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Profiling births via Caesarean delivery in Northern Ireland (2011-2019) using the Robson classification: a population-based cohort study using administrative maternity system data.

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Objective and Approach

Caesarean delivery (CD) rates are increasing globally. Over one-third of babies born in Northern Ireland (NI) during 2021-22 were via CD. Reducing the CD rate was cited as an important public health priority in the Strategy for Maternity Care in Northern Ireland (2012-2018). In 2015, WHO advocated that the Robson Ten Group Classification System (TGCS) be used to audit, analyse, and compare CD rates across countries. TGCS is currently not implemented in NI.

Results

Analysis of NI's administrative maternity system (NIMATS) is on-going (accessed via Honest Broker Service Project P045) to address this study's objectives, which will be completed for presentation: (1) describe the characteristics (maternal, obstetric practice, and fetal/infant features) of all deliveries during 2011-2019; (2) group all births over this period into TGCS categories and calculate the relative size of each group and the absolute contribution of each group to the overall CD rate; (3) compare the NI population distribution of TGCS group-specific CD rates against WHO-recommended benchmarks; (4) test for temporal trends in CD rates here over time; and (5) estimate the ability of a range of maternal, infant, and obstetric factors in predicting the overall CD rate and by TGCS group in NI over time.

Conclusions

Application of the Robson TGCS to NIMATS data has potential to address a critical knowledge gap relating to the use of CD in NI.

Implications

Avenues to extend this work to investigate longer-term outcomes (via possible linkage to the NI Child Health System) will be considered.

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