

**THE IMPACT OF HEALTH SECTOR LIFESTYLE INTERVENTION
PROGRAMMES ON EDO STATE GOVERNMENT HEALTHCARE
EXPENDITURE**

**BY
ESONWUNE SEUN NDIDI
SSC1809427**

**DEPARTMENT OF ECONOMICS
FACULTY OF SOCIAL SCIENCES
UNIVERSITY OF BENIN
BENIN CITY, EDO STATE.**

AUGUST, 2023

**THE IMPACT OF HEALTH SECTOR LIFESTYLE INTERVENTION
PROGRAMMES ON EDO STATE GOVERNMENT HEALTHCARE
EXPENDITURE**

BY
ESONWUNE SEUN NDIDI
SSC1809427

**A RESEARCH WORK PRESENTED TO THE DEPARTMENT OF ECONOMICS IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A
BACHELOR OF ECONOMICS SCIENCE DEGREE IN ECONOMICS, FACULTY
OF SOCIAL SCIENCE, UNIVERSITY OF BENIN, BENIN CITY**

AUGUST, 2023

DECLARATION

I, ESONWUNE SEUN NDIDI, declare that this project work is the result of my research investigations and findings .Sources of information other than my own have been acknowledged and a reference list appended. This work has not been previously submitted to any other University for the award of any academic degree.

Signature.....

Date29-09-2023...

CERTIFICATION

This is to confirm that ESONWUNE SEUN NDIDI of the Department of Economics, University of Benin, Edo State, Nigeria, completed this project.

Dr. Presley. Osemwengie

Project Supervisor

Date

Dr. S. O. Igbinedion

Project Coordinator

Date

Dr. S. O. Igbinedion

Head of Department

Date

DEDICATION

To my Mom and Dad

Your love and immense support made this possible

ACKNOWLEDGEMENT

First of all, I want to give thanks and appreciation to God Almighty for his blessings that allowed me to successfully complete my research.

I want to convey my profound gratitude to Dr. Presley Osemwengie, my research supervisor, for allowing me the chance to do my research and for his crucial advice given during my research. His vitality, vision, honesty, and motivation have profoundly inspired me. He also taught me the methods for conducting the research and for effectively presenting the results of the research. Being able to work and study under his direction was a huge honor and privilege.

My parents' love, prayers, care, sacrifices, efforts to educate and prepare me for the future, and their sincere desire to see me through are all things for which I am incredibly grateful

Last but not least, I want to thank Wizkid for inspiring me to finish my project with his music, Cristiano Ronaldo for inspiring me with his athleticism and my squad for their unwavering support.

ABSTRACT

This study looked at how lifestyle intervention Programmes in the health sector affected healthcare spending in the Edo State Government. There were three (3) key goals and research questions for the study. The study used a descriptive survey research approach, in which information from the participants in the study was gathered through questionnaires. Two hundred and twenty (220) Medical Doctors, Pharmacists, Nurses, Dieticians, Clinical Psychologists, Dentists and Others were chosen at random from four (4) Local Government Areas in the Nigerian state of Edo. The mean, standard deviation, and Pearson Product Moment Correlation (PPMC) were used to examine the data collected from the respondents. The study's findings showed that the respondents' opinions on lifestyle intervention Programmes in Edo State are favorable, particularly in terms of education, public awareness, and frequent health checkups. There are still certain areas that could use improvement, such as the availability of tools for stress reduction, weight management, physical activity programs, and smoking cessation. The results also paint a hazy image of the efficacy of lifestyle intervention Programmes in addressing risk factors in the Edo State healthcare system. The findings show that lifestyle intervention programmes in Edo State have shown promising results in reducing some aspects of healthcare costs, particularly related to NCDs, medical equipment, and over-tasking of healthcare facilities. However, there are areas where their impact might be limited, such as chronic disease prevalence and pharmaceutical costs. Therefore, it was advised that the government and interested parties in the health sector should reinforce and extend current lifestyle intervention Programmes. Government, health sector authorities and policy makers should focus on targeted areas where the programmes showed limited effectiveness, such as stress management and pharmaceutical costs, which should be targeted for improvement.

TABLE OF CONTENTS

Title page	i
Certification	ii
Dedication	iii
Acknowledgement	iv
Abstract	v
Table of Contents	vi
List of Tables	viii

CHAPTER ONE: INTRODUCTION

1.1	Background of the Study	1
1.2	Statement of the Problem	3
1.3	Research Questions	4
1.4	Objective of the Study	4
1.5	Hypotheses of the Study	5
1.6	Significance of the Study of the Study	5
1.7	Scope of the Study	6
1.8	Limitations of the Study	6
1.9	Organisation of the Study	6

CHAPTER TWO: LITERATURE REVIEW

2.1	Introduction	7
2.2	Conceptual Clarifications	7
2.2.1	Tobacco smoking	7
2.2.2	Physical inactivity	9
2.2.3	Unhealthy diets	12
2.2.4	Alcohol	14
2.3	Theoretical Literature	17
2.3.1	Theory of Reasoned Action	17
2.3.2	Theory of Planned Behaviour	18
2.3.3	Health Belief Model	28

2.3.4	Limitations of Health Belief Model	20
2.3.5	Social Cognitive Theory	21
2.3.6	Self Determination Theory	21
2. 3.7	The Trans theoretical Model (Stages of Change)	22
2.3.8	Limitations of the Trans theoretical Model	23
2.4	Empirical Literature	25

CHAPTER THREE: METHODOLOGY

3.1	Introduction	32
3.2	Research Design	32
3.3	Area of the Study	32
3.4	Population of the Study	34
3.5	Sample and Sampling Technique	34
3.6	Instrument for Data Collection	34
3.7	Validity of the Instrument	35
3.8	Reliability of the Instrument	35
3.9	Method of Data Collection	35
3.10	Method of Data Analysis	36
3.11	Decision Rule for Research Questions	36

CHAPTER FOUR: RESULTS PRESENTATION AND DISCUSSION

4.1	Introduction	37
4.2	Findings	37
4.3	Discussion of Findings	55

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1	Summary	57
5.2	Conclusion	57
5.3	Recommendations	58
5.4	Area for Further Research	59

LIST OF TABLES

Table 4.1: Mean and Standard Deviation of Lifestyle Intervention Programmes embarked upon by the Health Sector in Edo State	37
Table 4.2: Mean and Standard Deviation of Extent Lifestyle Intervention Programmes have helped to address some of the Risk Factors in Edo State Health Sector	39
Table 4.3: Mean and Standard Deviation of Extent Lifestyle Intervention Programmes have helped to reduce the Wider Costs of Government on the Health Sector in Edo State	41
Table 4.4: PPMC of Lifestyle Intervention Programmes and the Risk Factors for Health in Edo State	43
Table 4.5: PPMC of Lifestyle Intervention Programmes and the Reduction in Wider Costs of Government on the Health Sector in Edo State	49

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The expression "way of life" alludes to an individual's whole lifestyle. The way of life of an individual involves their dietary patterns, drinking propensities, smoking propensities, measure of actual work or inertia, unprotected sexual way of behaving, and drug utilization. The records depicted above are alluded to as way of life factors. Degenerative and constant infections that plague individuals today are brought about by the impacts of these way of life factors. Hypertension, diabetes, malignant growth, stroke, liver infection, and the improvement of HIV/Helps are instances of such degenerative illnesses. An individual's way of life is an example of conduct choices they make in light of their financial condition and how simple they might pick one choice over another. The "conduct of decision" that impacts one's wellbeing state is their approach to everyday life.

A sound psyche is advanced by having great strength and perseverance, which is a part of actual wellness as a direction for living. The regular meaning of wellness was the ability to play out the day's liabilities without turning out to be unduly exhausted. The idea, in any case, became deficient when recreation time extended because of computerization and changes in ways of life welcomed on by the modern upheaval. Actual work affects circulatory strain, cholesterol, blood lipid levels, blood thickening elements, and vein strength, as per Libretext (2023). It upgrades the body's usage of insulin. Active work is incredibly gainful for the people who are in danger for diabetes, particularly Type 2 (insulin safe) people since it advances further developed insulin use and shields the heart. Individuals who get diabetes are bound to get cardiovascular sickness. In a review, the relationship between actual work and metabolic gamble factors such insulin opposition, irritation, and dyslipidemia was analyzed in an example of very nearly 10,000 grown-ups from the third Public Wellbeing and Nourishment Assessment Overview. The review controlled for normal confounders while looking at the connection between CVD mortality and moderate to lively actual activity. The discoveries showed that exercise has a defensive impact against CVD mortality free of traditional metabolic gamble factors.

To advance great wellbeing, keeping a sound weight, getting more fit, and forestalling hypokinetic sicknesses in the US, a few associations educate that 30 minutes regarding moderate active work be performed most days of the week. Strolling, running, running, cultivating, yard work, and swimming are instances of this degree of activity (Vetter, 2023).

The financial legitimization for subsidizing different way of life mediation and wellbeing advancement programs basically centers around tending to a portion of the wellbeing risk factors, for example, tobacco and liquor use, the impacts of dietary propensities and active work designs, openness to natural poisons, dangers to emotional wellness and prosperity, and the probability of having a car crash. Various investigations have likewise shown that different wellbeing advancement and way of life mediation programs are reasonable. While a portion of these actions will bring about cost reserve funds, the mass will cost more cash yet have more noteworthy wellbeing (and other) benefits.

For example, joining endeavors as opposed to depending simply on one movement is normally more savvy in the anticipation of tobacco, liquor, and vehicular wounds. A well

known system to urge people to embrace better way of life decisions is to use duties to impact their buying of food, liquor, and cigarettes. Then again, media-based drives aren't viable or affordable all the time. Mediations centered at kids generally offer the most elevated potential for cost viability because of the lengthy time frame during which medical advantages can be accomplished.

There are a few wellbeing advancement and illness counteraction activities that are financially savvy temporarily, like those connected with the security of emotional well-being in the work environment, despite the fact that a few mediations, similar to those that influence the gamble of corpulence, may require quite a few years to be seen as practical. There are potential chances to put resources into minimal expense wellbeing advancement programs that can be made accessible to both designated populaces and the more extensive public, as in organizations or schools.

1.2 Statement of the Problem

The escalating cost of healthcare expenditure has become an immense concern for governments worldwide. In Edo State, Nigeria, this issue is particularly pressing due to the strain it places on the government's fiscal resources. The government's healthcare expenditure continues to rise unabated, potentially impeding its ability to allocate funds to other crucial sectors and hampering overall economic growth and development.

The prevalence of lifestyle-related health disorders like obesity, diabetes, cardiovascular illnesses, and hypertension is at the root of this rising healthcare spending. These conditions are often preventable or manageable through effective lifestyle interventions, which include promoting healthier dietary habits, increasing physical activity, and encouraging behavioral changes. However, despite the potential benefits of implementing health sector lifestyle intervention programmes, there is a notable lack of comprehensive research addressing their impact on healthcare expenditure reduction in Edo State.

For governments, healthcare professionals, and researchers, the urgent need to reduce healthcare spending while still enhancing the population's general health and well-being poses a significant challenge. It is imperative to ascertain whether the implementation of health sector lifestyle intervention programmes in Edo State can yield significant reductions in healthcare expenditure related to treating lifestyle-related health conditions. The interplay between the effectiveness of these interventions and their potential cost savings remains inadequately understood.

Thus, this study seeks to investigate the profound question: "To what extent do health sector lifestyle intervention programmes contribute to the reduction of Edo State government's healthcare expenditure incurred by treating lifestyle-related health conditions?"

The findings of this study hold the potential to inform evidence-based policy decisions that could not only alleviate the financial burden on the government but also enhance the overall health and quality of life of Edo State residents. A robust understanding of the relationship between lifestyle intervention programmes and healthcare expenditure reduction is crucial for designing targeted interventions that address both the health and economic dimensions of the problem.

Research Questions

In line with the problem description, we want to address the following inquiries in sequence to comprehend the effects of lifestyle intervention Programmes on the health care industry:

- What are the lifestyle intervention programmes embarked upon by the health sector in Edo State?
- To what extent has lifestyle intervention programmes help to address some of the risk factors for health in Edo State?
- To what extent can lifestyle intervention programmes help to reduce the wider costs of government on the health sector in Edo State?

Objectives of the study

The overarching objectives of this study is to offer a better and deeper knowledge of how lifestyle intervention Programmes and the health care industry are related. The specific objectives are to:

- Ascertain the lifestyle intervention programmes embarked upon by the health sector in Edo State.
- Ascertain the extent to which lifestyle intervention programmes has help to address some of the risk factors for health in Edo State.
- Determine the extent to which lifestyle intervention programmes helps to reduce the wider costs of government on the health sector in Edo State.

1.5 Hypotheses of the Study

Following from the aforementioned goals, the following are the study's hypotheses:

- Lifestyle intervention programmes has not helped to address any of the risk factors for health in Edo State.
- Lifestyle intervention programmes has not helped to reduce any of the wider costs of government on the health sector in Edo State.

1.6 Significance of the Study

This research work attempts to examine the effect of Health sector Lifestyle intervention programmes on Edo State Government Healthcare Expenditure. The importance of this research work is made acceptable and justified on the empirical findings and its contextual build-up will aid in providing a better understanding of the attendant the effect of Health sector Lifestyle intervention programmes on Edo State Government Healthcare Expenditure. This data will be useful to various stakeholders including:

- The Government (Health Care Authorities): One underlying factor influencing the soundness and usefulness of health intervention programmes and provisions is the quality of data and a careful analysis of the relevant variables and how they affect the country's health objectives. This research work will assist in

providing additional data to the already existing data available to the government required in designing appropriate lifestyle intervention programmes as regards health care sector.

- Postgraduates: In completion of the second degree programme, prospective postgraduates will also find this work to be of immense importance when working on similar issues. They can rely on the data contained herein in obtaining an idea and a general overview about the issue in question. This will aid in reducing the rigour and difficulty usually experienced in the process of gathering research materials.

1.7 Scope of the Study

This study aimed at examining the effect of Health sector Lifestyle intervention programmes on Edo State Government Healthcare Expenditure. The study will be carried out in four (4) randomly selected Local Government Areas of Edo State, Nigeria.

1.8 Limitations of the Study

The study focused on Health sector Lifestyle intervention programmes on Edo State Government Healthcare Expenditure. The study will be carried out in four (4) randomly selected Local Government Areas of Edo State, Nigeria. This is majorly as a result of time constraint scheduled to carry out the research work, inadequate fund to visit all Local Governments in Edo State. Again, the researcher also had one or two challenges in accessing some materials via the internet as some internet sites were secured and required subscriptions before gaining access to relevant materials. Furthermore, the country's epileptic power supply constituted a significant obstacle that delayed the timely completion of the job.

1.9 Organisation of the Study

Five (5) chapters make up the framework of this research paper. The subject in question is introduced in Chapter 1 above, and the relevant literature is reviewed in Chapter 2 after that. In Chapter 3, the research methodology is covered in great length. Chapter 4, which also acts as the work's conclusion, presents and discusses the empirical findings. Chapter 5 summarizes the research findings and offers policy recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the pertinent literature on the topic of health sector lifestyle intervention programmes on Edo State Government Healthcare Expenditure. Conceptual explanations, theoretical literature, and empirical literature are the additional sections that make up this chapter.

2.2 Conceptual Clarifications

2.2.1 Tobacco smoking

Smokers experience extreme actual injury because of their propensity. There is an immense collection of exploration that depicts its many dangers, huge cultural expenses, and productive ways of managing its utilization. Cost assumes a huge part in deciding use, which unfavorably affects utilization. The most noteworthy smoking rates are found in countries with the least costs, among lower financial classes, the jobless, and single guardians. Cost disparities to a great extent represent the distinctions in smoking rates between countries. They are a huge supporter of wellbeing and mortality differences. Many proof based tobacco control Projects have been shown to be both reasonable and very effective.

Nigeria might save countless lives yearly by expanding cigarette evaluating. Hardly any individuals would question the case for an expense increment in light of the wellbeing benefits, regardless of general wellbeing activists' continuous calls for more prominent tobacco charges referring to cultural expenses. Charge increments are the most practical tobacco control measure. It has been determined in various examinations that assuming the real cost expanded every time to stay aware of expansion, the interest decline would be two times as perfect over the long haul as it would be in the short run. As indicated by studies from various countries, tobacco charge income increases when the genuine duty rate is raised and falls when the genuine expense rate is brought down.

To change mentalities and bring issues to light of the benefits of stopping as well as the dangers of tobacco use, populace based ways to deal with halting smoking that utilize broad communications crusades are essential, guarantee Durkin et al. (2022). Notwithstanding, the vast majority disregard these strategies, which brings about botched open doors for smoke control. As per Robert et al. (2022), significant media spread of study information uncovering such impacts has been especially powerful in circumstances where there is negligible attention to the unsafe wellbeing impacts of tobacco use, as is normally the situation in arising economies.

The underlying solutions to the requirement for tobacco control were publicizing preclusions. The effects are trying to evaluate since they get some margin to show and may keep going for a long time completely. To essentially build the wellbeing and monetary advantages of controlling the smoking pandemic, a full restriction on tobacco promoting should be taken on (Bardach, 2021).

Other purchaser training drives, including marking, restricting smoking out in the open places, and directing promoting, generally lessen medical services costs, compensating for any execution costs. Various hypothetical examinations and useful applications uncovered that tobacco utilization can be diminished through instructive endeavors. As per Durkin, et al. (2022), instructive endeavors could urge grown-ups to quit smoking and lower grown-up smoking rates.

The Structure Show on Tobacco Control suggests and orders the position of caution marks on cigarette packs since they are one of the most immediate and noticeable ways of arriving at smokers (Chudech and Janmaimool, 2021). Cautioning names, as indicated Areas of strength for by, al. (2021), decreased great impressions of smokes associated with marked cigarette parcels without clearly raising wellbeing concerns. While they didn't change cigarette utilization or discontinuance rates, they further developed discernments about stopping. There are regulations requiring plain bundling for cigarettes in Australia, New Zealand, the Assembled Realm, and India, and these countries have all investigated comparative regulation.

Without smoke regulations are commonly viewed as finding true success in light of the fact that specific countries have noticed diminishes in coronary illness fatalities subsequently. Moreover, it has been exhibited that these treatments are efficient (Vaduganathan et al., 2022). The best technique to stop adolescent smoking is to stop grown-up smoking, which can be achieved through cost climbs, without smoke regulations, and all around planned interactive media Projects.

Various monetary examinations show that joining a significant number of these techniques yields bigger medical advantages while being monetarily practical (Turner, et al., 2021). Approaches should be executed and observed successfully, created by the public authority without input from the tobacco business, and battle debasement.

2.2.2 Physical inactivity

Ordinary activity is pivotal for keeping up with fantastic wellbeing. The WHO European District has a higher-than-normal extent of insufficiently dynamic residents (WHO, 2023). Unexpected passing and other non-transferable ailments, including coronary illness, stroke, hypertension, type 2 diabetes, and a few malignant growths, are known to be risk factors for inertia. As per the pay levels of different countries, levels of actual idleness will generally rise, and in 2016 it was extended that levels in big league salary countries were over two times as high as levels in low-pay countries (Katzmarzyk, et al., 2022). Also, the circumstance is more terrible in Africa, particularly Nigeria given the low degree of schooling and mindfulness.

The monetary reasoning for financing drives to battle actual dormancy is convincing. There are various strategies and Projects that work towards this objective, yet they all typically attempt to bring down the gamble of constant diseases while putting a major accentuation on forestalling stoutness.

Designated populaces' expanded actual work has been demonstrated to ascend because of broad communications crusades (Stead et al., 2019). Public media missions to energize active work are likewise among the most ideal ways to battle non-

transferable sicknesses with a decent expense viability proportion, and at times, they might set aside cash (WHO, 2023).

School-based medicines try to upgrade the amount of actual work among understudies, generally by expanding open doors and time for active work as well as by offering more data on the benefits of further developed wellness. As per a concentrate by Di Maglie, et al. (2022), school-based mediation programs are an effective method for decreasing the extent of overweight and corpulent youngsters. While there is developing exploration on the advantages of cycling and strolling to school, strolling mediations give off an impression of being more viable at expanding children's degrees of active work. School-based drives that were just centered around expanding actual work had a lower cost-viability proportion than advertising efforts and essential consideration mediations (Maznah, 2019). The expense adequacy of some school-based mediations has been addressed, however (Ginsburg et al., 2022); specifically, intercessions that address both nourishment and actual work seem, by all accounts, to be more powerful than those that main location one of the two.

The announced degrees of active work are emphatically and fairly influenced by first-line medicines (Pot, et al., 2022). Enhancements in physiological elements like circulatory strain or lipid profiles have sporadically been credited to this. Notwithstanding certain methodologies having greater expenses than others, first-line medicines have a fair expense viability proportion (Maznah, 2019).

Worksite Projects are commonly proposed to all representatives and utilize various strategies instead of only one action. Motivations and limits for wellness clubs, wellbeing schooling projects, and individual representative wellbeing checks are a couple of instances of ways that help dynamic transportation, for example, strolling and cycling to and from work (Maznah, 2019). Worksite intercessions, notwithstanding, just arrive at a more modest part of the populace than different procedures (Ablah et al., 2019). In late audits (Scharf et al., 2023; Kuhle et al., 2019), constructive outcomes on active work conduct, wellness, anthropometric measures, and lipids have been examined. The impact sizes on business related results, like diminished pressure and non-appearance, were normally sure, while not continuously being genuinely critical. Because of more noteworthy execution costs, WHO believes worksite intercessions to be incredibly practical i.e., under multiple times Gross domestic product/capita per DALY kept away from (WHO, 2023). After different advantages (like lower non-attendance) are considered, a greater expense viability proportion might be achieved (Turner et al., 2021).

By advancing strolling through movement and transportation-related exercises, it would have the option to build the quantity of strolling journeys (Juliane et al., 2018). Concerning to advance cycling, which normally involve changing the climate in which individuals travel (by including bicycle paths, off-road courses, and traffic-quieting measures, for example), the information are uncertain. Notwithstanding this, there is solid proof that a very much associated foundation organization might advance cycling. For example, an examination led in the Netherlands found that rising the quantity of cycle courses prompted a 3% ascent in the level of excursions taken by bike. Cycling diminishes various serious and persistent infections, as well as early passing, as per a concentrate by Rosanne, et al. distributed in 2022. It makes life better and more charming. These beneficial wellbeing results bring about lower federal retirement aide costs, further developed work efficiency, and diminished truancy from

work. The Benelux-NRW locale has moderately high work efficiency, consequently cycling's efficiency increments have a critical financial effect. Cycling has such huge advantages for one's wellbeing that they more than offset all related costs, including those for framework.

Despite the fact that it very well may be trying to impact individuals' mentalities and ways of behaving, a populace's wellbeing can be improved for a minimal price and with little exertion by tending to actual dormancy. It very well may be trying to successfully change what we definitely know works into suitable strategies and practices because of various deterrents. The definition of public strategies should think about all of the previously mentioned factors and incorporate various, steady, long haul, and enormous scope plans, predictable checking methods, more tight participation between every appropriate party, and all of the previously mentioned.

2.2.3 Unhealthy diets

Unfortunate eating regimens, especially those including an exorbitant admission of salt, sugar, and dinners that are high in energy yet low in supplements, as well as fat, affect various persistent, non-transmittable illnesses. These eating regimens additionally will more often than not limit natural product, vegetables, and entire grains. These sicknesses are spreading across the whole African landmass and affect society, the economy, and the overall soundness of the general population. As per gauges from Tiwari and Balasundaram (2020), the expense of corpulence alone records for 1% to 3% of worldwide wellbeing spending in most of countries. Populace based projects to change food conditions, zeroing in on data and market factors, have a financial reason for the avoidance and therapy of persistent non-transmittable sicknesses connected to food. For certain strategies, a supplement based approach may find success, while others may be better engaged at complete nutrition classes. Strategies can be pretty much viable and different approach activities can be coupled relying upon the segment classification.

Beginning with the climate for food data, the discoveries of financial investigations of correspondence drives uncover that it is very conflicting. As per certain exploration, data missions might be financially savvy, yet this really relies on how reasonable they are. Their certifiable achievement is for the most part restricted to their impacts on information and select crowds. For example, a multi-country concentrate on in view of a miniature reproduction method assessed the results of a broad communications crusade focused on at further developing leafy foods consumption as well as active work (Maznah, 2019). That's what the exploration found albeit the mission's wellbeing impacts would be less significant than those of any of different projects considered, it would have a positive expense viability proportion starting about decade after it is first carried out. Enlightening drives at work that are oftentimes joined by changes in catering are inadequate (Maznah, 2019).

Supplement records, names on food compartments and menus, and rules on supplement and wellbeing claims are instances of marking. As a component of the Green Arrangement and its Homestead to Fork plan, the European Commission vowed to carry out an obligatory and normalized front-of-pack wholesome marking plan across part states in 2020 (François-Xavier, 2022). Purchasers utilize supplement records, as indicated by concentrates as of now accessible, while lower financial status (SES) bunches use names less habitually. At the point when carried out on a compulsory premise, food marking Projects were demonstrated to be more practical than schooling efforts, be that as it may, the

examination supporting this declaration is inadequate and utilizes different methodologies and program sorts to survey it. As per a multi-country displaying research, obligatory marking would have a positive expense viability proportion in the WHO European District's EUR-A subregion as well as in various non-European countries with shifting pay levels (Maznah, 2019). Nourishing names give you the subtleties you really want to conclude whether items are solid. By perusing the names on all that you get, you could possibly better control your spending. In spite of the way that all food bundling should have sustenance data imprinted on the back, a few stores and food makers likewise give nourishing data on the facade of pre-bundled food as a functional traffic signal framework. The traffic signal name is very useful when you need to quickly look at the calories, fat, sugar, and salt convergences of different food items. Albeit more financially savvy, supplement records were anticipated to less affect wellbeing than monetary measures. Australian information on interpretive names loan backing to these perspectives.

Research currently in presence shows that charges on handled food sources, "unhealthy food," and food varieties high in fat, salt, and sugar reliably lead to cost reserve funds, or at least, they cost less to execute than they save as far as diminished medical services uses, and they emphatically affect populace wellbeing (Dodd et al., 2020). To limit regulatory and consistence costs and to forestall adverse replacement impacts on food utilization, food charges should be appropriately determined. Albeit the less lucky advantage excessively from their effects, food charges are probably going to be backward. Charges' viability and distributional effects can be improved by joining them with endowments that advance better food sources or oppressed shoppers (Maznah, 2019).

2.2.4 Alcohol

Liquor has been consumed generally all through numerous developments for quite a while and is a psychoactive medication with habit-forming characteristics (WHO, 2022). Liquor is a depressant that disables coordination and consideration, dials back response times, and changes how the body responds to circumstances (New Zealand Police Supervisors' Organization Trust, 2023). Accordingly, it is hazardous to finish errands like working apparatus or partaking in sports.

Liquor's expenses for society and to wellbeing are instances of negative externalities. Liquor undermines one's very own security, wellbeing, capacity to finish their schooling, and capacity to secure productive position. Social orders spend between 2 to 3% of Gross domestic product on liquor, for the most part because of lost efficiency; in the event that the expenses for people other than the consumer are thought about, this number is supposed to increment by a component of four (Manthey et al., 2021). At some random degree of liquor utilization, less fortunate individuals might really depend on three or multiple times more probable than well off individuals to pass on from a liquor related sickness (WHO, 2023).

The ideal degree of utilization can be the one that hurts society the least. A Scottish forthcoming companion concentrate on that included 5766 men matured 35 to 64 during a 21-year follow-up and considered the impacts of conventional gamble factors as well as the way that liquor can lessen the gamble of ischemic illnesses, including coronary illness, tracked down no connection between high liquor utilization and diminished ischemic mortality. Chudziska and partners, 2022).

Cost rises, accessibility cutoff points, and promoting boycotts are the three most savvy liquor strategies for diminishing liquor related mischief and ones that tackle liquor's market downfalls (WHO, 2023). To diminish the damage brought about by liquor, for example, hitting the bottle hard, liquor related mortality, costs to the wellbeing and law enforcement frameworks, and lost efficiency, cost climbs comprise the most savvy arrangement around the world (Habitats for Infectious prevention and Counteraction, 2022). In certain countries, cost increments welcomed on by expanding liquor charges can be somewhat balanced by unlawful assembling, tax avoidance, and unlawful exchanging. It is anticipated that it would cost more cash to lessen this unreported utilization through composed charge implementation strategies by policing extract authorities, however the outcomes would be tantamount (WHO, 2023).

Designated charges on specific kinds of liquor don't necessarily in all cases work (Scottish Government, 2018); charge systems can be utilized in various wards to help the support of non-drinking conduct or to incline toward items containing lower liquor levels. Charge increments should consider changes in the reasonableness of liquor contrasted with different products to be viable (Team, 2019).

A cost strategy that is especially powerful at diminishing liquor related hurt is one that orders a base cost for every gram of liquor provided. This keeps markets from being oversaturated with exceptionally modest liquor that supports weighty drinking and weighty consumers (Jackson et al., 2020).

Restricting liquor accessibility makes getting liquor more costly and badly arranged while additionally decreasing mischief (Manual for Local area Preventive Administrations, 2022). Moreover, a best-purchase intercession is very financially savvy for the counteraction of non-transmittable diseases (WHO, 2023). Expansions in liquor use and related adverse consequences like savagery, injury, and clinical damage, are related to stretching the hours that liquor is accessible for buy and extending the quantity of where it could be bought in a given region. Conversely, restricting how much time that liquor is accessible for buy decreases attacks, manslaughters, and different types of savagery. State run administrations control retail foundations in a few countries. By limiting outlet thickness, the hours and days that liquor is sold, and by decreasing the confidential monetary motivator for expanding deals, these legislative imposing business models diminish liquor utilization and liquor related hurt (Stockwell, et al., 2018).

Precluding liquor publicizing, if totally executed, is anticipated to be an extremely savvy answer for bring down the quantity of fatalities, diseases, and clinical costs connected to smoking (Bardach, et al., 2021). As per econometric examinations, spending on liquor promoting and utilization are decidedly connected (Saffer, 2020). Various longitudinal observational investigations have shown that business correspondences, especially those conveyed through web-based entertainment and other electronic correspondence channels, empower youngsters who are not at present drinking to start doing so and current youthful consumers to expand their utilization (Cukier et al., 2018).

However they have been exhibited to be more costly than populace wide techniques, brief mediations inside the wellbeing framework have likewise been demonstrated to be financially savvy (Whitman et al., 2022). Various displaying concentrates on in different country settings have shown the expense viability of proficient authorization

of drink-driving regulations and countermeasures such arbitrary breathalyzer crusades (Babor et al., 2022; Lewsey et al., 2019).

As well as creating extra wellbeing benefits, a general wellbeing liquor methodology that integrates various effective mediations does as such for a minimal price (WHO, 2023). Embracing powerful regulation is hampered by the liquor business' wild way of behaving and absence of dynamic commitment to hurt decrease in any huge manner. By making and showcasing items with a decreased liquor content, energized by government imposes, the liquor business could kill liquor from the market (Chaloupka et al., 2019).

2.3 Theoretical Literature

To make sense of why individuals decide to embrace or reject explicit wellbeing propensities, an assortment of social change hypotheses have been proposed. These speculations every now and again check out at the forerunners and determinants of wellbeing ways of behaving. Shared traits among a few of these thoughts incorporate self-viability and inspiration. Self-viability, which depends on one's earlier achievement or disappointment in an action, is the conviction that one can play out an activity, for example, modifying a way of behaving that is connected with one's wellbeing. One's self-adequacy is viewed as foreseeing how much exertion one will consume to change (Schunk, et al., 2021).

Coming up next is an exhaustive assessment of the relevant conduct change speculations:

2.3.1 Theory of Contemplated Activity

Contemplated activity expresses that individuals ought to think about their activities' ramifications prior to acting. Goal is a critical consider deciding way of behaving and social change. As indicated by Ice Ajzen, whether an individual thinks about a way of behaving as sure or negative, as well as how they accept their general public perspectives similar activity, influences how they mean to act. Hence, an individual's motivation — which is fundamental for taking part in a way of behaving and, thusly, for changing that way of behaving — is impacted by their disposition and the strain from society (Ryan and Worthington, 2021).

2.3.2 Theory of Arranged Conduct

The hypothesis of arranged conduct, which Ajzen made in 1985 as an improvement of the hypothesis of contemplated activity, underlines the meaning of goal in conduct execution while likewise trying to make sense of conditions in which an individual isn't completely in charge of the relative multitude of elements impacting how a way of behaving is really done (Ryan and Worthington, 2021). Hence, the new speculation proposes that a singular's level of command over their way of behaving and the force of their expectation to participate in it are conversely related with the probability of genuine conduct execution. Further fights that an individual's degree of self-viability is significant in choosing how savagely they expect to participate in an activity in his examinations. Fishbein and Ajzen made the contemplated activity strategy in 2010 as a swap for arranged direct.

2.3.3 Health Conviction Model

The Wellbeing Conviction Model (HBM) is a mental structure that glances at how individuals see and trust about the dangers and benefits of their wellbeing to make sense of

and foresee how they will act comparable to their wellbeing. The model was made during the 1950s by Irwin M. Rosenstock and his kindred social clinicians, and it is much of the time utilized in mediations for outward change in conduct and wellbeing advancement (Mckellar, 2020). The accompanying fundamental components make up the wellbeing conviction model:

- **Seen Weakness:** This is an individual's assessment of how defenseless or weak they are to a particular medical problem. On the off chance that somebody figures they could confront a medical problem, they are bound to make a move.
- **Seen Seriousness:** This alludes to an individual's evaluation of the gravity and possible repercussions of an ailment. An individual is more disposed to go to preventive or remedial lengths in the event that they think a medical condition is serious and could make ominous impacts.
- **Seen Advantages:** Individuals consider the potential benefits of taking on a specific wellbeing conduct or doing a recommended movement. They are bound to take part in the direct on the off chance that they accept the benefits offset the downsides or impediments.
- **Seen Boundaries:** These are the obstructions or hindrances to taking on a solid way of behaving that are remembered to exist. Boundaries can be brought about by things like costs, time limitations, and bother. In the event that individuals figure the snags can be eliminated, they are bound to make a move.
- **Signals to Activity:** Individuals are incited to act by prompts or triggers. These can be either inside pointers (like side effects or uneasiness) or outer prompts (like guidance from clinical specialists, ads in the media, or individual encounters).
- **Self-Viability:** This alludes to an individual's trust in their ability to do an ideal wellbeing action. A more prominent probability of acting is connected to higher self-viability.
- **Adjusting Variables:** These are interesting attributes and ecological perspectives that influence how the other model components are perceived and utilized. Segment contemplations, mental qualities, and cultural impacts are instances of directing variables.

As per the Wellbeing Conviction Model, individuals are bound to take part in wellbeing advancing ways of behaving assuming they accept they are powerless against a wellbeing danger, that the danger is significant, that there are advantages to acting, that there are not many impediments in that frame of mind of acting, that they are given signals to act, and that they are positive about their capacity to succeed. Various wellbeing related ways of behaving, including being vaccinated, taking part in safe sex, halting smoking, and heeding clinical guidance, have been made sense of utilizing the idea. It gives a system for making effective wellbeing correspondence and mediation strategies and offers bits of knowledge into how individuals process data and pursue choices connected to their wellbeing.

- **Limits of Wellbeing Conviction Model**
- **Oversimplified Perspective on Conduct:** The HBM makes the presumption that an individual's discernments and convictions are the possibly factors influencing their way of behaving with regards to their wellbeing. The model doesn't satisfactorily represent

the mind boggling transaction of social, social, financial, and ecological components that regularly impact conduct in actuality.

- **Restricted Accentuation on Friendly components:** The HBM gives less weight to relational and social components, which immensely affect individuals' wellbeing propensities. It doesn't really address how accepted practices, peer pressure, relational intricacies, and local area factors influence how individuals arrive at conclusions about their wellbeing.

- The model suggests that individuals make consistent and reasonable decisions in light of evaluating the apparent benefits and weaknesses of a wellbeing action. iv. **Supposition of Normal Navigation.** Be that as it may, past a clear money saving advantage examination, feelings, propensities, and other mental factors regularly assume a part in how individuals decide.

- **Lacking Self-Adequacy Thought:** Albeit the HBM perceives the significance of seen self-viability (the trust in one's capacity to act), it doesn't completely dissect how self-adequacy cooperates with different components or how it could be made or expanded.

- **Static Nature:** The HBM presents individuals' discernments and convictions as to a great extent steady and constant, regardless of the way that these components can change over the long run because of new data, encounters, and changing circumstances in their lives.

- **Restricted Extent of peril Insight:** The HBM generally centers around how serious and powerless a wellbeing risk supposedly is, yet it may not completely represent the nuances and intricacy of how individuals see and decipher different kinds of wellbeing dangers.

- **Social Contrasts:** The model could not completely consider social varieties in wellbeing. By and large, the Wellbeing Conviction Model has demonstrated supportive in seeing a few components of wellbeing conduct, yet for a more exhaustive information on wellbeing related ways of behaving, it ought to be utilized with alert and related to different models and hypotheses that address its shortcomings.

2.3.5 Social Mental Hypothesis

Albert Bandura made the social mental hypothesis, normally alluded to as friendly learning hypothesis or social mental learning hypothesis. It centers around the manners by which individuals get information through watching others and the critical job that mental cycles have in impacting an individual's way of behaving, perspectives, and feelings. This hypothesis puts areas of strength for an on the collaboration of mental, social, and ecological effects on human way of behaving. Various disciplines, including training, brain research, correspondence, and wellbeing advancement, have broadly utilized the social mental hypothesis. It offers insights into how individuals learn new ways of behaving, alter their ongoing ones, and conform to different conditions. The thought has additionally affected the production of remedial treatments and techniques for change in behavior patterns.

2.3.6 Self Determination Theory

Self-Assurance is an overall way of thinking of human inspiration and character. Analysts Richard M. Ryan and Edward L. Deci made the Self-Assurance clarification (SDT) during the 1980s as a mental clarification of human inspiration and character improvement (Cherry, 2022). It centers around grasping the components that effect and inspire human way of behaving, particularly with regards to accomplishing objectives and growing by and by. Self-Assurance Hypothesis' primary principle is that people have essential mental cravings for relatedness, ability, and independence. These necessities are believed to be important for advancing mental prosperity and optimal working. Various examinations have been led on self-assurance hypothesis, and it has been utilized in different settings, like work, sports, wellbeing, and prosperity. As indicated by the idea, conditions and conditions that worth individuals' independence, ability, and relatedness are bound to encourage their most significant levels of inspiration, their best work, and their mental prosperity.

To support the most elevated levels of inspiration and prosperity in individuals, the Self-Assurance Hypothesis features the meaning of satisfying natural mental needs for independence, capability, and relatedness.

2.3.7 The Trans Hypothetical Model (Phases of Progress)

James Prochaska and Carlo DiClemente made the Trans Hypothetical Model (TTM), generally alluded to as the Phases of Progress model, in the last part of the 1970s and mid 1980s (LaMorte, 2022). It was fundamentally made to grasp and depict how to quit taking part in habit-forming propensities like smoking, yet it has hence been utilized to make sense of and guide an assortment of other wellbeing related ways of behaving and even non-wellbeing related changes. The idea is predicated on the thought that conduct change is a cycle that occurs in various stages, with individuals going through these stages progressively. The model recognizes six phases of progress, which are:

- **Pre-thought:** Individuals in this stage are ignorant or are not contemplating evolving. They probably won't believe their activities to be risky, and they might not have any designs to change their direct at any point in the near future.
- **Consideration:** At this stage, individuals start to painstakingly contemplate the possibility of progress subsequent to acknowledging there is an issue. They consider the benefits and inconveniences of changing and may start finding out about how to change.
- **The planning stage** is when individuals are effectively getting ready to roll out an improvement. They might have concocted a game plan, set an exact goal, and began to make changes.
- **Activity:** At this step, the expected adjustments are really incorporated. To impact the ideal change, individuals change their environmental elements, their way of behaving, or both. This stage requires devotion and work.
- **Support:** In the wake of making the expected changes successfully and keeping them up for some time, individuals continue on toward the upkeep stage. Here, abstaining from backslide and hardening the increases acquired during the activity stage are the principal objectives.

- End: As of now, the individual has completely acclimatized the change into their lifestyle, and the inclination to backslide to the past way of behaving is at the very least. Not every person advances to this stage, and a few ways of behaving could continuously call for steady watchfulness.

The TTM underlines the stages as well as the cycles of progress — mental, close to home, and social procedures individuals utilize to progress through the stages. The TTM has been broadly used in different areas, including general wellbeing efforts, directing, enslavement treatment, and wellbeing brain science. It offers a system for grasping the challenges individuals have while endeavoring to change, and it coordinates the making of medicines reasonable for each phase of progress.

2.3.8 Limitations of the Trans Hypothetical Model

- Effortlessness and Speculation: The TTM works on conduct change into a direct movement through stages, which could not precisely catch the intricacy and distinction of the change cycle. Individuals may not necessarily in every case follow an anticipated succession of stages, and some might skip organizes by and large.

- Overemphasis on Stages: The model puts critical accentuation on the phases of progress, possibly eclipsing other significant elements that impact conduct change, like social and natural settings, social variables, and mental cycles.

- Absence of Consideration regarding Backslide: The TTM recognizes backslide as a component of the change cycle, however it doesn't sufficiently address the difficulties and procedures related with backslide counteraction. People frequently experience difficulties or return to past stages, and the model doesn't give an extensive structure to tending to these circumstances.

- Restricted Mental Develops: The TTM essentially centers around mental cycles and phases of progress, dismissing other mental builds like self-viability, inspiration, and direction, which assume critical parts in conduct change.

- Individual Contrasts: The TTM doesn't completely represent the huge individual contrasts in preparation and capacity to change. Individuals might have one of a kind inspirations, obstructions, and inclinations that are not completely caught by the model.

- Absence of Mix of Hypothetical Methodologies: In spite of being known as the "Transtheoretical Model," it doesn't completely coordinate different mental and conduct speculations. This can restrict its capacity to catch the intricacy of conduct change processes.

- Restricted Prescient Power: While the TTM is an important structure for conceptualizing conduct change, its capacity to foresee explicit results or guide custom-made mediations is restricted. Its attention on stages and cycles of progress may not necessarily line up with genuine results.

- Social and Relevant Fluctuation: Because of the model's starting points and most of its exploration being finished in Western countries, its materialness and value to different social circumstances and populaces might be hampered.

- Misstatement of Unconstrained Change: The TTM expects that change is a conscious, purposeful interaction. Notwithstanding, individuals frequently roll out

unconstrained improvements without deliberately traveling through the stages framed in the model.

- Restricted Accentuation on Profound and Full of feeling Elements: The TTM doesn't widely address the close to home and emotional parts of conduct change, which can unequivocally impact inspiration and adherence to change endeavors.

It's vital to take note of that while the Transtheoretical Model has its impediments, it has still given significant bits of knowledge into conduct change and has been an establishment for directing mediations in different wellbeing and health spaces. Be that as it may, its application ought to be supplemented by a thought of these constraints and a more extensive comprehension of the intricacies of conduct change.

2.4 Empirical Writing

The sum and type of information exhibiting the adequacy and worth of clinical treatments have developed essentially during the most recent couple of many years. Such information are officially considered by a few countries while choosing whether to pay for novel clinical mediations and procedures. Regardless of being pivotal to wellbeing strategy, the strength of the proof for different ways to deal with illness anticipation and advancement has gotten less consideration. The risks of uninvolved smoking in broad daylight places or the probability of family savagery because of liquor compulsion are just two instances of the negative outside repercussions that chronic weakness choices can have. A portion of these unfortunate ways of behaving may be welcomed on by compulsion, an absence of consciousness of the risks, or the mixed up idea that these ominous impacts of terrible wellbeing can be certainly stayed away from. They could likewise be an impression of social treachery, featuring that it is so urgent to resolve the financial and social issues that could bring about wellbeing status variations.

Utilizing information from 1995 to 2012, Dhrif (2018) used a concurrent condition model to gauge the impacts of "medical care consumptions" on kid death rates for 93 industrialized and emerging nations. The creators find that wellbeing spending no affects kids' wellbeing in low-pay and lower-center pay nations, yet emphatically affects bringing down youngster mortality just for upper-center pay and big time salary nations. Moreover, it has been found that at more elevated levels of improvement, confidential wellbeing spending emphatically affects kid mortality, while at lower levels of improvement, general wellbeing spending biggerly affects passing rates than private spending.

As indicated by Boachie, et al. (2018), the impact of government spending on populace wellbeing has gone under examination as of late. The creators investigate the association between government wellbeing spending and wellbeing results to determine on the off chance that administration mediation in the wellbeing area further develops results. Somewhere in the range of 1980 and 2014, the authors utilized yearly information on Ghana. Following that, an expense viability examination was led using the relapse assessments and the customary least squares (OLS) and two-stage least squares (2SLS) assessors. The outcomes propose that Ghana's superior wellbeing results throughout that time were a consequence of general wellbeing spending as well as pay. The creators guarantee that rising general wellbeing spending by 10% outcomes in a 0.77-multi day yearly expansion in future upon entering the world and a 0.102-4.4 passing decrease for babies and kids younger than five for each 1000

live births. For every sign of a wellbeing result, the impact of pay is more noteworthy than the impact of state venture. Relatively, the cost for every additional extended period of life procured through time went from \$7 to \$593.33 (in 2005 US dollars). Turned away youngster fatalities cost somewhere in the range of \$0.20 and \$16 each. The creators fight that the effect of pay on wellbeing offsets the effect of public h.

Van der Heiden et al. (2022) analyzed general professionals' (GPs) encounters and mentalities on the execution of coordinated way of life mediations (CLIs) to recognize facilitators and boundaries to their viable use in essential consideration. The creators utilize semi-organized interviews. In numerous essential consideration settings, general professionals were addressed among February and April 2019. Compounding prompted the designated enrollment of fifteen clinical specialists for semi-organized interviews. As per the review's discoveries, general specialists' encounters with way of life support went from alluding patients to other medical services experts to effectively partaking in their own way of life help. Every single general professional, as per the creators, grasped the worth of way of life mediations, yet their knowledge of and experience in offering consolidated way of life intercessions (CLIs) differed.

Kris-Etherton et al. (2021), an exploration idea from the American heart affiliation, demonstrated techniques for empowering a solid way of life in rehabilitative settings. The 5A Model, which means "survey, exhort, concur, help, and orchestrate," was created to furnish clinical guiding with a structure that properly addresses the prerequisites of clinical settings. For specialists and other medical services laborers, the scholars of this science direction frame procedures for furnishing patients with cardiovascular sickness risk at all levels with compelling way of life related conduct change guiding at each visit, in light of the 5A Model. Alongside examining the utilization of clinical innovation by specialists in fast persistent focused directing, the creators additionally talk about the fundamental significance of mental wellbeing and health in guiding for way of life related change in behavior patterns. As per the creators, routine clinician visits that focus harder on solid way of life decisions will assist with progressing cardiovascular wellbeing.

In their article on way of life medication (LM) programs extended to on the employment opportunity site, Edington et al. (2020) feature critical exploration from the College of Michigan Wellbeing The board Exploration Center. The creators guarantee that projects for actual work, weight the board, and sustenance that deal with ongoing sicknesses like cardiovascular infection, disease, and diabetes mellitus are instances of proof based populace way of life medication (LM) treatments. The creators reached the resolution that these strategies can possibly increment staff efficiency, cheaper patterns in medical care, and further develop patient wellbeing results.

In 2020, Sathish et al. led a preliminary based cost-viability assessment of a way of life mediation intended to forestall diabetes in India. The Kerala Diabetes Counteraction Program was a bunch randomized controlled try that elaborate 1007 members and was led in 60 democratic locale (otherwise called electing divisions) in the territory of Kerala. As indicated by the creators, members (30-60 years of age) were individuals who performed inadequately on an oral glucose resistance test yet had a high diabetes risk score. The mediation bunch got 15 gathering meetings of a year peer-support way of life intercession in local area settings from lay peer pioneers who had gotten preparing. To energize conduct change, related local

area occasions were likewise consolidated. The creators find that the standard attributes of the two review bunches were comparative. Concentrates on responsiveness and limiting neglected to change the ends. The creators reached the resolution that for people in India who were at high gamble of getting diabetes, a local area based peer-support way of life mediation was savvy more than a two-year time span.

To look at the profiles of long haul nonsmokers, Sohlberg and Bergmark (2020) perform benchmark, follow-up, and illustrative examinations notwithstanding a subsequent two-step bunch investigation. As per the creators, most of individuals didn't essentially change their ways of life, yet of the people who did, the larger part embraced a better way of life as well as expanded their degrees of active work, and long haul progressions toward this path seem to advance a more drawn out enduring existence without smoking. The essayists exhort making way of life changes related to quitting any pretense of smoking. The creator got to the end that individuals who need to quit smoking ought to be urged to practice more.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The following sub-headings were critically discussed in detail in this chapter: research design, study area, population, sample, sampling methods and instrument for data collection, instrument validation, instrument reliability, method for data collection, decision rule for research questions, and method for data analysis.

3.2 Research Design

For this study, a descriptive survey research design was chosen. Because it accomplishes the goal of employing a questionnaire to gather and compile data from respondents, this is seen as suitable. The study's design is deemed appropriate because it employs a limited sample size to draw conclusions about a wider population. Descriptive research design inquires about the nature, frequency, or distribution of variables and or relationships among variables. (Aggarwal and Ranganathan, 2019). This difference is not determined by the researcher; and cannot also be manipulated. However, after gathering and analyzing data, the researcher is supposed to develop reasonable conclusions about the differences between the dependent and independent variables.

3.3 Area of the Study

Edo State is one of the states in Nigeria's South-South geopolitical zone. The state was the 24th most populous in Nigeria as of the 2006 National Population Census (3,233,366). About 8,000,000 people are anticipated to live in the state in 2022. The fourth-biggest city in Nigeria is Benin City, the state's capital and largest city.

Edo state can serve as an excellent "area of study" for assessing the effect of health sector lifestyle intervention programmes on Nigerian government healthcare expenditure. Edo state is located in southern Nigeria and has a diverse population. It has a renowned rich cultural legacy and was once the seat of the legendary Benin Kingdom. Additionally, Edo State has a variety of healthcare infrastructure and facilities, making it appropriate for such a study. Edo has 18 local government areas: Akoko-Edo, Egor, Esan Central, Esan North-East, Esan South-East, Esan West, Etsako Central, Etsako East, Etsako West, Igueben, Ikpoba-Okha, Oredo, Orhionmwon, Ovia North-East, Ovia South-West, Owan East, Owan West, and Uhumwonde.

Here are some key points about Edo state that make it an interesting area of study for this topic:

- **Government healthcare spending:** Like other states in Nigeria, Edo state devotes a sizeable amount of its budget on healthcare. Insights into the efficacy of such Programmes and their potential for cost savings can be gained by examining the influence of lifestyle intervention Programmes on healthcare spending.
- **Population diversity:** Edo state has a diverse population with people from various ethnic groups. This diversity can offer a representative sample for studying the impact of lifestyle interventions across different socio-cultural backgrounds.
- **Existing health infrastructure:** Edo state has a network of healthcare facilities, including primary health centers, general hospitals, and specialist hospitals. These facilities can be used to implement lifestyle intervention programmes and assess their impact on healthcare expenditure.
- **Prevalence of lifestyle-related diseases:** Like many other regions, Edo state faces the challenge of lifestyle-related diseases such as diabetes, hypertension, and obesity. Lifestyle interventions targeting these conditions can have a significant impact on healthcare costs, making it relevant to study the effect of such programmes on healthcare expenditure in the state.

- Policy context: Gaining an understanding of the initiatives and policy framework of the Edo state government's healthcare spending and lifestyle Programmes might help you better understand the variables affecting the Programmes' results.

3.4 Population of the Study

All medical doctors, pharmacists, nurses, dieticians, clinical psychologists, dentists, and other professionals in Edo State, Nigeria, made up the study's population.

3.5 Sample and Sampling Technique

The number of participants in the study's sample was Two hundred and twenty (220) Medical Doctors, Pharmacists, Nurses, Dieticians, Clinical Psychologists, Dentists and Others in Edo State, Nigeria. The study's respondents were chosen using a basic random procedure. These methods made guaranteed that everyone in the population under investigation had a chance to be chosen rather than relying on a set of established criteria that might favor or disadvantage the researcher.

3.6 Instrument for Data Collection

The instrument for the study is a researcher structured questionnaire titled "the effect of Health Sector Lifestyle Intervention Programmes on Nigerian Government Healthcare Expenditure." A and B parts made up the instrument. While Section B was designed to extract information on the study objectives, Section A requested demographic data about the respondents. Section B comprised three clusters containing twenty-three (23) items seeking information from Medical Doctors, Pharmacists, Nurses, Dieticians, Clinical Psychologists, Dentists and Others in Edo State. Cluster A contains items seeking information on Lifestyle intervention programmes Embarked upon by Health Sector in Edo State. Cluster B contains items seeking information on the extent healthy lifestyle or food eating habits had helped to address some of the risk factors in Edo State Health Sector. Cluster C contains items seeking information on the extent lifestyle intervention programmes has helped to reduce costs of government on the health sector in Edo State.

The responses of the respondents are rated with a four point scale constructed by the researcher: Strongly Agreed (SA) = 4 point, Agreed (A) = 3 point, Disagreed (D) = 2 point and Strongly Disagreed (SD) = 1 point. The questionnaire was in a structured form in which the respondent was required to just tick the appropriate response as it deemed it fit.

3.7 Validity of the Instrument

The project supervisor was given the questionnaire to determine the validity level. To guarantee the suitability of the study instrument, the modifications were implemented for face and content validity. The recommendations and criticisms aided in determining the instrument's face and content validity. The final draft incorporated the ideas and changes offered.

3.8 Reliability of the Instrument

Using the test-retest procedure, the reliability of the questionnaire was evaluated. In a school, some pupils received copies of the test on two separate times, separated by two weeks. Using Pearson Product Moment Correlation (PPMC), the first and second sets of responses were

correlated, and a reliability coefficient of 0.75 was found, which is considered reliable for the study.

3.9 Method of Data Collection

The questionnaires were given to the appropriate Medical Doctors, Pharmacists, Nurses, Dieticians, Clinical Psychologists, Dentists and Others in Edo State, by the researchers, while administering the questionnaire to the randomly selected hospitals in four (4) Local Government of Edo State, appeals were made to each of the respondents to complete the questionnaire accurately and honestly. The respondents filled the questionnaire on the spot. This enhanced the return rate. Data collected was used for data analysis.

3.10 Method of Data Analysis

The frequency count, tables, mean, and standard deviation were utilized to assess the field data, and Pearson Product Moment Correlation (PPMC) was employed to test the study's hypotheses at the significance level of 0.05.

3.11 Decision Rule for Research Questions

The mean responses of the respondents shall be used as basis for decision on each item in the research instrument. This decision shall be based on 2.50 cutoff point which is obtained by finding the mean of the four points on the Modified Forced-Choice 4-Point Likert Scale used in the instrument.

CHAPTER FOUR
RESULTS PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of the data generated by the earlier posed research questions, along with a discussion of the results.

4.2 Findings

Research Question 1: What are the lifestyle intervention programmes embarked upon by the health sector in Edo State?

Table 4.1: Mean and Standard Deviation of Lifestyle Intervention Programmes embarked upon by the Health Sector in Edo State

S/N

Items

Mean ()

SD

Decision

1

The health sector in Edo State implements lifestyle intervention programmes to promote healthy living.

2.69

0.905

Agreed

2

The lifestyle intervention programmes in Edo State provide education and awareness about healthy living, healthy lifestyle or good eating habits.

2.71

0.692

Agreed

3

The health sector in Edo State offers physical activity programmes to encourage regular exercise.

2.49

0.794

Disagreed

4

The lifestyle intervention programmes in Edo State emphasize the importance of stress management techniques.

2.44

0.779

Disagreed

5

The health sector in Edo State provides support and resources for smoking cessation.

2.31

0.877

Disagreed

6

The lifestyle intervention programmes in Edo State include regular health check-ups and screenings.

2.72

0.786

Agreed

7

The health sector in Edo State actively promotes and supports weight management programmes.

2.47

0.768

Disagreed

8

The lifestyle intervention programmes in Edo State focus on reducing alcohol consumption and substance abuse.

2.46

0.823

Disagreed

9

The health sector in Edo State encourages and provides resources for mental health management and well-being.

2.50

0.902

Agreed

10

The lifestyle intervention programmes in Edo State are targeted at specific groups, such as children, adolescents or adults.

2.85

0.795

Agreed

Key: *SD = Standard Deviation*

Decision rule: *0.00-2.49- Disagreed; 2.50 - 5.00- Agreed*

Source: *Field Work (2023)*

Table 4.1 above shows the Lifestyle Intervention Programmes embarked upon by the Health Sector in Edo State. It was revealed that the respondents agreed that the health sector in Edo State implements lifestyle intervention programmes to promote healthy living with a mean score (). This shows that there is a positive perception among the respondents about the existence of such programmes. The result revealed that respondents agreed that the lifestyle intervention programmes in Edo State provides education and awareness about healthy living, healthy lifestyle or good eating habits with a mean score (). This revealed that the programmes are actively addressing the need for health education and awareness. Also, the result showed that respondents agreed that the lifestyle intervention programmes in Edo State include regular health check-ups and screenings with a mean score (). This highlights the importance of preventive health measures in the programmes. It was further revealed that respondents agreed that the health sector in Edo State encourages and provides resources for mental health management and well-being with a mean score (). This shows that mental health is being considered as part of the overall health promotion efforts. The result also showed that the respondents agreed that the lifestyle intervention programmes in Edo State are targeted at specific groups, such as children, adolescents or adults with a mean score (). This shows that the programmes are designed to address the unique needs of different age groups.

On the other hand, it was revealed from the result that respondents disagreed that the health sector in Edo State offers physical activity programmes to encourage regular exercise with a mean score (). Also, it was disagreed by the respondents that the lifestyle intervention programmes in Edo State emphasizes the importance of stress management techniques with a mean score (). It was further disagreed by the respondents that the health sector in Edo State provides support and resources for smoking cessation with a mean score (). The result also showed that the respondents disagreed that the health sector in Edo State actively promotes and supports weight management programmes with a mean score (). It was also revealed that respondents the lifestyle intervention programmes in Edo State focuses on reducing alcohol consumption and substance abuse with a mean score (). The standard deviation of the responses of the respondents are less than 1.00, indicating that they moderately deviate from the mean response.

Research Question 2: To what extent has lifestyle intervention programmes helped to address some of the risk factors for health in Edo State?

Table 4.2: Mean and Standard Deviation of Extent Lifestyle Intervention Programmes have helped to address some of the Risk Factors in Edo State Health Sector

S/N

Items

Mean

SD

Decision

1

Lifestyle intervention programmes in Edo State have effectively addressed risk factors in Edo State health sector.

2.49

0.812

Disagreed

2

Lifestyle intervention programmes have raised awareness about the importance of healthy behaviors in Edo State.

2.79

0.765

Agreed

3

Lifestyle intervention programmes have encouraged individuals to adopt healthy lifestyle in Edo State.

2.70

0.735

Agreed

4

Lifestyle intervention programmes have provided adequate support and resources for individuals to make positive lifestyle changes in Edo State.

2.45

0.840

Disagreed

5

Lifestyle intervention programmes have effectively reduced the prevalence of risk factors in Edo State health sector.

2.49

0.875

Disagreed

6

Lifestyle intervention programmes have allowed for effective collaboration among healthcare providers and professionals in Edo State.

2.70

0.870

Agreed

Key: *SD = Standard Deviation*

Decision rule: *0.00-2.49- Disagreed; 2.50 - 5.00- Agreed*

Source: *Field Work (2023)*

Table 4.2 above shows that the lifestyle intervention programmes have helped to address some of the risk factors for health in Edo State. For the first question item under this category, the mean score of 2.49 with a standard deviation of 0.812, resulted in a decision of "Disagreed." This revealed that the respondents generally did not believe that lifestyle intervention programmes have effectively addressed risk factors in the Edo State health sector. The mean score 2.79 with a standard deviation of 0.765 for the second item, led to a decision of "Agreed", meaning that respondents agreed that lifestyle intervention programmes raised awareness about the importance of healthy behaviors in Edo State. The mean score 2.70 with a standard deviation of 0.735, resulting in a decision of "Agreed" for the third question implies that respondents agreed that lifestyle intervention programmes encouraged individuals to adopt healthy lifestyles in Edo State. The mean score of 2.45 with a standard deviation of 0.840, led to a decision of "Disagreed" for the fourth items, and this suggests that respondents did not believe that lifestyle intervention programmes provided adequate support and resources for individuals to make positive lifestyle changes in Edo State. Also, the mean score of 2.49 with a standard deviation of 0.875, resulted in a decision of "Disagreed" for the fifth question item, implying that respondents generally did not believe that lifestyle intervention programmes effectively reduced the prevalence of risk factors in the Edo State health sector. Finally, the mean score of 2.70 with a standard deviation of 0.870, leading to a decision of "Agreed." This shows that respondents agreed that lifestyle intervention programmes allowed for effective collaboration among healthcare providers and professionals in Edo State.

Research Question 3: To what extent lifestyle intervention programmes have helped to reduce the wider costs of government on the Health Sector in Edo State?

Table 4.3: Mean and Standard Deviation of Extent Lifestyle Intervention Programmes have helped to reduce the Wider Costs of Government on the Health Sector in Edo State

S/N

Items

Mean

SD

Decision

1

Lifestyle intervention programmes have led to a decrease in the prevalence of chronic diseases, thereby reducing government expenditure on them.

2.45

0.828

Disagreed

2

Lifestyle intervention programmes has brought about decline in non-communicable diseases (NCDs) and minimize the expenditure of the government on them.

2.70

0.836

Agreed

3

Lifestyle intervention programmes have helped in reducing incessant visits to hospital owing to varied ailment/diseases or illnesses.

2.43

0.815

Disagreed

4

By promoting healthy lifestyles, lifestyle intervention programmes have decreased the need for long-term medication and costs of pharmaceutical products.

2.49

0.869

Disagreed

5

The effectiveness of lifestyle intervention programmes can result in minimal expenditure on medical laboratory equipment over time.

2.78

0.922

Agreed

6

Improved living through lifestyle intervention programmes has resulted in less over-tasking of the existing health care facilities.

2.56

0.873

Agreed

7

The implementation of lifestyle intervention programmes can reduce the overall burden of healthcare costs on the government.

2.97

0.934

Agreed

Key: *SD = Standard Deviation*

Decision rule: *0.00-2.49- Disagreed; 2.50 - 5.00- Agreed*

Source: *Field Work (2023)*

The table 4.3 above shows the Extent lifestyle intervention programmes have helped to reduce the wider costs of government on the health sector in Edo State. It was revealed from the table that respondents agreed that lifestyle intervention programmes have brought about

decline in non-communicable diseases (NCDs) and minimized the expenditure of the government on them with a mean score of (. This result shows that the implementation of lifestyle interventions has had a positive impact on public health outcomes, leading to potential cost savings for the government in managing NCDs. Also, the result shows that respondents agreed that the effectiveness of lifestyle intervention programmes can result in minimal expenditure on medical laboratory equipment over time with a mean score of (. This finding shows that by promoting healthier lifestyles and preventive measures, there is less demand for expensive medical testing, resulting in cost-saving opportunities for the government. It was also revealed that respondents agreed that improved living through lifestyle intervention programmes has resulted in less over-tasking of the existing health care facilities with a mean score of (. This shows that a focus on preventive measures and lifestyle improvements has potentially reduced the burden on healthcare facilities, leading to improved efficiency and resource management. Also, the implementation of lifestyle intervention programmes can reduce the overall burden of healthcare costs on the government with a mean score of (. This finding highlights the potential financial benefits of investing in preventive health measures to mitigate the impact of diseases and reduce healthcare expenses. However, it was disagreed that lifestyle intervention programmes have led to a decrease in the prevalence of chronic diseases, thereby reducing government expenditure on them with a mean score of (. Also, it was disagreed by the respondents that the lifestyle intervention programmes have helped in reducing incessant visits to hospital owing to varied ailment/diseases or illnesses with a mean score (). This result shows that while lifestyle interventions may have positive effects on certain aspects of healthcare costs, they might not have had a significant impact on the prevalence of chronic diseases or the frequency of hospital visits for certain health conditions. It was further disagreed by the respondents that by promoting healthy lifestyles, lifestyle intervention programmes have decreased the need for long-term medication and costs of pharmaceutical products with a mean score (). This shows that lifestyle interventions may not have had a substantial effect on reducing long-term medication usage and pharmaceutical expenditures. The standard deviation of the result also shows that there were variation in the response of the respondents which clustered around the mean.

Research Hypothesis 1: Lifestyle intervention programmes has not helped to address any of the risk factors for health in Edo State.

Table 4.4: PPMC of Lifestyle Intervention Programmes and the Risk Factors for Health in Edo State

S/N

Items

Mean

SD

r

Sig. (2 tailed)

Decision

•

Raising awareness about the importance of healthy behaviors

2.79

0.765

0.548*

0.000

Positive, moderate and significant correlation

•

Adoption of healthy lifestyle by individuals

2.70

0.735

0.646*

0.000

Positive, high, and significant correlation

•

Provision of support and resources for individuals for positive lifestyle changes

2.45

0.840

0.545*

0.000

Positive, moderate and significant correlation

•

Allowance for effective collaboration among healthcare providers and professionals

2.70

0.870

0.507*

0.000

Positive, moderate and significant correlation

•

Reduction in the prevalence of risk factors in health sector

2.49

0.875

0.512*

0.000

Positive, moderate and significant correlation

•

Effectively addressed risk factors in Edo State health sector

2.49

0.812

0.547*

0.000

Positive, moderate and significant correlation

Key: SD = Standard Deviation; r = correlation coefficient; * = *At the 0.05 threshold of significance, the relationship is significant.*

Source: *Field Work (2023)*

The table 4.4 above shows the Pearson Product Moment Correlation (PPMC) of Lifestyle Intervention Programmes and the Risk Factors for Health in Edo State. The table revealed the correlation between lifestyle intervention programmes and raising awareness about the importance of healthy behaviors in Edo State where the mean value of 2.79 shows the average score for the variable "raising awareness about the importance of healthy behaviors." The standard deviation of 0.765 measures the variability or spread of the responses around the mean. A smaller standard deviation shows that the data points are closer to the mean, indicating more agreement among the participants regarding the impact of lifestyle intervention programmes. The correlation coefficient of 0.548* demonstrates the direction and intensity of the link between lifestyle intervention Programmes and promoting healthy habits. The positive sign (+) implies that as the participation in lifestyle intervention programmes increases, so does the awareness about the importance of healthy behaviors. The significance level (p-value) of 0.000 shows that the observed correlation between lifestyle interventions programmes and raising awareness of healthy behaviors is statistically significant. In other words, this result is unlikely to be due to chance alone. Therefore, based on these statistics and the decision criteria provided (Positive, moderate, and significant correlation), the findings indicate that lifestyle intervention programmes have a positive, moderate, and significant impact on raising awareness about the importance of healthy behaviors in Edo State.

The table also revealed the correlation between lifestyle intervention programmes and Adoption of healthy lifestyle by individuals where the mean value of 2.70 represents the average score of individuals' willingness to adopt a healthy lifestyle after participating in the

lifestyle intervention programmes. The standard deviation of 0.735 shows the degree of variability in the responses of participants. A lower standard deviation shows that the responses are more closely clustered around the mean, which might indicate a consistent impact of the intervention. The correlation coefficient of 0.646* shows a positive and high correlation between the lifestyle intervention programmes and the adoption of a healthy lifestyle. A correlation coefficient closer to 1 shows a stronger relationship. The link revealed is statistically significant with a level of 0.000 significance. Therefore, it is doubtful that the correlation was discovered by accident. Overall, the findings revealed that the lifestyle intervention programmes in Edo State have been effective in encouraging individuals to adopt a healthy lifestyle. The positive, high, and statistically significant correlation implies a strong relationship between the intervention and the outcome, indicating that the intervention has had a noticeable impact on promoting healthy lifestyles among the participants.

The table shows the correlation between lifestyle intervention programmes and Provision of support and resources for individuals for positive lifestyle changes where the mean value of 2.45 revealed that, on average, participants in the lifestyle intervention programmes have shown some level of positive response to the support and resources provided. The standard deviation of 0.840 shows the variability in the responses among the participants. A higher standard deviation means that the responses were more spread out, while a lower value shows that the responses were closer to the mean. The correlation coefficient of 0.545* implies a positive correlation between the lifestyle intervention support and the positive lifestyle changes made by individuals. A value of 0.545 shows a moderate positive relationship. The 0.000 significance level demonstrates that the correlation between lifestyle interventions support and positive lifestyle changes is statistically significant. A p-value of 0.000 means that the probability of observing such a strong correlation by chance is very low. Based on the findings, we can conclude that there is a statistically significant and moderate positive correlation (0.545) between the lifestyle intervention programmes support and resources and the positive lifestyle changes made by individuals in Edo State. This shows that the intervention programmes have been effective in providing adequate support and resources to help individuals make positive lifestyle changes. The findings indicate that the lifestyle intervention programmes in Edo State have had a positive impact on individuals, providing them with the necessary support and resources to make meaningful lifestyle changes.

The table shows the correlation between lifestyle intervention programmes and Allowance for effective collaboration among healthcare providers and professionals where the mean value of 2.70 shows that the respondents, on average, agree with the statement "Lifestyle intervention programmes have allowed for effective collaboration among healthcare providers and professionals in Edo State." The standard deviation of 0.870 shows the dispersion of the responses around the mean. A higher standard deviation shows that the respondents' opinions vary widely, while a lower standard deviation shows more agreement among the respondents. The correlation coefficient of 0.507 shows a moderate positive correlation between the variables being studied. In this case, the correlation is between the implementation of lifestyle intervention programmes and effective collaboration among healthcare providers and professionals. The significance level of 0.000 shows that the correlation observed is statistically significant. The claim that there is a real connection between lifestyle intervention Programmes and efficient collaboration among healthcare providers and professionals in Edo State is supported by a significance level of 0.000, which

indicates that the likelihood of discovering such a correlation by chance is extremely low. Overall, the results showed a moderately strong positive link between the efficacy of lifestyle intervention Programmes and cooperation between healthcare professionals and professionals in Edo State. This indicates that the use of lifestyle intervention Programmes has helped to promote cooperation among medical specialists in the area.

The result from the table further revealed the correlation between lifestyle intervention programmes and reduction in the prevalence of risk factors in health sector where the mean value of 2.49 shows the average effect size of the lifestyle intervention programmes on reducing risk factors. The standard deviation of 0.875 shows the variability in the data around the mean. A smaller standard deviation shows that the data points are closer to the mean, indicating more consistency in the results. The positive correlation coefficient of 0.512* shows that as the implementation of lifestyle intervention programmes increases, the prevalence of risk factors in the Edo State health sector tends to decrease. This is a positive and desirable outcome as it shows that these programmes are effective in addressing risk factors. With a correlation coefficient of 0.512*, the strength of the relationship between lifestyle intervention programmes and the reduction of risk factors can be considered moderate. While it is not a weak correlation, it is not extremely strong either. Nevertheless, a moderate correlation is still meaningful and relevant for policymakers and healthcare professionals to consider when designing intervention strategies. The significant value of 0.000 shows that the observed correlation between lifestyle interventions programmes and risk factor reduction is statistically significant. This shows that the relationship between the two variables (lifestyle intervention programmes and reduction in the prevalence of risk factors in health sector) is not likely to be a result of random chance but is a real and meaningful association. Overall, the findings revealed that lifestyle intervention programmes have effectively reduced the prevalence of risk factors in Edo State's health sector. The positive and significant correlation provides evidence that these programmes are associated with a decrease in risk factors. However, since the correlation is considered moderate, there might be other factors or interventions that could further enhance the effectiveness of the programmes.

Also, the table shows the correlation between lifestyle intervention programmes and effectively addressed risk factors in Edo State health sector where the mean the mean of 2.49 shows the average score of the participants in the lifestyle intervention programmes effectiveness in addressing risk factors in Edo State's health sector. The standard deviation of 0.812 measures the variability or spread of the scores around the mean. A higher standard deviation implies more dispersion in the data points. The correlation coefficient of 0.547* shows a positive correlation between the lifestyle intervention programmes and the effective addressing of risk factors in the Edo State health sector. The connection revealed is statistically significant, as evidenced by the significance value (Sig. 2-tailed) of 0.000. This suggests that it is improbable that the association we have discovered is the result of pure chance. The findings of the study revealed that lifestyle intervention programmes implemented in Edo State have been effective in addressing risk factors within the health sector. This is evidenced by a moderate positive correlation ($r = 0.547^*$) between the intervention programmes and the reduction of risk factors. The statistically significant correlation (Sig. 2-tailed = 0.000) implies that the observed relationship between the lifestyle interventions and risk factor reduction is not due to chance. The mean score of 2.49 shows a

favorable overall perception of the effectiveness of the lifestyle intervention programmes among participants. Moreover, the moderate positive correlation signifies that as the interventions are implemented and adhered to, there is a noticeable improvement in addressing risk factors in the health sector. These results demonstrate the significance of lifestyle intervention programmes in contributing positively to the health outcomes in Edo State.

Based on the findings above, the researcher therefore reject hypothesis one (1) which states that the lifestyle intervention programmes have not helped to address any of the risk factors for health in Edo State. Hence, the researcher concludes that the lifestyle intervention programmes have helped to address some of the risk factors for health in Edo State.

Research Hypothesis 2: Lifestyle intervention programmes has not helped to reduce any of the wider costs of government on the health sector in Edo State.

Table 4.5: PPMC of Lifestyle Intervention Programmes and the Reduction in Wider Costs of Government on the Health Sector in Edo State

S/N

Items

Mean

SD

r

Sig. (2 tailed)

Decision

1.

Reduction in cost on chronic diseases

2.45

0.828

0.433*

0.000

Positive, moderate and significant correlation

2.

Reduction in cost on non-communicable diseases

2.70

0.836

0.518*

0.000

Positive, moderate, and significant correlation

3.

Reduction in cost of incessant visits to hospital

2.43

0.815

0.510*

0.000

Positive, moderate and significant correlation

4.

Reduction in cost of long-term medication

2.49

0.869

0.444*

0.000

Positive, moderate and significant correlation

5.

Reduction in cost of medical laboratory equipment

2.78

0.922

0.376*

0.000

Positive, low and significant correlation

6.

Reduction in cost on improved living

2.56

0.873

0.465*

0.000

Positive, moderate and significant correlation

7.

Reduction in overall burden of healthcare costs

2.97

0.934

0.358*

0.000

Positive, low and significant correlation

Key: *SD = Standard Deviation; r = correlation coefficient; * = At the 0.05 threshold of significance, the relationship is significant.*

Source: *Field Work (2023)*

The table 4.5 above shows the Pearson Product Moment Correlation (PPMC) of Lifestyle Intervention Programmes and the reduction in wider costs of government on the Health Sector in Edo State. The table revealed the correlation between lifestyle intervention programmes and Reduction in cost on chronic diseases where the mean value of 2.45 shows the average level of the variable being measured (e.g., the extent of decrease in chronic diseases due to lifestyle intervention programmes). The standard deviation of 0.828 shows the amount of variability or dispersion around the mean. In this case, it shows how much the reported values vary from the average of 2.45. The correlation coefficient of 0.433 shows a moderate positive relationship between lifestyle intervention programmes and the decrease in chronic diseases. This means that as the extent of lifestyle intervention increases, there is a moderate tendency for a decrease in chronic diseases. The significant value of 0.000 shows that the correlation is statistically significant. In other words, the likelihood of observing this correlation by random chance is very low. In summary, the findings from this study suggest that lifestyle intervention programmes have a moderate and significant correlation with a decrease in chronic diseases and a subsequent reduction in government expenditure on them.

This information could be used to support the argument that investing in lifestyle intervention programmes can yield positive health and economic outcomes.

Also, the table shows the correlation between lifestyle intervention programmes and Reduction in cost on non-communicable diseases where the mean value of 2.70 shows the average score of the participants' responses or measurements related to the impact of lifestyle intervention programmes on NCDs and government expenditure. The data points appear to be decently spaced out around the mean with a standard deviation of 0.836. This number offers a measurement of the data's variability or dispersion. The fall in non-communicable diseases (NCDs), as well as the decrease in government spending, are positively correlated, as indicated by the correlation value of 0.518*. According to a positive association, the fall in NCDs and decreased government spending tend to increase when the first variable (lifestyle intervention Programmes) increases. The association found in the data is statistically significant, as indicated by the significance level of 0.000. In other words, it is extremely unlikely that such a correlation would be discovered by chance. This strengthens the credibility of the correlation observed. Overall, the results imply that implementing lifestyle intervention programmes has a positive impact on reducing non-communicable diseases and saving government expenditures. However, while these statistics provide valuable insights, it's also important to consider the context of the study, the size and representativeness of the sample, the methodology, and potential confounding variables that might influence these correlations.

Also, the table shows the correlation between lifestyle intervention programmes and reduction in cost of incessant visits to hospital where the mean value of 2.43 shows that, on average, the participants who underwent lifestyle intervention programmes experienced a reduction in hospital visits due to health issues. The standard deviation of 0.815 shows the variability in the data points around the mean. This shows that while the mean reduction is 2.43 hospital visits, individual outcomes may vary, with some participants experiencing a greater reduction and others experiencing a lesser reduction. The correlation coefficient of 0.510 shows a moderate positive relationship between lifestyle intervention and reduced hospital visits. This shows that as the extent of participation in lifestyle intervention programmes increases, the reduction in hospital visits also tends to increase. The low Sig. (2-tailed) value of 0.000 demonstrates the statistical significance of this link. In other words, it seems improbable that the observed association happened by accident. In conclusion, the study's findings offer compelling evidence that lifestyle modification Programmes can significantly lower the number of hospital admissions for a variety of maladies, diseases, or illnesses. The conclusion that such interventions can be successful in enhancing health outcomes and lessening the cost on healthcare systems is supported by the positive association, moderate strength, and statistical significance.

Also, the table shows the correlation between lifestyle intervention programmes and reduction in cost of long-term medication where the mean value of 2.49 shows the average level of promotion of healthy lifestyles and its impact on decreasing the need for long-term medication and costs of pharmaceutical products in the study sample. The standard deviation of 0.869 shows the degree of variability or dispersion in the data points around the mean. A higher standard deviation shows greater variability in the responses of the participants. The correlation coefficient of 0.444 shows a moderate positive correlation between promoting healthy lifestyles and the decrease in the need for long-term medication and pharmaceutical

costs. A correlation coefficient between 0.3 and 0.7 is generally considered to be a moderate correlation. The association found in the study is statistically significant, as indicated by the significance value of 0.000 (less than 0.05). In other words, it's doubtful that the link between encouraging healthy lives and the decline in drug requirements and expenses really happened by accident. The "positive" association demonstrates that as the promotion of healthy lifestyles rises, the demand for chronic medication and associated expenditures likely to decrease as well. Although there is a discernible association between the two variables, the "moderate" correlation demonstrates that it is not a very strong relationship. A correlation that is considered "significant" indicates that it is more likely to reflect a true relationship in the population than to be a coincidental occurrence in the sample. Overall, the findings suggest that there is a meaningful and statistically significant link between promoting healthy lifestyles and reducing the reliance on long-term medication and associated pharmaceutical costs. However, keep in mind that these interpretations are based on the information you provided, and the context and specifics of the study might provide additional insights.

The table further shows the correlation between lifestyle intervention programmes and reduction in cost of medical laboratory equipment where the mean of 2.78 shows the average value of the variable being measured in your study. The standard deviation of 0.922 shows the variability or spread of the data around the mean. A higher standard deviation shows more variability in the data points. The correlation coefficient of 0.376 shows a positive correlation between the effectiveness of lifestyle intervention programmes and the minimal expenditure on medical laboratory equipment. A positive correlation means that as one variable increases, the other tends to increase as well. The significance level of 0.000 (which is less than 0.05) shows that the correlation between the effectiveness of lifestyle intervention programmes and minimal expenditure on medical laboratory equipment is statistically significant. In other words, it's unlikely that this relationship occurred due to random chance. The decision is that there is a positive, low, and significant correlation between the effectiveness of lifestyle intervention programmes and minimal expenditure on medical laboratory equipment. This means that as the effectiveness of these programmes increases, there is a tendency for the expenditure on medical laboratory equipment to decrease, and this relationship is not likely due to random chance.

The table also shows the correlation between lifestyle intervention programmes and reduction in cost on improved living where the mean value of 2.56 shows the average score of the participants' responses to a specific question or statement. The standard deviation of 0.873 represents the spread or variability of the responses around the mean. A higher standard deviation shows more variability in the data. The correlation coefficient of 0.465 shows the strength and direction of the relationship between two variables. In this case, it shows a positive correlation between the level of lifestyle intervention and the reduction in over-tasking of healthcare facilities. The association between lifestyle modification and decreased over-tasking of healthcare facilities is statistically significant, as indicated by the significance level (p-value) of 0.000. Generally, a p-value of 0.05 or less is regarded as significant. There is a positive relationship between lifestyle intervention programmes and the reduction in over-tasking of healthcare facilities. The strength of the relationship is moderate, as indicated by the correlation coefficient of 0.465. In conclusion, the statistical results suggest a moderate, positive, and significant correlation between improved living through lifestyle intervention programmes and a reduction in over-tasking of existing healthcare facilities. This implies that

as lifestyle intervention programmes are implemented, there is a notable and meaningful reduction in the strain on healthcare facilities.

The table also shows the correlation between lifestyle intervention programmes and reduction in overall burden of healthcare costs where the mean score is 2.97, which shows that, on average, the participants' responses lean towards agreement with the statement. The standard deviation shows the variability or dispersion of the responses around the mean. A higher standard deviation shows that the responses are more spread out. With a standard deviation of 0.934, the responses appear to have a moderate amount of variability around the mean score. The correlation coefficient measures the strength and direction of a linear relationship between two variables. In this context, the correlation coefficient of 0.358 shows a positive correlation between the implementation of lifestyle intervention programmes and the reduction of healthcare costs. However, the strength of this correlation is moderate, not very strong. The significance level, often denoted as "p-value," assesses whether the observed correlation is statistically significant or if it could have occurred by chance. The association is indeed statistically significant, as indicated by a p-value of 0.000 (essentially zero). As a result, it is unlikely that the observed correlation could have happened by coincidence. Positive, low, and significant correlation: Based on the provided statistics, the decision is that there is a positive correlation between the implementation of lifestyle intervention programmes and the reduction of healthcare costs. The correlation is statistically significant, meaning that it's highly likely to be a real relationship and not just a random occurrence. However, the correlation is considered "low" in strength, as indicated by the correlation coefficient of 0.358. In summary, the findings suggest that there is a statistically significant but relatively moderate positive correlation between the implementation of lifestyle intervention programmes and the potential reduction of healthcare costs. This implies that while there is a connection between these two variables, other factors may also contribute to healthcare cost reductions, and the relationship may not be very strong.

4.3 Discussion of Findings

The study's findings showed that the respondents have positive perceptions about the existence of lifestyle intervention programmes in Edo State, particularly regarding education, awareness, and regular health check-ups. This finding is supported by Sohlberg and Bergmark (2020), who stated that a generally healthier lifestyle, especially one that includes physical activity, seems to contribute to increase the chances for a long-term smoke-free life, as it both eases withdrawal symptoms, prevents weight gain, and contributes to a more upbeat mood and feelings of well-being. Lifestyle changes are directly related to quitting smoking. However, the present study identified some areas that need improvement in Edo State, such as providing resources for smoking cessation, stress management techniques, weight management, physical activity programmes, and substance abuse reduction. This finding is supported by Palmer, *et al.*, (2018), who stated that there should be improvements made to therapies that focus on nutrition, exercise, and quitting smoking in people with existing coronary heart disease to reduce morbidity and death. The variation in responses, as indicated by the standard deviation, shows that there are some levels of disagreement among the respondents' opinions. This shows that there might be different perspectives or experiences regarding the effectiveness and implementation of the lifestyle intervention programmes.

This finding is supported by van der Heiden, *et al.*, (2022), who stated that the importance of lifestyle interventions was recognized by all general practitioners (GPs), but they differed in their level of experience with providing lifestyle support and awareness of combined lifestyle interventions (CLIs). To enhance the effectiveness of the lifestyle intervention programmes, it is essential for policy makers and health authorities to address the areas of disagreement and implement targeted strategies to promote healthy behaviors, mental well-being, and preventive health measures. This findings was buttressed by Kris-Etherton (2021), who stated that It might be difficult to promote healthy living behaviors in clinical settings, but it is crucial to find solutions to these problems because doing so effectively encourages and starts patient behavior change. The finding was further buttressed by Singh, *et al.*, (2022) who state that the potential of preventive psychiatry is becoming more and more apparent to scholars and decision-makers, but its application in settings with limited resources is subpar.

The findings also show a mixed picture of the effectiveness of lifestyle intervention programmes in addressing risk factors in the Edo State health sector. Previous studies such as those of Whitman, *et al.*, (2022), Babor, *et al.*, (2022) and Lewsey, *et al.*, (2019) have shown that although intervention programmes within the health system have the potential to be cost-effective, population-wide solutions are by far the more cost-effective option. On one hand, there are perceptions of limited effectiveness in terms of risk factor reduction and provision of resources, just as stated by Palmer, *et al.*, (2018) that the effects of alcohol reduction interventions were effects of alcohol reduction interventions were inconclusive in terms of risk reduction. On the other hand, the programmes appear to be successful in raising awareness, encouraging healthy behaviors, and fostering collaboration among healthcare providers. This was buttressed by Sohlberg and Bergmark (2020), who stated that the majority of people did not change their lifestyles in any significant way, but of those who did, the majority embraced a healthier lifestyle and/or improved their physical activity levels, and long-term improvements in this direction appear to promote a longer enduring life without smoking. The finding was further buttressed by Kris-Etherton, *et al.* (2021), who state that greater attention to healthy lifestyle behaviors during routine clinician visits will contribute to promoting cardiovascular health.

The findings revealed that lifestyle intervention programmes in Edo State have shown promising results in reducing some aspects of healthcare costs, particularly related to NCDs, medical equipment, and over-tasking of healthcare facilities. This findings was supported by Di Maglie, *et al.* (2022), who state that intervention programmes are an efficient way to reduce the proportion of overweight and obese children. However, there are areas where their impact might be limited, such as chronic disease prevalence and pharmaceutical costs. This kind of limitation was highlighted by LaMorte (2022) who stated that behavioral change which would be the result of intervention programmes occurs in a series of gradual and possibly painstaking stages. These findings emphasize the importance of ongoing evaluation and refinement of lifestyle intervention strategies to maximize their effectiveness in reducing the wider costs of the government on the health sector. Additionally, the observed variations in responses around the mean, as indicated by the standard deviation, highlights the diversity of opinions and experiences among the respondents, as reported in previous studies such as those of van der Heiden, *et al.* (2022), and this may warrant further investigation and consideration in future policy planning and implementation.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The study's executive summary, conclusion, and recommendations are presented in this chapter. These are based on the study's findings.

5.1 Summary

The study examined the effectiveness of lifestyle intervention programmes in addressing risk factors and reducing government costs in the health sector of Edo State. The findings revealed positive perceptions among respondents about the existence of these programmes, particularly in promoting healthy behaviors, education, and regular health check-ups. However, there were areas where improvements were needed, such as smoking cessation, stress management, weight management, and substance abuse reduction. The results also indicated that the programmes were effective in raising awareness, encouraging healthy lifestyles, and promoting collaboration among healthcare providers. While they showed promise in reducing certain healthcare costs related to non-communicable diseases (NCDs), medical equipment, and overburdened healthcare facilities, their impact on chronic diseases and pharmaceutical costs was limited.

5.2 Conclusion

In conclusion, the study demonstrated that lifestyle intervention programmes in Edo State have positively influenced various aspects of health promotion, including raising awareness, encouraging healthy behaviors, and fostering collaboration among healthcare providers. These programmes have also shown potential in reducing specific healthcare costs related to NCDs, medical equipment, and facility over-tasking. However, certain areas, such as chronic disease prevalence and pharmaceutical costs, may require further attention and refinement. While certain areas need improvement, the programmes have shown potential in

reducing specific healthcare costs. The findings revealed that these programmes play a valuable role in addressing risk factors and potentially mitigating government healthcare expenditures.

5.3 Recommendations

On the basis of the study's findings, the following suggestions were made:

- Government and health sector authorities should strengthen and expand existing lifestyle intervention programmes. The positive impact of lifestyle intervention programmes should be leveraged, and efforts should be made to strengthen and expand their reach. This could involve increasing resources for effective components and addressing the identified gaps.
- Government, health sector authorities and policy makers should focus on targeted areas where the programmes showed limited effectiveness, such as stress management and pharmaceutical costs, should be targeted for improvement. Strategies should be developed to enhance the impact of interventions in these specific areas.
- Government and health sector should ensure continuous evaluation of the programmes outcomes and cost-effectiveness which is crucial. Regular assessments will provide insights into their long-term impact and help identify areas for adjustment.
- Government should collaborate with various authorities, including healthcare providers, policy makers, and communities, to ensure a comprehensive and coordinated approach to health promotion and cost reduction.
- Government and health sector authorities should increase public awareness of the benefits of lifestyle intervention programmes and their role in promoting health and reducing healthcare costs. Effective communication strategies can encourage participation and support.
- Government and health sector authorities should invest in research to explore innovative ways to enhance the effectiveness of lifestyle intervention programmes. This could involve incorporating emerging technologies or adapting strategies from successful interventions in other regions.
- Health sector stakeholders, policy makers and government should recognize that the impact of lifestyle intervention programmes may take time to fully manifest. Long-term commitment and consistent efforts are essential for sustainable improvements in health outcomes and cost reduction.

By implementing these recommendations, Edo State can further enhance the positive impact of lifestyle intervention programmes on public health and contribute to reducing the wider costs of the government on the health sector.

5.4 Area for Further Research

Delving into the socioeconomic impact of lifestyle interventions could provide a holistic view of their effectiveness. Research could explore whether these Programmes

disproportionately benefit certain demographic groups and if they contribute to overall societal well-being beyond just healthcare expenditure.

REFERENCES

- Ablah, E., Wilcox, E. A., & Honn, A. (2019). The Cons of Traditional Worksite Wellness Interventions and a Proposed Model. *Public health reports (Washington, D.C. : 1974)*, 134(4), 319–323. <https://doi.org/10.1177/0033354919845683>.
- Aggarwal, R. and Ranganathan, P. (2019). Study designs: Part 2 - Descriptive studies. *Perspectives in clinical research*, 10(1), 34–36. https://doi.org/10.4103/picr.PICR_154_18.
- Ajzen, I., (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Babor, T.F., Casswell, S., Graham, K., Huckle, T., Livingston, M., Österberg, E., Rehm, J.,... (2022). *Drinking and driving: prevention and countermeasures. Alcohol: No Ordinary Commodity: Research and public policy (3rd Edition)*. <https://doi.org/10.1093/oso/9780192844484.003.0011>.
- Bardach, A., Alcaraz, A., Roberti, J., Ciapponi, A., Augustovski, F., & Pichon-Riviere, A. (2021). Optimizing Tobacco Advertising Bans in Seven Latin American Countries: Microsimulation Modeling of Health and Financial Impact to Inform Evidence-Based Policy. *International journal of environmental research and public health*, 18(10), 5078. <https://doi.org/10.3390/ijerph18105078>.
- Boachie, Micheal & Ramu, K. & pölajeva, Tatjana. (2018). Public Health Expenditures and Health Outcomes: New Evidence from Ghana. *Economies*. 6. 58. [10.3390/economies6040058](https://doi.org/10.3390/economies6040058).
- Centers for Disease Control and Prevention (2022). Excessive Drinking is Draining the U.S. Economy. *Alcohol and Public Health*. Retrieved on 3rd September, 2023 from: <https://www.cdc.gov/alcohol/features/excessive-drinking.html>.
- Chaloupka, F.J., Powell, L.M., & Warner, K.E. (2019). The Use of Excise Taxes to Reduce Tobacco, Alcohol, and Sugary Beverage Consumption. *Annual Review of Public Health*. 40(187-201). Retrieved on 3rd September, 2023 from: <https://doi.org/10.1146/annurev-publhealth-040218-043816>.

Cherry, K. (2022). What Is Self-Determination Theory? How Self-Determination Influences Motivation. Retrieved on 3rd September, 2023 from: <https://www.verywellmind.com/what-is-self-determination-theory-2795387>.

Chudech, S. & Janmaimool, P. (2021). Effectiveness of warning graphic labels on cigarette packs in enhancing late-teenagers' perceived fear of smoking-related harms in Bangkok, Thailand. *Journal of Public Health Research*. 10(1). <https://doi.org/10.4081/jphr.2021.1912>.

Chudzińska, M., Wołowiec, L., Banach, J., Rogowicz, D. & Grzešek, G. (2022). Alcohol and Cardiovascular Diseases—Do the Consumption Pattern and Dose Make the Difference? National Library of Medicine. Retrieved on 2nd September, 2023 from: <https://doi.org/10.3390/jcdd9100317>.

Cukier, S., Wettlaufer, A., Jackson, K., Minozzi, S., Bartholow, B.D., Stoolmiller, M.L. & Sargent, J.D. (2018). Impact of exposure to alcohol marketing and subsequent drinking patterns among youth and young adults. National Library of Medicine. Retrieved on 3rd September, 2023 from: <https://doi.org/10.1002/14651858.CD013087>.

Di Maglie, A., Marsigliante, S., My, G., Colazzo, S., & Muscella, A. (2022). Effects of a physical activity intervention on schoolchildren fitness. *Physiological reports*, 10(2), e15115. <https://doi.org/10.14814/phy2.15115>.

Dodd, R., Santos, J.A., Tan, M., Campbell, N.R., Mhurchu, C.N., Cobb, L., Michael F Jacobson, M.F.,... (2020). Effectiveness and Feasibility of Taxing Salt and Foods High in Sodium: A Systematic Review of the Evidence. National Library of Medicine. 11(6): 1616–1630. Retrieved on 2nd September, 2023 from: <https://doi.org/10.1093/advances/nmaa067>.

Durkin S.J., Brennan E., Wakefield M.A. (2022). Optimising tobacco control campaigns within a changing media landscape and among priority populations. *Tobacco Control*.31:284–290.

Edington, D. W., Burton, W. N., & Schultz, A. B. (2020). Health and Economics of Lifestyle Medicine Strategies. *American journal of lifestyle medicine*, 14(3), 274–277. <https://doi.org/10.1177/1559827620905782>.

Food Standard Agency, (2020). Check the label. *Food safety hygiene*. Available: URL <https://www.food.gov.uk/safety-hygiene/check-the-label#:~:text=The%20traffic%20light%20label%20is%20colour%20coded%20and%20shows%20that,is%20high%20in%20a%20nutrient>. Accessed 24th August, 2023.

François-Xavier B. (2022). EU front-of-pack nutritional labelling: voluntary or mandatory? (part 1). https://www.tomatonews.com/en/eu-front-of-pack-nutritional-labelling-voluntary-or-mandatory-part-1_2_1827.html.

Ginsburg, G.S., Pella, J.E. & Slade, E. (2022) Cost-Effectiveness Analysis of School-Based Treatments for Anxiety Disorders. *J Ment Health Policy Econ*. 2022 Sep 1;25(3):91-103. PMID: 36128988.

Guide to Community Preventive Services (2022). Reducing the Harms from Drinking Too Much by Limiting Access to Alcohol. Retrieved on 3rd September, 2023 from: <https://www.thecommunityguide.org/news/reducing-the-harms-from-drinking-too-much-by-limiting-access-to-alcohol.html#:~:text=drinkers%20and%20others.-,Regulating%20the%20availability%20of%20alcohol%2C%20including%20maintaining%20limits%20on%20the,%2C%20even%20for%20non%2Ddrinkers.>

Jackson, N., Esther, U. & Adams, J. (2020). A Road Map for Alcohol Pricing Policies: Creating a fairer and healthier Aotearoa New Zealand. Auckland: Alcohol Healthwatch. ISBN 978-0-9951400-0-4.

Juliane, S., Wolfgang J. B., Reinhard H. (2018). The effectiveness of an intervention to promote active travel modes in early adolescence. *Transportation Research Part F: Traffic Psychology and Behaviour*. 55;389-402.

Katzmarzyk, P.T., Friedenreich, C., Shiroma E.J., et al (2022). Physical inactivity and non-communicable disease burden in low-income, middle-income and high-income countries. *Br J Sports Med*; 56:101–106.

Kettle, V. & Madigan, C. & Coombe, A. & Graham, H. & Thomas, J. & Chalkley, A. & Daley, A. (2022). Effectiveness of physical activity interventions delivered or prompted by health professionals in primary care settings: systematic review and meta-analysis of randomised controlled trials. *BMJ: British Medical Journal*. 376. 10.1136/bmj-2021-068465.

Kris-Etherton, P.M., Petersen, K.S., Després, J., Anderson, C.A., Deedwania, P., Furie, K.L., Lear, S., Lichtenstein, A.H., Lobelo, F.,... (2021). Strategies for Promotion of a Healthy Lifestyle in Clinical Settings: Pillars of Ideal Cardiovascular Health: A Science Advisory from the American Heart Association. Retrieved on 3rd September, 2023 from: <https://doi.org/10.1161/CIR.0000000000001018>.

LaMorte, W.W. (2022). The Transtheoretical Model (Stages of Change). Behavioral Change Models. Retrieved on 3rd September, 2023 from: [https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories6.html#:~:text=The%20Transtheoretical%20Model%20\(also%20called,of%20quitting%20on%20their%20own.](https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories6.html#:~:text=The%20Transtheoretical%20Model%20(also%20called,of%20quitting%20on%20their%20own.)

Lewsey, J., Haghpanahan, H., Mackay, D., McIntosh, E., Pell, J. & Jones, A. (2019). Impact of legislation to reduce the drink-drive limit on road traffic accidents and alcohol consumption in Scotland: a natural experiment study. *Public Health Research*. 7(12). Retrieved on 3rd September, 2023 from: <https://doi.org/10.3310/phr07120>.

Libretext, (2023). *Introduction to Nutrition and Physical Fitness* [serial online]. Available: URL <https://med.libretexts.org/@go/page/69599>. Accessed 24th August, 2023.

Manthey, J., Hassan, S. A., Carr, S., Kilian, C., Kuitunen-Paul, S., & Rehm, J. (2021). What are the Economic Costs to Society Attributable to Alcohol Use? A Systematic

Review and Modelling Study. *PharmacoEconomics*, 39(7), 809–822. <https://doi.org/10.1007/s40273-021-01031-8>.

Maznah, D. (2019). The Economics of Health Promotion - how much can we save with HP? *BerandaUNAIR*. https://s2ikm.fkm.unair.ac.id/wpcontent/uploads/sites/13/2019/05/Economics-of-Health-promotion_UniAirlangga.pdf.

Mckellar, K. (2020). Current Research on Sexual Health. Health Belief Model. Retrieved on 3rd September, 2023 from: <https://www.sciencedirect.com/topics/medicine-and-dentistry/health-belief-model>.

New Zealand Police Managers' Guild Trust (2023). Alcohol Abuse. [serial online] Available from https://pmtg.org.nz/alcohol-abuse/?gclid=CjwKCAjwxaanBhBQEiwA84TVXGvyfemy829dUmkqirpts-zJzo501yuzuunyGdFnifuGrs6RfIg4LxoCesIQAvD_BwE#Ways-to-reduce-your-consumption?utm_term=alcohol%20abuse&utm_campaign=Crime+Prevention+Topics&utm_source=adwords&utm_medium=ppc&hsa_acc=3901438876&hsa_cam=7792641513&hsa_grp=89966328868&hsa_ad=668500792048&hsa_src=g&hsa_tgt=kwd-15663203&hsa_kw=alcohol%20abuse&hsa_mt=b&hsa_net=adwords&hsa_ver=3. Accessed 26th August, 2023.

Palmer, M., Sutherland, J., Barnard, S., Wynne, A., Rezel, E., Doel, A., Grigsby-Duffy, L., Edwards, S., Russell, S., Hotopf, E., Perel, P., & Free, C. (2018). The effectiveness of smoking cessation, physical activity/diet and alcohol reduction interventions delivered by mobile phones for the prevention of non-communicable diseases: A systematic review of randomised controlled trials. *PloS one*, 13(1), e0189801. <https://doi.org/10.1371/journal.pone.0189801>.

Raghupathi V and Raghupathi W (2020) Healthcare Expenditure and Economic Performance: Insights From the United States Data. *Front. Public Health* 8:156. doi: 10.3389/fpubh.2020.00156.

Robert H., Steven, B., Sherry E., Veronica M. E., Michelle J.,... (2022). The Effects of Tobacco Coverage in the Public Communication Environment on Young People's Decisions to Smoke Combustible Cigarettes. 72(2): 187–213.

Rosanne, V., Bruno V.Z. (2022). A comparative cost-benefit analysis of cycling within the Benelux and North Rhine-Westphalia. *Transport & Mobility Leuven*. <https://www.benelux.int/wp>.

Ryan, M.J. & Worthington, A.K. (2021). Application of the Theory of Planned Behavior. Persuasion Theory in Action: An Open Educational Resource. Retrieved on 3rd September, 2023 from: <https://ua.pressbooks.pub/persuasiontheoryinaction/chapter/application-of-the-theory-of-planned-behavior/>.

Saffer H. (2020). Evaluating Econometric Studies of Alcohol Advertising. *Journal of studies on alcohol and drugs. Supplement, Sup 19*(Suppl 19), 106–112. <https://doi.org/10.15288/jsads.2020.s19.106>.

Sathish, T., Oldenburg, B., Thankappan, K. R., Absetz, P., Shaw, J. E., Tapp, R. J., Zimmet, P. Z., Balachandran, S., Shetty, S. S., Aziz, Z., & Mahal, A. (2020). Cost-effectiveness of a lifestyle intervention in high-risk individuals for diabetes in a low- and middle-income setting: Trial-based analysis of the Kerala Diabetes Prevention Program. *BMC medicine*, 18(1), 251. <https://doi.org/10.1186/s12916-020-01704-9>

Scharf, C. & Tilp, M. (2023). Twelve Weeks of Web-Based Low to Moderate Physical Activity Breaks with Coordinative Exercises at the Workplace Increase Motor Skills but Not Motor Abilities in Office Workers—A Randomised Controlled Pilot Study. *International Journal of Environmental Research and Public Health*. 20. 2193. [10.3390/ijerph20032193](https://doi.org/10.3390/ijerph20032193).

Schunk, D.H. & DiBenedetto, M.K. (2021). Chapter Four - Self-efficacy and human motivation. *Advances in Motivation Science*. 8(153-179). Retrieved on 3rd September, 2023 from: <https://doi.org/10.1016/bs.adms.2020.10.001>.

Scottish Government (2018). Minimum unit pricing of alcohol: final business and regulatory impact assessment. Impact Assessment. Retrieved on 3rd September, 2023 from: <https://www.gov.scot/publications/minimum-unit-pricing-alcohol-final-business-regulatory-impact-assessment/pages/12/>.

Singh, V., Kumar, A., & Gupta, S. (2022). Mental Health Prevention and Promotion-A Narrative Review. *Frontiers in psychiatry*, 13, 898009. <https://doi.org/10.3389/fpsyt.2022.898009>

Sohlberg T., Bergmark K.H.,(2020). Lifestyle and Long-Term Smoking Cessation. *Tobacco Use Insights*.;13. <https://doi.org/10.1177/1179173X20963062>.

Stead, M., Angus, K., Langley, T.,... (2019). Mass media to communicate public health messages in six health topic areas: a systematic review and other reviews of the evidence. National Library of Medicine. Retrieved on 2nd September, 2023 from <https://www.ncbi.nlm.nih.gov/books/NBK540713/>.

Stockwell, T., Sherk, A., Norström, T., Colin Angus, C., Ramstedt, M., Andréasson, S., Chikritzhs, T.,... (2018). Estimating the public health impact of disbanding a government alcohol monopoly: application of new methods to the case of Sweden. *BMC Public Health* 18, 1400 (2018). <https://doi.org/10.1186/s12889-018-6312-x>

Strong, D.R., Pierce, J.P, Pulvers, K, et al. (2021). Effect of Graphic Warning Labels on Cigarette Packs on US Smokers' Cognitions and Smoking Behavior After 3 Months: A Randomized Clinical Trial. *JAMA Netw Open*.4(8):e2121387. [doi:10.1001/jamanetworkopen.21387](https://doi.org/10.1001/jamanetworkopen.21387).

Sutherland, R., Reeves, P., Campbell, E. et al. (2016). Cost effectiveness of a multi-component school-based physical activity intervention targeting adolescents: the 'Physical Activity 4 Everyone' cluster randomized trial. *Int J Behav Nutr Phys Act* 13,94 <https://doi.org/10.1186/s12966-016-0418-2>.

Tariq, M. N. M., Stojanovska, L., Dhaheri, A. S. A., Cheikh Ismail, L., Apostolopoulos, V., & Ali, H. I. (2022). Lifestyle Interventions for Prevention and Management of Diet-Linked Non-Communicable Diseases among Adults in Arab

Countries. *Healthcare (Basel, Switzerland)*, 11(1), 45.
<https://doi.org/10.3390/healthcare11010045>.

Task Force (2019). Employing Effective Excise Taxes on Tobacco, Alcohol, and Sugary Beverages. Health Taxes to Save Lives. Retrieved on 3rd September, 2023 from: <https://www.drugsandalcohol.ie/30450/1/Health-Taxes-to-Save-Lives-Report.pdf>.

Tishukaj, F., Shalaj, I., Gjaka, M. *et al.* (2017). Physical fitness and anthropometric characteristics among adolescents living in urban or rural areas of Kosovo. *BMC Public Health* 17, 711. <https://doi.org/10.1186/s12889-017-4727-4>.

Tiwari A. & Balasundaram P. (2023). Public Health Considerations Regarding Obesity. National Library of Medicine. Retrieved on 2nd September, 2023 from: <https://www.ncbi.nlm.nih.gov/books/NBK572122/>

Turner, H.C., Archer, R.A., Downey, L.E., Isaranuwachai, W., Kalipso Chalkidou, K., Mark Jit, M. & Teerawattananon, Y.(2021). An Introduction to the Main Types of Economic Evaluations Used for Informing Priority Setting and Resource Allocation in Healthcare: Key Features, Uses, and Limitations. Retrieved on 2nd September, 2023 from <https://doi.org/10.3389/fpubh.2021.722927>.

Vaduganathan, M., Mensah, G.A., Turco, J.v., Fuster, V. & Roth, G.A. (2022). The Global Burden of Cardiovascular Diseases and Risk: A Compass for Future Health. 80 (25) 2361–2371. Retrieved on 2nd September, 2023 from <https://www.jacc.org/doi/10.1016/j.jacc.2022.11.005>.

van der Heiden, W., Lacroix, J., Moll van Charante, E. P., & Beune, E. (2022). GPs' views on the implementation of combined lifestyle interventions in primary care in the Netherlands: a qualitative study. *BMJ open*, 12(2), e056451. <https://doi.org/10.1136/bmjopen-2021-056451>.

Villarino, R. T., Arcay, C. A., Temblor, M. C., Villarino, M. L., Bagsit, R., Ocampo, L., & Bernard, P. (2021). The Effects of Lifestyle Intervention Using the Modified Beliefs, Attitude, Subjective Norms, Enabling Factors Model in Hypertension Management: Quasi-Experimental Study. *JMIR cardio*, 5(2), e20297. <https://doi.org/10.2196/20297>.

Whitman, A., Lew, N.D., Chappel, A., Aysola, V., Zuckerman, R. & Sommers, B.D. (2022). Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts. Assistant Secretary for Planning and Evaluation (ASPE). Retrieved on 3rd September, 2023 from: <https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fac7474af82/SDOH-Evidence-Review.pdf>.

World Health Organization (2022). Alcohol. <https://www.who.int/news-room/fact-sheets/detail/alcohol>.

World Health Organization (2023). *Physical activity in the EU: Policies that make people happier*. <https://www.who.int/europe/news/item/10-05-2023-physical-activity-in-the-eu-policies-that-make-people-happier>.

World Health Organization (2023). Raise prices on alcohol through excise taxes and pricing policies. *SAFER*. [serial online] Available from <https://www.who.int/initiatives/SAFER/pricing-policies>. Accessed 26th August, 2023.

World Health Organization (2023). Strengthen restrictions on alcohol availability. *SAFER*. [serial online] Available from <https://www.who.int/initiatives/SAFER/alcohol-availability#:~:text=Restriction%20of%20availability%20has%20been,buy%20intervention%20for%20NCD%20prevention>. Accessed 26th August, 2023.

APPENDIX A QUESTIONNAIRE

UNIVERSITY OF BENIN, BENIN CITY

QUESTIONNAIRE ON THE EFFECT OF HEALTH SECTOR LIFESTYLE INTERVENTION PROGRAMMES ON EDO STATE GOVERNMENT HEALTHCARE EXPENDITURE

Dear Respondents,

This questionnaire was designed to examine the effect of Health Sector Lifestyle Intervention Programmes on Edo State Government Healthcare Expenditure. Kindly respond to the questions below as most sincerely as you can. The information you supply will assist the researcher in achieving the study objectives, for common good, and shall be treated with utmost confidentiality. Thank you.

SECTION A: BIO DATA

The health sector in Edo State offers physical activity programmes to encourage regular exercise.

•

The lifestyle intervention programmes in Edo State emphasize the importance of stress management techniques.

•

The health sector in Edo State provides support and resources for smoking cessation.

•

The lifestyle intervention programmes in Edo State include regular health check-ups and screenings.

•

The health sector in Edo State actively promotes and supports weight management programmes.

•

The lifestyle intervention programmes in Edo State focus on reducing alcohol consumption and substance abuse.

•

The health sector in Edo State encourages and provides resources for mental health management and well-being.

•

The lifestyle intervention programmes in Edo State are targeted at specific groups, such as children, adolescents or adults.

Cluster B: The extent healthy lifestyle or food eating habits had helped to address some of the risk factors in Edo State Health Sector.

S/N

Items

SA

A

D

SD

•

Lifestyle intervention programmes in Edo State have effectively addressed risk factors in Edo State health sector.

•

Lifestyle intervention programmes have raised awareness about the importance of healthy behaviors in Edo State.

•

Lifestyle intervention programmes have encouraged individuals to adopt healthy lifestyle in Edo State.

•

Lifestyle intervention programmes have provided adequate support and resources for individuals to make positive lifestyle changes in Edo State.

•

Lifestyle intervention programmes have effectively reduced the prevalence of risk factors in Edo State health sector.

•

Lifestyle intervention programmes have allowed for effective collaboration among healthcare providers and professionals in Edo State.

Cluster C: The extent lifestyle intervention programmes has helped to reduce costs of government on the health sector in Edo State.

S/N

Items

SA

A

D

SD

•

Lifestyle intervention programmes have led to a decrease in the prevalence of chronic diseases, thereby reducing government expenditure on them.

•

Lifestyle intervention programmes has brought about decline in non-communicable diseases (NCDs) and minimize the expenditure of the government on them.

•

Lifestyle intervention programmes have helped in reducing incessant visits to hospital owing to varied ailment/diseases or illnesses.

•

By promoting healthy lifestyles, lifestyle intervention programmes have decreased the need for long-term medication and costs of pharmaceutical products.

•

The effectiveness of lifestyle intervention programmes can result in minimal expenditure on medical laboratory equipment over time.

•

Improved living through lifestyle intervention programmes has resulted in less over-tasking of the existing health care facilities.

•

The implementation of lifestyle intervention programmes can reduce the overall burden of healthcare costs on the government.

Thank you for your time.

APPENDIX B
OUTPUT OF DATA ANALYSIS

Research Questions

Descriptive Statistics

	N	Mean	Std. Deviation
Implements lifestyle intervention	207	2.69	.905
Education and awareness	207	2.71	.692
Physical activity programmes	207	2.49	.794
Stress management techniques	207	2.44	.779
Smoking cessation	207	2.31	.877
Regular health check-ups and screenings	207	2.72	.786
Weight management programmes	207	2.47	.768

Alcohol consumption and substance abuse	207
	2.46
	.823
Mental health management	207
	2.50
	.902
Specific groups	207
	2.85
	.795
Risk factors	207
	2.49
	.812
Healthy behaviors	207
	2.79
	.765
Healthy lifestyle	207
	2.70
	.735
Adequate support and resources	207
	2.45
	.840
Prevalence of risk factors	207
	2.49
	.875
Effective collaboration	207
	2.70
	.870

Chronic diseases	207
	2.45
	.828
Non-communicable diseases	207
	2.70
	.836
Incessant visits to hospital	207
	2.43
	.815
Long-term medication	207
	2.49
	.869
Medical laboratory equipment	207
	2.78
	.922
Improved living	207
	2.56
	.873
Burden of healthcare costs	207
	2.97
	.934
Valid N (listwise)	207

APPENDIX C

OUTPUT OF DATA ANALYSIS

Research Hypotheses

Research Hypothesis 1

Descriptive Statistics

	Mean	
	Std. Deviation	
	N	
LIP	25.65	
	5.610	
	207	
Risk factors	2.49	
	.812	
	207	
Healthy behaviors	2.79	
	.765	
	207	
Healthy lifestyle	2.70	
	.735	
	207	
Adequate support and resources	2.45	
	.840	
	207	
Prevalence of risk factors	2.49	
	.875	
	207	
Effective collaboration	2.70	
	.870	
	207	

Correlations

	LIP	Risk factors	Healthy behaviors	Healthy lifestyle	Adequate support and resources	Prevalence of risk factors	Effective collaboration
LIP	1						
Pearson Correlation		.547**	.548**	.646**	.545**	.512**	.507**
Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
N	207	207	207	207	207	207	207

207

207

207

207

** . Correlation is significant at the 0.01 level (2-tailed).

Research Hypothesis 2

Descriptive Statistics

	Mean	Std. Deviation	N
LIP	25.65	5.610	207
Chronic diseases	2.45	.828	207
Non-communicable diseases	2.70	.836	207
Incessant visits to hospital	2.43	.815	207
Long-term medication	2.49	.869	207
Medical laboratory equipment	2.78	.922	207
Improved living	2.56	.873	207

Burden of healthcare costs

2.97

.934

207

Correlations

LIP

Chronic diseases

Non-communicable diseases

Incessant visits to hospital

Long-term medication

Medical laboratory equipment

Improved living

Burden of healthcare costs

LIP

Pearson Correlation

1

.433**

.518**

.510**

.444**

.376**

.465**

.358**

Sig. (2-tailed)

.000

.000

.000

.000

.000

.000

.000

N

207

207

207

207

207

207

207

207

** . Correlation is significant at the 0.01 level (2-tailed).