Scottish Government Health Directorates Chief Scientist Office



INVESTIGATING OUTCOMES OF POSTPARTUM PSYCHOSIS IN SCOTLAND: A HEALTH INFORMATICS APPROACH.

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Aim: The aim of this study was to use a health informatics approach to assess the factors influencing admissions to hospital for perinatal mental illness in Scotland, as well as the impact these admissions might have on both mother and child outcomes.

Project Outline: We used a national linked dataset of all perinatal records and psychiatric hospital admission records, plus records of early child-health checks. In total, 3,290 pregnancy-related psychiatric admissions for 1,730 women were assessed.

Key Results: Women with a record of a prior psychiatric admission (compared to those with no such history) were over two and a half times more likely to have at least one readmission during the two year study follow-up period. This confirms that childbirth represents a period of elevated risk for relapse for women known to have serious psychiatric disorders.

In total 190 (11.0%) of our sample where admitted to a specialist Mother and Baby Unit (MBU). Women admitted to a MBU were more likely than those admitted to a general psychiatric ward to come from socially affluent areas and were from older age groups. This might reflect a health inequality in terms of access to MBU admission but this is a complex question which requires further research.

Almost one third (29%) of children born to mothers with a psychiatric admission in relation to pregnancy or childbirth were assessed as potentially at high risk of developmental impairments. Children in this group tended to be from more socially deprived areas and were more likely to have had a mother with a previous psychiatric admission.

Conclusions: A health informatics and data linkage approach has considerable potential for improving our understanding of the social and clinical factors which contribute to admissions for perinatal mental illness in Scotland.

What does this study add to the field? This study builds on our understanding of the clinical, social and demographic factors which influence admissions (and readmissions) to hospital of women during the period leading up to and following childbirth. It also represents a first attempt to use a national data linkage approach to assess the impact of MBUs in Scotland on readmission and adverse child health outcomes, possibility and opens up the of more comprehensive routine data linkage work in this area.

Implications for Practice or Policy: To date there has been no systematic assessment of the benefits or cost-effectiveness of specialised MBUs in Scotland. Although this study identified that MBUs appear to be looking after women with more severe psychiatric disorders, there was also a suggestion of a possible health inequality in terms of access to MBUs (mothers living in more deprived areas and younger mothers may not be accessing MBU services as often as might be expected). However, these must be considered preliminary findings, with more detailed research required. Our findings also suggest that there may be some benefit to identifying mothers at particularly high risk, such as mothers living in more deprived communities who are known to have a history of previous psychiatric admissions and/or major mental illnesses such as schizophrenia or bipolar disorder.

Where to next? Future work could make use of more extensive data linkage options in Scotland (for example, to include pupil census data on special educational needs status, educational attainment data and data from the prescribing information system) over longer periods of follow-up to more fully assess how perinatal mental illness might impact on child health outcomes.

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