

Running head: Health

Health project on obesity in London

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Dissertation
Help Services

Chapter: 3 (Literature Review)

3.0 Introduction:

This chapter aims to assess the supportive studies about obesity in London, further this chapter discussed the prevalence rate of obesity in the UK specifically in London based on gender and also evaluate the factors that ultimately potentiate the risk factors for obesity. Alvidrez et al, (2019) elaborate that well-being is additional than the nonappearance of illness or sickness; it is a condition of physical, emotional, and social well-being as well as good living that should be a part of your daily routine. This literature review also contains the data on the obesity rate in London associated with obesity prevalence that ultimately leads to obesity in the UK population. Additionally, the analytical parameters and government intervention related to obesity in the UK would be discussed below

3.1 Definitional issue:

According to Blüher (2019), obesity is a complicated condition characterized by an accumulation of excess weight and body mass. Obesity is more than a cosmetic procedure. It is a health issue that raises your chance of developing other illnesses and diseases issues like cardiovascular disease, Glucose level issues (diabetes), hypertension, and some malignancies. According to Obesity and overweight (2021) associated with weight gain is characterized as the accumulation of fat that can be harmful to one's health. Subsequently, Chooi et al. (2019) mention that there have been a variety of main reasons why individuals struggle to prevent becoming obese. Obesity is probably triggered by a mix of hereditary and environmental factors, individual nutritional and activity (exercise) decisions. But on the other side Ward et al, (2019) the excellent thing though is that small weight reduction can help or avoid obesity-related health concerns.

3.2 Prevalence of obesity based on gender and race in the UK:

Obesity and overweight (2021) mention the more recent WHO (world health organization) worldwide estimates below from 2016, over 1.9 billion women are considered obese than men. Jun & Namgung 2018 study carried out and reveals that approximately 650 million women were fat, while 29 per cent of the population were insufficiently physically active and estimates that 39 per cent of males and 40 percent of females are obese. But in UK (specifically in London) around 2016, approximately 13 per cent of both females and males (11 percent of respondents (men) and 15% of the respondent (women) were overweight. From 1975 through 2016, the global rate of obesity increased dramatically (Jun & Namgung 2018) (see Chart 1 below)

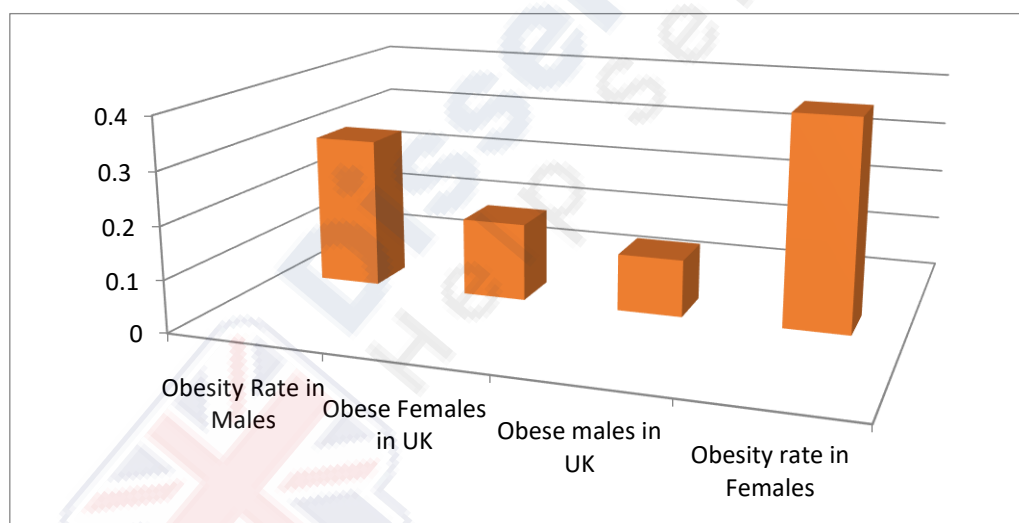


Chart 1 (Obesity rate based on gender in UK)

Obesity and overweight (2021) argue that during 2019, million tonnes females were expected to be severely obese in comparison with males. Excess weight, previously thought to be a concern only in the UK and particularly in London, is already on the increase rate. Throughout 2000, the percentage of obese people based on gender climbed by about 24% throughout the UK. The heavy and obese female rate has increased drastically from four per

cent in 1975 to just above eighteen per cent during 2016. Obesity and overweight (2021), support the statement and states that both males and females have become obese in recent years: in 2016, 37% specifically eighteen per cent of males and nineteen per cent of females were obese in the UK. Subsequently, these values dramatically increase in 2019 because of the Covid-19 pandemic and value increase up to twenty per cent of females in comparison with males in the UK (London) (see below chart 2)

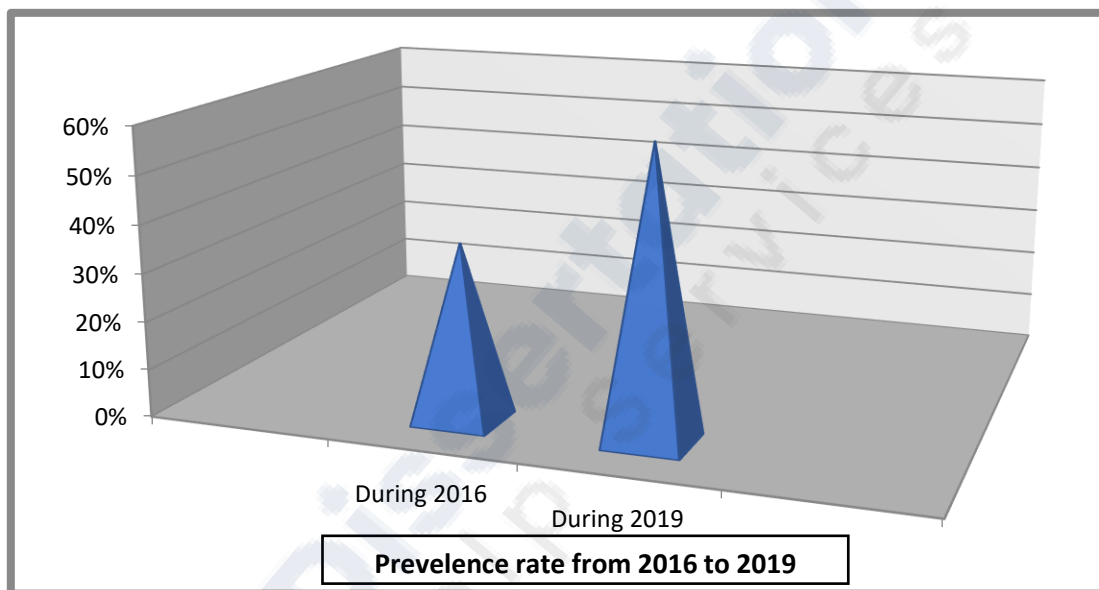


Chart 2 (Female obesity prevalence rate from 2016 to 2019)

Obesity and overweight (2021) mention that 6 per cent of males and 8 per cent of females were obese. Obesity is associated with more fatalities than malnutrition. According to Health and wellbeing (2021) from 2017 to 2018, around 56% of adults (aged 18 or up) in London was obese body mass index of twenty-five and even rise) or overweight (BMI of thirty or higher), compared with 62% across England. There have been some significant variances, however, throughout boroughs across London. Six districts have a greater percentage of overweight and obese individuals than the national average. Because while western and southern London also has one of the weakest paces of adult weight problems, outside London does have the largest proportion of persons classified as being clinically

obese (Heilmann et al., 2017). Health and wellbeing (2021) mention that typically, London throughout England generally witnessed little shift over time; however, several boroughs often see significant changes in the last 2 years. The most significant gains were in Havering (+ ten per cent), Barnet (+seven per cent), and Hillingdon (+seven per cent). Tower Hamlets (-nine per cent), Bromley (-eight per cent), and Enfield (- 7 per cent) have had the greatest declines during the last 3 years (-seven per cent). According to Health and wellbeing (2021) obesity in London can also asses in comparison to the average median, a bigger number of females and males population within London are severely obese (see below figure1)

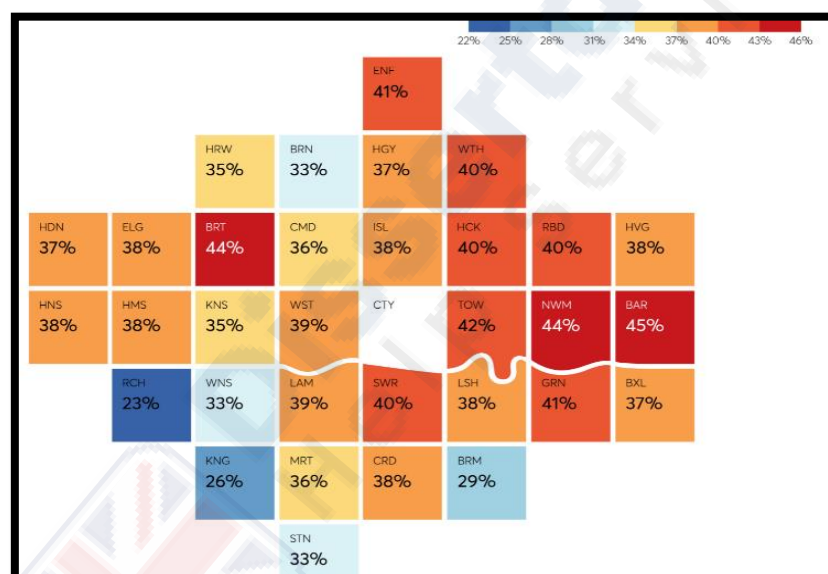


Figure 1 (obesity rate from 2017 to 2018 in UK)

From 2017 to 2018, 38 per cent of London's females are fat or obese than males, opposed to 34 per cent on median throughout England. Throughout London, overall per cent of females classified as extremely overweight climbs from 3% to 5% in comparison with males. Also at the county level, the overall females percentage of obesity is largest in northern and eastern east London, whereas the situation is inverted within London particularly in Europe (Health and wellbeing 2021). Within the 10 years, before 2017 to 2018, the percentage of individuals (females) classified as severely obese within London,

Wales, and England society at large increased about 2 per cent but one percentage, correspondingly. On the other side, adults also face obesity issues in London. Health and wellbeing 2021 suggest adult individuals in London are less overweight, but there is no distinction in regular exercise here between the city and also the national rate and thus no improvement during the last 2 years (see below figure 2)

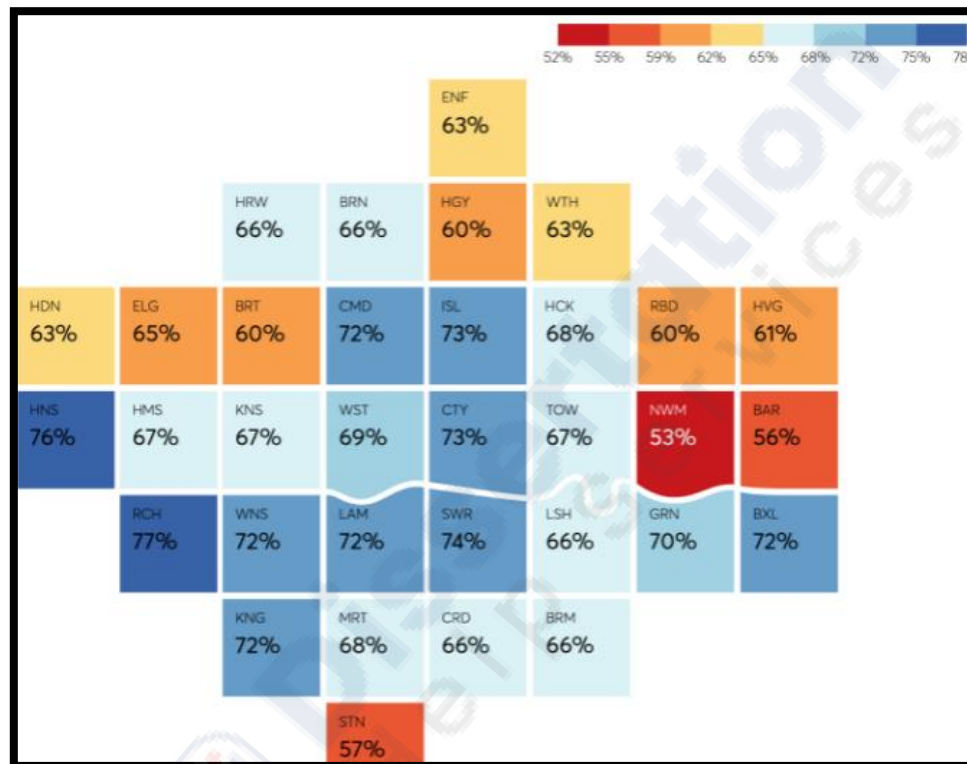


Figure 2 (In London adult obesity from 2017 to 2018)

On the same side, Health and wellbeing (2021) mention that health status and wellbeing have been demonstrated to be greatly enhanced by strength training. It can help people learn and achieve more. It's why the company creates activity goals for both kids and adults. And use the CMO (Chief Medical Officer's) target and with at 150 minutes of moderately vigorous physical activity each week, this very same percentage of individuals (66%) in England, Wales, and London as a whole were classified as fit and healthy in 2017 to 2018. Adult (individuals) in east London seem to be the least energetic, with approximately half of Barking, Dagenham, and Newham residents meeting the state's suggested level of

physical activity. Numerous of both the districts west and north of the city performed far more, with the metabolic rate exceeding 70% in very many (Health and wellbeing 2021).

Over the 2 years leading up to 2017 and 2018, exercise levels in England, Wales, and London were stable. Certain boroughs, on the other hand, have witnessed significant changes, including Hounslow (+ eighteen per cent) as well as Sutton (- eleven per cent) witnessing the most significant shifts. Whereas adults want to be healthy during play, some adults choose to be involved through team sports or public transport like cycling and walking. As a result, transportation connections can also have a serious influence on people's levels of activity. With less access to transportation in eastern London, inhabitants are more likely to rely upon their automobiles, and percentages of traveling are less (Health and wellbeing 2021).

Meanwhile, Kohlmeier 2020 suggest that obesity prevalent rate based on gender specifically in the UK indicated by obesity are a Common, Serious, and Costly Disease (2021) when compared to individuals with far less knowledge, males and females with advanced degrees used to have a reduced obesity rate of prevalence. Kohlmeier 2020 indicated that Non-Hispanic individuals with White skin tone, non-Hispanic individuals with Black skin tone, and Hispanic white females, as well as non-Hispanic White skin tone males, all had a similar obesity and degree pattern. The above statement is supported by Morrison et al, (2017) the variations, on the other hand, were not clinically meaningful and indicate that obesity prevalence has increased to educational achievement amongst non-Hispanic males with Black skin tone, albeit the variation was not useful. Prevalence of obesity did not significantly differ with education level between non-Hispanic females and males in London on the same side Hispanic males.

3.3 Analysis of the prevalence of Obesity based on gender in the UK:

Rauber et al, (2020) argues that obesity is far less important for men throughout the higher and lowers economic state than in the top group. This tendency was discovered by

Rauber et al, (2020) in both non-Hispanic males with White skin tone and Hispanic males. Obesity was just more common among non-Hispanic males with Black skin tone in the richest households than that in the poorest households. The above statements completely argue by Kohlmeier 2020 and state that obesity was less popular among females in the richest quintile than that of the lower and middle-income categories. This trend was found in non-Hispanic females with White skin tone, non-Hispanic females, or Hispanic females. The prevalence of obesity amongst non-Hispanic females with Black skin tone was unaffected by wealth (Kohlmeier 2020).

Overweight and weight gain illnesses have geographical disparities. Obesity is a Common, Serious, and Costly Disease (2021) was to look at the disparities in obesity rates and lifestyle factors in Europe (London) based on their geographic location. It argues by Hooper et al, 2018 and used WHOIS (World Health Organization Interview Survey) data from 2013 till 2014, and Robinson et al, (2021) argue that the findings, 66.5 per cent of cities in London prevalence of significantly higher than in London side Vietnamese (8.3 per cent vs. 20.2 per cent). Significantly linked to a higher risk of obesity, according to adjusted MLR (multiple logistic regressions) analyses. A male, aged 18–44 years of age (” versus “65 age or older), and possessing a college education (versus possessing any graduate education) were all linked to a higher risk of overweight amongst rural residents. Mostly among rural people (95 per cent) was also being Vietnamese linked with either a 64% lower prevalence of obesity (95 per cent) (Obesity is a Common, Serious, and Costly Disease 2021).

Kyle et al, (2017) indicated that obesity is prevalent for background and structural reasons, the prevalence of obesity has become an epidemic throughout the world, posing a huge threat to promoting physical activity and wellbeing. Over the previous thirty years, economic recovery, industrialization, mechanized transportation, urbanization, a growing lack of physical activity, and a dietary shift to prepared energy-dense foods diets have all contributed

to this trend. Obesity rates in several countries significantly doubled, tripled, or even quadrupled in recent years. Kyle et al, (2017) argue that in the upcoming years, the growing number of overweight adults (obese individuals), in especially, portends a massive risk of illness on physicians and healthcare institutions. Klarin et al, (2017) argue that obesity and overweight are a multifaceted condition with hereditary, behavioral, societal, and predisposing factors that raises the chances of chronic incidence and death. That non-exhaustive overview, which is based mostly on epidemiological data published only within the previous decade, addresses the scope of the spread of obesity diseases, known and unknown risk factors, consequences, and financial consequences around the world (Klarin et al., 2017)

Cantor & Thorpe (2018) indicates, that Obesity is a medical issue that requires medical attention. Obesity is a health problem, not an ethical fault, But besides that obesity prevention needs some ethical issues that need to be addressed during preventive measures and treatment of obesity. On the other hand Heilmann et al, (2017) focus and argue the measuring and management of obesity and overweight represent emerging frontiers within primary prevention, with considerable government policies focused on mechanisms for observing both patients and demographic-specific groups. These responsibilities are clearly defined in the official reports that mention that the ramifications for general wellbeing, mental health, egalitarianism, informed decision, socio-cultural environment, privacy, including attributions of obligations and rights are among the various ethical challenges that occur in the management of morbidity and mortality due to obesity prevalence (Heilmann et al., 2017)

Mata & Hertwig (2018) carried out the studies and indicates that prevalence of obesity has become a feature of fertility rate and also the likelihood of someone being conceived in either an obesogenic society and environment, as per the dynamic model; the

prevalence of obesity would also plateau regardless of previous intervention programs; and the obesity rate prevalence, obese, and severe obesity throughout the United States will peak whilst also 2030 at twenty-eight per cent, thirty-two per cent, and 9 percent, including both. Rauber et al, (2021) argue the above statement and mentions that a nonlinear equations project was established to forecast estimated growth patterns of obesity (prevalence of obesity) across the community. The method takes into account either interpersonal or socially deviant factors that drive weight gain, as well as other recognized variables that impact obesity patterns and part of the world population growth. This tendency has significant consequences for appropriately assessing the effectiveness of transverse interventions of anti-obesity targeted at lowering obesity prevalence rates (Rauber et al., 2021). On the other hand, Nobles et al, (2019) indicate that “Social determinates for obesity” socioeconomic position and inequity are the most constant underlying social determinants of obesity prevalence: in relatively high nations, poorer educational attainment - and therefore more disparity, in particular, is linked to higher rates of obesity among older people. This could be understood by persons having lower socioeconomic levels lacking psychological or economic wealth, such as information, family protection, money, and methods.

3.4 Factors affecting health:

The factors that affect the health of individuals and accelerate the obesity rate specifically in the UK and considerable and contain different factors like genetic, physical, and socio-economic factors that ultimately potentiate the obesity rate. Aydin & Karamehmet (2017) indicates that people's and groups' fitness is predisposed by a variety of circumstances that also affect the obesity rate in the UK (London). The surroundings and atmosphere in which people live determine whether or not they are healthful. Whether we live, the overall status of our surroundings, genetics, economic income or educational qualification, and quality social relationships each have a significant effect on health to something like a huge

extent. Many factors contribute to their roles in a person's health issues like the genetic factor Zhu et al, (2020) carried out the studies and, mention that genetic factors are a term that describes an individual's elevated risk of getting symptoms as a result of their genetic composition. The bringing together of human health with genetics could lead to a better knowledge of the genesis, management, including treatment of chronic diseases like diabetes, Alzheimer's disease, heart problems, cancer (particularly oral malignancies, oral infections, and abnormalities), and psychiatric disorders (Rohde et al., 2019). Subsequently, the other factors that affect individual health and accelerate the obesity rate are physical factors Hamer et al, 2020 indicate that fitness, abilities, and strategies are all physical considerations. Versatility, CRE, adaptability, and strength are all aspects of fitness. The above statement argues by Robinson et al, (2021) and indicates those can have a variety of effects on productivity. Air quality (mean air pollution) is associated with increases in asthma other lung disorders, as well as a higher risk of dying prematurely from respiratory illnesses. Bacteria can cause illness if it contains chemicals, insecticides, or even other toxins that can also cause unembellished and long-lasting illnesses. Subsequently, physical factors also alter the body mass of a person (Robinson et al., 2021).

On the other hand, Niedzwiedz et al, (2020) indicate that socioeconomic factors are the other most considerable factor that affects an individual's health and cause obesity in the UK (London). The statement is supported by O'Connor et al, (2021) and indicates that wealth, schooling, effort, district security, including community provisions are all socioeconomic rudiments that container has a considerable influence on how healthy and impartial how extended we survive. These features affect your capability to make good choices, obtain medical conduct and accommodation, relieve conflict, among additional things. Steel et al, (2018) carried out studies for factors associated with socioeconomic position, including people who are deprived of education, which play an important role in

estimating health consequences. Moreover, cigarette use, a poor diet, a sedentary lifestyle, and alcohol abuse also contributing factors. On the other hand Hemmingsson (2018), findings revealed a high level of poverty which could be connected to several other socioeconomic statuses, including impoverishment, SNAP eligibility, job, and wealth.

3.5 Analysis of the factors affecting health:

Subsequently, Hemmingsson (2018) conducted a study for obesity is linked to genetics or not in the UK. And mention that in certain illnesses, including Prader-Willi and Bardet-Biedl syndrome, genes can cause significant obesity. But Chu et al, (2018) argue that for individuals to be obese, both genetics and behavioral factors may be required. But on the same side according to perinatal and early obesity effects; poor nutrition; quite so much television viewing; no enough physical activity or relaxation; and our dietary as well as physical activity surroundings are all factors that affect obesity (body weight-genes), albeit the effect is minimal and inheritance is just not destiny. Elovainio et al, (2017) argue that socioeconomic factors also have a significant effect on obesity in the UK and had the greatest obesity rates. On the other hand, Atchison et al, (2020) indicate that the paradigm of socioeconomic health determinants suggests that material situations limit one's accessibility to (appropriate) housing and shelter, as well as impacting wellbeing-associated behaviors, which explains why those with reduced wages are more sensitive to overweight and obesity because of dietary behaviors minimization, and physical activity reduction.

Stryjecki et al, (2018) carried out the studies about the background information related to factors that affect health and states that health care is indeed a critical factor in determining one's overall well-being. However, Hamer et al, (2020) argue that in the very first instance, it is socioeconomic criteria for measuring access to mental health treatments and impact personal decisions. Wherever the UK reside, the status of our surroundings, heredity, our money and educational qualification, and our social relationships each have a

significant impact on people's health to something like a huge extent. Different researchers have different opinions regarding factors affecting health in the UK (London) but last, they all agree that health is drastically affected by genetic, physical, and social-economic factors. Subsequently, the entire literature review may agree that genetic, physical, and social-economic factors are the most influential factors that affect a patient's health in the UK.

3.6 The implication of Obesity:

Public health | Clinical | Royal College of Nursing (2021) conducted studies and states that Some have recently criticized population health, accusing it of failure to acknowledge major health issues in the United Kingdom throughout the last thirty years. Derek Wanless, seminal report, *Ensuring Great Health with the Whole Community*, echoed this concern. Barely a few decades well after convulsions of something like the implementation of something like the SBP (Shifting the Balance of Power) project, the reorganization of Primary Healthcare Foundations and Regional Health Officials in the UK (London) now promises to destabilize national public health organizations in the UK. The above statement supported by Okamura et al., (2018) carried out the studies regarding the current healthcare quality dilemma in London is well-known. According to a significant number of studies in the UK, "that load of damage indicated by the collaborative efforts of almost all of current patient experience concerns is astonishing". Similarly, Heianza et al, (2021) argue and mention that "currently, in UK (London) we have a problem; there is no guarantee anybody will accomplish optimal care for their specific health issue" and the implication for obesity is the body mass index (BMI) improvements in health. Carreras-Torres et al, (2018) argue that the purpose of a response to a substance is known as health consequences in the UK (London) (or economic and health costs). In several fields, including sanitation, environment research, safety and health, and biomedical in overall, health consequences are a major factor (Kyle et al, (2017).

3.7 Analysis of implication of obesity:

Scheelbeek et al, (2019) indicate that obesity, in general, has a huge impact on health development and also impart a drastic effect on UK population health. The cost of overweight individuals to civilization as a whole is predicted to just be £27 million. Nowadays obesity is estimated by electronic health records many poor countries are gradually using electronic health records (EHR). The above statement is supported by Kyle et al, (2017) and indicates that it is urgently needed since it enhances health status while also being cost-effective. Because innovations can bring various risks, maintaining the security of data and information is just a significant task. The recent announcement of security vulnerabilities has cast doubt on the system.

Kyle et al, (2017) conducted studies to evident the raising utility and growing enthusiasm for its implementation in the UK, the ethical considerations that may arise are receiving little attention. Using a username and password to secure EHR is indeed a viable approach. The purpose of the report is to address the numerous ethical difficulties that arise when using EHRs, as well as potential remedies. Patient benefit is the first ethical issue in implication within previous, a health history was knowledge written down for scientific, therapeutic, regulatory, and economic purposes. On the other hand, Frühbeck et al, (2019) argue that it had severe problem inaccessibility because it could only be used by one person's opinion. Even though it was refreshed manually, it took anything else from 1 till 6 months upwards to complete. Especially today, the main objective of electronic medical records will be the same: to help enhance clinical outcomes in the UK. Compared to standard records, EHRs get several advantages. The development of readable records eliminates most of those problems associated with incorrect medications, doses, and procedures. The second ethical issue is confidentiality, whether EHRs seem to be to perform as intended, healthcare providers, insurance agencies, and others should need access to personal records of the UK.

Another key to maintaining secrecy is to limit access to that information with only those who are authorized. The first step is to authorize users. The recipient's access is determined by predefined character privileges. Flint & Tahrani (2020) carried out studies and mention that the operator issues identities and accounts in the UK after identifying the customer and determining the amount of awareness to be disclosed. The client should be informed that they will be held responsible for how the content they access is used and misused. They possess access to sensitive content they require to fulfill their duties in the UK. As a result, one of the most important forms of health record protection is allocating user privileges.

3.8 Governmental and Non- Governmental Intervention for obesity:

Mazur-Biały et al, (2017) indicate that to reduce the obesity rate in the UK (London) the need for such initiatives derives from the market of healthcare system considerable information difficulties specifically for the UK. Because customers are often unable to predict possible the standards of nursing service supplied by medical providers, the UK government should regulate healthcare providers, which benefits the whole population of the UK. Governments of the UK, on the other hand, have a higher risk of infection in less obvious ways, either through laws affecting training, drinking water, and other vital areas, including through the management of health institutions, clinicians, and payers. As an intervention plans UK government also influences society through influencing take-home pay and levels of education. On the same side State surveillance, obesity public awareness, receive food welfare benefits, licensing for nutritious food, university nutrition programs, clinical advice, nutrition labeling, and food promotional pricing regulations have all played a key role throughout the administration's response to obesity.

But on the same side, non-governmental interventions are also known as NGOs, and Shafer et al, (2019) conducted studies to estimate the major role of NGOs throughout the health care system in the UK to also provide resources and advocate for better health of UK

community. Health, social, including psychological resources, along with growing penetration, maintenance as well as healthcare, financial capital support, informative and educational assistance, and instruction, are all included in the delivery of services. Shafer et al, (2019) indicate that non-governmental organizations help people who are afflicted with specific diseases like obesity and other chronic illness or who belong to populations that face social inequity. They could also provide knowledge about routine interventions regarding various cancers as well as support students in planning for the future while also encouraging individuals in their current predicament.

3.9 Analysis of Governmental and non-governmental intervention for Obesity:

Tulatz (2019) indicates that recently, the United Kingdom government declared a series of policies aimed at lowering obesity rates. The following are some of the initiatives: The extension of NHS in London and Wales (England's) weight-loss services to assist more individuals in losing weight. For certain enterprises with even more least 250 or more employees, regulations requiring calorie marking on tables for foods and beverages in cafés, eateries, bars, and outlets mandatory. The above statement is argued by Dicker et al, (2020), and mentions that new restrictions make it unlawful to advertise high calories foods on broadcast or the internet after 9 p.m., whenever obese individuals will be greatest inclined to view them. Before that, the UK government will run a fresh public survey on what the restriction on internet ads for foods rich in fat, salty, or sweets should be applied throughout all periods of the next day. Multiple specific consultations have been launched, first front and food labels and also on calorie marking on liquor.

Moreover, Dicker et al, (2020) conducted studies to intervened the governmental and non-governmental implementation for obesity and declare that obesity has been a problem in the United Kingdom for some decades, and there are a variety of government policies aimed at combating it, with either a particular focus on pediatric obesity. On the same side Buckton

et al, (2018) mention that individuals who had been severely obese used to have an increased chance of someone being admitted and requiring more intense therapy owing to coronavirus, and therefore an increased chance of dying with COVID-19 (Buckton et al., 2018).

On the other hand, Coggon & Adams (2021), mentions that United Kingdom governmental organizations and non-governmental organizations (NGOs) initiate steps to stop or at least to reduce the obesity prevalence in London and overall England. Nimegeer et al, (2019) agree with the above statement and indicates that some parts of the modern "obesogenic environment" are addressed by the steps outlined today. Because marketing has been shown to improve individuals eating choices, limits on the promotional campaigns of high-fat, high-salt, and high-sugar foods might assist individuals to ingest even one of these items.

3.10 Significant issue:

The most significant that I face during this chapter is Researchers don't know how much calorie restriction affects COVID-19 results, although decreasing 5-10 percent of one's calorie intake can enhance community markers like serum cholesterol, heart rate, and serum cholesterol. But according to Elagizi et al, (2018) reducing even a tiny lot of muscle in obese persons can have a big impact on their health

3.11 Summary:

The main objective of this chapter is to assess the obesity rate based on gender and race, and the other objective is to ensure the governmental intervention taken by the UK government to minimize the rate of obesity in the UK. A fit daily routine can aid you to avoid long-term disorders and continuing diseases. Good sensation about physical health and taking care of your health help with self-confidence and self-respect. Maintain a safe lifestyle by following your body's instructions. We can say that obesity discrimination is pervasive in our culture, and any efforts to assist people to lose weight mustn't exacerbate it.

4.0 Conclusion:

This part concludes the whole chapter 3 (literature review) and declares the rate of obesity in the UK and also the risk factor that accelerates the rate of obesity. Furthermore, another of the explanations outlined inside this PHE report of research for the relationship between obesity as well as coronavirus is that individuals who are overweight are extra probable to place off obtaining therapeutic aid due to preconception in hospital environments. Obesity is caused by a variety of factors that are not just contingent on the level of effort or ambition. To assist the NHS to contend with the continued impacts of the coronavirus, and several other health consequences of obesity, such as an increased risk of chronic disease, coronary heart disease, and several chronic diseases, it is especially crucial to strive to lower elevations of obesity or overweight. Because marketing has been shown to improve individuals eating choices, limits on the promotional campaigns of high-fat, high-salt, and high-sugar foods might assist individuals to ingest even one of these items. Counting calories, and particular keeping everything off, is difficult, and individuals need adequate support to use it in need for our state's healthcare to develop.



Reference:

- Alvidrez, J., Castille, D., Laude-Sharp, M., Rosario, A. and Tabor, D., 2019. The national institute on minority health and health disparities research framework. *American Journal of Public Health*, 109(S1), pp.S16-S20.
- Atchison, C.J., Bowman, L., Vrinten, C., Redd, R., Pristera, P., Eaton, J.W. and Ward, H., 2020. Perceptions and behavioural responses of the general public during the COVID-19 pandemic: A cross-sectional survey of UK Adults. *MedRxiv*.
- Aydin, G. and Karam Mehmet, B., 2017. Factors affecting health tourism and international health-care facility choice. *International Journal of Pharmaceutical and Healthcare Marketing*.
- Blüher, M., 2019. Obesity: global epidemiology and pathogenesis. *Nature Reviews Endocrinology*, 15(5), pp.288-298.
- Blüher, M., 2019. Obesity: global epidemiology and pathogenesis. *Nature Reviews Endocrinology*, 15(5), pp.288-298.
- Buckton, C.H., Patterson, C., Hyseni, L., Katikireddi, S.V., Lloyd-Williams, F., Elliott-Green, A., Capewell, S. and Hilton, S., 2018. The palatability of sugar-sweetened beverage taxation: A content analysis of newspaper coverage of the UK sugar debate. *Plos one*, 13(12), p.e0207576.
- Cantor, M.N. and Thorpe, L., 2018. Integrating data on social determinants of health into electronic health records. *Health Affairs*, 37(4), pp.585-590.
- Carreras-Torres, R., Johansson, M., Haycock, P.C., Relton, C.L., Smith, G.D., Brennan, P. and Martin, R.M., 2018. Role of obesity in smoking behaviour: Mendelian randomisation study in UK Biobank. *Bmj*, 361.
- Chooi, Y.C., Ding, C. and Magkos, F., 2019. The epidemiology of obesity. *Metabolism*, 92, pp.6-10.

- Chu, D.T., Nguyet, N.T.M., Dinh, T.C., Lien, N.V.T., Nguyen, K.H., Ngoc, V.T.N., Tao, Y., Le, D.H., Nga, V.B., Jurgoński, A. and Tran, Q.H., 2018. An update on physical health and economic consequences of overweight and obesity. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 12(6), pp.1095-1100.
- Coggon, J. and Adams, J., 2021. ‘Let them choose not to eat cake...’: Public health ethics, effectiveness and equity in government obesity strategy. *Future Healthcare Journal*, 8(1), p.49.
- Dicker, D., Bettini, S., Farpour-Lambert, N., Frühbeck, G., Golan, R., Goossens, G., Halford, J., O’Malley, G., Mullerova, D., Salas, X.R. and Hassapiou, M.N., 2020. Obesity and COVID-19: the two sides of the coin. *Obesity Facts*, 13(4), pp.430-438.
- Elagizi, A., Kachur, S., Lavie, C.J., Carbone, S., Pandey, A., Ortega, F.B. and Milani, R.V., 2018. An overview and update on obesity and the obesity paradox in cardiovascular diseases. *Progress in cardiovascular diseases*, 61(2), pp.142-150.
- Elovainio, M., Hakulinen, C., Pulkki-Råback, L., Virtanen, M., Josefsson, K., Jokela, M., Vahtera, J. and Kivimäki, M., 2017. Contribution of risk factors to excess mortality in isolated and lonely individuals: an analysis of data from the UK Biobank cohort study. *The Lancet Public Health*, 2(6), pp.e260-e266.
- Flint, S.W. and Tahrani, A.A., 2020. COVID-19 and obesity—lack of clarity, guidance, and implications for care. *The lancet diabetes & endocrinology*, 8(6), pp.474-475.
- Frühbeck, G., Busetto, L., Dicker, D., Yumuk, V., Goossens, G.H., Hebebrand, J., Halford, J.G., Farpour-Lambert, N.J., Blaak, E.E., Woodward, E. and Toplak, H., 2019. The ABCD of obesity: an EASO position statement on a diagnostic term with clinical and scientific implications. *Obesity facts*, 12(2), pp.131-136.

- Hamer, M., Kivimäki, M., Gale, C.R. and Batty, G.D., 2020. Lifestyle risk factors, inflammatory mechanisms, and COVID-19 hospitalization: A community-based cohort study of 387,109 adults in UK. *Brain, behavior, and immunity*, 87, pp.184-187.
- Hamer, M., Kivimäki, M., Gale, C.R. and Batty, G.D., 2020. Lifestyle risk factors, inflammatory mechanisms, and COVID-19 hospitalization: A community-based cohort study of 387,109 adults in UK. *Brain, behavior, and immunity*, 87, pp.184-187.
- Health and wellbeing (2021). Available at: [https://www.centreforlondon.org/reader/the-london-intelligence-health-and-wellbeing/data/#:~:text=In%202017%2F18%2C%2056%20per,62%20per%20cent%20across%20England.\(Accessed:21June2021\).](https://www.centreforlondon.org/reader/the-london-intelligence-health-and-wellbeing/data/#:~:text=In%202017%2F18%2C%2056%20per,62%20per%20cent%20across%20England.(Accessed:21June2021).)
- Heianza, Y., Zhou, T., Sun, D., Hu, F.B. and Qi, L., 2021. Healthful Plant-Based Dietary Patterns, Genetic Risk of Obesity, and Cardiovascular Risk in the UK Biobank Study. *Clinical Nutrition*.
- Heilmann, A., Rouxel, P., Fitzsimons, E., Kelly, Y. and Watt, R.G., 2017. Longitudinal associations between television in the bedroom and body fatness in a UK cohort study. *International journal of obesity*, 41(10), pp.1503-1509.
- Hemmingsson, E., 2018. Early obesity risk factors: socioeconomic adversity, family dysfunction, offspring distress, and junk food self-medication. *Current obesity reports*, 7(2), pp.204-209.
- Hooper, L., Anderson, A.S., Birch, J., Forster, A.S., Rosenberg, G., Bauld, L. and Vohra, J., 2018. Public awareness and healthcare professional advice for obesity as a risk factor for cancer in the UK: a cross-sectional survey. *Journal of public health*, 40(4), pp.797-805.

- Jun, H.J. and Namgung, M., 2018. Gender difference and spatial heterogeneity in local obesity. *International journal of environmental research and public health*, 15(2), p.311.
- Klarin, D., Emdin, C.A., Natarajan, P., Conrad, M.F. and Kathiresan, S., 2017. Genetic analysis of venous thromboembolism in UK Biobank identifies the ZFPM2 locus and implicates obesity as a causal risk factor. *Circulation: Cardiovascular Genetics*, 10(2), p.e001643.
- Kohlmeier, M., 2020. Avoidance of vitamin D deficiency to slow the COVID-19 pandemic. *BMJ Nutrition, Prevention & Health*, 3(1), p.67.
- Kyle, R.G., Wills, J., Mahoney, C., Hoyle, L., Kelly, M. and Atherton, I.M., 2017. Obesity prevalence among healthcare professionals in England: a cross-sectional study using the Health Survey for England. *BMJ open*, 7(12).
- Mata, J. and Hertwig, R., 2018. Public beliefs about obesity relative to other major health risks: Representative cross-sectional surveys in the USA, the UK, and Germany. *Annals of Behavioral Medicine*, 52(4), pp.273-286.
- Mazur-Biały, A., Bilski, J., Pocheć, E. and Brzozowski, T., 2017. New insight into the direct anti-inflammatory activity of a myokine irisin against proinflammatory activation of adipocytes: Implication for exercise in obesity. *Journal of Physiology and Pharmacology*, 68(2).
- Morrison, P.K., Harris, P.A., Maltin, C.A., Grove-White, D., Barfoot, C.F. and Argo, C.M., 2017. Perceptions of obesity and management practices in a UK population of leisure-horse owners and managers. *Journal of Equine Veterinary Science*, 53, pp.19-29.
- Niedzwiedz, C.L., O'Donnell, C.A., Jani, B.D., Demou, E., Ho, F.K., Celis-Morales, C., Nicholl, B.I., Mair, F.S., Welsh, P., Sattar, N. and Pell, J.P., 2020. Ethnic and

- socioeconomic differences in SARS-CoV-2 infection: prospective cohort study using UK Biobank. *BMC medicine*, 18, pp.1-14.
- Nimegeer, A., Patterson, C. and Hilton, S., 2019. Media framing of obesity: a content analysis of UK newspapers from 1996 to 2014. *BMJ open*, 9(4), p.e025646.
- Nobles, J., Christensen, A., Butler, M., Radley, D., Pickering, K., Saunders, J., Weir, C., Sahota, P. and Gately, P., 2019. Understanding how local authorities in England address obesity: A wider determinants of health perspective. *Health Policy*, 123(10), pp.998-1003.
- Obesity and overweight* (2021). Available at: <https://www.who.int/news-room/factsheets/detail/obesity-and-overweight> (Accessed: 21 June 2021).
- Obesity is a Common, Serious, and Costly Disease (2021). Available at: <https://www.cdc.gov/obesity/data/adult.html> (Accessed: 22 June 2021).
- O'Connor, R.C., Wetherall, K., Cleare, S., McClelland, H., Melson, A.J., Niedzwiedz, C.L., O'Carroll, R.E., O'Connor, D.B., Platt, S., Scowcroft, E. and Watson, B., 2021. Mental health and well-being during the COVID-19 pandemic: longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study. *The British Journal of Psychiatry*, 218(6), pp.326-333.
- Okamura, A., Watanabe, M., Yamashita, K., Yuda, M., Hayami, M., Imamura, Y. and Mine, S., 2018. Implication of visceral obesity in patients with esophageal squamous cell carcinoma. *Langenbeck's archives of surgery*, 403(2), pp.245-253.
- Public health | Clinical | Royal College of Nursing* (2021). Available at: <https://www.rcn.org.uk/clinical-topics/public-health> (Accessed: 3 July 2021).
- Rauber, F., Chang, K., Vamos, E.P., da Costa Louzada, M.L., Monteiro, C.A., Millett, C. and Levy, R.B., 2021. Ultra-processed food consumption and risk of obesity: a

- prospective cohort study of UK Biobank. *European journal of nutrition*, 60(4), pp.2169-2180.
- Rauber, F., Steele, E.M., Louzada, M.L.D.C., Millett, C., Monteiro, C.A. and Levy, R.B., 2020. Ultra-processed food consumption and indicators of obesity in the United Kingdom population (2008-2016). *PLoS One*, 15(5), p.e0232676.
- Robinson, E., Boyland, E., Chisholm, A., Harrold, J., Maloney, N.G., Marty, L., Mead, B.R., Noonan, R. and Hardman, C.A., 2021. Obesity, eating behavior and physical activity during COVID-19 lockdown: A study of UK adults. *Appetite*, 156, p.104853.
- Robinson, E., Boyland, E., Chisholm, A., Harrold, J., Maloney, N.G., Marty, L., Mead, B.R., Noonan, R. and Hardman, C.A., 2021. Obesity, eating behavior and physical activity during COVID-19 lockdown: A study of UK adults. *Appetite*, 156, p.104853.
- Rohde, K., Keller, M., la Cour Poulsen, L., Blüher, M., Kovacs, P. and Böttcher, Y., 2019. Genetics and epigenetics in obesity. *Metabolism*, 92, pp.37-50.
- Scheelbeek, P. et al. (2019) "Potential impact on prevalence of obesity in the UK of a 20% price increase in high sugar snacks: modelling study", BMJ, p. 14786. doi: 10.1136/bmj.14786.*
- Shafer, P.R., Borsky, A., Ngo-Metzger, Q., Miller, T. and Meyers, D., 2019. The practice gap: National estimates of screening and counseling for alcohol, tobacco, and obesity. *The Annals of Family Medicine*, 17(2), pp.161-163.
- Siddharth, S. and Sharma, D., 2018. Racial disparity and triple-negative breast cancer in African-American women: a multifaceted affair between obesity, biology, and socioeconomic determinants. *Cancers*, 10(12), p.514.
- Steel, N., Ford, J.A., Newton, J.N., Davis, A.C., Vos, T., Naghavi, M., Glenn, S., Hughes, A., Dalton, A.M., Stockton, D. and Humphreys, C., 2018. Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic

analysis for the Global Burden of Disease Study 2016. *The Lancet*, 392(10158), pp.1647-1661.

Stryjecki, C., Alyass, A. and Meyre, D., 2018. Ethnic and population differences in the genetic predisposition to human obesity. *Obesity Reviews*, 19(1), pp.62-80.

Tulatz, K., 2019. Obesity, political responsibility, and the politics of needs. *Medicine, Health Care and Philosophy*, 22(2), pp.305-315.

Ward, Z.J., Bleich, S.N., Cradock, A.L., Barrett, J.L., Giles, C.M., Flax, C., Long, M.W. and Gortmaker, S.L., 2019. Projected US state-level prevalence of adult obesity and severe obesity. *New England Journal of Medicine*, 381(25), pp.2440-2450.

Zhu, Z., Guo, Y., Shi, H., Liu, C.L., Panganiban, R.A., Chung, W., O'Connor, L.J., Himes, B.E., Gazal, S., Hasegawa, K. and Camargo Jr, C.A., 2020. Shared genetic and experimental links between obesity-related traits and asthma subtypes in UK Biobank. *Journal of Allergy and Clinical Immunology*, 145(2), pp.537-549.

