2)	60(50.8)	
Self employed	98(60.9)	63(39.1)	
Fully employed	46(54.1)	39(45.9)	
Student	15(53.6)	13(46.4)	
Full house wife	33(58.9)	23(41.1)	

Source: Field Survey 2022

Research Question Four:

The various Lifestyle and Sleeping Habit of residents of ETI-OSA EAST LCDA

A. Smoking habits among residents of ETI-OSA EAST LCDA

Table 4.4 shows that 55.8% of the respondents have never smoked before, 23.8% had quit smoking and 20.4% smokes as at the time of the study. Smoking among the respondents showed significant association to sex, marital status and level of education.

Table 4.4: Smoking habits among residents of ETI-OSA EAST LCDA

Smoking Habits	**Frequency**	**Percent (%)**
Never	250	55.8
Former	109	23.8
Current Smoker	89	20.4

Source: Field Survey 2022

Cross tabulation of Smoking habits among Residents of ETI-OSA EAST LCDA by Socio Demographics Charateristics

Table 4.4.1 below provides a comprehensive analysis of the relationships between demographic variables and smoking habits. Gender shows a highly significant association with smoking status, with a greater percentage of males being current smokers and more females being never smokers. Marital status also exhibits a highly significant connection, where single individuals are more likely to be current smokers, while married individuals are more likely to be never smokers. Education level demonstrates significance, revealing that those with higher education (Tertiary) are more likely to be never smokers, whereas those with lower education (None and Primary) are more inclined to be current smokers. In contrast, employment status, while not statistically significant, suggests a trend where fully employed individuals have a lower likelihood of being current smokers compared to other employment categories. These findings provide valuable insights into the interplay of demographic factors and smoking behaviors, which can inform targeted public health interventions.

Table 4.4.1: Cross tabulation of Smoking habits among residents of ETI-OSA EAST LCDA by Socio Demographics Charateristics

Variables	Never	Former	Current Smoker	P value
Age				
<19				
20-29				
30-39				
40-49				
50-59				
60-69				
>69				
Sex				0.000*
Male	96(44.2)	62(28.6)	59(27.2)	
Female	154(66.7)	47(20.3)	30(13)	
Marital Status				0.000*
Single	90(73.2)	14(11.4)	19(15.4)	
Married	95(53.4)	47(26.4)	36(20.2)	

Divorced	26(54.2)	14(29.2)	8(16.6)	
Separated	16(37.2)	13(30.2)	14(32.6)	
Widowed	23(41.1)	22(39.3)	11(19.6)	
Level of Education				0.001*
None	26(40.6)	19(29.7)	19(29.7)	
Primary	27(45.8)	18(30.5)	14(23.7)	
Secondary	70(53.8)	38(29.2)	22(17)	
Tertiary	127(65.2)	34(17.4)	34(17.4)	
Employment Status				0.087
Unemployed	69(58.5)	28(23.7)	21(17.8)	
Self employed	83(51.5)	40(24.8)	38(23.7)	
Fully employed	56(65.9)	17(20)	12(14.1)	
Student	17(60.7)	6(21.4)	5(17.9)	
Full house wife	25(44.6)	18(32.1)	13(23.3)	

Source: Field Survey 2022

B. Alcohol consumption among residents of ETI-OSA EAST LCDA

Table 4.5 shows that 68.5 % of the respondents don't consume alcohol an alcohol consumption showed significant association to sex and marital status.

Table 4.5: Alcohol consumption among residents of ETI-OSA EAST LCDA

Alcohol Consumption	**Frequency**	**Percent**
Yes	**141**	**31.5**
No	**307**	**68.5**

Source: Field Survey 2022

Cross Tabulation of Alcohol consumption and Socio Demographic Charatericties

Table 4.5.1 below examines the association between demographic variables and alcohol consumption. Age does not appear to be significantly related to alcohol consumption, as indicated by a non-significant p-value (0.212). However, there are notable associations with other factors. Gender shows a statistically significant relationship (p-value: 0.002*), with more males reporting alcohol consumption compared to females. Marital status is also significantly linked to alcohol consumption (p-value: 0.044*), with single individuals having a higher likelihood of reporting alcohol consumption than those who are married. In contrast, education level and employment status do not exhibit significant associations with alcohol consumption, as indicated by non-significant p-values (0.547 and 0.179, respectively). These findings offer valuable insights into the demographic factors associated with alcohol consumption.

Table 4.5.1: Cross Tabulation of Alcohol consumption and Socio Demographic Charaterictics

Variables	Yes	No	P value
Age			0.212
<19	0(0)	5(100)	
20-29	20(22.7)	68(77.3)	
30-39	31(32)	66(68)	
40-49	24(30.4)	55(63.6)	
50-59	26(40)	39(60)	
60-69	19(35.8)	34(64.2)	
>69	21(34.4)	40(65.6)	
Sex			0.002*
Male	84(38.7)	133(61.3)	
Female	57(24.7)	174(75.3)	
Marital Status			0.044*
Single	28(22.8)	95(77.2)	
Married	61(34.3)	117(65.7)	
Divorced	16(33.3)	32(66.7)	
Separated	20(46.5)	23(53.3)	
Widowed	16(28.6)	40(71.4)	
Level of Education			0.547
None	25(39.1)	39(60.9)	
Primary	19(32.2)	40(67.8)	
Secondary	39(30)	91(70)	

Tertiary	58(29.7)	137(70.3)	
Employment Status			0.179
Unemployed	36(30.5)	82(69.5)	
Self employed	60(37.3)	101(62.7)	
Fully employed	19(22.4)	66(77.6)	
Student	10(35.7)	18(64.3)	
Full house wife	16(28.6)	40(71.4)	

Source: Field Survey 2022

C. Sleeping habits of residents of ETI-OSA EAST LCDA

Table 4.6 shows the sleeping habits of residents of ETI-OSA EAST LCDA sleeping and majority had moderate sleeping time and sleeping habits was associated with marital status, level of education, physical activity, smoking habits and alcohol consumption.

Table 4.6: sleeping habits of residents of ETI-OSA EAST LCDA

Sleeping Habits	**Frequency**	**Percent (%)**
Not Adequate (< 5 hours)	115	25.7
Moderate (5 to 7 hours)	213	47.5
Adequate (> 7 hours)	120	26.8

Source: Field Survey 2022

Cross Tabulation of Sleeping Habits of Residents of ETI-OSA EAST LCDA by Socio Demographic Characteritics

Table 4.6.1 below shows the relationship between sleeping habits and sociodemographic characteristics. Marital status and level of education shows relationship with sleeping habits. Among the age groups, the older age groups have moderate and adequate sleeping habits, about 48.8% among the male respondents have moderate sleeps and also among the female respondents.

Among the single respondents, majority have adequate sleep and also majority of the respondents regardless of level of education have moderate sleeps .

Tale 4.6.1: Cross Tabulation of Sleeping Habits of Residents of ETI-OSA EAST LCDA by Socio Demographic Characteritics

	Not Adequate	Moderate	Adequate	P value
Age				0.281
<19	1(20)	2(40)	2(40)	
20-29	25(28.4)	33(37.5)	30(34.1)	
30-39	25(25.8)	46(47.4)	26(26.8)	
40-49	23(29.1)	34(43)	22(27.8)	
50-59	20(30.8)	35(53.8)	10(15.4)	
60-69	9(17)	32(60.4)	12(22.6)	
>69	12(19.7)	31(50.8)	18(29.5)	
Sex				0.546
Male	58(26.7)	106(48.8)	53(24.4)	
Female	57(24.7)	107(46.3)	67(29)	
Marital Status				0.037*
Single	31(25.2)	44(35.8)	48(39)	
Married	44(24.7)	93(52.2)	41(23)	
Divorced	12(25)	27(56.3)	9(18.8)	
Separated	10(23.3)	23(53.5)	10(23.3)	
Widowed	18(32.1)	26(46.4)	12(21.4)	
Level of Education				0.010*
None	12(18.8)	33(51.6)	19(29.7)	
Primary	14(23.7)	35(59.3)	10(16.9)	
Secondary	29(22.3)	72(55.4)	29(22.3)	

Tertiary	60(30.8)	73(37.4)	62(31.8)	
Employment Status				0.260
Unemployed	31(26.3)	60(50.8)	27(22.9)	
Self employed	37(23)	72(44.7)	52(32.3)	
Fully employed	29(34.1)	36(42.4)	20(23.5)	
Student	8(28.6)	12(42.9)	8(28.6)	
Full house wife	10(17.9)	33(58.9)	13(23.2)	

Source: Field Survey 2022

Healthy Living Practices among residents of Eti Osa East LCDA

Figure 4.2 show the level of healthy living practices among the respondents, good healthy living practices comprises of respondents that fall in the category of : do not smoke, do not consume alcohol,have adequate sleep, have good eating habit and have moderate physical activities.

The figure shows that only 7.8% of the respondents have good healthy living practices.

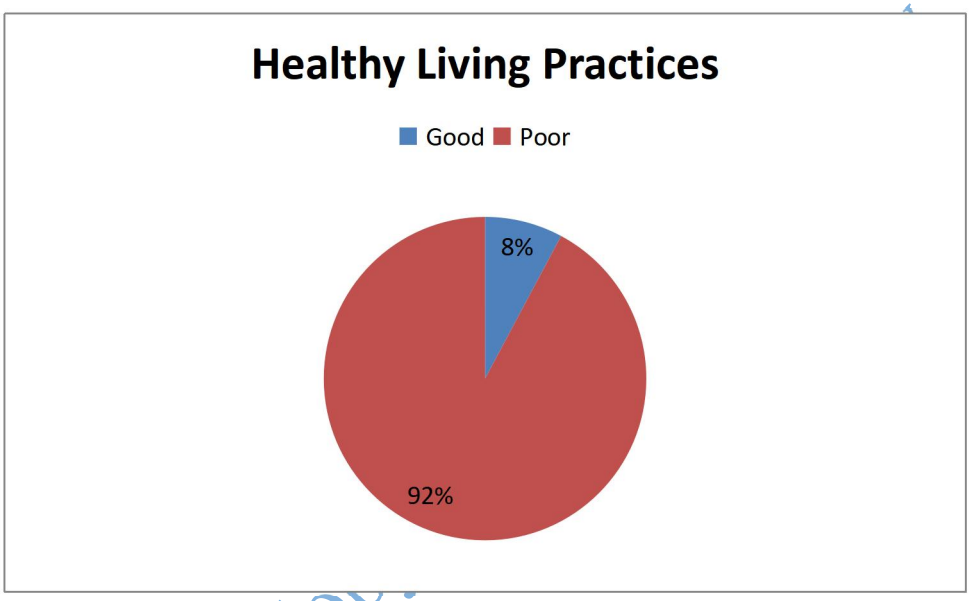

Figure 4.2: Healthy Living Practices among residents of Eti Osa East LCDA

Source: Field Survey 2022

Association of Healthy Living Practices and Sociodemographic Charateristics of Respondents

The table below shows significant associations between sociodemographic factors and healthy living practices. The findings show that respondents aged ≤24 are more likely to have a good healthy living practices, with a significant association indicated by a p-value of 0.001. Similarly, the table reveals that females are more likely to have a good healhty living practices compared to males, as evidenced by a p-value of 0.021. Marital status also plays a significant role, with single individuals being more likely to have a good healthy living practices than currently married individuals, supported by a p-value of 0.001. Furthermore, education level demonstrates significance, with those having tertiary education having a higher likelihood of a good healthy living practices compared to those with lower educational attainment (p-value = 0.030). Lastly, employment status exhibits a notable association, where self-employed individuals are more likely to have a good healthy living practices compared to the unemployed or fully employed, supported by a p-value of 0.003.

Table 4.7.1: **Associations between Sociodemographic Factors and Healthy Living Practices.**

Variables	**Good**	**Poor**	**P value**
Age			0.001*
≤24	3(8.6)	27(6.5)	
25-4	19(54.3)	96(23.3)	
35-49	7(20)	117(28.3)	
>49	6(17.1)	173(41.9)	
Sex			0.021*
Male	10(28.6)	207(50.1)	

Female	25(71.4)	206(49.9)	
Marital Status			0.001*
Single	21(60)	102(24.7)	
Currently Married	10(28.6)	168(40.7)	
Previously Married	4(11.4)	142(34.6)	
Level of Education			0.030*
None	3(8.6)	61(14.8)	
Primary	2(5.7)	57(13.8)	
Secondary	6(17.1)	124(30)	
Tertiary	24(68.6)	171(41.4)	
Employment Status			0.003*
Unemployed	3(8.6)	115(27.8)	
Self employed	22(62.9)	139(33.7)	
Fully employed	3(8.6)	82(19.9)	
Student	1(2.9)	27(6.5)	
Full house wife	6(17.1)	50(12.1)	

Source: Field Survey 2022

Research Question Five: **Factors Associated with Healthy Living Practices among Residents Eti Osa East LCDA**

Table 4.7 showed factors associated with unhealthy lifestyles. The findings showed that people aged 25-34 were 1.73 times more likely to practice poor healthy living compared to those aged > 49 years. Male were more inclined to poor healthy living practices compared to female (UOR= 2.512; 95% CI 1.17-5.36). The odds of poor healthy living practices was less among singles (UOR= 0.14; 95% CI 0.045-0.41) and currently married (UOR = 0.47; 95% 0.14-1.53). Level of education is significalty associated with healthy living practices. Those with secondary were 2.74 times more likely to have poor healthy living compared to those with Tertiary education (95% CI 1.02-7.41). Also, employment status was a significant predictor of healthy living practices.

Table 4.7: **Factors Associated Poor Healthy Living Practices**

	UOR	95% CI	P Value	AOR	95% CI	P Value
Age						
<24	0.54	0.13,2.22	0.391	0.338	0.066,1.729	0.193
25-34	1.73	0.56,5.26	0.338	0.943	0.272,3.274	0.927
35-49	0.30	0.12,0.75	0.010	0.448	0.263,1.227	0.118
>49	1					
Sex						
Male	2.51	1.17,5.36	0.017	2.339	0.63,5.685	0.061
Female	1					
Marital Status						
Single	0.14	0.045,0.41	0.000	0.258	0.063,1.057	0.60
Currently Married	0.47	0.14,1.53	0.210	0.922	0.249,3.417	0.903
Previously Married	1					
Level of Edudcation						
None	2.85	0.830,9.82	0.096	1.534	0.389,6.054	0.541
Primary	4.0	0.92,17.45	0.065	2.531	0.521,12.29	0.249
Secondary	2.90	1.15,7.31	0.024	2.742	1.015,7.413	0.047
Tertiary	1					
Employment Status						
Unemployed	4.6	1.1,19.13	0.036	4.695	0.963,22.89	0.056
Self Employed	0.758	0.29,1.98	0.571	0.745	0.239,2.332	0.612
Fully Employed	3.28	0.785,13.70	0.103	2.652	0.564,12.46	0.217
Student	3.24	0.371,28.32	0.288	8.998	0.825,98.10	0.071
Full Housewife	1					

Source: Field Survey 2022

4.3 Discussion of the Findings

The study shows that more than half of the participants had healthy eating habits. This study was in line with a study conducted elswwhere which showed that 67% of the participants shows positive attitude towards healthy eating[1]; and also supports a study conducted where most people consumed more than 5 classes of food based on a 7-d food diary. A majority of the respondents had a positive attitude or motivation towards their healthy eating behavior. Those who perceived their own eating habits to be healthy were more likely to comply with current dietary guidelines than those who did not[1,2].

Findings from this study shows that more than half of the respondents shows moderate level of physical activity. This finding of this study was higher than that of a study conducted in Ghana where only about 30% were engaged in moderate level of physical activity; but lower than studies conducted in Pakistan and Australia where Physical activity participation rates were at a high level[3,4,5]. In Australia, several facilitites are readily available for physical activity for the public, this could explain the high level of physical activity[5].

Also, this study showed that less than one quarter of the respondents were smokers as at the time of the study. This is in line with a study conducted in Australia where 18 % self-reporting as current smokers, 6.8 %described themselves as daily smokers[5]. Similarly, about 31.5% of the study participants currently consume alchohol; which corroborate a study elsewhere that showed that many people still engaged risky alcohol intake[5].

As shown in several studies, adequate sleep is important for stable health and well being. For adequate sleep, minimum of 7 hours sleep is recommended per day. However, in this study only a few proportion of the study participant sleeps more than 7 hours (adequate) daily. The finding is in line with a study done in Ethiopia where only 28.5% had good sleep quality[6]. But this study contradicts a study conducted in Pakistan where More than 50% of the participants were sleeping more than 7 hours per day[7].

Overall, the finding from this study showed that only less than ten percent of the respondents practiced good healthy living. This indicate that a relatively small percentage of the people who took part in the study demonstrated a healthy lifestyle behaviors. This finding have great implications for preventing or reducing cardiovascular disease which is one of the leading causes of death among adult population. Factors such as age, sex, marital status, education level, and employment status were associated with healthy living practices in this study.

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Conclusion

5.1 Summary of Findings

The study aimed to determine the attitudes of residents of Eti Osa East LCDA towards healthy living practices. The study adopted a cross-sectional study design using adopted questionnaire.

Findings from the study show that 55.8 % of the participants had healthy eating habits. Healthy eating showed significant association to marital status. The study also show the level of physical activity among the respondents and 56.2% of the respondents shows moderate level of physical activity. Findings from the study shows that 55.8% of the respondents have never smoked before, 23.8% had quit smoking and 20.4% smokes as at the time of the study. Smoking among the respondents showed significant association to sex, marital status and level of education.About 68.5 % of the respondents don't consume alcohol an alcohol consumption showed significant association to sex, marital status.

Findings also revealed that the attitude the respondents showed to sleeping and majority had moderate sleeping time and sleeping habits was associated with marital status and level of education.Also about 7.8% practices good healthy living practices, adherence to a healthy lifestyle practices , that is, abstinence from or cessation of smoking, light-to-moderate alcohol consumption, eating a healthy diet, being physically active, adequate duration of sleep and this showed significant association to age, marital status,level of education, employment status and sex.

5.2 Conclusion

Poor healthy living practice was prevalent in this study. CVD is largely a preventable disease, yet unfortunately it remains the leading cause of death worldwide. Healthcare systems need to prioritize programming to make healthy living practices a routine part of all patient and client

communications. Adherence to a healthy lifestyle practices , that is, abstinence from or cessation of smoking, light-to-moderate alcohol consumption, eating a healthy diet, being physically active, adequate duration of sleep and maintenance of a healthy weight without central adiposity, would prevent CVD among people.

5.3 Recommendations

1. Intervention targeted at educating residents on healthy eating, affordable lunch packs and affordable healthy cooking ideas can assist in improving the health and nutritional status of residents within the community. The nutrition education intervention should be coupled with individual counselling for those residents in need of disease-specific nutrition management.
2. Ensuring that this gymnastic facility is available at any time for the use of residents will enable most residents to engage in PA.
3. Creation of awareness on healthy living practices, necessary campaigns and sensitization will help improve the various healthy living practices among residents.

5.4 Contribution to Knowledge

This study has provided answers to the specific objective, determining the attitudes of residents of Eti Osa East LGA towards healthy living practices.

5.5 Suggested Areas for Further Research

i. The study did not looked at barriers and enablers which would have provided more insight regarding the barriers and enablers to implementing healthy eating, a healthy lifestyle, physical activity and good sleeping habits.

ii. Future studies can look more into exploring the barriers and enablers to healthy eating, a healthy lifestyle and physical activity using a qualitative approach such as in-depth interviews, which will give a deeper understanding of these specific barriers and enablers. An in-depth understanding will help inform the employee health and wellness programme and policymakers to better tailor and focus work-based programmes and/or policies to address the specific barriers and enablers at a deeper level.

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Informed Consent

Title of Study: Questionnaire on Assessment of Healthy Living Practices Among Residents of Eti-Osa East LCDA, Lagos State

Principal Investigator: Oladunni Bukola Esther

Purpose of Study

My name is OLADUNNI BUKOLA ESTHER, a master of public health student at the Faculty of public health, LeadCity University, Ibadan. I am conducting a study on the assessment of the healthy living practices of residents of Eti Osa LCDA.

I am interested in understanding the level of knowledge and attitudes of residents of Eti Osa LCDA towards healthy living practices, and also examine their dietary patterns and physical activity. I equally want to know the factors that influence healthy living practices among residents of Eti Osa LCDA, Lagos.

I will greatly appreciate your participation in my study. Your insight will assist in the understanding reasons behind the unhealthy living practices.

Research Procedure

If you agree to be in this study, you will be asked to answer questions about yourself, your knowledge of healthy living practices, attitudes of people towards healthy living practices, and as well as questions about the factors that influence healthy living practices will be asked using a structured questionnaire. Answering the questionnaire will take about 20 minutes of your time.

Risks and Benefits

There are minimal or no risks if you take part in this study. There are also no incentives but the information you provide will help you improve your health and that of your loved ones.

Compensation

There is no monetary compensation or incentive for this study. Participation is voluntary.

Confidentiality

Like it is stated above, your comments will not be anonymous. Every effort will be made by the researcher to preserve your confidentiality. Only the research team will have access to the answered questionnaires. Confidentiality and privacy will be maintained by keeping all materials under lock and key. Your name will not be recorded.

Contact Information

If you have questions at any time about this study, as the result of participating in this study, you may contact

OLADUNNI BUKOLA ESTHER

PUBLIC HEALTH DEPARTMENT,

LEADCITY UNIVERSITY, TOLL GATE, IBADAN,

+2348023930074

Oladuniesther01@gmail.com

OR

Chairman LCU Institutional Review Board. Lead City University Ibadan Oyo State through lcu.hrec@lcu.edu.ng

Voluntary Participation

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

Consent

I have read and understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature/thumb print _____ Date _____

Participants Name: _____

Investigator's signature _____ Date _____

Investigator's Name: _____

Witness Name: (If necessary) _____

Signature or thumb print: _____

Questionnaire

Lead City University

Ibadan, Oyo State

Assessment of Healthy Living Practices Among Residents of Eti-Osa East LCDA, Lagos State

Dear Respondent,

This research is on ASSESSMENT OF HEALTHY LIVING PRACTICES AMONG RESIDENTS OF ETI-OSA EAST LCDA, LAGOS STATE, NIGERIA.

The information provided will be strictly confidential and participation is voluntary.

Yours Sincerely

Oladunni Esther. B

Section A: General Characterization Information

1. Age as at last Birthday: _____
2. Sex: Male [ ] Female [ ]
3. Marital Status: Single [ ] Married [ ] Divorced [ ] Separated [ ] Widowed [ ]
4. Level of Education: None [ ] Primary [ ] Secondary [ ] Tertiary [ ]
5. What is your employment status? Unemployed [ ] Self-employed [ ] fully employed [ ] student [ ] full House wife [ ]
6. Anthropometric measurements
7. 1.1. Weight (in Kg);
8. Height
9. Waist circumference (cm)
10. Blood pressure: Systolic (mmHg); Diastolic (mmHg)
11. Thinking about your day-to-day life, do you consider you have a sedentary lifestyle? Yes [ ] No [ ]

Section B: Physical Activity and Exercise

Please rate your physical activities over the past 4weeks

Type of Activity	How many days per week?				How many hours per day?		
	Never (0days)	Seldom (1-2days)	Sometimes (3-4days)	Often (5-7days)	<1hr	1-2hrs	>2hrs
Participate in sitting activity such as clubs, discussion group, religious meeting							
Walking outside for any reason such as exercise, walking with dog, in a mall							
Engage in light activities such as fishing, bowling							
Engage in moderate activities such as dancing, skating, skipping ropes							
Engage in strenuous activities such as jogging, swimming, cycling, climbing stair for exercise							
Any exercise to increase muscle strength such as lifting weights, pushups, pull-ups							

Engage in flexible activities such as stretching, yoga							
Any light housework such as washing dishes, mopping floors, ironing							
Any moderate housework such as laundry, scrubbing floor							
Any heavy housework such cutting grass, moving furniture							

Section C: Nutrition Intake

In a typical week, how often do you eat/drink the following food/drinks?

Food/Drink	Never	<1 time	1-3 times	4-6 times/ per	Once or

		per week	per week	week	more/day
Vegetables					
Fruit					
Milk					
Fish, Meat and Eggs					
Bread, Pasta, Cereal					
Grains such as rice					
Legumes such as Beans					
Fried foods					
Sweets such cake or cookies					
Soft drinks					

Section: Lifestyle And Sleeping Habit

14. Do you currently smoke? Yes [ ] No [ ]

15. Have you ever smoked? Yes [ ] No[ ]

15b. If yes, when did you quit smoking?<1 year ago [ ] 1-5 years ago [ ] 5-10 years ago [ ] >10 years ago [ ]

16. Are you a regular consumer of alcohol (more than one glass of wine or beer with the meals)? Yes [ ] No [ ]

17. Have you ever been a regular consumer of alcoholic drinks? Yes [ ] No [ ]

18. Do you use drugs regularly? Yes [ ] No [ ]

19. Have you ever used drugs regularly? Yes [ ] No [ ]

20. Do you sleep well? Yes [ ] No [ ]

21. How many hours per night? <5 h [ ]5 to <7 h [ ] 7 or more hours [ ]

22. How often do you wake up at night? Never or once [ ] 2 or 3 times [ ] 4 or more times [ ]

23. Do you wake up feeling tired? Yes [ ] No [ ]

24a. Do you take sleeping pills? Yes [ ] No [ ]

25. How many different medications (tablets, dragees, syrups, insulin, etc.) do you take per day? None [ ] just 1 [ ] 2 – 5 [ ] More than 5 [ ]

26. Do you take regularly natural products (teas, supplements, etc.) for therapeutic purposes? Yes [ ] No [ ]

27. In general, how do you evaluate your health condition? Very good [ ] Good [ ] Reasonable [ ] Bad [ ] Very bad [ ]

Bio-data

A. **Personal Data**

Name:	OLADUNNI ESTHER BUKOLA
Sex	Female
Date of Birth	20th March 1978
Marital Status	Married
State of Origin	Kwara State

Local Govt. Area	Oke Ero LGA
Nationality	Nigerian
Religion:	Christianity
Discipline:	Community Health
Address:	9, Uba Mworohboh Close, Seaside Estate, Ajah
Telephone:	+2348023930074, 08081760134
Email:	oladunniesther1@gmail.com.com,

B. Educational Institutions Attended with Dates

ECWA Primary School, Araromi, Kwara State	1984-1989
ECWA Secondary School, Igbaja, Kwara State	1993-1999
School of Hygiene, Eleyele, Oyo State	2000-2003

C. Working Experience

Best Care Clinic Tokunbo, Lagos Island, Lagos.	2005 – 2006
Alimosho Local Government Primary Health Centre	2009 – 2013
Langbasa Primary Health Centre, Ado Langbasa, Ajah, Lagos	2013 to date

Hobbies

Reading, Meeting new Faces, Cooking and Knowledge acquisition.

Referee

Supol Ayoola Oladunni
ADC to The Vice President
Federal Republic of Nigeria
08033596571.

Mrs. Raimat Akinyemi
Community Health Worker
08139349492.

---------- ----------

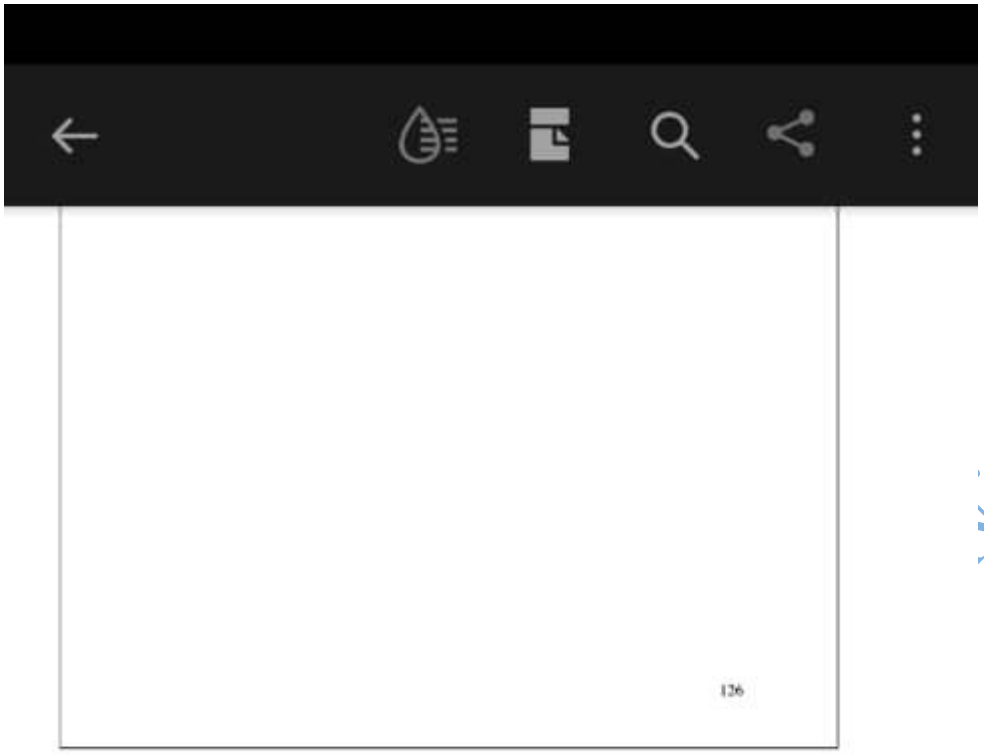
Signature Date

The University Compliance Certification

This is to certify that this thesis was written by Esther Bukola OLADUNNI, with Matric No. LCU/PG/002172 in the Department of Public Health, Faculty of Allied and Health Sciences,

Lead City University, Ibadan is in full compliance with the approved University format and style.

Signature _____ Date _____



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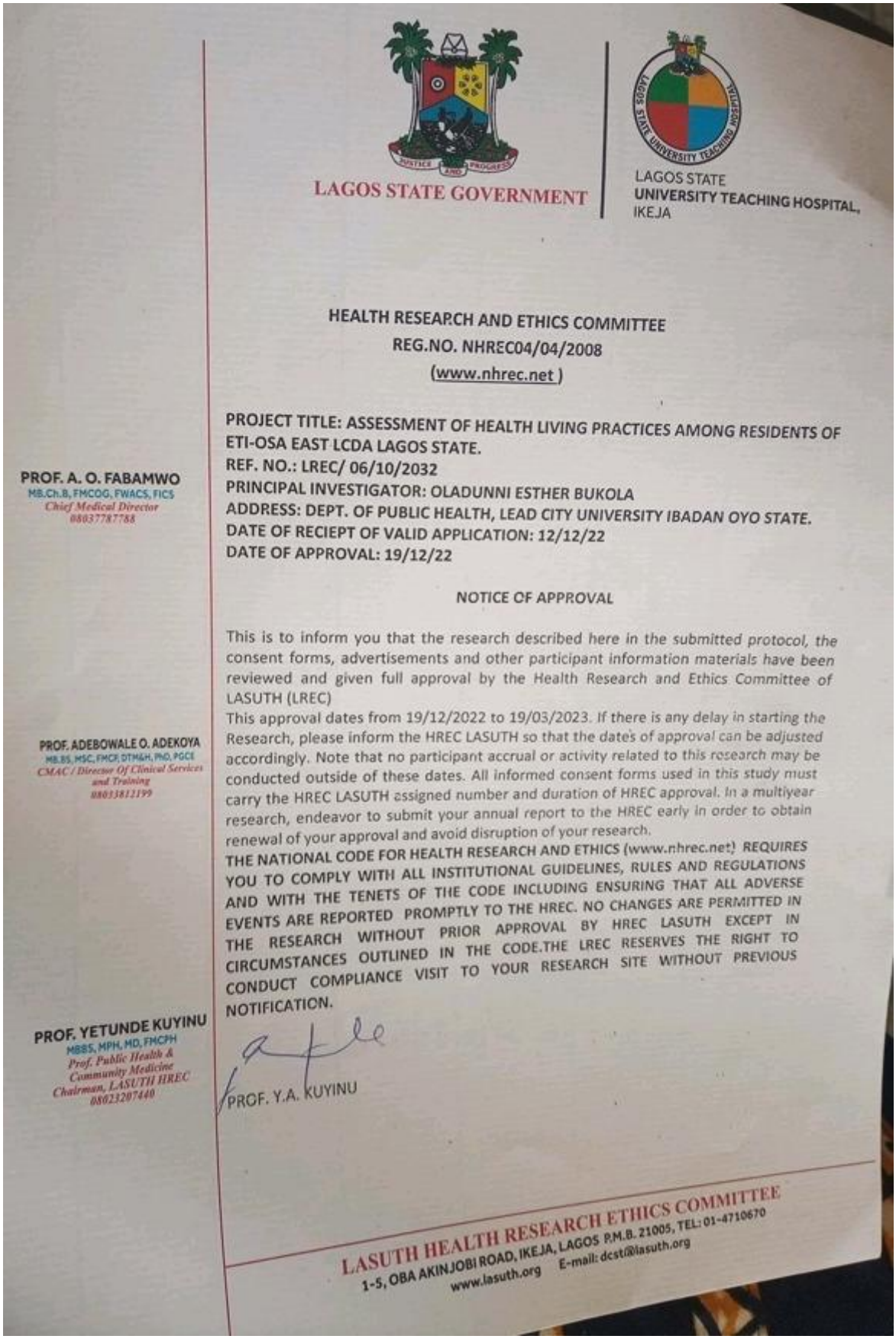

LAGOS STATE GOVERNMENT

LAGOS STATE
UNIVERSITY TEACHING HOSPITAL,
IKEJA

HEALTH RESEARCH AND ETHICS COMMITTEE
REG.NO. NHREC04/04/2008
(www.nhrec.net)

PROJECT TITLE: ASSESSMENT OF HEALTH LIVING PRACTICES AMONG RESIDENTS OF ETI-OSA EAST LCDA LAGOS STATE.
REF. NO.: LREC/ 06/10/2032
PRINCIPAL INVESTIGATOR: OLADUNNI ESTHER BUKOLA
ADDRESS: DEPT. OF PUBLIC HEALTH, LEAD CITY UNIVERSITY IBADAN OYO STATE.
DATE OF RECIEPT OF VALID APPLICATION: 12/12/22
DATE OF APPROVAL: 19/12/22

NOTICE OF APPROVAL

This is to inform you that the research described here in the submitted protocol, the consent forms, advertisements and other participant information materials have been reviewed and given full approval by the Health Research and Ethics Committee of LASUTH (LREC)

This approval dates from 19/12/2022 to 19/03/2023. If there is any delay in starting the Research, please inform the HREC LASUTH so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC LASUTH assigned number and duration of HREC approval. In a multiyear research, endeavor to submit your annual report to the HREC early in order to obtain renewal of your approval and avoid disruption of your research.

THE NATIONAL CODE FOR HEALTH RESEARCH AND ETHICS (www.nhrec.net) REQUIRES YOU TO COMPLY WITH ALL INSTITUTIONAL GUIDELINES, RULES AND REGULATIONS AND WITH THE TENETS OF THE CODE INCLUDING ENSURING THAT ALL ADVERSE EVENTS ARE REPORTED PROMPTLY TO THE HREC. NO CHANGES ARE PERMITTED IN THE RESEARCH WITHOUT PRIOR APPROVAL BY HREC LASUTH EXCEPT IN CIRCUMSTANCES OUTLINED IN THE CODE.THE LREC RESERVES THE RIGHT TO CONDUCT COMPLIANCE VISIT TO YOUR RESEARCH SITE WITHOUT PREVIOUS NOTIFICATION.

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