

Final analytical report tuberculosis

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Analytical Report

**Social Epidemiology and Public
Health Development
(LCHS7000)**

Ethnicity and health inequalities

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Part-1

Introduction

Ethnicity and health inequalities are ideas that are interconnected in that they emphasise discrepancies in health outcomes and access to healthcare services across various ethnic groups within a community (Robertson et al., 2021).

Ethnicity refers to a group's common cultural characteristics, such as language, rituals, and historical legacy. It has an impact on how people identify themselves and are seen in society. Health inequalities, on the other hand, refer to the disparities in health status and healthcare utilisation that exist across diverse ethnic groups (Government of Canada, 2021).

Potential risks related with ethnicity and health disparities are complex. Socioeconomic status is a major predictor, with marginalised ethnic populations frequently experiencing poverty and restricted access to education, resulting in fewer healthcare options (Commission on Race and Ethnic Disparities, 2021). Cultural ideas and practises may impact healthcare-seeking behaviours, causing medical interventions to be delayed or insufficient.

Language limitations and cultural misconceptions may inhibit good communication between healthcare personnel and patients, lowering the overall quality of care. Furthermore, unequal healthcare resource allocation and institutional biases within healthcare institutions create health inequities (De Varennes, 1997).

To address these concerns, a holistic strategy is required that takes into account the socioeconomic determinants of health, promotes cultural sensitivity in healthcare delivery, and advocates for fair access to healthcare resources and opportunities for all ethnic groups.

In the United Kingdom, there are severe disparities in the health of different ethnic groups, with persons from particular ethnic minority origins having poorer health than their White counterparts (ageing-better.org.uk, 2023).

Four most important health and social inequalities

Access to Healthcare: Unequal access to healthcare services is one of the key health inequities that diverse ethnicities experience. Minority populations' access to adequate healthcare can be hampered by factors such as language hurdles, cultural differences, financial restraints, and prejudice. Access to healthcare facilities and health insurance is limited, resulting in delayed diagnosis and treatment, aggravating health inequities (World Health Organisation, 2018).

Chronic Diseases: Certain ethnic groups are more likely to develop chronic diseases such as diabetes, heart disease, and hypertension. These health inequities are exacerbated by genetics, lifestyle factors, and socioeconomic differences. African Americans and Hispanics, for example, have a greater chance of acquiring diabetes than Caucasians in the United States (Alegria et al., 2018).

Mental Health Stigma: Mental health disorders are frequently stigmatised in many cultures, resulting in underreporting and poor mental health support for minority communities. Stigma and misunderstandings about mental health can deter people from getting assistance, resulting in untreated disorders and poorer health consequences (www.who.int, 2014).

Social Determinants of Health: Social determinants of health, including education, work prospects, housing, and environmental variables, have a significant influence on the health of ethnic populations. Discrimination, poverty, and a lack of representation can result in limited access to resources and opportunities for specific ethnic groups, resulting to health inequalities (Riley, 2012).

Addressing these health and societal challenges demands a multifaceted strategy. Governments and healthcare institutions must work to offer culturally appropriate care, promote health literacy, and improve access to healthcare services.

Statistics

Various statistical gaps indicate racial and health disparities. Certain ethnic groups, for example, may be more prone to chronic diseases such as diabetes and cardiovascular disease. Access to healthcare services is disproportionately limited for certain ethnicities, leading in delayed diagnosis and treatment (Raleigh and Holmes, 2021). Mental health disparities are also widespread, with stigma impacting help-seeking behaviours. Income, education, and living conditions are all socioeconomic factors that have a significant impact on health outcomes. As a result, minority populations suffer greater rates of illness and mortality. To overcome these disparities, targeted initiatives, health laws, and increased awareness are necessary to promote equitable healthcare for all ethnicities (Raleigh and Holmes, 2021).

In England, there are health inequalities between ethnic minority and white populations, as well as across different ethnic minority groups. The issue is difficult, both within ethnic groups and across different situations.

People from the White Gypsy or Irish Traveller, Bangladeshi, and Pakistani groups, for example, have the lowest health outcomes across a variety of criteria (Raleigh and Holmes, 2021).

Black and South Asian populations had higher rates of neonatal and maternal mortality, cardiovascular disease (CVD), and diabetes than white groups. White populations had the highest rates of cancer, dementia, and Alzheimer's disease.

National response to reduce ethnicity and health inequalities:

Address ethnicity and health disparities through data collecting, monitoring, and culturally competent healthcare. Provide language access services and involve ethnic groups in decision-making. Address socioeconomic variables, provide culturally appropriate treatments, and enhance health literacy. Encourage diversity in healthcare leadership, minimise stigma and prejudice, and tailor treatments to at-risk groups (Public Health England, 2018) . Improve healthcare availability and affordability while lobbying for legislative reforms that prioritise lowering inequities and addressing socioeconomic determinants of health. Collaboration among healthcare experts, legislators, community leaders, and ethnic groups is critical for successful and long-term solutions (Public Health England, 2018).

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PHE: PHE has played a critical role in spearheading efforts to alleviate ethnic health disparities. It has done research, produced papers, and offered assistance to identify and tackle unique health concerns encountered by various ethnic communities (Phe.gov, 2019).

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The NHS Long Term Plan: The NHS has committed to reducing health inequities by providing targeted support to ethnic minorities. This involves increasing access to healthcare services, enhancing cultural competency among healthcare practitioners, and removing obstacles to healthcare utilization (NHS England, 2019).

Discrimination Policies: Legislation has been reinforced to combat discrimination and racism in healthcare settings, ensuring that all patients, regardless of race, get fair and equal treatment (GOV.UK, 2023).

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Equality Act: The Equality Act of 2010 establishes a legal framework to protect individuals from discrimination while also encouraging equality in healthcare (Legislation.gov.uk, 2010).

Organisations that support ethnicity and health inequalities

Several organisations in the United Kingdom are devoted to tackling ethnicity and health disparities in order to build a fair and inclusive healthcare system. The "Race Equality Foundation," which works to reduce ethnic health inequalities, is one such organization (www.london.gov.uk, 2023). They collaborate with health and social care providers to increase access to services, create awareness, and promote best practises in healthcare provision for ethnic minority groups.

Another prominent organisation is "Doctors of the World UK." This organisation provides critical medical treatment to vulnerable people, particularly ethnic minorities, who encounter challenges to healthcare access. They push for legislative reforms and seek to make healthcare more equal for all people, regardless of race or immigrant status (Doctors of the World, 2018).

Furthermore, the "Health Equality and Rights Organisation" (HERO) aggressively targets health disparities in ethnic minority populations (register-of-charities.charitycommission.gov.uk, 2023). They do research, advocate for legislation, and teach healthcare personnel to improve cultural competency and sensitivity.

These organisations are critical in combating systematic prejudice, advocating policy reforms, and creating culturally competent healthcare practises. They help to create a healthier and more inclusive society in the UK by actively supporting ethnicity and health disparities.

Organizations goals and role in raising awareness:

Organizations working to minimize ethnic and health disparities focus on raising awareness through educational initiatives, community engagement, and advocacy (www.england.nhs.uk, 2023). Their state organization's aims include fostering cultural awareness in healthcare, resolving gaps in access to excellent healthcare, and advocating legislation to provide fair healthcare for all ethnicities. Charities play an important role in sponsoring activities that target marginalized populations, giving resources for health screenings and immunisations, and providing assistance to those suffering health issues owing to ethnic differences (www.england.nhs.uk, 2023). Together, these initiatives promote a more inclusive and fair healthcare system, resulting in better overall health outcomes and a more peaceful society.

Conclusion

Government initiatives create awareness by addressing gaps in healthcare and improving cultural competency. They want to make healthcare more accessible and eradicate prejudice. Education is critical in creating empathy and understanding in order to effect change in public thinking (De Varennes, 1997). Diversity in healthcare professions promotes more culturally responsive care. Empowering communities to advocate for their own health needs and involve them in policy-making ensures that efforts meet the unique issues that various ethnicities experience. A national solution to these concerns advances social justice by assuring fair access to healthcare for everyone, while also benefiting society by improving overall health outcomes and promoting a more inclusive and harmonious community (www.england.nhs.uk, 2023).

PART-2

Tuberculosis

Introduction

responsibilities of a regional epidemiologist involve researching, monitoring, and analysing patterns of illness and health problems in the community. Also investigate the underlying causes of a major public health issue, devise evidence-based preventative and control methods, engage with healthcare experts and authorities, and convey results to the public and policymakers (Weed and Mink, 2002).

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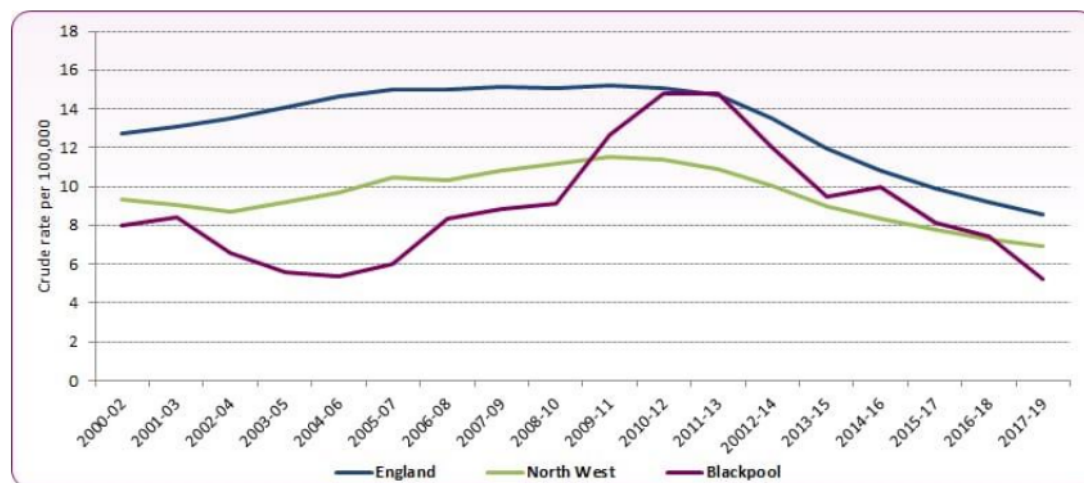
Definition

Tuberculosis is a bacterial infection transferred by breathing small droplets from an infected person's coughs or sneezes (www.who.int, 2023).

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The lungs are the most affected. It can, however, damage any organ of the body, including the glands, bones, and neurological system (www.who.int, 2023). The most common variety of tuberculosis is TB that affects the lungs, although it normally spreads only after extended exposure to someone who has the sickness. It frequently spreads among a family who lives in the same residence, for example.

Over the last two decades, tuberculosis has resurfaced as a severe public health issue in the United Kingdom (www.blackpooljsna.org.uk, 2023).



Social and cultural consequences of tuberculosis

Tuberculosis has serious social and cultural implications. Stigmatisation of afflicted people may occur, obstructing treatment-seeking behaviour and social integration. Discrimination may occur in affected populations, resulting in limited access to resources. Cultural attitudes may influence illness perception, influencing preventative measures and healthcare seeking, and therefore continuing the transmission cycle (Rubel and Garro, 1992).

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Sign and symptoms of TB

Persistent cough that lasts for more than three weeks.

Coughing up blood or bloody sputum.

Chest pain or discomfort.

Fatigue and weakness.

Unintentional weight loss.

Loss of appetite.

Night sweats.

Fever and chills.

Shortness of breath.

Swollen lymph nodes (Mayo Clinic, 2021).

Prevalence of tuberculosis

World-wide

45 The World Health Organisation (WHO) estimates that there were 10 million new cases of TB globally in 2019. Although the worldwide burden of tuberculosis is steadily decreasing, it remains a major source of illness and mortality, particularly in low- and middle-income nations (Bagcchi, 2022).

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In the United Kingdom

34 The incidence of tuberculosis (TB) in England was 7.8 per 100,000 people, which was less than the World Health Organisation (WHO) criterion for a low incidence nation (less than or equal to 10 per 100,000 population) (GOV.UK, 2023).

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Since 2011, the overall incidence of tuberculosis in England has declined, although the rate of decline is decreasing.

Main body

Public health measures for tuberculosis

Screening and Diagnosis: Create targeted tuberculosis screening programmes for elderly people, particularly those in long-term care institutions and nursing homes. Early identification can aid in quick treatment and the prevention of future spread (GOV.UK, 2023).

Education and Awareness: Run educational initiatives to educate older people, carers, and healthcare professionals about tuberculosis symptoms, risk factors, and the significance of obtaining medical attention if symptoms appear (GOV.UK, 2023).

Infection Control Measures: Implement infection control policies in hospital settings to reduce the spread of tuberculosis. Adequate ventilation, mask usage, and isolation of TB patients can all assist to keep the illness from spreading (GOV.UK, 2023).

Vaccination: Encourage older persons to get the ⁵¹Bacille Calmette-Guérin (BCG) vaccination, which has been found to protect against severe forms of tuberculosis (TB).

Contact Tracing: Conduct contact tracing to identify persons who may have been exposed to tuberculosis by infected elderly patients and give appropriate screening and preventative therapy (GOV.UK, 2023).

Invest in research to understand the special problems of TB in the elderly population, and monitor TB trends among older persons to inform focused interventions (GOV.UK, 2023).

Collaboration: Encourage collaboration among healthcare professionals, public health authorities, and community organisations to establish a holistic approach to tuberculosis prevention and control among the elderly population (GOV.UK, 2023).

By applying these steps, public health officials may help minimise the burden of tuberculosis on the elderly, improve patient outcomes, and prevent the illness from spreading further.

Risk factors of tuberculosis

Tuberculosis (TB) risk factors include impaired immune systems caused by HIV/AIDS, malnutrition, or chronic conditions. Close contact with active TB patients can promote transmission (CDC, 2019). Poverty, overcrowding, and poor access to healthcare heighten the

risk. Smoking, drug misuse, and alcohol intake impair lung function, making people more vulnerable. Age also plays a factor, with young children and the elderly being at increased risk. Furthermore, particular ethnic groups and individuals in poor nations are especially vulnerable (CDC, 2019). Inadequate TB control programmes and noncompliance with treatment both contribute to the disease's persistence. Addressing these risk factors is critical to preventing and controlling the spread of tuberculosis.

Epidemiological studies

Tuberculosis epidemiological studies on older populations seek to identify people infected or at risk of the illness. These investigations entail rigorous data collecting and analysis of important parameters such as age, comorbidities, and exposure to infected patients (Sulis et al., 2014). Researchers use a variety of methodologies, including surveys, medical records, and diagnostic tests, to examine the prevalence, incidence, and risk factors related with TB in the elderly. Understanding the special vulnerabilities of this age group allows public health officials to conduct focused interventions, early diagnosis, and suitable treatment options to minimise the incidence of TB and improve overall health outcomes for elderly people (Sulis et al., 2014).

Most common public health approaches and strategies:

Passive Surveillance: This strategy depends on healthcare professionals and laboratories to report detected tuberculosis cases in the elderly to public health authorities. It aids in the tracking of individual instances but may miss certain cases owing to underreporting (conflict.lshtm.ac.uk, 2023).

Active Surveillance: Public health officials aggressively hunt for TB cases in the elderly through frequent screening programmes and case finding activities. This method provides a more thorough identification of instances (conflict.lshtm.ac.uk, 2023).

Sentinel Surveillance: Focused on specific healthcare institutions or areas, this approach monitors tuberculosis incidence in a representative sample of the senior population, giving useful data for focused interventions (conflict.lshtm.ac.uk, 2023).

Case Registries: Electronic databases that gather and retain information on TB cases in the elderly allow for long-term surveillance, trend analysis, and intervention assessment.

Laboratory-based Surveillance: Monitoring TB incidence in the elderly through the study of laboratory data, such as molecular typing, medication resistance patterns, and culture findings, improves understanding of TB transmission and resistance trends (conflict.lshtm.ac.uk, 2023).

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Seroprevalence Surveys: These periodic surveys quantify the prevalence of tuberculosis infection in the senior population, assisting in the identification of locations with high transmission rates (European Centre for Disease Prevention and Control, 2022).

Rapid reaction teams examine TB outbreaks in aged care institutions, determining the source of infection and applying control measures (European Centre for Disease Prevention and Control, 2022).

By integrating these surveillance and monitoring methods, public health officials may establish focused strategies to prevent, diagnose, and treat tuberculosis in the senior population, therefore lowering mortality.

Public health impacts of tuberculosis

Public health implications: The purpose of these research is to evaluate the prevalence, incidence, and distribution of tuberculosis among the older population. Researchers may identify high-risk groups and devise focused preventive and intervention programmes to reduce the spread of the illness by analysing data on TB cases, transmission patterns, and risk factors (academic.oup.com, 2023).

Short-term consequences: Elderly people with tuberculosis frequently have more severe symptoms and complications, which leads to more hospitalisations and higher healthcare expenses. Epidemiological studies can aid in quantifying the impact of tuberculosis on healthcare systems and directing budget allocation for better patient treatment (Lawn et al., 2009).

Long-term consequences: Even after effective treatment, tuberculosis can have long-term repercussions on the elderly. Long-term effects of tuberculosis on lung function, quality of life, and the likelihood of acquiring chronic respiratory illnesses Such as COPD (Lawn et al., 2009).

Health intervention program and types of evaluation

Longitudinal assessment: Over a specified time period, this assessment will evaluate participants' health indicators such as BMI, blood pressure, cholesterol levels, and mental well-being to assess the intervention's long-term impact (Otero et al., 2016).

Controlled Trial Evaluation: A randomised control group will be utilised to evaluate the program's results with a non-intervention group, reducing potential biases and confounding variables (Wei et al., 2019).

Cost-effectiveness Analysis: This analysis will determine if the benefits of the intervention outweigh the costs of implementation (Yadav et al., 2014).

By utilising various evaluation approaches, the "Healthy Habits for Life" programme hopes to give thorough insights into its efficacy as well as significant data for programme modification and prospective expansion. The programme can contribute to healthier communities and lower healthcare costs through evidence-based outcomes, encouraging a positive change in population health.

Strength and weakness of public health approach

The "Healthy Habits for Life" program's strength is its holistic and complete approach to health promotion. It has the ability to promote long-lasting beneficial behaviour changes and enhance overall well-being by targeting several elements of individuals' lifestyles, including physical exercise, diet, stress management, and mental health (M. Guinn and J. Rubin, 2021).

One disadvantage of the programme might be its restricted reach and scalability. Reaching a big and varied audience may be difficult depending on the resources available and the capacity to conduct the intervention (Nutritools, 2019). To solve this, the programme may need to form strong alliances and collaborate with community organisations in order to provide more people with access to its services.

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