



Module: Social Epidemiology and Public Health Development

Module code: LCHS7000

**Assignment Title (Component 2 Analytical Report):
Ageing, Health Inequalities, and Diabetes: Public Health
Analysis**

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Task 1: Social Epidemiological Analysis

Title:

Age and Health Inequalities among the ageing segment (65 and above) of society in the UK

Introduction:

The target group selected for this report is the ageing segment of people aged 65 and above in society in the UK. This ageing group is selected as this group is driven by socio economic health inequalities and deprivation in the UK.

Contextual background and underlying factor:

3 diseases/illnesses

Low rates of access to healthcare

Low access to healthcare for UK residents aged 65+ is influenced by several factors, including social isolation, digital exclusion, lack of effective year giving support, and lack of specialised services. Inadequate transportation support and inadequate support in accessing digital health technology created a barrier for older adults to access effective Healthcare support according to the need.

High rates of mental illness

In the UK, the aging population suffers from common mental health disorders like depression and anxiety. According to the data presented by Age UK (2022), mental health problems are a common phenomenon in the old age population, as around 22% men and 28% aged 65 ever suffer from mental health disorders like depression and bipolar disorder. It is estimated that almost 85% of older people with depression received no support and assistance from the NHS as identified in the website of Mentalhealth.org.uk (2024). The factors that affect the mental health and wellbeing of older people in the UK are lack of participation in meaningful activities, discrimination, lack of effective Physical health, lack of effective relationships, and poverty (refer to figure 1).

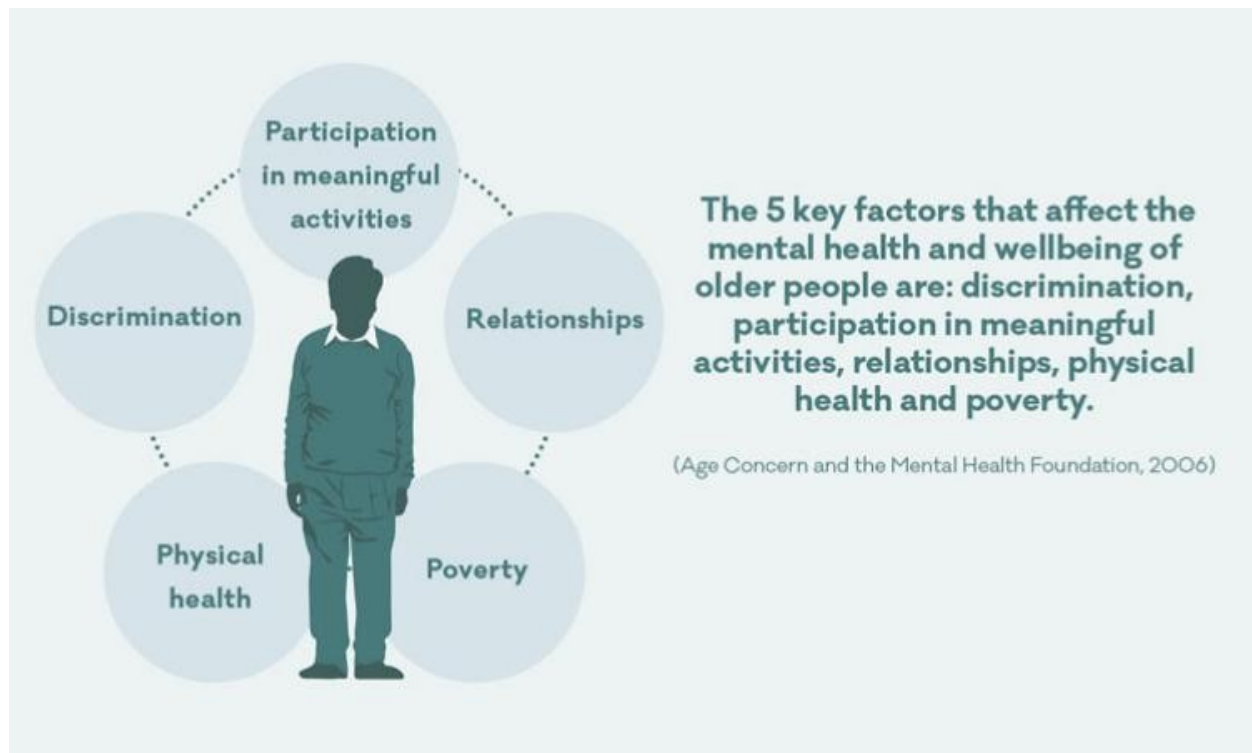


Figure 1: factors that affect the mental health and well-being of older people

(Source: Mentalhealth.org.uk 2024)

Mortality rates among the elderly group

The mortality rates of elderly people aged 65+ are significantly higher than those of other age groups, which is largely driven by age related chronic illness (Politis *et al.*, 2024). According to the data of Age UK (2022) 28,655 older people aged 65 and above died in 2022 to 2023 due to a lack of social care. The number is equivalent to an average of 79 deaths/day, 550/week and 2388/month (Age UK, 2022). Inadequate care workers who assist older people with sufficient care causes challenges in providing effective care giving support (Ahmad *et al.*, 2022).

3 social issues:

Social isolation and loneliness

Older people aged 65+ are vulnerable to social isolation and loneliness. More than 2 million people in England over age 75 live alone and spend time without any communication with friends, family, and neighbours (NHS UK, 2022). This loneliness and social isolation can lead to depression and serious health decline in retaining physical and social wellbeing (NHS UK, 2022). By 2034, 1.2 million people over the age of 65+ in England will feel lonely. 7% of 1 in 14 people aged 65+, equivalent to 940,000 older people in the UK, feel lonely (Age UK, 2024). Almost 270,000 of older people aged 65+ in England spend a week without talking to friends and family members, which leads to loneliness and social isolation (Age UK, 2024).

Housing issues

Older people aged 65+ face a housing crisis and struggle to live in a home that is unsuitable for their physical needs, which can create loneliness (The Guardian, 2025). Around 50% of older people in England face homelessness (The Guardian, 2025). The housing issues create challenges for the population to live in stable and suitable conditions, which creates a risk of social isolation (Watkinson *et al.*, 2024). This causes health inequalities among older people, which impacts overall health and well-being.

Poverty

The old age population aged 65 and above suffers from poverty due to several factors like old age illness, bereavement, redundancy, and relationship breakdown (Age UK, 2022). Around 8% of ageing pensioners in the UK do not have enough resources to afford the basic things which are required to live comfortably (Centre For Ageing Better, 2025).

National Response to reduce health inequalities in the old-age population aged 65 and above in the UK:

The NHS Core20PLUS55 Approach framework aims to assist solutions by reducing health inequalities of deprived populations, which includes the older population (NHS Core20PLUS5 (adults), 2022). The national response to reduce health inequalities is related to the lack of integrated care and the target of social care reform. The Care Act 2014 assists framework that supports enhancing life expectancy among older adults (Watkinson *et al.*, 2024). The UK government prioritises improving healthy life expectancy among older adults (UK Parliament, 2024). The NHS older adult programme is guided by the NHS long term plan effectively prioritises integrated and effective care by supporting the mental health of old age generation through its effective community-based services (NHS Older people, 2024). The key initiatives here include care planning, addressing isolation and loneliness through effective community engagement (NHS Older people, 2024).

Organisations that support the chosen group:

Multiple organizations in the UK support assistance to the old age population aged 65+ to combat mental and physical challenges. 'AgeUK' is the best-known charitable organization that assists companionship to the elderly people. 'The Silver Line' assists people to combat the loneliness of people over 65+. Additionally, 'Independent Age' is the charitable organization that offers support and volunteer companionship to the older people (McCarthyandstone, 2025). Time to talk befriending provides opportunities for genuine socialising for the people. Another organization, Reengage increase social connections and reduce loneliness of older people. Lack of financial support also causes health inequality among older people. There are

organizations which are 'Independent Age, Turn2us, The Money Charity that assist and support. Organisations like Alzheimer's Society, Dementia UK, Friends for the Elderly help in assisting health and specialised care to the older adults (McCarthyandstone, 2025).

Conclusion:

It can be concluded from the overall discussion that the selected population faces health inequalities due to lack of participation in meaningful activities in society, societal discrimination, lack of effective Physical health, lack of effective relationships, and poverty, which has impacted their physical and mental wellbeing. However, with integrated care and supportive assistance, the population can be supported.

Task 2: Epidemiological Analysis

Managing Type 2 Diabetes in the London Borough of Tower Hamlets for the ageing segment (65 and above) of society in the UK, with a strong epidemiological plan

Introduction

According to the CDC Foundation (2022), a public health problem is a medical issue that affects a significant portion of any specific population. As a regional epidemiologist dealing with a major public health problem of the non-communicable disease, which is Type 2 Diabetes in the London Borough of Tower Hamlets, the ageing segment (65 and above) of society in the UK has been selected for discussion. Type 2 diabetes is a chronic metabolic condition that elevates levels of blood glucose (Bielka *et al.*, 2024; WHO Diabetes, 2024). Type 2 diabetes has socio cultural and health consequences. Socially, it reduces the quality of life, creates discrimination that sometimes creates social isolation. Culturally, the dietary and lifestyle patterns can cause the disease (Mathu *et al.*, 2022). Health consequences of Type 2 diabetes include vision loss, blurred vision organ damage, kidney disease, cardiovascular disease, and several psychological distress (NIH, 2024).

Type 2 diabetes is a severe, escalating global health crisis. According to the International Diabetes Federation (2024), around 589m adults are living with diabetes. According to Diabetes UK (2024) almost 4.6m people suffer from diabetes in the UK. Number of individual registered for Type 2 diabetes is higher than type 1.

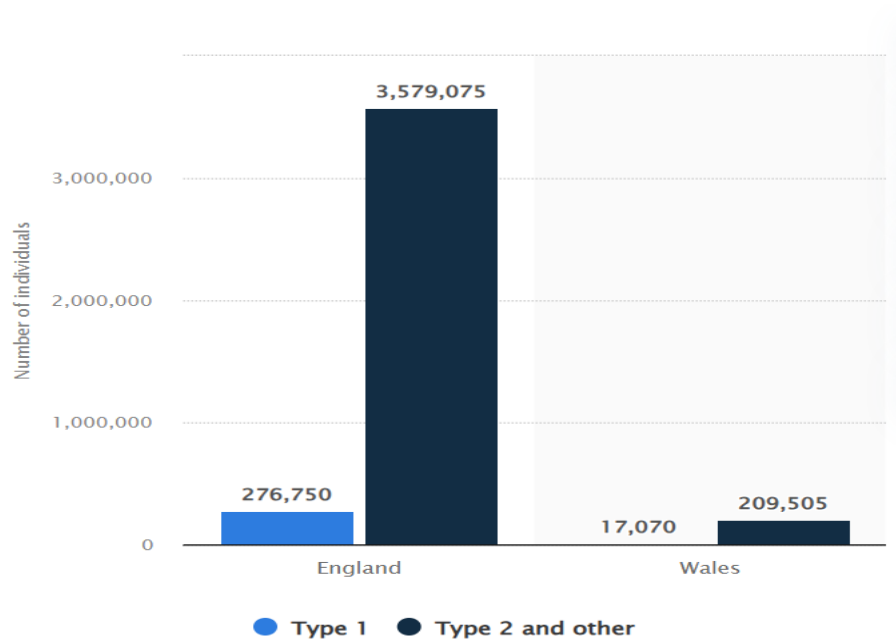


Figure 2: Number of individual registered for Type 2 diabetes

(Source: Statista 2026)

The London Borough of Tower Hamlets in the UK has the highest prevalence of type 2 diabetes.

Main Body

Public health measures in the Type 2 Diabetes in the London Borough of Tower Hamlets to contain, manage, treat, and reduce/control the impact of the health problem on the target population drawing on the 3 P's

Prevention	Protection	Promotion
To prevent Type 2 Diabetes in the London Borough of Tower Hamlets in the UK, several community-based lifestyle programmes, such as the NHS Diabetes Prevention Programme, the Community Specific diabetes prevention program, the weight management and nutritional counselling programme, improving diet controlling program can be helpful	Routine screening for blood glucose monitoring, insulin management, vaccination programme along with the development of several integrated care pathways for regional diabetes prevention can be optimally helpful in managing and treating type 2 diabetes. Tower Hamlets GP Care Group creates public awareness for reducing side effects related to diabetes like Kidney issue, cardiovascular disease and BP issue. Tower Hamlets GP Care Group improves health and wellbeing of residents.	Health promotion can be possible through empowering the target population for Tower Hamlets. Several patient education programs can help in optimizing better management and treatment of diabetes in the particular age group. Additionally, culturally appropriate health promotion campaigns can foster community engagement practices. Tower Hamlets GP Care group assists educational materials in various ethnic languages to promote the management of Type 2 diabetes

Key determinants/risk factors of the chosen disease/health issue

The key determinant factors include ageing, ethnicity, social isolation, socio economic deprivation, lifestyle factors (Shamsutdinova *et al.*, 2023). For instance, family history, genes of the population in Tower Hamlets create a risk factor for type 2 diabetes. Socio economic deprivation, like lack of opportunities for equal earnings act as a barrier to following a healthy lifestyle and buying healthy nutritional food items. This unhealthy consumption and food choices cause a risk of type 2 diabetes for the population.

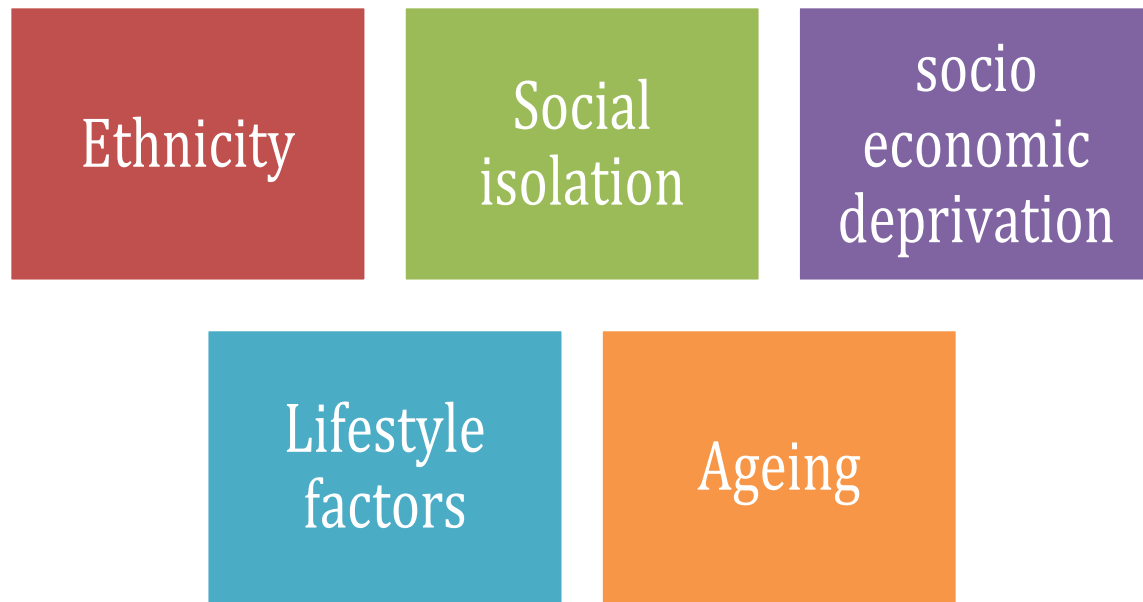


Figure 3: key determinant factors for type 2 diabetes

(Source: self-made)

Epidemiological studies and a health needs assessment

Through epidemiological studies and HNA, it is found that the majority of the population living in Tower Hamlet of the population belong to the South Asian Bangladeshi Community (Tower Hamlets Borough Profile, 2024). The lifestyle and food choices of this community make them prone to diabetes (Public Health England, 2018). The South Asian Bangladeshi Community lives in the London Borough of Tower Hamlets (Habib, 2026). This South Asian Bangladeshi Community sometimes faces socio-economic challenges like social deprivation which also causes type 2 diabetes. For crafting HNA, a culturally sensitive diabetes prevention program could be taken into consideration (Ronaldson *et al.*, 2022). An integrated culturally sensitive support program for the old-age targeted population could be considered. The individual with obesity, poor food choices and a sedentary lifestyle could be targeted. For collecting data for HNA, digital datasets, hospital statistics, GP records and NHS digital records could be taken into account.

Explanation of the main public health approaches and strategies

An integrated surveillance Framework is required for older adults in Tower Hamlets. A routine surveillance system that assists the estimation of incidence and prevalence for the old age group 65+ for effective epidemiological monitoring is required. Through routine surveillance data related to age, lifestyle, and ethnicity can be collected. The comprehensive national dataset tracking can help in tracking the diabetes care process and outcomes. Active surveillance screening strategies like the NHS Health Check-up Programme that fostered GP screening of

the target population could be considered. Epidemiological studies like cross sectional and cohort studies that collected data for ethnic communities to track the health of the elderly population can be considered. Population Health Surveillance and Local Intelligence can be included as it can help in type 2 diabetes prevention through understanding the health inequalities of the particular socio economic targeted group.

Planning and using epidemiology to determine the public health impact/short- and long-term consequences/effect of the disease

To effectively determine public health, a strong community-based lifestyle intervention program can be curated to address the needs (Mallik *et al.*, 2026). The community-based lifestyle intervention program that can be developed by understanding the lifestyle, food choices, socio economic condition of the particular demographic target population in the London Borough. The data sources that could be trusted for making the plan can be National Diabetes Statistics, data taken from GPs, and data taken from the Office for National Statistics. To measure the public health outcomes, epidemiological indicators could be considered. These indicators can calculate the total burden of diseases of the targeted population.

Short Term consequences	Long-term consequences
• The short-term consequences involve 2-3% of lifestyle modification of the population facing diabetes • High rates of hospital admission due to the growing concern over type 2 diabetes of targeted age group • Another short-term consequence involves effective consultation with the GP regarding symptom management	• The long-term consequences involve long term improvement in the quality of life • Changes in food choices of the targeted population having type 2 diabetes • Reduction of cardiovascular and other comorbid diseases

Health intervention programme and evaluation of the impact(s) of any proposed intervention(s)

The health intervention is designed for older adults in Tower Hamlets age 65+ as this age group has focused on multiple aspects and complications that led to increase of type 2 diabetes. Considering the socio economic and cultural aspect, the proposed intervention here is - community based culturally sensitive intervention delivered to the local community of older adults in Tower Hamlets age 65+. In the intervention community based activities that can increase quality of life and reduce social isolation can be fostered. The intervention can also ensure encouraging physical activities among older adults.

Evaluation of the proposed impact

Measure	Metric	Method	Anticipated impact
Primary care data from clinical visits (Department of Health and Social Care, 2025)	Monitor the blood glucose level of the target population	Electronic records of data stored by GP	Reduce blood glucose level
Secondary clinical visits	Monitor the weight management of targeted population	Electronic records of data stored by GP	weight management
Social	Reduction of social isolation and loneliness	Questionnaires	Reduction of social isolation and loneliness
Behavioural visit	Monitor the Life style improvement	Questionnaires	Effective physical activity

Strengths and weaknesses of the epidemiological approach

The strength of the epidemiological approaches includes a strong epidemiological foundation, culturally specific data sources, and integration of clinical care and social support. The Development of targeted intervention, understanding the socio-economic barriers, can be considered as another strength of the epidemiological approach. Understanding systematic challenges of the targeted population is another strength of the abdominal approach. The routine surveillance system described can help in disease prevention along with reducing the complication rate.

The weakness of the epidemiological approach leads to a lack of detailed information regarding the social economic barriers to loneliness and isolation. Lack of evidence-based detailed information on diet and lifestyle, which act as a primary driver of type to diabetes of the targeted population can be considered as another weakness. The lack of evidence-based approaches of cultural belief of the specific target and population of the London borough can be termed as weakness (Department of Health and Social Care, 2025). Additionally, multimorbidity and other complicated challenging systems that cause type to diabetes in older adults in the London borough have not been accurately described due to lack of evidence-based population-level information which can be considered as another weakness. On the other hand, epidemiology focuses on the population level with sometimes lead to the neglect of the individual psychological level of experience is which can also be termed as weakness.

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