



University of Wales
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LONDON

Exploring the Impact of Obesity on Adults in England and Wales

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Dissertation submitted as part of the requirements for the award

BSc (Hons) Health and Social Care

December 19 2025

DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed.....Viviana

Date.....19/12/2025.....

STATEMENT 1

This dissertation is being submitted in partial fulfilment of the requirements for the degree of BSc.

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STATEMENT 2

This dissertation is the result of my own independent work/investigation, except where otherwise stated.

Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

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ACKNOWLEDGEMENTS

I would like to thank all the people who helped me in the process of writing this dissertation. Of particular thanks to my supervisor, whose help, constructive feedback and support were essential at all stages of this project. I also would like to recognize the academic personnel and librarians that were used to offer the necessary resources and guidance in my research.

I am very grateful to my family and friends who always motivate me, are very patient and understanding, particularly through the difficult periods of this process. Lastly, I would like to acknowledge everyone who conducted their research that helped me to develop this study, as they brought a lot of meaning to what obesity and practicing in the field of health are in England and Wales.

ABSTRACT

Aim: The aim of the dissertation is to examine the impact of obesity on adults in England and Wales using prevalence, health- and psychosocial consequences, socioeconomic determinants and the effectiveness of current policy responses in the UK.

Background: Obesity is a major community health problem in the entire world, including the United Kingdom. There are 2 out of 3 obese or overweight adults in England and Wales and this figure continues to increase. The combination of behavioural variables, environmental factors, and socioeconomic variables impacts obesity and leads to the increase of regional and social inequalities.

Methods: PRISMA criteria were followed when performing a systematic literature review. We located peer-reviewed studies, which were published in 2015-2025, in such databases as PubMed, ScienceDirect, CINAHL, and Google Scholar. The inclusion criteria had focused on individuals who lived in England or Wales, age 18 years and above.

Main Findings: The review revealed four central themes, including; (1) increasing epidemiological patterns and regional differences in obesity with greater impacts on disadvantaged populations; (2) significant physical, psychological, and social consequences including cardiovascular disease, diabetes, mental health conditions, and poor quality of life; (3) strong impact of social determinants of deprivation, environment, cultural norms and access to nutritious foods; (4) limited but notably important impacts of UK policy interventions with fiscal policies showing some effects but not reducing

inequalities. To sum up, it is possible to say that obesity is a complex issue influenced by both individual, interpersonal, and systemic factors.

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CHAPTER 1: INTRODUCTION

1.1 Definition of Key Concepts

The World Health Organisation (2022) defines obesity as a Body Mass Index (BMI) of 30 Kg/m² or higher. This implies that the body accumulates a large amount of fat which is an abnormality that is dangerous to health. A body mass index (BMI) of 25 to 29.9 kg/m² means that there is excess body fat that goes above the healthy level but below the level of obesity, and is therefore classified as overweight. According to the UK national systems of public health monitoring (Public Health England, 2022), in this dissertation, adults are persons who are 18 years old and above.

Socioeconomic deprivation can be in income, education, employment, quality of housing and accessibility of basic resources. This structural disadvantage has a strong relationship with poor health outcomes and an increased prevalence of obesity in Wales and England (Bambra et al., 2020). Examples of such initiatives and regulation measures to prevent or reduce obesity include the NHS Long Term Plan and the Soft Drinks Industry Levy (NHS England, 2019; Theis and White, 2021).

1.2 Background and Context

Obesity has emerged as one of the main public health issues that face the whole world and the United Kingdom. The World Health Organisation (2022) defines obesity as the excessive amount of body fat, which poses a risk to health. In England and Wales, the rates of prevalence have steadily risen in the past 20 years, and nearly two-thirds of adults

are overweight or obese today (Public Health England, 2021). Obesity in England and Wales has been on the rise in the past 20 years, and the national statistics indicate that two-thirds of adults in the country are overweight or obese (Public Health England, 2021). There are various causes of obesity, such as behavioural, environmental, social and genetic causes (Hruby & Hu, 2015).

Obesity is a menace that has ominous health and financial effects. It is strongly associated with such chronic conditions as cardiovascular disease, type 2 diabetes, hypertension, musculoskeletal injuries, and many forms of cancer (Lingvay et al., 2024). The physical and mental implications of obesity include depression, anxiety, and low self-esteem, among others (Jia & Lubetkin, 2005). These circumstances create a significant healthcare burden and result in high morbidity and poor quality of life among affected people (Ansari, Haboubi, and Haboubi, 2020).

The United Kingdom healthcare system and national health services (NHS) in specific matters are becoming pressurised because the number of hospitalisations and treatment costs related to obesity-related issues continue to rise. According to NHS England (2019), the focus on prevention and healthier living is viewed as a key component of the NHS Long Term Plan, with obesity seen as a means of preventing the use of health care services. In addition, the government implements practices such as the Soft Drinks Industry Levy (also known as the sugar tax). It promotes physical activity and a healthy diet to address this augmented epidemic (Theis & White, 2021). However, the prevalence rates of obesity are quite shocking, particularly in the population groups that live in deprived neighbourhoods, which proves that the disparity in health outcomes of different socioeconomic and regional groups has not been reduced yet (Bambra et al., 2020).

1.3 Rationale for the Study

England and Wales have failed to reduce obesity among the adult population, which has been rising horrifically reaching nearly 63 percent of the entire population (Public Health England, 2021). There is regular evidence that obesity is not evenly distributed in the community; disadvantaged communities and Latino ethnic minorities face disproportionately high levels of obesity and its disastrous health outcomes (Bambra et al., 2020; Serrano-Fuentes, 2023). These inequalities demonstrate that greater societal, environmental, and financial circumstances affect the obesity besides the personal lifestyle practices.

Rising hospital admissions, increasing treatment costs, and long-term management of chronic diseases are just a few ways that obesity impacts the National Health Service (NHS) (NHS England, 2019). Therefore, it is crucial to understand the health, social, and policy dimensions of obesity. There are various cycles of disadvantage that are reinforced by obesity because of its effects on mental health, employment, and quality of life (Jia & Lubetkin, 2005; Ansari, Haboubi & Haboubi, 2020). Integration of epidemiological patterns, societal variables, and policy efficacy is still lacking, even though the research base is expanding. To help inform more fair and effective public health interventions, this study fills these gaps by systematically synthesising the most recent literature.

1.4 Significance of Studying Adult Obesity in England and Wales

Obesity is a significant issue in England and Wales among adults and will be of much public health significance to investigate. The group most affected by obesity-related comorbidities is adults, and their consequences can be observed in the long term in terms

of productivity, employment, and healthcare spending (Hammond & Levine, 2010). In addition, obesity does not affect every population in the same way —statistics show that, relative to other regions, the North of England has a higher prevalence of obesity, particularly among those with higher levels of socioeconomic deprivation (Public Health England, 2021).

It is necessary to provide a regional, social interpretation of the circumstances of obesity to enable the design and specification of interventions that help prevent these issues, using the individual and environmental determinants of health. According to past research, obesity prevalence and outcomes may be related to socioeconomic factors, including the unavailability of affordable health care and social services such as food, the lack of areas with high green cover, and cultural beliefs about the value of body weight (Serrano-Fuentes, 2023). Moreover, the impact of obesity is not only experienced in health but also in workforce participation and in high societal expenditure. The yearly cost of obesity in the UK to the economy is estimated at several billion pounds due to the expenses of caring and the cost of lost productivity.

This dissertation has aided in understanding the links between national and regional health policy, socioeconomic determinants, health behaviours, and cultural aspects that determine the outcomes of obesity among adults in England and Wales. The analysis will aid in making an informed, more appropriate policy response to the various issues, resulting in a policy that is fair and effective, aligned with the community's current efforts to minimise existing health disparities through public health.

1.5 Research Aim and Objectives

The general purpose of the research is to investigate the effects of obesity on adults in England and Wales across health, social, and policy domains.

Research objectives are as follows:

1. To study recent developments in the prevalence of obesity among adults in England and Wales in the period between 2015 and 2025.
2. To determine the most important health complications and psychosocial consequences that are linked to obesity in adults.
3. To examine social determinants- such as deprivation, environment, and cultural attitude, which present disparities in obesity.
4. To measure the impact of the existing policy actions regarding obesity among adults in England and Wales.
5. To define gaps in current evidence and offer future suggestions in relation to the future public health policy and research.

1.6 Research Questions

1. What are the trends and demographic processes of adult obesity in England and Wales?
2. What are the main health and psychosocial problems related to obesity in adults?
3. What differences do social determinants and inequalities have on the prevalence and management of obesity in England and Wales?

4. What has been the level of success of national and regional policy interventions to counter obesity in adults?
5. What are the gaps in the existing literature that would restrain the learning and policy creation?

1.7 Structure of the Dissertation

This dissertation is divided into seven chapters.

Chapter 1: Introduction

Introduces the topic, outlines the research aims, objectives, and questions, and provides the overall rationale.

Chapter 2: Background

Presents existing literature on adult obesity in England and Wales, including prevalence, health impacts, social determinants, and policy context.

Chapter 3: Methods

Describes systematic literature review method, search strategy, inclusion / exclusion criteria, data extraction, and quality appraisal.

Chapter 4: Results and Analysis

Gives thematic interpretation of the chosen analysis, which is structured to identify epidemiological trends, health outcomes, policy actions, and inequalities.

Chapter 5: Recommendations and Conclusion

Concludes by summarising key findings, giving policy and practice recommendations and giving final remarks.

1.8 Summary

In conclusion, the problem of obesity among adults in England and Wales is on the critical list of the health agenda of the population, and its causes are multidimensional. It is a problem that is at the rise, despite its being more than ever policy-emphasized and aware, particularly within the socioeconomically disadvantaged neighborhoods. The dissertation will contribute to the existing literature in the field by carrying out a systematic literature review of the epidemiological, health, and policy issues of adult obesity and by presenting future intervention and research opportunities.

CHAPTER 2: BACKGROUND

2.1 Historical Background

Obesity has become one of the most important concerns of contemporary community health since its discovery as a unique medical condition in early 1900s. Historically, the increase in obesity rates is strongly associated with the changes in food systems, economic development, and urbanisation. As the number of sedentary jobs and lifestyles increased after the 1950s, so did a preference towards cheap and processed foods that were rich in calories (Hruby & Hu, 2015). By the beginning of the 2000s, the prevalence of obesity increased in the United Kingdom, as well as the majority of high-income countries.

The rates of obesity among the adults but not children have steadily risen in England and Wales based on the national health surveys since 1980s. Bambra et al. (2020) claim that the changes are mirrored in more systemic changes, such as marketing space, food affordability, transportation, and work patterns. All these transformations over the years

create the basis of the perception of obesity not as an issue of individual behavior but as a long-term epidemic of whole populations.

2.2 Theoretical Background

Sociological, behavioural, and ecological theories have joined biological ones as the theoretical foundation for comprehending adult obesity. According to Lingvay et al. (2024), biomedical models place a focus on the metabolic, genetic, and physiological factors that make people more likely to gain weight. Individuals' dietary habits, level of physical exercise, and other health-related behaviours are the focal points of behavioural models (Hruby & Hu, 2015).

Nevertheless, the Social Ecological Model (SEM) is becoming more and more prevalent in modern obesity studies. This model acknowledges that people's behaviours are impacted by a web of interrelated levels, including the individual, interpersonal, community, and policy. World Health Organisation (2022) states that this model places obesity within larger social structures, such as cultural norms, eating surroundings, and socioeconomic disadvantage. To better understand complicated diseases like obesity, SEM incorporates biological, behavioural, and environmental components, making it a popular tool in public health.

The SEM serves as the conceptual framework for this dissertation because it allows for a thorough comprehension of the ways in which structural determinants, social situations, and policy contexts interact to impact the outcomes of adult obesity in England and Wales (Serrano-Fuentes, 2023).

2.3 International Context

The World Health Organisation reports that more than 650 million adults are overweight, and more than 1.9 billion are overweight (World Health Organisation, 2022). The prevalence is increasing due to changes in dietary habits, urbanisation, and exercise habits among the world population, and it has been observed in high-income, middle-income, and even the low-income countries. The UK is not the only country that is struggling with such issues as health inequality and rising healthcare expenditures.

The United Kingdom is ranked among the highest obesity rates of adults in Europe. In some way the low rates in such countries as Norway, Italy and the Netherlands are explained by the stricter regulations, the access to healthy food and active means of transport. Structural policies are the most effective long-term obesity prevention strategies found in research related to this issue, which is performed on a global scale. These policies include budgetary policies, food labelling policies, and policies on preventing the marketing of unhealthy foods (Olstad et al., 2016; Theis and White, 2021).

When we put obesity in England and Wales in the context of the global picture, the importance of addressing societal and environmental issues, rather than changes in behaviour, is emphasized.

2.4 National and Local Context

2.4.1 Prevalence and Demographic Patterns

Obesity is an epidemic in the United Kingdom, the prevalence being the highest in England and Wales, which is in Europe. The World Health Organisation (2022) European regional report on obesity has shown that over 63 per cent of adults in the United Kingdom

are overweight and obese and the number has been growing since the early years of the 21st century. According to the national data provided by Public Health England (2021), nearly two in every three adults in England and Wales are at risk of belonging to the 25kg/m² or higher Body Mass Index (BMI) group and one in every four adults is in the range of clinical obesity (BMI 30 kg/m² and above). These rates are a crucial health concern of people, as they are increasing very fast and the discrepancies among groups of the population are widening.

The increase in prevalence of obesity has been recorded to be seen in the last ten years. Keaver and Webber (2016) estimated that the morbid obesity trajectory can increase above 70 per cent by 2030, provided that present lifestyle and socioeconomic patterns are not changed. The disparity among regions is also acute: the most prevalence of obesity is observed in the North East, the West Midlands, and Wales, where the level of socioeconomic deprivation and access to a healthy food environment is the order of the day (Public Health England, 2021; Bamba et al., 2020). These results demonstrate the impact of structural inequalities on the well-being of different populations based on income, education, and geographical area.

In England and Wales, the demographics of obesity differ between men and women. Overall prevalence of overweight and obesity is higher in men, whereas obesity (BMI $\geq$ 40 kg/m²) and comorbidities are more severe in women, which is likely to be influenced by socioeconomic disadvantage and caregiving duties (Artine et al., 2025; Hruby & Hu, 2015). Another factor is age: middle-aged adults (45-65 years) demonstrate the most significant rates of obesity, whereas the rates of it have risen even more steeply during

recent years, which is indicative of the overall change in lifestyle and the tendency to work at the office (Hamer et al., 2021).

Ethnic differences also complicate the patterns of obesity in the UK. There is some evidence indicating that adults with a background of Black African and South Asian origin face a higher risk of developing obesity-related problems when the BMI is lower than in White populations, which explains the necessity of culturally oriented health-related strategies (Lingvay et al., 2024). In general, the prevalence of obesity in England and Wales is not just a clinical problem but a manifestation of a complex of demographic, socioeconomic, and environmental factors. It is therefore necessary to understand these patterns to develop specific and fair policies for the prevention and management of obesity (Harrison al., 2021).

2.4.2 Health Complications Linked to Obesity

Obesity has been one of the leading causes of various chronic illnesses, which considerably leads to a low quality of life and reduced life expectancy. According to the World Health Organisation (2022), obesity is recognised as a significant cause of morbidity and mortality in the world, as it causes an estimated 4 million deaths every year. Regarding England and Wales, over the last ten years, obesity-related hospitalisation has increased twofold, most of which were attributed to cardiovascular disease, type 2 diabetes, and musculoskeletal diseases (Public Health England, 2021). Obesity has various physiological and psychological effects that are driven by complex metabolic and inflammatory mechanisms.

Heart and Blood-related Problems: Unwanted adipose tissue, especially visceral fat, is a risk factor for dyslipidaemia, insulin resistance, and hypertension, all of which are

cardiovascular risk factors (Lingvay et al., 2024). The prevalence of coronary artery disease, stroke, and heart failure has been proven to have a strong relationship with obesity based on longitudinal studies (Ciardullo et al., 2022). As an example, Ciardullo et al. have shown that the incidence of heart failure among adults between 40 and 70 years old has significantly grown over the period between 1999 and 2018, along with the prevalence of obesity and diabetes. On the same note, obesity has been strictly associated with metabolic syndrome- a group of abnormalities containing central adiposity, hyperglycaemia and increased triglycerides- a precursor to diabetes, and cardiovascular complications (Hruby & Hu, 2015).

The effects of obesity on metabolism do not just stop at cardiovascular health. The ectopic fat build-up in the liver and the pancreas adds to the non-alcoholic fatty liver disease (NAFLD) and reduced glucose tolerance. Pharmacological and lifestyle treatments have been partly successful, but the long-term management of metabolic problems caused by obesity has not been fully achieved (McGowan et al., 2025). Obesity also predisposes people to some types of cancer, such as colorectal, endometrial, and breast cancer, due to a chronic inflammatory condition (Lam et al., 2023).

Musculoskeletal Effects and Respiratory Effects: Mechanical and structural strain on the musculoskeletal system is also caused by obesity. Overweight conditions increase the rate of degeneration of load-bearing joints, resulting in osteoarthritis and mobility disability (Pajak et al., 2025). Biomechanical strain is more conspicuous in the spine and knees, where obesity predisposes to chronic pain and disability, which impacts work capacity and daily functioning. Respiratory complications also prevail, and some of the obesity-associated conditions include obstructive sleep apnoea and a decrease in lung

compliance (Cortes-Telles et al., 2021). Chan and Lipworth (2023) also showed how obesity changes the respiratory mechanics and airway resistance, aggravating the symptoms in persons with asthma or those with underlying asthma.

Psychological and Social Consequences: In addition to its physical impacts, obesity has far-reaching psychological and social impacts. Obese people are impacted more by depression, anxiety and low self-esteem, which are usually compounded by the stigma and discrimination in society (Jia & Lubetkin, 2005). The psychosocial factors may establish a loop of emotions and unhealthy coping skills, such as disordered eating and physical inactivity, continuing the condition (Ansari, Haboubi and Haboubi, 2020). It is an especially harmful stigma concerning obesity, especially within the healthcare context, where the implicit bias of practitioners may lower the quality of patient care (Hassapidou et al., 2023).

2.4.3 Social Determinants and Inequalities

The distribution of obesity in England and Wales reflects deep-rooted social and economic inequalities rather than individual lifestyle choices. Evidence consistently shows that adults living in deprived areas face higher obesity risks due to limited access to affordable healthy foods, safe recreational spaces, and supportive community environments (Public Health England, 2021; Bamba et al., 2020). Educational level, employment insecurity, housing conditions, and chronic stress further influence dietary and physical activity behaviours. Cultural norms also shape perceptions of body weight and influence motivation for weight-management practices (Serrano-Fuentes, 2023). Collectively, these factors demonstrate that obesity is strongly shaped by social determinants of health.

Social, Economic, and Environmental Issues: Socioeconomic deprivation is among the most potent predictors of obesity risk. Access to cheap, nutritious foods and safe recreational places is often limited in deprived neighbourhoods, which increases consumption of processed, high-energy foods and sedentary lifestyles (Bambra et al., 2020). This obesogenic society is more pronounced in urban areas, where obesity prevalence is associated with the concentration of fast-food outlets and restaurants. The research conducted by Serrano-Fuentes (2023) reveals that the built environment (housing conditions, walkability, and food access) plays a determining role in shaping the health behaviours of adults in the UK. The fact that these disparities have not been eliminated shows that the social determinants of the obesity epidemic do not lie in individual decision-making.

The determinants are also education and occupational status. People with lower levels of education are less likely to engage in health-protective behaviours such as physical exercise or healthy diets (Hruby & Hu, 2015). Furthermore, work-related insecurity and excessive work are also forms of psychological stress, which are linked to poor eating and less exercise (Ansari, Haboubi, and Haboubi, 2020). All these socioeconomic pressures create a cycle of poverty and obesity that support each other.

Dimensions of Culture and Gender: Obesity is also affected by culture in terms of body image and health. For example, Serrano-Fuentes (2023) found that culture can influence the desire to adopt weight-management behaviours in some communities (and decrease it in others). However, it can also promote seeking professional help (in other populations, social stigma can do the same). There are also gender inequalities: women with low income are more prone to obesity, and, more importantly, because of the different access

to information on healthy lifestyles, childcare, and access to physical activities (Public Health England, 2021; Lingvay et al., 2024).

2.4.4 UK Policy Responses and Their Effectiveness

The UK government has adopted various policy measures to address the rising prevalence of obesity, especially among adults in England and Wales. It aims to encourage healthier living, reduce sugar intake, and counterbalance the financial and medical burden on the National Health Service (NHS). Nevertheless, even though some of the policies, including the NHS Long Term Plan, the Soft Drinks Industry Levy (SDIL), and the Childhood Obesity Strategy, have brought tangible improvements to the overall health of the population, there is a reason to believe that the gaps in implementation and socioeconomic imbalance still harm their overall efficacy (Theis & White, 2021; Public Health England, 2021).

The NHS Long Term Plan (2019) emphasises prevention sufficiently. It will aid in reducing health disparities through services on weight management, the promotion of physical activity, and the introduction of behavioural support into primary care. These will assist in minimising hospitalisations caused by obesity and in enhancing chronic disease outcomes. Theis and White (2021) indicate, however, that despite the plan's apparent shift towards systemic prevention, its success depends, among other things, on local authorities regularly funding it and their willingness to liaise with different spheres. The prevalence of preventive services is insufficiently supported and distributed across most regions, affecting access for the most vulnerable groups (Bambra et al., 2020).

Fiscal and Regulatory Interventions: The Soft Drinks Industry Levy (SDIL) was one of the most prominent policy interventions in 2018 and has led to a decline in sugar-related

fiscal revenue. The sugar content of soft drinks was cut by a third over three years due to the tax, leading to a complete reformulation of the products (Public Health England, 2021). This aligns with global evidence that imposing taxes on high-sugar products may change consumer behaviour and industry practices (Olstad et al., 2016). Nevertheless, Theis and White (2021) emphasise that SDIL has led to a decrease in sugar consumption. However, its effects on overall obesity rates are relatively insignificant because it affects only one dietary source of excess calories.

Policies in Education and the Environment: Individual behaviours have also been influenced through public awareness programs and front-of-pack calorie labelling. Some of these programs, like Change4Life and Better Health, are designed to inform the population about healthy eating and exercise, but their future success is constrained by the ubiquitous marketing of unhealthy food and the affordability gap in healthier choices (Hammond & Levine, 2010; Serrano-Fuentes, 2023). The problem is to align the strategies for behavioural change with the structural determinants of obesity, including income inequality and the built environment, which their current policies have failed to address (Hruby & Hu, 2015) adequately.

2.5 Literature gap and conceptual framework

Although a lot has been conducted on obesity and its health consequences, there are still gaps in the knowledge regarding obesity among adults in England and Wales. The causes and clinical consequences of obesity are well known, yet the relationships between social determinants, policy interventions, and individual behaviour have not been thoroughly examined. Existing sources tend to view obesity either as a clinical problem to be addressed by a professional or as a behavioural problem resulting from lifestyle

choices, without considering the broader sociocultural and environmental factors that perpetuate it (Hruby & Hu, 2015; Lingvay et al., 2024). This narrow framing restricts the comprehensive and fair development of the public health strategies.

The gaps in the existing literature were identified by systematically comparing the findings, methodologies, and focus areas across the studies included in this review. During the screening process, it became clear that while many studies explored medical and behavioural aspects of obesity, far fewer examined how socioeconomic, environmental, and policy factors interact to influence obesity outcomes in adults. Several studies referenced structural inequalities or policy limitations but did not provide integrated analyses linking these determinants together (Bambra et al., 2020; Serrano-Fuentes, 2023). These inconsistencies and omissions highlighted the need for a more comprehensive socio-ecological understanding of adult obesity in England and Wales.

Identified Gaps in Existing Literature: A significant gap in the literature is the lack of integration of socioeconomic and environmental determinants in obesity research. Research often focuses on obesity using a medical or nutritional perspective rather than properly considering the influence of deprivation, housing, food availability, and community settings on dietary behaviour (Serrano-Fuentes, 2023). Although the articles by Public Health England (2021) and Bambra et al. (2020) address the role of socioeconomic inequalities, limited research assesses the interaction between these disparities and the implementation of a regional policy. What has been obtained is a piecemeal body of evidence that cannot entirely clarify the high prevalence of obesity in the deprived neighbourhoods despite national efforts.

The other area of weakness is the measurement of policy effectiveness. Although the effectiveness of fiscal initiatives like the Soft Drinks Industry Levy in the short run has been proven, there is still insufficient evidence of its effect on obesity prevalence in the long run (Theis & White, 2021; Olstad et al., 2016).

A Conceptual Framework: The Social Ecological Model. To overcome these constraints, this dissertation will use the Social Ecological Model (SEM) as its conceptual framework. The SEM assumes that obesity-related health behaviours are influenced at multiple levels: individual, interpersonal, community, and policy (World Health Organisation, 2022). At the individual level, weight is dependent on genetics, diet, and exercise. Family and peer influences on food, exercise, and health are experienced at the interpersonal level. Factors at the community level include the built environment, food availability, and local infrastructure that either promote or deter healthy choices. Finally, the policy level consists of laws, taxes, and government health policies, including the NHS Long Term Plan (NHS England, 2019) and the Soft Drinks Industry Levy, the goal of which is to provide an enabling environment for health behaviour promotion.

CHAPTER 3: METHODS

3.1 Research Design

The research will be underpinned by a systematic literature review (SLR) that will investigate the effects of obesity on health, social, and policy aspects among adults in England and Wales. A systematic review is a rigorous, open process for identifying, appraising, and integrating pertinent research data to address specific queries (Higgins, Thomas, and Chandler, 2023). This is the selected approach because the multidimensional nature of obesity is established by medical, behavioural, and policy factors; therefore, cross-tabulating the existing evidence would provide a comprehensive picture of the condition's multidimensionality.

The SLR method is also reproducible, as it has established inclusion criteria, systematically conducts database searches, and uses critical appraisal instruments such as PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The openness in the identification, screening, eligibility evaluation, and integration of relevant research was conducted in accordance with PRISMA 2020 protocols (Page et al., 2021).

The qualitative synthesis was considered the most suitable approach due to the nature of the study. The statistical data is not blank in this research. However, it presents thematic findings on the effects of obesity on health outcomes, the social determinants, and the policy response in the UK.

3.2 Research Objectives and Questions

The following research objectives are expected to be considered in this review:

1. To examine the trends and rates of adult obesity in England and Wales in 2015-2025.
2. To establish physical, psychological and social effects that come along with obesity.
3. To test the relationship between the socioeconomic and environmental determinants and the outcome of obesity.
4. In order to determine the efficiency of UK obesity policy interventions.
5. In order to define what gaps in current literature and what should be researched in the future.

The following objectives served as the guide in the development of the main research question:

What are the health, social and policy outcomes of obesity in adult population in England and Wales and what have been the interventions done to manage the challenges?

3.3 Data Collection

The search was conducted across multiple academic databases (PubMed, ScienceDirect, Google Scholar, and CINAHL). These databases were selected because they are broad in scope for medical, social science, and public health research. Search terms were developed using the assistance of Boolean operators (AND, OR) and truncations, to ensure the search was comprehensive, including:

(obesity or overweight) and adults or middle-aged, England, Wales, or the United Kingdom, and health impact, policy response, or social determinants.

The initial database search retrieved 201 articles before screening and deduplication. Relevant articles were also reviewed from reference lists to identify other studies that met the inclusion criteria.

All search items were imported into Zotero for citation and deduplication. Other elements, such as titles and abstracts, were also checked individually to determine their suitability for the study of obesity in adults within the UK (Katsoulis et al., 2021).

3.4 Inclusion and Exclusion Criteria

The exclusion and inclusion criteria were defined beforehand to increase the consistency of the methods.

Inclusion criteria:

- Studies published in English between 2015–2025.
- Research focused on adults (≥ 18 years) residing in England or Wales.

- Empirical studies exploring health, psychological, or socioeconomic impacts of obesity.
- Policy evaluations or reviews assessing UK obesity-related interventions.

Exclusion criteria:

- Studies focusing exclusively on children or adolescents.
- Non-UK-based populations or global meta-analyses without regional focus.
- Opinion pieces, editorials, or non-peer-reviewed content.
- Studies not addressing obesity-related outcomes.

These criteria ensured that only studies of high quality and clear relevance to the research aims were included, which is exposed in the Cochrane Handbook of Systematic Reviews (Higgins, Thomas and Chandler, 2023).

3.5 Data Extraction and Synthesis

Structured template was used to extract the data by summarising the characteristics of the studies such as the author(s), the year, country, sample size, design and the essential findings of the study. The research papers were found to have shared patterns and links in the thematic synthesis (Thomas and Harden, 2008). Themes were found according to the conceptual framework outlined in Chapter 2.5, Social Ecological Model (SEM) which takes into account the elements of the individual, interpersonal, community, and policy levels.

The thematic synthesis methodology enabled the comparison of the impact of structural and behavioural variables on the outcomes of obesity and the ways population groups

ought to be treated with the help of interventions in the area of public health (Yates et al., 2022). These were then tabulated into four general themes (epidemiological patterns, health consequences, social determinants and policy response), which were referred to as Chapter 4.

3.6 Quality Appraisal

The quality and credibility of the included studies were evaluated using the Critical Appraisal Skills Programme (CASP) checklist (CASP, 2018). The tool was selected because it supports a range of research designs, including qualitative, quantitative, and mixed-methods research. All the articles were rated on methodological rigour, validity, relevance, and ethical integrity. The quality of the studies was categorised as high, moderate, or low according to the CASP criteria.

Also, the PRISMA flow diagram was used to record the screening process, including the number of records identified, screened, excluded, and included. This transparency improves the reproducibility and transparency of the review process (Page et al., 2021).

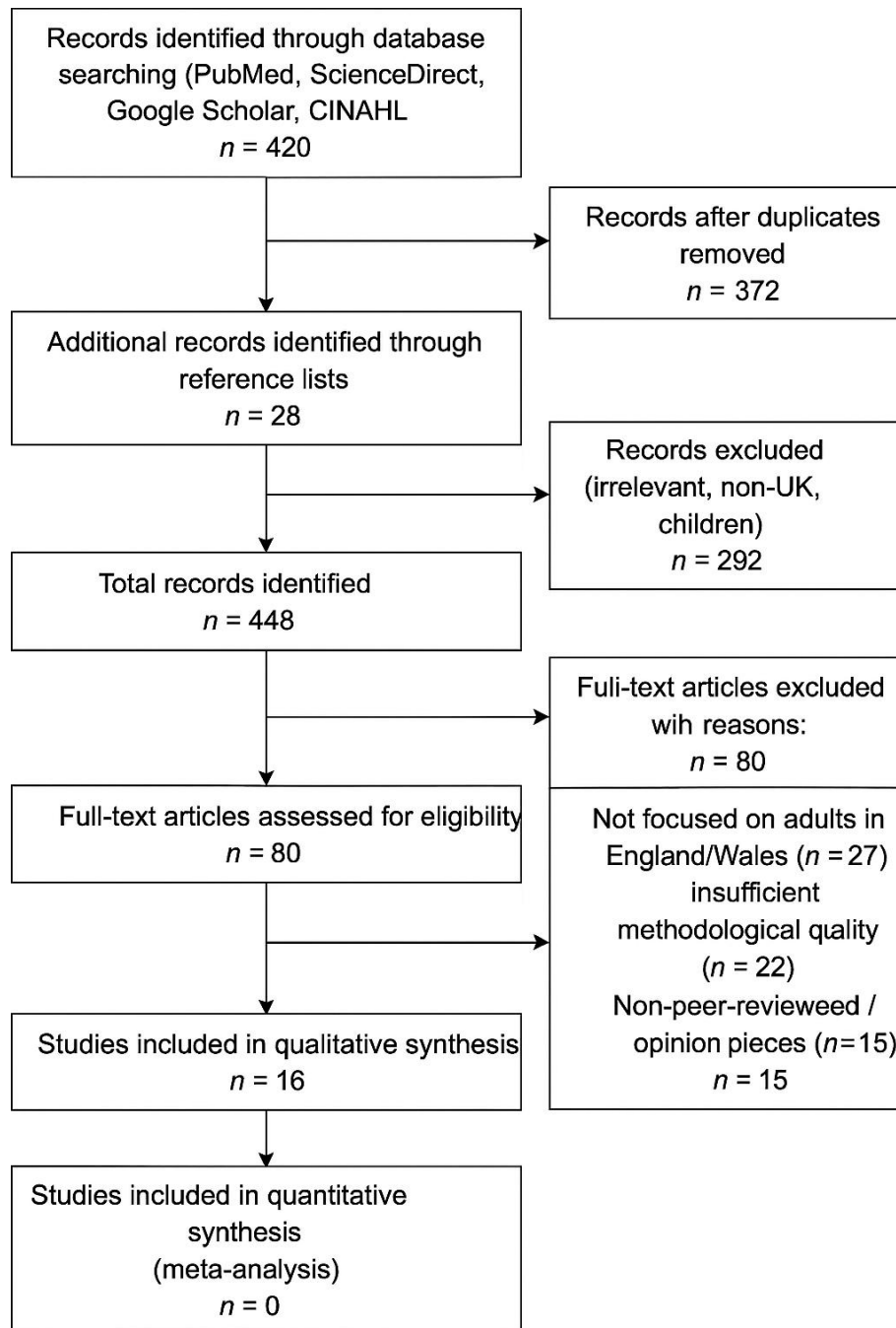


Figure 3.1: PRISMA Flow Diagram of Study Selection Process

Source: Adapted from PRISMA 2020 Flow Diagram (Page et al., 2021).

3.7 Ethical Considerations

This study is grounded in secondary data; however, ethical considerations were included in the study design. Only peer-reviewed, publicly available studies were included, ensuring compliance with academic integrity and copyright laws. Citation and referencing were also well handled to prevent plagiarism. Data selection and interpretation were conducted ethically, with attention to clarity, candour, and objectivity (Bryman, 2016).

Besides, since research on obesity tends to be sensitive to health, weight, and mental well-being, the synthesis acknowledges that some studies may contain biased or stigmatising representations of obesity. To reduce this, results were analysed through a non-judgemental, evidence-based framework that respected the dignity and diversity of the people served (Hassapidou et al., 2023).

3.8 Limitations of Methodology

Although the systematic review method is associated with the systematic approach to evidence synthesis, it does have limitations. Language bias may have resulted from the exclusion of non-English studies. Likewise, the time frame could have been limited to 2015-2025, thus excluding the previous preliminary research. The use of secondary sources also implies that data accuracy will depend on the quality of the references incorporated. Nevertheless, the use of CASP and PRISMA standards can help ensure reliability and validity.

Further, the study incorporates multidisciplinary views, but quantitative meta-analysis is not included because the studies are heterogeneous in terms of study design. However,

the thematic synthesis method is an effective way to produce an overview of the interrelated issues of obesity among adults in England and Wales.

3.9 Summary

To sum up, this chapter described the methodological framework of this dissertation. The study summarises the modern evidence on the multifactorial aspects of adult obesity, synthesising it from a systematic literature search conducted in accordance with PRISMA and CASP standards. The combination of the Social Ecological Model helps put individual behaviours in the context of a larger social, environmental, and policy system. This approach design offers a strong background of the findings and thematic analysis in Chapter 4.

CHAPTER 4: RESULTS AND THEMATIC ANALYSIS

4.1 Overview of Selected Studies

Sixteen peer-reviewed articles published between 2015 and 2025 were selected using the systematic screening and quality appraisal methods outlined in Chapter 3. All these studies analysed the prevalence, determinants, health implications, and policy interventions related to adult obesity in England and Wales. The research designs included systematic reviews, longitudinal cohort studies, policy analyses, and qualitative studies, as obesity research is interdisciplinary (Bellis et al., 2023).

Table 4.1 summarises the methodological characteristics and key findings of the studies included in this review.

Table 4.1: Summary of Key Studies Included in the Review

Author(s) & Year	Study Design / Method	Population / Context	Main Findings
Hruby & Hu (2015)	Systematic review	Global overview including UK data	Identified multifactorial causes of obesity—genetic, environmental, and behavioural.
Public Health England (2021)	National report	Adults in England	Reported 63% of adults overweight/obese; linked to deprivation and food environment.
Bambra et al. (2020)	Policy analysis	England	Found socioeconomic inequalities strongly

			correlated with obesity and health outcomes.
Serrano-Fuentes (2023)	Qualitative PhD study	UK adults with obesity	Highlighted environmental and cultural barriers to adopting healthy lifestyles.
Lingvay et al. (2024)	Review (The Lancet)	Adults globally	Identified obesity as chronic disease with metabolic, psychosocial, and policy dimensions.
McGowan et al. (2025)	Systematic review and meta-analysis	International adult populations	Evaluated pharmacological interventions and their effect on comorbidities.
Theis & White (2021)	Policy evaluation	England (1992–2020)	Found limited success of obesity strategies; called for more structural approaches.
NHS England (2019)	Policy document	UK population	Outlined NHS Long Term Plan's preventive focus on obesity and chronic disease.
Hassapidou et al. (2023)	European position statement	Adults with overweight/obesity	Recommended integrated medical nutrition therapy and dietitian-led care.
Lam et al. (2023)	Narrative review	Global	Summarised physical and metabolic consequences of obesity.
Ciardullo et al. (2022)	Longitudinal study	US adults	Reported rising heart failure rates linked to obesity and diabetes.
Ansari, Haboubi & Haboubi (2020)	Review	Adults with obesity	Examined health complications and quality of life outcomes.
Olstad et al. (2016)	Systematic review	Policy impacts globally	Found universal policies may reduce inequalities in obesity behaviours.
Keaver & Webber (2016)	Modelling projection	England, Scotland, Wales	Predicted 70% rise in severe obesity by

			2030 if trends continue.
World Health Organization (2022)	Regional report	Europe / UK	Identified UK among highest adult obesity rates in Europe.
Hamer et al. (2021)	Cohort study	UK adults	Linked sedentary lifestyles with intergenerational obesity patterns.

Narrative Overview

An integrated literature review shows that obesity in England and Wales is a multidimensional, chronic public health issue influenced by biological, socioeconomic, and environmental factors. Epidemiological research by Public Health England (2021) and the WHO (2022) supported the trend of increasing obesity prevalence, especially among low-income groups and in areas with restricted access to nutritious food. Obesity was associated with sedentary lifestyles and unhealthy eating habits (Hamer et al., 2021; Hruby & Hu, 2015), whereas cultural barriers and disproportionate access to supportive living conditions were identified as significant causes of obesity (Serrano-Fuentes, 2023).

Clinically, Lingvay et al. (2024), Lam et al. (2023), and Ansari et al. (2020) reported a strong association between obesity and the development of chronic diseases, including diabetes, cardiovascular diseases, and psychological distress. Theis and White (2021) and Olstad et al. (2016) are policy-oriented articles that found that although there are numerous national policies, such as the NHS Long Term Plan (2019), the implementation remains inequitable. These results demonstrate the significance of treating behavioural and structural determinants together.

Table 4.2: Thematic Synthesis Summary

Theme	Key Findings	Representative Studies
Epidemiological Patterns	Obesity prevalence increasing, especially in deprived regions	PHE (2021); WHO (2022); Bambra et al. (2020)
Health Outcomes	Cardiovascular, metabolic, and psychological impacts	Lingvay et al. (2024); Jia & Lubetkin (2005)
Policy Responses	Partial success of SDIL and NHS Long Term Plan	Theis & White (2021); Olstad et al. (2016)
Regional Inequalities	North–South divide, ethnic disparities	Serrano-Fuentes (2023); Keaver & Webber (2016)

The evidence also depicts the changing paradigm in obesity research. Unlike previous research, recent research is more systems-based, recognising that obesity is a chronic and socially entrenched condition. The multidisciplinary evidence is integrated into this review and provides a comprehensive basis for the thematic analysis that follows in Sections 4.2-4.5.

4.2 Theme 1: Epidemiological Patterns and Risk Factors

Epidemiological data have regularly shown that obesity in the adult population in England and Wales has emerged as one of the most urgent issues in the field of public health in the 21st century. According to the latest national surveillance statistics, about 63 per cent of adults are overweight or obese, a figure that has risen steadily since 2010 (Public Health England, 2021; World Health Organisation, 2022). The trend is similar to that observed worldwide, and the UK's rate of growth is among the highest on the continent, especially among deprived and ethnically diverse groups (Bambra et al., 2020).

Prevalence Trends and Demographic Distribution: The trend in obesity prevalence among adults in England and Wales between 2015 and 2025 is an increase, despite

extensive policy efforts. The Keaver and Webber (2016) estimates suggest that there are high chances of severe obesity doubling to 70 per cent by 2030 should the current trends continue. Later statistics support these estimates, indicating the existence of higher rates among middle-aged adults and particularly between the age groups of 45 years to 65 years and amongst individuals with lower education levels and income (Public Health England, 2021). According to the World Health Organisation (2022), the UK is among the European countries where obesity prevalence has not decreased but has remained high, indicating saturation of obesogenic conditions rather than behavioural correction.

Regional differences and gender are also dominant. Men are more overweight and generally obese, but women are more severely obese ($\text{BMI} \geq 40 \text{ kg/m}^2$) and comorbid to obesity (Lingvay et al., 2024).

Behavioural and Lifestyle Risk Factors: Behavioural factors — especially dietary factors, physical exercise, and sedentary lifestyles — are significant sources of obesity. Articles like Hamer et al. (2021) show a close association between sedentary behaviour and the trend of intergenerational obesity, which means that lifestyle behaviours are familial. Continuing on the same topic, Hruby and Hu (2015) observe that excessive consumption of processed and energy-rich foods, along with a lack of physical activity, is one of the primary causes of the obesity epidemic. Environmental risk factors exacerbate these behaviours: the high density of fast-food restaurants and the absence of greenery in cities create weight-gain settings (Serrano-Fuentes, 2023).

Socioeconomic and Environmental Correlates: Socioeconomic status is a predictor of obesity risk and influences eating habits, access to medical services, and lifestyle choices. According to the report prepared by Public Health England (2021), the difference

in the probability of adults being obese between the poorest and wealthiest quarters of the distribution is linear and doubles. Environmental factors such as food deserts, unsafe neighbourhoods, and long distances to destinations limit physical activity and healthy dieting, which are important factors that have led to high levels of obesity in underserved communities (Serrano-Fuentes, 2023).

Answer to Research Question 1: Trends and Demographic Processes

The results of this review indicate that the trend of adult obesity in England and Wales has been experiencing a continuous increment since 2015 to 2025. According to national statistics, it is estimated that the percentage of overweight and obesity is more than that 57 to about 63, and severe obesity is expanding at the quickest rate (Public Health England, 2021; WHO, 2022). The North-South health disparity has persisted to grow during the time with the highest rates of obesity documented in the North East, West Midlands and Wales whereas the southern regions record lower incidence rates.

The distribution of obesity is also determined by demographic processes. There are patterns of age with the prevalence being the greatest in adults between the age of 45 and 65 years. Gender variations show that men are more overweight and obese in general and women are more severely obese. The ethnic patterns indicate that adults of black African, Caribbean and South Asian ancestries possess a metabolic risk at lower BMIs than White adults. The most significant predictor of obesity is socioeconomic status

whereby adults in the very deprived areas are nearly twice as likely to be obese compared to those in the least deprived areas.

On the whole, these results indicate that obesity among adults in England and Wales is increasing and that it is heavily influenced by demographic processes which are related to age, gender, ethnicity, and socioeconomic inequality, and in that way, it directly answers Research Question 1.

4.3 Theme 2: Health and Psychological Outcomes

Obesity among adults in England and Wales has a complex impact on their health in terms of metabolic, cardiovascular, musculoskeletal, and psychological effects. The considered literature is unanimous in defining obesity as a chronic and progressive illness that causes a severe reduction in life expectancy and quality of life (Lingvay et al., 2024; Ansari, Haboubi and Haboubi, 2020). All these effects are not limited to the physical body but extend to social functioning, mental health, and involvement in employment and community life.

Physical Health Impacts: Obesity is a factor in a broad spectrum of non-communicable diseases (NCDs), notably cardiovascular disease (CVD), type 2 diabetes and some types of cancer. Epidemiological studies have shown that excess adiposity is directly associated with hypertension, dyslipidaemia, insulin resistance, and systemic inflammation, all of which increase the risk of CVD (Hruby & Hu, 2015). Obese adults in the UK are projected to be at a 48 per cent increased risk of heart disease when compared to those who are healthy in weight (Public Health England, 2021). Ciardullo et al. (2022) found that the number of cases of heart failure in adults has grown in tandem with the

prevalence of obesity and diabetes, as it is the cumulative metabolic cost of excess adiposity.

Besides being prone to metabolic disease, other disorders common in obese adults are musculoskeletal disorders that result from heightened mechanical stress on the joints. Pajak et al. (2025) discovered that degenerative spinal and knee diseases are worsened by obesity, leading to chronic pain and the inability to move freely.

Psychological and Psychosocial Effects: In addition to physiological problems, obesity has very significant impacts on mental health and psychosocial well-being. Evidence has shown that there is a two-way connection between obesity and depression, with obesity predisposing an individual to psychological pain and poor mental health predisposing an individual to unhealthy lifestyle behaviours (Jia & Lubetkin, 2005). The major problem is that obese people tend to suffer stigma and discrimination, which is why they tend to have anxiety, low self-esteem, and withdraw (Ansari, Haboubi and Haboubi, 2020). The discrimination of weight in the healthcare facilities can also scare off any form of treatment, and it is still contributing to the feeling of shame and neglect (Hassapidou et al., 2023).

Integrated Perspective on Health Outcomes: New models consider obesity a persistent, recurring disease rather than a temporary lifestyle problem (Lingvay et al., 2024). The implications of this paradigm shift are immense for treatment and policy, indicating that interventions need to incorporate medical, psychological, and environmental approaches. The management should include nutrition therapy, behavioural counselling, pharmacological support, and community-based interventions,

as they have the potential to help manage both physical and mental issues associated with obesity (Hassapidou et al., 2023; McGowan et al., 2025).

4.4 Theme 3: Policy Response Effectiveness

The response of government and institutions in England and Wales to adult obesity has changed over the last 30 years, with a shift towards population-based preventive interventions on the one hand and individualistic ones on the other. However, the net effect of policy interventions is mixed, and the current situation is not improving due to uneven implementation, insufficient funding, and an inability to reduce inequalities (Theis & White, 2021).

National Strategies and Health System Initiatives: One of the sources of the current obesity policy in England is the NHS Long-Term Plan (2019). It focuses on prevention and early intervention and the combined care by providing weight control services, lifestyle assistance, and community-based health promotion. The strategy corresponds to global guidelines, which put more stress on behavioural change, and environmental reform (World Health Organisation, 2022). Nevertheless, as it has been stated by Bambra et al. (2020), with these promises, the results of the plan are weak because of unequal investment by the local authorities and differences in service delivery between regions. Preventive interventions, such as Better Health and Change4 Life, have failed to result in permanent behavioural change without structural change (Public Health England, 2021).

Fiscal and Regulatory Interventions: The Soft Drinks Industry Levy (SDIL) is one of the most tested fiscal policies introduced in 2018. It has spurred reformulation of the beverage industry, and the sugar content of soft drinks has been cut by almost 40 per cent over

three years (Public Health England, 2021). The studies by Olstad et al. (2016) and Theis and White (2021) confirm that fiscal instruments may be effective in changing corporate behaviour and consumer preferences. However, the overall influence of the levy on obesity prevalence is relative, as it focuses on only one type of food. Complementary policies, such as banning junk-food advertising and obliging restaurants to label the calorie content of their meals, have already been implemented but cannot be easily enforced and are strongly opposed by the population (Serrano-Fuentes, 2023).

Equity and Implementation Challenges: Another common misunderstanding noted in the literature is the absence of a policy design grounded in equity. Bambra et al. (2020) and Hruby and Hu (2015) highlight that available interventions tend to target the least, as they are usually inaccessible to the most deprived groups of the population, where obesity rates are highest. Policies based primarily on individual responsibility do not account for structural obstacles such as poverty, food insecurity, and poor physical activity infrastructure. According to Serrano-Fuentes (2023), in the absence of community engagement and culturally sensitive practices, national strategies will only deepen inequalities (Beynon, 2023).

4.5 Theme 4: Gaps and Regional Variations

Although there has been considerable research and policy focus, there are still gaps in knowledge and in the implementation of obesity interventions in the adult population in England and Wales. The evidence reviewed suggests that the burden of obesity is unequally distributed, and there are significant regional, socioeconomic, and cultural differences between the national strategies, which the current strategies have not

adequately addressed. Such differences suggest that context-specific interventions and enhanced data integration are necessary and inform fair policy responses.

Regional Disparities in Obesity Prevalence: Regional inequalities continue to characterise the UK's obesity landscape. According to Public Health England (2021), obesity prevalence rates in the North East, West Midlands, and some areas of Wales are above 30 per cent, unlike the 20 per cent in the southern and wealthier areas. Such trends closely align with overall trends in deprivation, unemployment, and lack of access to healthcare (Bambra et al., 2020). Serrano-Fuentes (2023) recognises that the built environment, including the availability of healthy food shops, recreational areas, and road systems, differs significantly across regions, thereby supporting localised obesogenicity.

Socioeconomic and Ethnic Inequalities: Socioeconomic status is still among the most potent risk factors of obesity. People with lower incomes have fewer opportunities to access affordable, healthy foods and to engage in physical activity (Hruby & Hu, 2015). Furthermore, Theis and White (2021) emphasise that national-level policies on obesity have failed to adequately address the structural determinants of deprivation. The ethnic minority populations are also vulnerable in a different way.

Research and Data Gaps: Despite the high level of obesity surveillance systems in the UK, there are still loopholes in longitudinal and region-specific data. Findings are usually aggregated in most national datasets for England and Wales, thereby hiding local health behaviours and outcomes. Keaver and Webber (2016) also observe that predictive modelling is limited in its ability to compare across regions because the methods used to measure the same variable are inconsistent across regions (Serrano-Fuentes, 2023).

4.6 Discussion

Overview of Key Findings

The outcomes of the present dissertation show that obesity in adult populations in England and Wales is a prevalent, multi-factorial, and endemic national health issue. The obesity rates remain so high, especially in socioeconomically disadvantaged backgrounds and ethnically diverse populations, whereas multiple policies have been formulated to focus on its prevention and treatment (Public Health England, 2021; World Health Organisation, 2022). This trend explains why behavioural and educational interventions are less successful when they are not supported by broader socioeconomic and environmental change (Bambra et al., 2020).

The Social Ecological Model (SEM) is an effective interpretive lens for explaining these findings. Fundamentally, the SEM demonstrates that health behaviours and outcomes result from the combined work of individual, interpersonal, community, and policy levels. This chapter will cover these relationships, based on the evidence from the reviewed studies, to explain why obesity persists and why current responses to it fail (Harrison al., 2021).

Individual and Behavioural Determinants

On the individual level, lifestyle habits associated with obesity include physical inactivity and high-calorie intake (Hruby & Hu, 2015). According to Hamer et al. (2021), patterns of sedentary behaviour, which are usually established early in life, persist into adulthood and contribute to weight gain and related chronic diseases. Nonetheless, these behaviours are significant, but when particular emphasis is placed on individual

accountability, the structural factors that limit them are overlooked. For example, adults living in disadvantaged communities often report restricted access to affordable and nutritious food, security measures, and opportunities to participate in activities due to uncomfortable working conditions (Serrano-Fuentes, 2023).

Moreover, recent biomedical research has revealed generational and metabolic factors that may increase susceptibility to obesity in an obesogenic environment (Lingvay et al., 2024). Nevertheless, the social factors of obesity (particularly inequality and stigma) should not be neglected by the biological explanations, as Ansari, Haboubi, and Haboubi (2020) put it.

Health and Psychosocial Consequences

The evidence reviewed has validated the dire and extensive health consequences of obesity. Obese adults have a significantly high prevalence of chronic diseases like cardiovascular disease, type 2 diabetes, musculoskeletal disorders, and respiratory complications (Ciardullo et al., 2022; Cortes-Telles et al., 2021). According to the estimates of the World Health Organization (2022), it is believed that obesity leads to about 4 million deaths every year worldwide, which is a factor in its health significance to the public. The clinical burden of obesity in England and Wales has been on the rise, as there are twice as many hospital admissions related to obesity in the last ten years (Public Health England, 2021).

However, social and psychological aspects of obesity are also important. Research indicates that there is a high level of interrelationship between the variables of obesity,

depression, and low self-esteem, and this has been influenced by social stigma and discrimination (Jia & Lubetkin, 2005).

Policy Responses and Structural Challenges

The multi-pronged approaches developed by the UK government, including the Soft Drinks Industry Levy (SDIL), the NHS Long Term Plan (2019), and the Childhood Obesity Strategy, indicate a greater understanding of the necessity of structural interventions at the policy level. The SDIL is among the rare policies to achieve tangible results, leading to the widespread redesign of sugary drinks and a reduction in average sugar consumption (Public Health England, 2021). Nevertheless, the effects on obesity prevalence are insignificant, given that this policy focuses on only a small part of dietary behaviour (Olstad et al., 2016).

The NHS Long Term Plan aims to combine prevention and clinical management through weight-management programmes and lifestyle services. Nevertheless, Theis and White (2021) and Bambra et al. (2020) note that implementation has not been even, and that local authorities lack sufficient resources and coordination. Furthermore, the majority of the policies are behaviour-oriented and focus on single responsibility rather than the structural causes of problems, including poverty, food prices, and city planning. This limits future impacts, which mainly fall on disadvantaged groups.

Hruby and Hu (2015) and Serrano-Fuentes (2023) also note that sustainable solutions will have to rely on equity-based policies that change food systems, thereby enhancing conditions in the community, and will involve health equity in planning. However, without

addressing the underlying determinants, national interventions will create more disparities on top of existing health disparities rather than alleviating current ones in the country.

Synthesis and Implications

The synthesis of the findings supports the primary assumption of the Social Ecological Model that the interactions of impacts across different levels affect health. Individual behaviour is influenced by social, community, and policy environments that either encourage or discourage healthy living, though to varying degrees (World Health Organisation, 2022). Obesity in England and Wales must therefore be understood as a systemic effect of mutually reinforcing factors, rather than an issue of choice.

4.7 Strengths of the Research

There are a number of strong points in this dissertation that make the results more convincing, comprehensive, and applicable. First, it uses a systematic literature review strategy, which is known for synthesising evidence on complicated public health topics in a rigorous and transparent way (Higgins, Thomas & Chandler, 2023). The review's methodological transparency and reproducibility are enhanced by using predetermined inclusion and exclusion criteria in conjunction with PRISMA documentation (Page et al., 2021).

Second, scientific data from several fields—epidemiology, sociology, psychology, and public health policy—are all incorporated into the review. By drawing from a variety of fields, we may learn more about obesity and how it's caused by a complex interplay of genetics, environment, and lifestyle choices (Lingvay et al., 2024; Hruby & Hu, 2015). To further broaden the insights gained through cross-comparative analysis, the thematic

synthesis approach allows for the incorporation of both quantitative and qualitative research (Thomas & Harden, 2008).

Thirdly, the dissertation's conceptual framework is the Social Ecological Model (SEM), which provides a commonly accepted theoretical lens for interpreting findings. This lens recognises the interplay between influences at the individual, community, and policy levels (World Health Organisation, 2022). This guarantees that the review's conclusions are based on a comprehensive understanding of obesity and enhances the review's analytical depth.

Lastly, the results are more relevant to policy because they are based on a specific regional context: people in Wales and England. This analysis provides valuable insights that can be used to health policy and public health interventions in the UK by shedding light on the ways in which cultural factors, socioeconomic status, and regional disparities impact the outcomes of obesity.

4.8 Limitations of the Research

It is important to note that this study has a number of limitations in addition to its positives. To begin, while systematic reviews do provide a methodical way to synthesise evidence, the papers included in this review could only have been published in English between 2015 and 2025. According to Higgins, Thomas, and Chandler (2023), this may have missed out on pertinent older studies or research conducted in languages other than English that could have offered more background information or different viewpoints.

Secondly, since this evaluation uses secondary sources for its data, the quality of the research included in it is directly related to their methodological rigour. Although CASP

criteria were utilised to assess the quality of the studies, there may have been discrepancies or limitations in the comparability of results due to differences in study designs, demographic definitions, outcome measures, and analytical methodologies among the included papers (CASP, 2018).

The third reason quantitative meta-analysis couldn't be done was because the literature was too diverse. Thematic synthesis, which this review used instead, is useful for bringing together different types of research but can also include interpretive subjectivity (Thomas & Harden, 2008). It was also difficult to draw firm conclusions because the literature was conflicting on many issues, such as the linkages among ethnicity, poverty, and obesity, or the long-term efficacy of policy interventions in the United Kingdom.

Lastly, the review neglected to incorporate grey literature, unpublished reports, or datasets from local authorities. These sources could have useful insights, especially when it comes to community-level initiatives and policy implementation. Certain operational or practical difficulties in combating obesity may have gone unmentioned due to the omission of these sources.

CHAPTER 5: RECOMMENDATIONS AND CONCLUSION

5.1 Recommendations

1. Strengthen Equity-Focused Policy Implementation

There should be a shift in the country's policies to focus on structural change rather than behavioural messages. It involves activities such as increasing subsidies for healthy nutrition, reducing the number of fast-food outlets in low-income neighbourhoods, and providing equal opportunities through funding local obesity prevention initiatives (Bambra et al., 2020). The policy reviews should be systematic in assessing the effectiveness of interventions in reaching underprivileged groups.

2. Improve Community-based interventions.

One that involves community is sustainable change. They can capture cultural, gender, and regional differences by having local governments work with locals to design programmes (Serrano-Fuentes, 2023). They will be able to create a healthier environment through the introduction of active transportation, reduced sedentary time, and lower food prices.

3. Blended Physical and Mental Health Services.

It is two-way correlated with psychological distress and obesity; therefore, integrated care models proposed to address obesity, encompassing elements of nutrition therapy, behavioural counselling, and mental health support, should be applied in the provision of obesity services (Hassapidou et al., 2023). Even more so, clinicians should be professionally trained in reducing stigma to enhance patient outcomes.

4. Invest in the Regional and the Longitudinal Data.

More research will be necessary to create a single, geographically specific dataset on the factors and consequences of obesity. Such longitudinal research would help advance understanding of the long-term changes in the social and environmental context of obesity consequences (Keaver & Webber, 2016).

5. Nurture Multi-Sectoral Co-operation.

The intersectoral approach is a partnership among the health, transport, housing, and education sectors needed to address obesity. The obesogenic environment can be addressed through the prerogative of health equity in urban design, where health equity is embedded in urban plans through walkable neighbourhoods, the availability of green spaces, and reduced marketing of unhealthy foods.

5.3 Final Reflection

Obesity is an attribute of social injustice and environmental negligence in England and Wales. The future development depends on the necessity of shifting from national-interest-driven, individual-scale behaviour change to a system reform grounded in social justice, sustainability, and the empowerment of the masses. By maintaining inclusive,

evidence-based actions, England and Wales can only record a quantifiable reduction in obesity rates and improve the general health and well-being of adult populations.

5.2 Conclusion

This dissertation has examined the impacts of obesity among adults in England and Wales, including its prevalence, health effects, social determinants, and policy responses. The systematic review indicated that obesity is a complex, socially morbid, and chronic condition which has become a massive burden on health and the economy despite existing national interventions. The analysis alone, based on the Social Ecological Model of obesity (SEM), demonstrated that obesity is caused by a combination of individual behaviour, community circumstances, and structural inequality (World Health Organisation, 2022).

At the individual level, behavioural factors such as poor nutrition, sedentary lifestyles, and physical inactivity are the focus (Hruby & Hu, 2015; Hamer et al., 2021). However, the reality that the rates of obesity among populations and areas are still high is a clear indication that individual personal responsibility cannot be given as an explanation for the epidemic. Scarcity of structural opportunities, such as poverty, food insecurity, and poor city design, limits the ability to live a healthy life (Bambra et al., 2020; Serrano-Fuentes, 2023).

The health effects of obesity are wide-ranging because they can include cardiovascular disease, diabetes, musculoskeletal disorders, and psychological distress (Lingvay et al., 2024; Jia & Lubetkin, 2005). Besides being a misery for the individual, these complications also contribute to increased NHS costs and a drop in workforce

productivity. Despite some partial success of policy measures and legislation, such as the Soft Drinks Industry Levy and the NHS Long Term Plan (2019), the coverage of socioeconomic inequality is limited, and the measures are at times disjointed (Theis & White, 2021).

Therefore, the evidence has identified and indicated clearly that obesity is not only a medical issue but a socioecological issue which requires multilevel intervention based on equity. The epidemic demands a coordinated effort that spans public health, social policy, education, and environmental planning.

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