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An international cross-sectional survey to compare gestational diabetes mellitus diagnosis and management in antenatal care across the UK, Ireland, and Australia during the COVID-19 pandemic

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Gestational diabetes mellitus (GDM) is associated with poorer maternal and infant outcomes⁽¹⁾. Variations in national and local GDM guidance and their implementation will impact who is selected for screening, diagnostic practices, care pathways and, as a result, GDM incidence and outcomes. As part of the Impact Diabetes Bump2Baby and Me study⁽²⁾, we explored inter- and intra-country variation in GDM diagnosis and management practices within usual care, and during the COVID-19 pandemic across three countries.

A cross-sectional online survey comprising closed- and open-ended questions was developed through interviews, piloted and refined. It was distributed between July 2021 and November 2022 through professional networks and snowball sampling to obstetricians, diabetologists, diabetic specialist nurses and midwives, dietitians and neonatologists in the UK, Ireland, and Australia. Questions addressed guidelines used to select women for screening, diagnostic tests and criteria applied, care pathways, and postnatal screening practices. The questions aimed to address usual practices and adaptations during the COVID-19 pandemic. Data were downloaded into R, visualised, and descriptively analysed.

159 clinicians participated (72 UK, 59 Ireland, 28 Australia). For GDM screening, national guidelines were used by the majority to select women in UK and Australia, but there was more inconsistency in Ireland. Increased use of other guidelines (e.g. UK RCOG) or local protocols arose during the pandemic. The majority of all respondents reported using risk-factor based screening during the first trimester. A small number used universal screening, which reduced during the pandemic. At 24–28 weeks' gestation universal screening was more common in Australia and this continued during the pandemic. The UK and Ireland used risk-factor based screening more frequently at this gestation. The risk factors used to select women for screening varied between countries both in the first and late-second trimesters. Glucose tolerance tests were the most frequently used diagnostic test for GDM, however Australia and Ireland had more variety in other tests being used (HbA1c or fasting glucose) than the UK. The diagnostic criteria varied between countries and were informed by national guidelines, however the UK RCOG guidelines were used during the pandemic in all three countries. Clinical care pathways for women with GDM, including postnatal care, varied greatly between and within countries.

There is considerable variation in who is screened, how they are screened, and what diagnostic criteria are applied to identify GDM both within and between countries, both in usual antenatal care and during the COVID-19 pandemic. National guidelines vary between countries and are inconsistently applied within them, which can result in under diagnosis of GDM. Varied care pathways can result in differing maternal and infant outcomes. Evidence-informed standardisation of practices between and within countries is needed.

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References

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