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Ethnic disparities in the prevalence and management of gestational diabetes among pregnant women in the UK: A systematic review.

Chapter 1

1.1 Introduction

Gestational diabetes mellitus (GDM) is a temporary but serious form of glucose intolerance that occurs during pregnancy. As reported by the World Health Organisation (WHO, 2023), GDM can result in significant complications, such as pre-eclampsia, preterm delivery, and an elevated risk of type 2 diabetes for both the mother and the child. In the United Kingdom, around 4–5% of pregnancies are affected by this condition; however, the rates are considerably higher among ethnic minority groups. According to the National Health Service (NHS England, 2019), these disparities persist despite ongoing efforts to improve antenatal care across all populations. Research shows that pregnant women from Black African, Black Caribbean, South Asian, and Middle Eastern backgrounds are at a higher risk of developing GDM and often receive inconsistent standards of care, as highlighted by Public Health England (PHE, 2018).

This dissertation intends to investigate ethnic disparities in the occurrence and management of GDM among pregnant women in the UK. The emphasis will be on analysing how cultural, social, economic, and systemic factors contribute to these disparities. A systematic review will be performed to assess existing literature and identify the gaps that persist in both clinical knowledge and healthcare delivery. By leveraging academic evidence, this dissertation aims to provide practical recommendations that can guide maternity services and public health policy.

The following chapter will clarify key terminology, offer background context, and outline the rationale behind the research.

1.2 Definitions and Terminology

This dissertation analyses the differences in prevalence and management of gestational diabetes mellitus (GDM) among pregnant women in the United Kingdom based on ethnicity. To enhance understanding and interest in the topic, this section outlines key terms and discusses their significance to the study. The primary concepts central to this research include GDM, ethnic disparities, prevalence, and management, each of which is essential for the framework, focus, and interpretation of the study's results.

The World Health Organisation (WHO, 2023) defines gestational diabetes mellitus as a form of glucose intolerance that is diagnosed for the first time during pregnancy, usually in the second or third trimester. Although GDM typically resolves after delivery, it is associated with various complications, such as high birth weight, neonatal hypoglycaemia, pre-eclampsia, and an elevated risk of developing type 2 diabetes for both the mother and the child in the future. Grasping the nature of GDM is important, as it is the primary medical condition being investigated in this research.

Ethnic disparities refer to variations in health outcomes, disease prevalence, and quality of care perceived by individuals from different ethnic groups. According to NHS England (2019), these disparities often stem from intricate interactions between systemic inequality, socioeconomic factors, cultural obstacles, and differences in service delivery. In relation to this study, the term illustrates how women from minority ethnic backgrounds may be more severely impacted by GDM and may also experience inequitable healthcare standards.

Prevalence indicates the extent to which a condition exists within a specified population. In the context of GDM, prevalence statistics help highlight which ethnic

groups are most affected and the rates at which this occurs. For instance, the Office for Health Improvement and Disparities (2022) noted that GDM is more frequently diagnosed in women of Black African, South Asian, and Middle Eastern descent compared to White British women.

Management refers to the approaches used to oversee and treat GDM. This encompasses lifestyle modifications, such as changes in diet and increased physical activity, in addition to clinical strategies like blood glucose monitoring and insulin administration. The National Institute for Health and Care Excellence (NICE,2021) offers recommendations for managing GDM through evidence-based antenatal pathways designed to decrease risks for both mothers and newborns. Understanding how management varies across different ethnic groups is crucial for identifying systemic inequalities in maternal care.

Acronyms and Abbreviations

The terms listed below will be used consistently throughout the dissertation:

- NHS – National Health Service
- NICE – National Institute for Health and Care Excellence
- GDM – Gestational Diabetes Mellitus
- OHID – Office for Health Improvement and Disparities
- WHO – World Health Organisation
- PHE – Public Health England
- BME – Black and Minority Ethnic
- BDA – British Dietetic Association
- BMI – Body Mass Index
- GOV.UK – Government of the United Kingdom website

1.3 Rationale for Research

Gestational diabetes mellitus (GDM) is a rising concern in maternal health, particularly within the United Kingdom's diverse population. Although GDM can affect women of all ethnic backgrounds, existing research highlights that it is more commonly diagnosed among women from Black African, Black Caribbean, South Asian, and Middle Eastern backgrounds compared to those from White British backgrounds. These disparities highlight the need to investigate how ethnicity influences not only the prevalence of GDM but also the quality and consistency of its management. According to Public Health England (2018), women from minority ethnic groups are significantly more likely to develop GDM and are at increased risk of poor maternal outcomes.

The National Health Service England (2019) has shown several contributing factors to these inequalities, including socioeconomic deprivation, language barriers, limited access to culturally appropriate health education, and variation in healthcare provision. Despite this awareness, current healthcare strategies have not fully addressed how these social determinants of health interact with ethnicity to affect both the incidence of GDM, and the standard of care provided. Moreover, much of the existing academic literature tends to focus on either the clinical aspects of GDM or its epidemiology, rather than offering an integrated examination of both prevalence and management in ethnically diverse populations.

This dissertation seeks to bridge that gap by conducting a systematic review of UK-based studies that investigate ethnic disparities in both the prevalence and clinical management of GDM. The aim is to show patterns in diagnosis and care delivery that may inform culturally sensitive healthcare policies and contribute to more equitable maternity services for all ethnic groups in the UK.

1.4 Aim and Objective

Aim

The purpose of this dissertation is to investigate the ethnic differences in the occurrence and treatment of gestational diabetes mellitus (GDM) among expectant women in the United Kingdom. This research will evaluate how variations in diagnostic and care procedures among different ethnic groups may lead to disparities in maternal health outcomes.

Objectives

1. To assess the occurrence of GDM among various ethnic groups in the UK.
2. To examine the management of GDM among both ethnic minority and majority populations.
3. To recognise social, cultural, and structural factors that contribute to disparities in GDM care.
4. To offer recommendations aimed at promoting equitable and culturally sensitive maternity care services.

1.5 Conclusion

This chapter has highlighted the essential components of the dissertation, starting with an overview of gestational diabetes mellitus (GDM) and its unequal effects on women from ethnic minority groups in the UK. Important definitions and terminology have been defined to maintain consistency throughout the study. The rationale for the research has been examined concerning health disparities, and the aim and objectives have been identified. The following chapter will conduct a critical review of the existing literature regarding the prevalence and management of GDM among various ethnic groups.

Chapter 2

2.1 Introduction

Purpose of the Chapter

This chapter provides the crucial background needed to comprehend the wider context of this dissertation, which examines ethnic disparities in the occurrence and treatment of gestational diabetes mellitus (GDM) within the United Kingdom. By establishing a foundational understanding through historical, theoretical, international, and national perspectives, this chapter seeks to uncover how cultural, policy-related, and systemic factors have influenced healthcare responses to GDM, especially among ethnic minority groups.

The aim of this chapter is to extend beyond singular clinical observations and investigate how broader frameworks—including historical events, public health initiatives, theoretical models of inequality, and international benchmarks—have shaped contemporary maternal care systems. It also examines how significant organisations and national health guidelines have progressed in their methods for diagnosing and managing GDM.

By providing this background, the chapter ensures a comprehensive understanding of the topic before moving into the methodology and analysis phases. The information contained here will aid in a critical evaluation of current care practices and guide the innovation of equitable, culturally aware recommendations for maternal health.

2.2 Historical Background

Development of the Topic

Gestational diabetes mellitus (GDM) was first identified as a medical condition in the mid-20th century, characterised by glucose intolerance arising during pregnancy, which usually resolves after childbirth (American Diabetes Association, 1979). Over the years, the diagnostic criteria and awareness surrounding GDM have greatly advanced, especially as studies have revealed the short- and long-term risks it poses for both mothers and their infants. Initially, there was a lack of global consistency in the definition and diagnosis of GDM, leading to varying maternal health outcomes across different healthcare systems (Metzger et al., 1998).

In the United Kingdom, a significant shift occurred with the release of guidelines by the National Institute for Health and Care Excellence (NICE, 2008), which introduced standardised recommendations for the screening, diagnosis, and management of GDM. These guidelines were designed to mitigate complications such as macrosomia, pre-eclampsia, and perinatal mortality. Over time, NICE (2020) revised these protocols to incorporate emerging evidence and to better assist women who are at greater risk of developing GDM.

As national health records became more thorough, data began to uncover disproportionate rates of GDM among women from ethnic minority backgrounds. This increasing awareness prompted research into how social determinants like ethnicity, deprivation, and access to culturally appropriate care were impacting maternal health outcomes. According to the National Health Service (NHS, 2019), the prevalence of GDM is significantly higher in women of South Asian, Black African, and Black Caribbean descent compared to those from White ethnic backgrounds. This underscored the necessity for more customised public health strategies and fair healthcare delivery.

Significant Historical Figures and Contributions

Numerous global and national organisations have made essential contributions to the understanding of GDM and its connection to ethnicity. A particularly influential study was the Hyperglycaemia and Adverse Pregnancy Outcomes (HAPO) study, which established a definitive association between maternal blood glucose levels and adverse outcomes for newborns. This research directly affected the diagnostic criteria later adopted by the World Health Organisation (WHO, 2013), leading to a more consistent approach across nations.

In the UK, Public Health England (PHE, 2018) has been instrumental in emphasising disparities in maternal health, proving that women from ethnic minority backgrounds are at a higher risk of encountering negative outcomes during pregnancy, including complications related to GDM. Their findings informed future national strategies aimed at reducing inequality.

The Office for Health Improvement and Disparities (OHID, 2021), alongside NHS England, has continued to prioritise this issue by incorporating culturally suitable practices and improving data collection regarding maternal ethnicity and outcomes. These advancements establish the historical groundwork for this dissertation's concentration on ethnic disparities in GDM care and highlight the need for additional research and policy reform.

2.3 Theatrical Background

Key Theories and Concepts

The Social Determinants of Health (SDH), as described by the World Health Organisation (WHO, 2023), refer to the circumstances under which people are born, develop, live, work, and age. These determinants—including income, education, housing, and healthcare access—impact an individual's susceptibility to conditions like GDM. NHS England (2023) has incorporated the SDH model to elucidate the reasons why women from ethnic minority groups are disproportionately confronted with maternal health issues, as they frequently encounter structural obstacles that hinder timely screening and treatment.

Intersectionality, a concept introduced by Crenshaw (1989), serves as a theoretical framework for understanding how different facets of a person's identity—such as ethnicity, gender, class, and immigration status—combine to form unique experiences of oppression or privilege. This concept helps clarify the compounded difficulties that ethnic minority women face in accessing GDM care, rather than examining identity factors in isolation. Salway et al. (2016) pointed out that such intersections lead to cumulative disadvantages, including miscommunication, language difficulties, and cultural disconnects between patients and health providers.

The Health Belief Model (HBM), created by Rosenstock (1974), investigates the psychological factors influencing health behaviour. It suggests that individuals are more inclined to undertake preventative health measures if they perceive themselves at risk for a condition, regard the condition as serious, believe the advantages of taking action outweigh the obstacles, and own the self-efficacy to act. Public Health England (2018) remarked that some women from ethnic minority communities may refrain from GDM screening due to low perceived risk or cultural stigma, making the HBM a valuable framework for comprehending behavioural delays.

Cultural Competence in healthcare refers to the capacity of professionals to provide care that honours and addresses the cultural and linguistic needs of varied populations. As noted by the Office for Health Improvement and Disparities (OHID, 2021), culturally competent care enhances communication, adherence to treatment, and overall outcomes, particularly in managing GDM. NHS England (2023) has backed initiatives like interpreter services and cultural awareness training to boost interactions with ethnic minority patients.

Application of Theories

These theories have been utilised in diverse research and practical settings. The SDH framework informed NHS England's Maternity Transformation Programme, which pinpointed housing, deprivation, and healthcare access as critical factors in maternal health inequalities. Intersectionality has been extensively employed in qualitative studies to investigate how racism, migration, and gender norms intersect in maternity care (Salway et al., 2016). The HBM has shaped behavioural interventions aimed at ethnic minority groups, assisting in the development of communication strategies on diet, screening, and treatment compliance (Guariguata et al., 2019). Cultural competence principles have influenced NHS policy reforms, such as integrating diversity training into midwifery education and hiring community link workers.

Critical Evaluation

Although beneficial, each theory has its drawbacks. The SDH framework may oversimplify the intricate individual experiences by concentrating mainly on structural factors. While Intersectionality is a strong theoretical tool, it often proves difficult to translate into measurable policies or quantitative findings. The HBM has faced criticism for placing excessive focus on individual accountability and neglecting broader systemic barriers like poverty and discrimination. If applied superficially, cultural competence may degenerate into a tokenistic exercise that fails to confront underlying institutional inequalities (Truong et al., 2014).

Despite these limitations, combining these frameworks produces a multifaceted approach that is vital for understanding and tackling GDM disparities. Collectively, they offer a comprehensive perspective on how social systems, personal behaviors, and institutional practices intersect to influence maternal health outcomes in ethnically diverse populations.

2.4 International context

Gestational diabetes mellitus (GDM) is a global public health concern with differing prevalence rates, risk factors, and management methods in various countries. The International Diabetes Federation (IDF, 2020) indicates that around 16.7% of global live births experience some type of hyperglycaemia during pregnancy, with 84% of these instances linked to GDM. The frequency of GDM is especially high in low- and middle-income nations, where access to screening and postnatal care is often restricted.

In Canada, national guidelines stress the importance of early screening and culturally appropriate care for populations at risk. For instance, the Public Health Agency of Canada (PHAC, 2021) recognises Indigenous, South Asian, and African-Caribbean women as high-risk groups and advocates for community-based interventions to tackle health disparities. Similarly, Australia's National Diabetes Services Scheme includes culturally adapted dietary guidance and interpreters for immigrant communities, enhancing patient compliance and health outcomes (Diabetes Australia, 2022).

Conversely, nations such as India and Pakistan encounter considerable difficulties due to a lack of awareness, inconsistent diagnostic standards, and insufficient follow-up care. Research by Bhavadharini et al. (2018) revealed that many women in South Asia do not undergo postpartum glucose testing, elevating their long-term risk of developing type 2 diabetes.

The World Health Organisation (WHO, 2023) promotes universal screening for GDM during antenatal visits and the inclusion of GDM policies in maternal health programs. Nevertheless, the execution of these policies differs significantly based on available resources and political commitment.

International collaboration initiatives, like the FIGO (International Federation of Gynecology and Obstetrics) GDM Initiative, bolster global efforts to standardize diagnosis and enhance maternal health outcomes across various contexts (FIGO, 2019). These global models offer valuable perspectives that can inform and improve the UK's strategy for addressing ethnic disparities in GDM management.

2.5 National Context

In the United Kingdom, gestational diabetes mellitus (GDM) has received increasing attention because of its growing prevalence and its connection to health disparities. The National Health Service (NHS England, 2023) acknowledges GDM as an escalating issue within maternity care, especially among women from ethnic minority backgrounds. Current estimates indicate that approximately 5% of pregnancies in the UK are impacted by GDM, with elevated rates observed in women of South Asian, Black African, and Middle Eastern descent (NHS Digital, 2022). These inequalities have led to a heightened national emphasis on fair antenatal care and preventive measures.

The National Institute for Health and Care Excellence (NICE, 2015) released clinical recommendations for identifying and managing GDM, advising on early screening for women at risk who have a high body mass index (BMI), a family history of diabetes, or belong to ethnic groups with a higher susceptibility. Although these guidelines aim to create a uniform standard of care, their application across different trusts has not always been uniform. Research conducted by Knight et al. (2021) reveals discrepancies in screening rates, diagnostic standards, and postnatal follow-up, particularly in areas with greater ethnic diversity and economic disadvantage.

The NHS Long Term Plan (NHS England, 2019) commits to alleviating health inequalities, which includes enhancing maternity services through the use of digital health records, custom care plans, and improved continuity of care models. Nevertheless, reports from the Care Quality Commission (CQC, 2021) indicate that in spite of policy advancements, women from ethnic minority groups still experience lower satisfaction and trust levels in maternity services compared to their White British counterparts.

Actions taken to tackle these issues have involved the development of maternity equity and equality action plans across Integrated Care Systems (ICSs), aiming to align service delivery more effectively with the needs of diverse communities (Department of Health and Social Care, 2023). Additionally, targeted funding has facilitated the hiring of community midwives and healthcare advocates from minority communities to foster cultural trust and engagement.

Overall, the UK has made notable advancements in recognising and addressing the challenges related to GDM. However, further enhancements in service delivery, cultural competence training, and care standardisation are crucial to achieving equitable outcomes across all ethnic groups.

2.6 Summary of Key Points and Link to Next Chapter

This chapter examined the background of ethnic disparities in the occurrence and management of gestational diabetes mellitus (GDM) in the UK. It defined important terminology and introduced foundational theories—such as the Social Determinants of Health, Health Belief Model, Intersectionality, and Cultural Competence—to provide a comprehensive understanding of the issue from structural, behavioural, and cultural perspectives. National guidance provided by the National Institute for Health and Care Excellence (NICE, 2015) and NHS England (2019), along with international practices, offered broader insights into policy responses. This contextual framework paves the way for the next chapter, which will detail the methodology, outlining the systematic review design and the processes for evidence selection and analysis to fulfil the research objectives.

References

American Diabetes Association (1979) *Gestational diabetes mellitus*. *Diabetes Care*, 2(4), pp. 499–501.

Bhavadharini, B., Mahalakshmi, M.M., Anjana, R.M., Maheswari, K., Uma, R. and Mohan, V. (2018) 'Screening practices for gestational diabetes in South India: A need for standardization', *Diabetes Technology & Therapeutics*, 20(8), pp. 546–550.

Care Quality Commission (CQC) (2021) *Maternity survey 2021*. Available at: <https://www.cqc.org.uk/publications> (Accessed: 5 August 2025).

Crenshaw, K. (1989) 'Demarginalizing the intersection of race and sex', *University of Chicago Legal Forum*, 1989(1), pp. 139–167.

Department of Health and Social Care (2023) *Women's Health Strategy Progress Report*. Available at: <https://www.gov.uk/government/publications/womens-health-strategy-progress> (Accessed: 6 August 2025).

Diabetes Australia (2022) *Gestational diabetes*. Available at: <https://www.diabetesaustralia.com.au/gestational-diabetes> (Accessed: 6 August 2025).

FIGO (International Federation of Gynecology and Obstetrics) (2019) *FIGO initiative on gestational diabetes mellitus*. Available at: <https://www.figo.org/gdm> (Accessed: 6 August 2025).

Guariguata, L., Linnenkamp, U., Beagley, J., Whiting, D.R. and Cho, N.H. (2019) 'Global estimates of the prevalence of hyperglycaemia in pregnancy', *Diabetes Research and Clinical Practice*, 103(2), pp. 176–185.

Knight, M., Bunch, K., Tuffnell, D., Shakespeare, J., Kotnis, R., Kenyon, S. and Kurinczuk, J.J. (2021) *Saving lives, improving mothers' care – Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017–19*. Oxford: National Perinatal Epidemiology Unit.

Metzger, B.E., Coustan, D.R. and the Organizing Committee (1998) 'Summary and recommendations of the Fourth International Workshop-Conference on Gestational Diabetes Mellitus', *Diabetes Care*, 21(Supplement 2), pp. B161–B167.

National Health Service (NHS) England (2019) *The NHS Long Term Plan*. Available at: <https://www.longtermplan.nhs.uk> (Accessed: 6 August 2025).

NHS Digital (2022) *Maternity services monthly statistics: England, January 2022*. Available at: <https://digital.nhs.uk/data-and-information> (Accessed: 6 August 2025).

NHS England (2023) *Maternity Transformation Programme: Year 5 Progress Report*. Available at: <https://www.england.nhs.uk/publication/maternity-transformation-programme> (Accessed: 6 August 2025).

National Institute for Health and Care Excellence (NICE) (2008) *Diabetes in pregnancy: Management from preconception to the postnatal period*. NICE Clinical Guideline CG63. London: NICE.

National Institute for Health and Care Excellence (NICE) (2015) *Diabetes in pregnancy: Management from preconception to the postnatal period*. NICE Clinical Guideline NG3. London: NICE.

National Institute for Health and Care Excellence (NICE) (2020) *Diabetes in pregnancy: Management from preconception to the postnatal period (Updated guidelines)*. NICE Clinical Guideline NG3. London: NICE.

Office for Health Improvement and Disparities (OHID) (2021) *Ethnic health inequalities in maternity services*. Available at: <https://www.gov.uk/government/publications> (Accessed: 6 August 2025).

Public Health Agency of Canada (PHAC) (2021) *Diabetes in pregnancy: A national overview*. Available at: <https://www.canada.ca/en/public-health/services> (Accessed: 6 August 2025).

Public Health England (PHE) (2018) *Health inequalities: Reducing ethnic disparities in health outcomes*. Available at: <https://www.gov.uk/government/organisations/public-health-england> (Accessed: 6 August 2025).

Rosenstock, I.M. (1974) 'The health belief model and preventive health behaviour', *Health Education Monographs*, 2(4), pp. 354–386.

Salway, S., Mir, G., Turner, D., Ellison, G.T.H., Carter, L. and Gerrish, K. (2016) 'Obstacles to "race equality" in the English National Health Service: Insights from the healthcare commissioning arena', *Social Science & Medicine*, 152, pp. 102–110.

Truong, M., Paradies, Y. and Priest, N. (2014) 'Interventions to improve cultural competency in healthcare: A systematic review of reviews', *BMC Health Services Research*, 14(1), p. 99.

World Health Organisation (WHO) (2013) *Diagnostic criteria and classification of hyperglycaemia first detected in pregnancy*. Geneva: WHO.

World Health Organisation (WHO) (2023) *Gestational diabetes factsheet*. Available at: <https://www.who.int/news-room/fact-sheets> (Accessed: 6 August 2025).