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MSc Public Health and Social Care in Practice

MODULE CODE AND TITLE:	LCHS7000
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ASSIGNMENT TITLE:	Component 2 Analytical Report

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Date of submission: 1ST May 2026

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TASK 1:

Title: Gender Inequality and Health Inequalities in Adult men and Women in United Kingdom.

Introduction

"Gender inequality is not only a moral issue, but a public health issue."

- **World Health Organization**

Gender is defined as socially constructed roles, behaviours, and expectations of men and women, which have a profound impact on health outcomes and experiences in the society. The target population chosen to carry out this assignment is adult men and women in the United Kingdom with emphasis on the role gender disparity plays in causing health disparity. Health inequalities can be characterized as preventable, inequitable, and institutional disparities in health among different segments of the population (Marmot, 2020).

Such inequalities also appear in the trends of illness, death, and healthcare access in the UK. Men and women face different but connected disadvantages. For example, men have shorter life expectancy and death rates. In contrast, women have higher risks of chronic diseases and mental health issues (ONS, 2023; McManus et al., 2016). These disparities are partly explained by biological differences between men and women, but recent studies suggest the effects of social factors are greater. These include socioeconomic differences, work and gender roles (World Health Organization, 2023). So, to understand health inequalities and resolve them it is important to understand gender as a social and biological phenomenon.

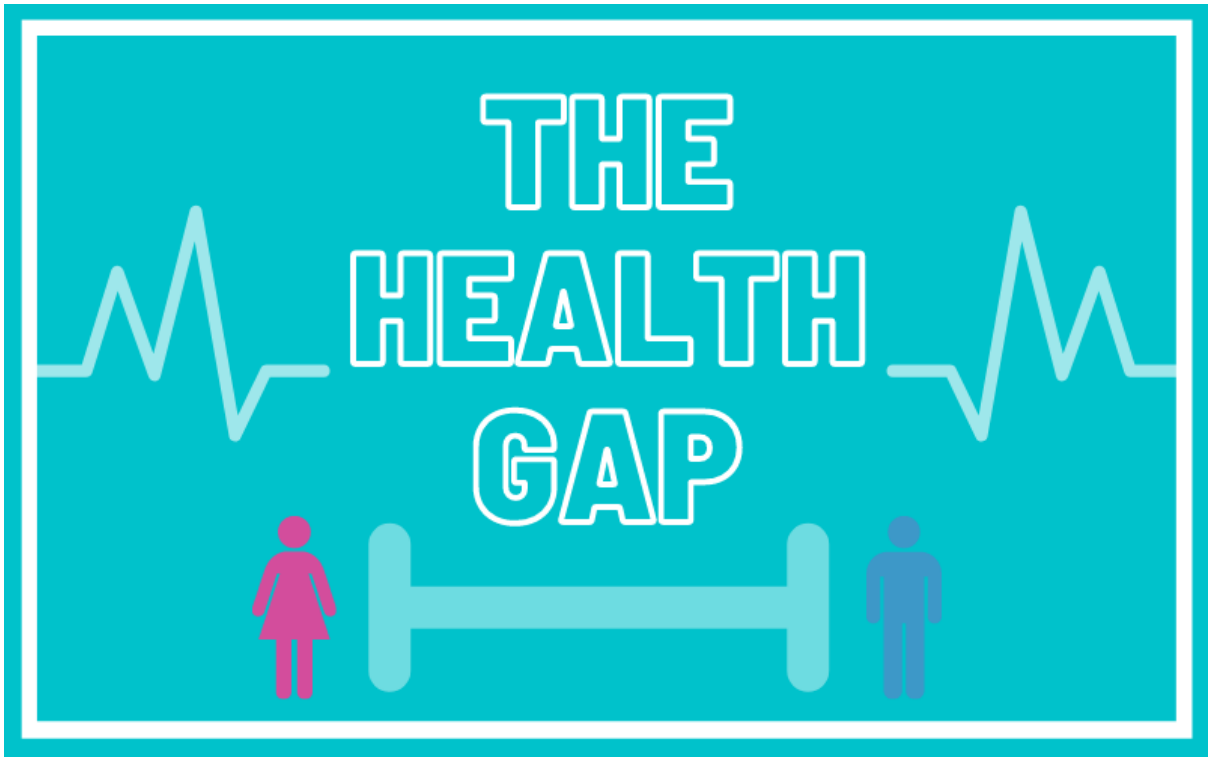

Figure 1 : The Health Gap in men and women

In order to evolve deeper into these inequalities, the major areas where the health inequalities based on gender are most pronounced in the UK.

Contextual Background and Underlying Factors.

1. Male Mortality rate is increase.

In the UK, the life expectancy of men is nearly 4 years which is less than women (ONS, 2023). Such disparity is associated with increased risky behaviour like smoking, alcohol misuse and late healthcare seeking.

Men are more vulnerable due to cultural demands of masculinity, which dishearten the expression of emotions and help-seeking behaviour. It results in the late diagnosis and worse outcomes.

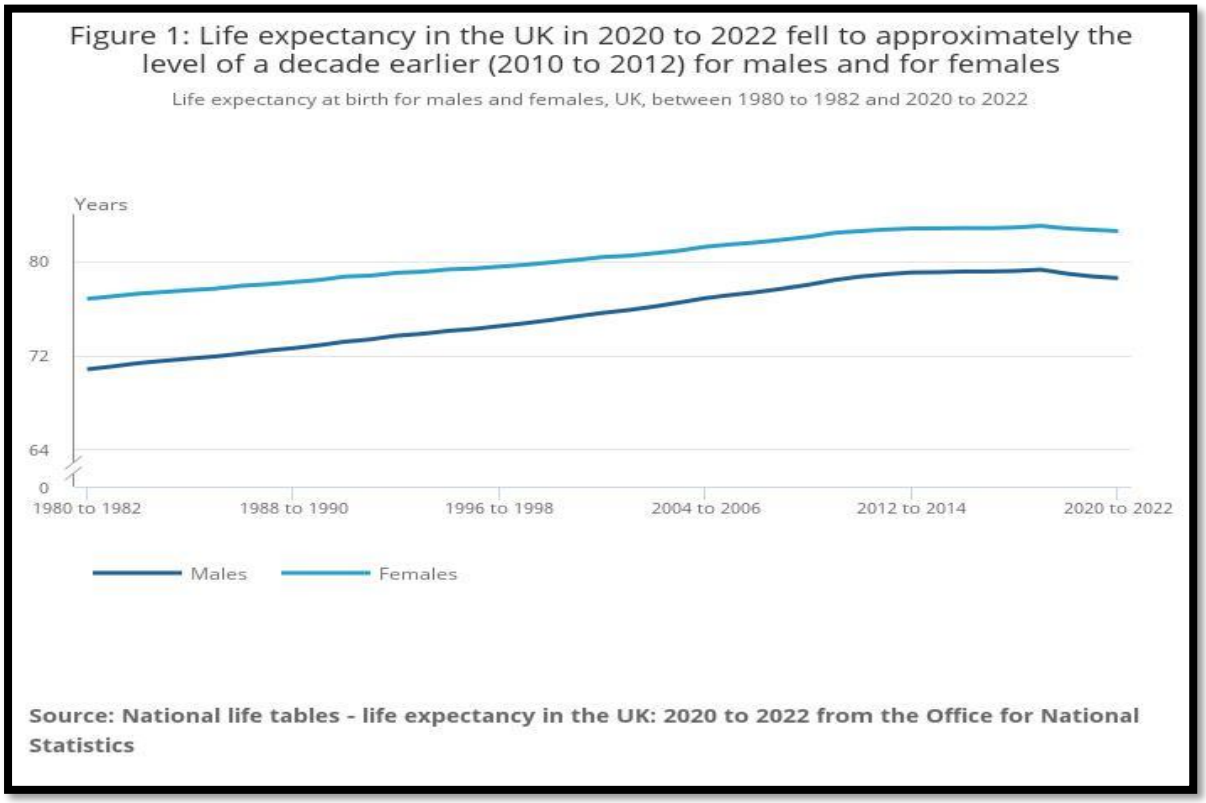

Figure 2 : Demonstrates the gender differences in life expectancy in the UK (ONS, 2023).

- **Solution:** Men and workplace health checks, and early intervention programme can be used by conducting public health campaigns to enhance engagement and lessen early mortality.

2. Men have more risk of cardiovascular disease (CVD)

Men have greater risks of cardiovascular diseases (CVD). It is a significant cause of death in men, and it occurs at a younger age in men as compare to women (NHS England, 2022).

Poorer diet, inactivity and smoking are risk factors for developing cardiovascular diseases in men as compare to women (WHO, 2022).

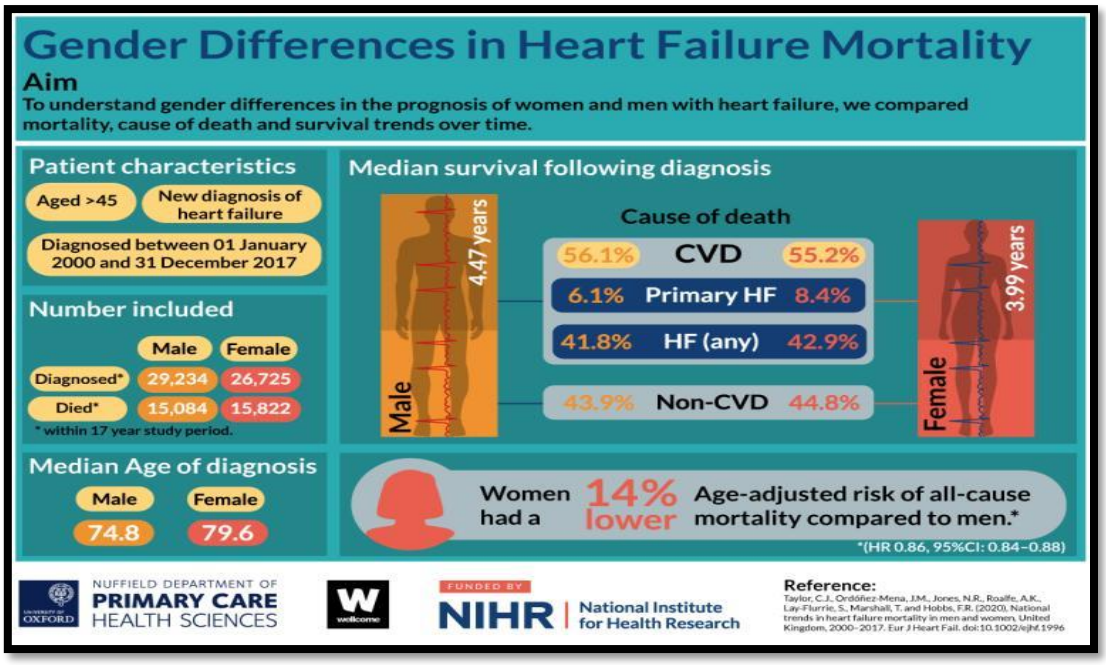

Figure 3: Differences in heart failure death among men and women

- **Solution:** Risk can be avoided through screening and male health programmemes, lifestyle modification and improve early diagnosis.

3. Women suffer from more mental health issues.

Anxiety and depression is more commonly reported in women. There are higher rates of diagnosis in women (McManus et al., 2016). This is related to social stressors such as parenting, poverty and domestic violence.

Women may also be more likely to report these issues. Men may not report these issues due to stigma.

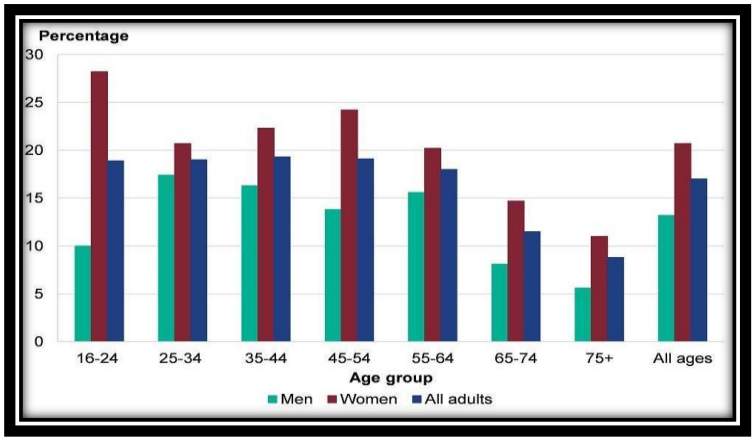

Figure 4: The incidence of mental health issues by sex in UK (McManus et al., 2016)

- **Solution**: Better access to gender sensitive mental health services and addressing the social determinants of health such as violence and poverty.

4. Economic Inequality and Gender Pay Gap (Women Disadvantaged):

In the UK, women's average weekly earnings are lower than men with a gender pay gap of 14% (ONS, 2023). This shows the lack of equal opportunity of employment for promotion.

Structural inequality has a greater negative impact on women in the form of discrimination and childcare.

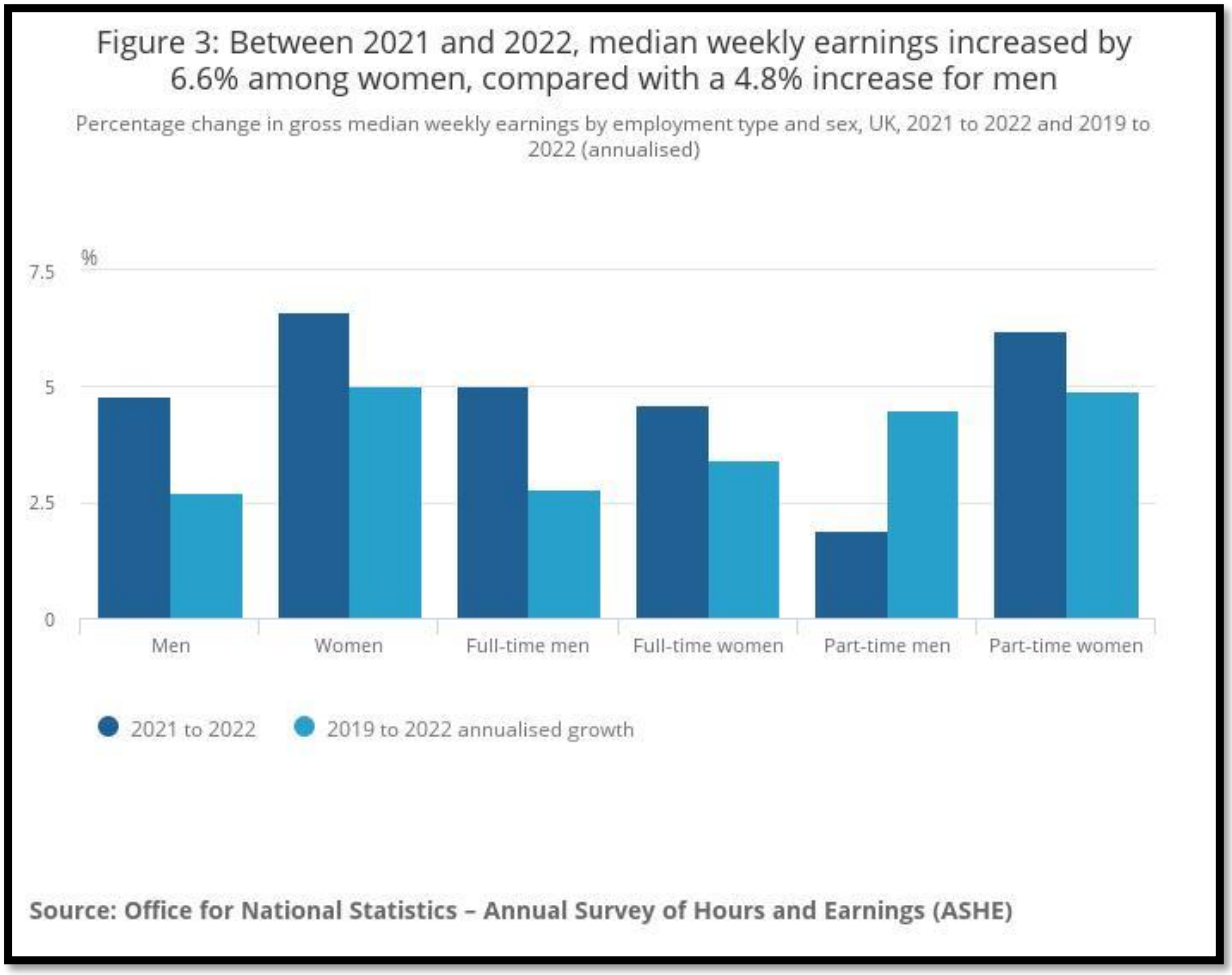

Figure 5: Gender pay gap in the UK (ONS, 2023)

- **Solution:** Pay gap can be reduced by tighter equality laws at work, flexible working rights and pay gap transparency.

5. Caregiving and Gender Roles

It is also more likely that women offer unpaid care, which has a negative effect on their employment opportunities and health (Carers UK, 2022). This enhances stress and social isolation as well as financial instability.

Women are more susceptible as the society demands them to play the role of caregivers, restricting them to full-time jobs.

- **Solution**: Formal care services are to be expanded, shared caregiving policies to be introduced, and carers should be supported financially.

6. Obstacles to Healthcare among Men

Men are less beneficiaries of healthcare services, especially preventive health services (Public Health England, 2019). This causes subsequent diagnosis and increased severity of illness.

Men are vulnerable due to the culture of masculinity, which doesn't promote any help seeking and vulnerability.

- **Solution**:: Normalising and male-specific health promotion and engagement with the community can improve early diagnosis and treatment.

3. National Response to Reduce Health Inequalities

UK has implemented a number of policies to overcome gender health disparities. The NHS England Long Team Plan (2019) is targeted at prevention and early diagnosis as well as improving access to health care for men and women. In addition, the gender pay gap reporting (Gov.uk, 2022) is predicted to reduce the elevation of economic inequality and the Women Health Strategy (DHSC, 2021) is aimed at specific needs of women.

But access and awareness created by these policies do not necessarily lead to solutions for the more complicated issues of gender norms and inequality (Marmot, 2020). Thus, more specific solutions are needed.

Moreover, these inequalities are primarily driven by the socially constructed gender roles. While there have been changes in national policies and organisations, we need to tackle the root of inequality.

4. Organizations – Mind

One such important organisation is the Mind, which helps people facing mental health problems. It offers support services like helplines, community services and awareness.

The overall goals are the reduction of stigma, better access to mental health services and the influencing of policy through research. Mind can be beneficial for both men and women since it can help them address gender-specific problems, such as high rates of depression among women and stigma of men.

Figure 5: Logo of mind organization

Overall, the organisation can help to reduce gender health disparities in the form of support, education and advocacy.

Conclusion

Overall, the health differences between men and women in the UK are affected by a range of biological differences and social determinants such as income, employment and culture. Higher mortality, lower health service utilisation is associated with men while women are more prone to mental health issues and poverty. More importantly, these disparities are mainly due to socially constructed gender roles as opposed to biology per se. Despite the improvements in national policies and organisations, more needs to be done to combat the underlying causes of inequality. To have a fair health outcome between men and women, a more all inclusive and preventive measure is necessary.

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❖TASK 2

TASK 2:- Epidemiological Investigation of Obesity in Hackney (London Borough)

Target Group:- Children aged 10–11 (Year 6) in Hackney, particularly from deprived households

1. Introduction

The World Health Organization (WHO, 2022) obesity is defined as the abnormal or excessive accumulation of fat within the body leading to health risks, typically measured in terms of body mass index (BMI ≥ 30 kg/m²) (WHO, 2022).

- **There are many consequences of childhood obesity.**

i. Health,

obese children have an increased risk of developing chronic health conditions including

- ✓ type 2 diabetes,
- ✓ heart disease
- ✓ high blood pressure in adulthood (World Health Organisation, 2022).

ii. Socially, obesity can

- ✓ lead to stigma,
- ✓ bullying
- ✓ low self-esteem, which in turn can impact on mental health and academic performance (Marmot, 2020).

iii. Culturally,

- ✓ Dietary Behaviours,
- ✓ Food Environments
- ✓ Cultural Norms Modulate Behaviour, And Often Perpetuate Unhealthy Eating Habits in Disadvantaged Urban Communities.

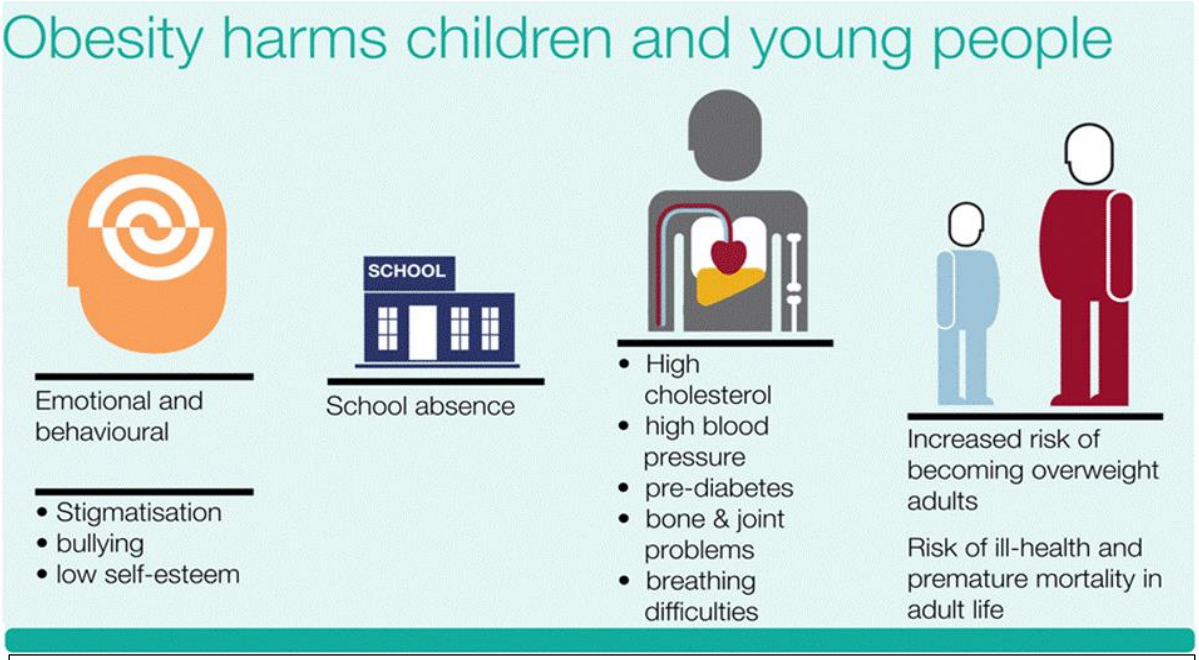

Figure 1: Harms of obesity

2. Incidence and prevalence (Worldwide and UK Statistics)

The number of overweight and obese children (5-19 years) has increased from 4% in 1975, to more than 18% in recent years globally (WHO, 2022). The factors responsible for obesity is urbanisation, diet and a decrease in physical activity.

The National Child Measurement Programme (NCMP) predicts England will have 22.2% of Year 6 children obese in 2025 (OHID, 2025). This is a chronic public health issue, and the trend is towards increasing prevalence in older primary school aged children, and in deprived areas.

In our local area, obesity is more prevalent in Hackney than nationally and for the region. This is an example of a strong social evidence of health, as deprivation is a risk factor for obesity (Public Health England/OHID, 2024; Marmot, 2020). Therefore, there are inequalities in obesity.

Target Population

In the case analytic report we will be looking at Year 6 (10-11 years old) in the London Borough of Hackney. It will include those living in areas of high deprivation, as these people are more likely to be obese and have other health inequalities.

3. Public Health Measures

Public health responses in Hackney are set up around three ideas: prevention, protection and promotion.

Figure : 3 P of Public Health Measure

i. Prevention:

Prevention is about stopping people from getting sick. This is done by reducing health risks through changes in lifestyle and the environment.

For example

- ✓ **schools provide meals that meet food standards.**
- ✓ **Kids also get moving through programs like the Daily Mile.**
- ✓ **The government has rules like the Soft Drinks Industry Levy to help with this.**
- ✓ **The levy has made companies change their recipes to reduce sugar in drinks.**
- ✓ As a result people are eating sugar as shown by the Office for Health Improvement and Disparities in 2025.

Prevention helps keep people healthy.

ii. Protection

- Protection focuses on keeping people safe from things that can harm their health.
- There are rules that **limit the number of food places near schools.**
- Rules also **stop companies** from **advertising food to kids on TV and online.**
- Protection helps keep people safe.

iii. Promotion

- Promotion is about helping people make choices and stick to them.
- **The National Health Service** has campaigns like Better Health.
- These **campaigns teach** people about **eating and exercise.**
- The town also has services to **help families make choices.**
- These services work with people from all backgrounds.
- Promotion helps people make choices.

Prevention, protection and promotion all play a role in peoples health.

5. Risk factor of obesity

There are certain factors that is responsible for obesity which are as follow:

5.1 Structural Determinants

The main reason deprivation says and socioeconomic deprivation (Marmot, 2020).

For example

- Budget of healthy food
- Decline in safe play space
- The Number of Exposure to fast-food
- How much ultra-processed food people eat.

4.2 How Environment Affects Health

The food scene in Hackney is an example of an area that can make people overweight:

- Many fast-food outlets are around schools.
- There are a number of fast-food places, near schools.
- These factors can contribute to obesity.

4.3 Behavioural Pathways

It includes certain factors like **knowledge of healthy eating pattern and activity habits.**

4.4 Biological Interaction

It says that it is run in family. Gene is a responsible for fat metabolism and storage, epidemiological studies confirm that gene expressions are environmentally stimulated and obesity occurs when genetic risk is expressed in an obesogenic environment (WHO, 2022).

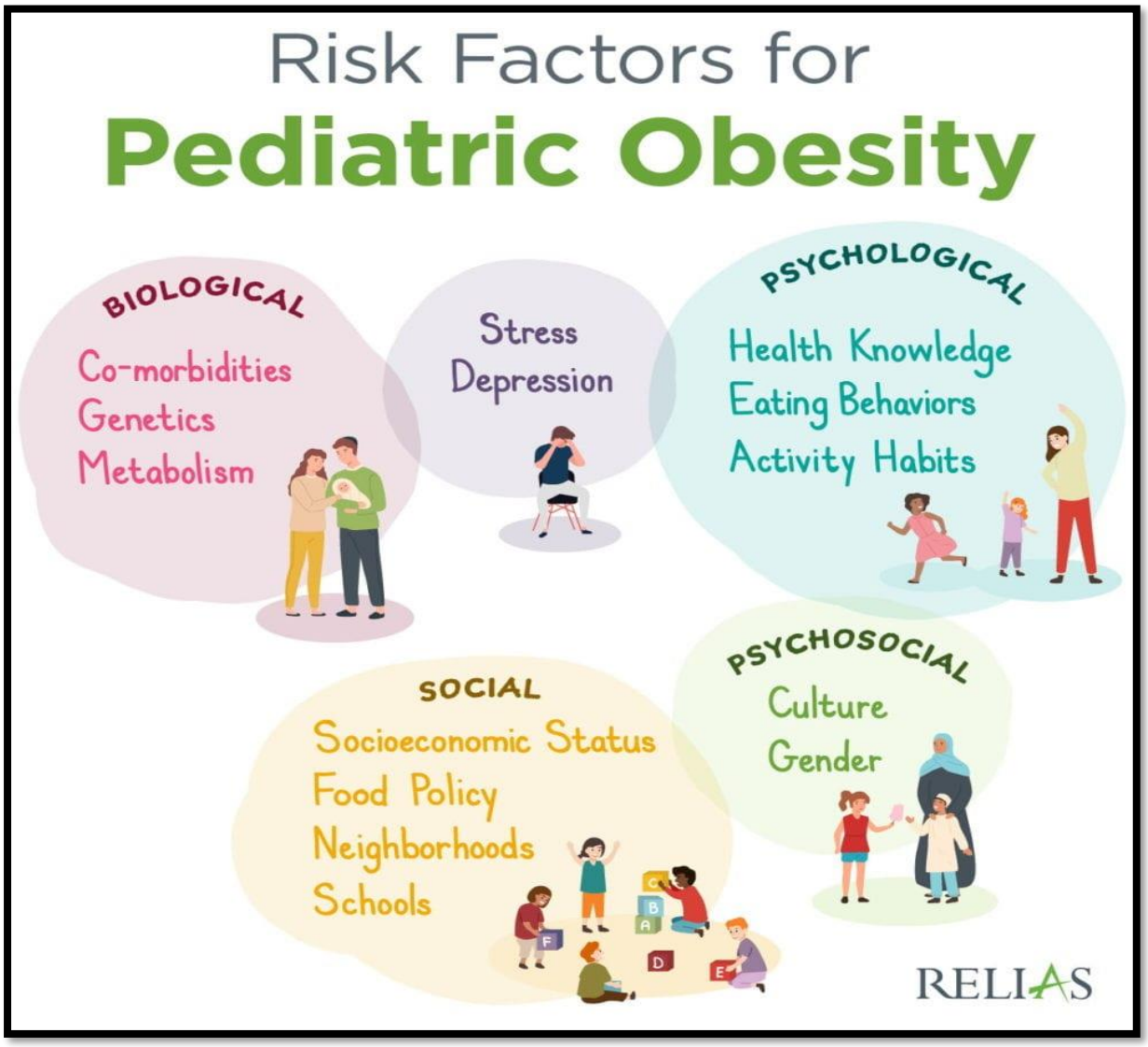

Figure 4: Risk factors of Pediatric obesity (Relias, n.d.)

5. Population at Risk and Health Needs Assessment

Epidemiological and health needs assessment studies indicate that children in Year 6, aged 10 to 11, in the London Borough of Hackney are at the highest risk of obesity. The National Child Measurement Programme shows that children from disadvantaged backgrounds and with strong social patterns are more likely to be obese (Office for Health Improvement and Disparities, 2025).

Local Joint Strategic Needs Assessments also reveal additional risks for ethnic minorities and for children in areas with many fast-food outlets (Public Health England, 2024). Older

children are more likely to be obese, especially those in Year 6 (World Health Organization, 2022). This highlights the need to focus on disadvantaged groups.

6. Types of Public Health Surveillance for Childhood Obesity

Types of Public Health Surveillance for Childhood Obesity England's main surveillance program for childhood obesity is the National Child Measurement Programme (NCMP).. This is an annual survey of children's height and weight (OHID, 2015). A small number of schools may undertake sentinel surveillance for local intelligence.

It provides **passive, population-level surveillance.**

NCMP data is **cross-sectional**. This allows estimation of prevalence but not causation. It is the most reliable national dataset for tracking obesity trends in children.

In addition, local research and targeted interventions use **active surveillance**, gathering detailed behavioral data on diet and physical activity. Selected schools may also conduct sentinel surveillance for deeper local insights.

Syndromic surveillance has an indirect impact by tracking other risk factors such as physical activity and nutrition.

7. **Public Health Impact**

7.1 Short-Term Impact

The short-term impact of obesity is:

- insulin resistance and metabolic disease in childhood
- hypertension and lipid problems in childhood
- less active and involved in school life

Psychologically, obesity is associated with:

- fat shaming and bullying
- higher rates of depression and anxiety higher rates of depression and anxiety
- poor self-esteem and engagement at school (PHE, 2024)

7.2 Long-term effects (life-course epidemiology)

It includes increases risk of:

- type 2 diabetes
- cardiovascular disease
- metabolic syndrome
- premature mortality (WHO, 2022)
- The good news is this is preventable disease, so failure to act early is a missed opportunity for primary prevention.

8. Epidemiological and Health Intervention Programme (Multi-Level) Design

8.1 Intervention Programme (Ecological, Multi-Level Approach)

The reason of obesity is various in hackney so we can not focus one intervention but multiple interventions are needed to improve it.

i. Structural-Level Interventions (Upstream)

- ✓ Greater HFSS (high fat, salt, sugar) zoning around schools
- ✓ Higher taxes on and regulation of exposure to marketing of ultra-processed foods
- ✓ Land use policies to promote safe green recreational areas
- ✓ Subsidies for healthy foods in disadvantaged communities (food equity).

2. Community Level Interventions

- ✓ “Healthy Hackney Schools Partnership" with required daily exercise targets
- ✓ Cooking and nutrition skills education co-developed with parents
- ✓ Breakfast in schools to address energy deficit from food insecurity

3. Downstream Support (Individual-level Interventions)

- ✓ Targeted national health service (NHS) child weight management programmes with behaviour and psychological support
- ✓ Family-based (rather than child-only) lifestyle interventions
- ✓ Use of wearable devices for monitoring activity and eating behaviours

8.2 Anticipated Epidemiological Effect (Effectiveness)

Epidemiologically, effectiveness of the intervention will be measured in terms of:

- ✓ Decline in NCMP measures of obesity (trends in Year 6 cohort over 3-5 years)
- ✓ Change in the BMI distribution curve (population level, rather than individual) downward shift
- ✓ Shrinking of obesity inequality gap (trends in most and least deprived quintiles)
- ✓ Proxies of healthy behaviour (fruit/vegetable consumption, physical activity, high-fat, sugar, salt (HFSS) consumption)

Expected Outcomes

The intervention will have an impact if it results in:

- ✓ A shift in the population distribution of BMI to the left (population health gain model)
- ✓ A decrease in the number of new obese cases (primary prevention model)
- ✓ A reduced social gradient in obesity (reduced health inequity)

But the full effect is likely to be seen only over a longer epidemiological time frame (5-10 years) because of life course embedding of risk.

Strength of the Epidemiological Analysis

The epidemiological approach in this study has a number of advantages:

- Inference on population level: NCMP data enables monitoring of obesity trends on the population level
- Inequality assessment: allows assessment of gradients of obesity by level of deprivation

- Risk factor triangulation: allows triangulation of environmental, behavioural and biological risk factors
- Policy relevance: enables measurement (BMI, prevalence) to assess policy impact

Crucially, this permits transition from disease diagnosis to preventive population health policy (population health strategy) - critical for chronic diseases.

Critique of the Epidemiological Approach

While useful, there are a number of limitations of this approach:

1. NCMP Data limitations

- BMI is a sub-optimal measure of adiposity - does not measure fat distribution, or body composition
- Cross-sectional study is of limited value in establishing causality
- Possibility of under-representation as coverage is not 100%

2. Classification and Measurement bias

- Children's BMI cut-offs differ for age and sex
- May not account for cultural and ethnic differences in body composition

3. Confounding and Causal Ambiguity

- Socio-economic, dietary and physical activity factors are not independent variables
- Residual confounding cannot be excluded with observational data

4. Ecological Fallacy Risk

- Area-based measures of deprivation (e.g. Hackney averages) may mask within-area variability, and overgeneralise

Overall Critical Synthesis:

Epidemiology provides a strong way to understand population profiles and influence policy. However, it falls short in explaining the individual causes of health issues. The best understanding of public health relies on combining three approaches:

- ✓ **Epidemiological surveillance (NCMP trends)**
- ✓ **Social determinants conceptualization (structural causation)**
- ✓ **Modeling of ecological systems (multi-level causation)**

This means that interventions should not only measure the prevalence of obesity but also explore the social and environmental factors that contribute to it.

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