International Journal of Population Data Science





Journal Website: www.ijpds.org

Developing a new cohort of children born to women who used opioids in pregnancy using administrative data: insights into cohort creation and early results

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Background with rationale

Children born to opioid-dependent mothers are at a developmental disadvantage from pre-birth. They are additionally affected by the mother's compromised ability to recognise and respond to the infant's cues. Development is often compounded by environmental factors. Research to date has primarily focused on early infancy and small, clinical samples. This group is difficult to follow-up using traditional methods due to chaotic home environments, housing instability and parent-child separation. The use of administrative data circumnavigates such difficulties, allowing follow-up of children over longer periods, even when removed from the birth parent.

Main aim

This paper will describe the complex creation of a cohort of children born to opioid-dependent women, using administrative data. It will also describe early results about pregnancy and neonatal outcomes.

Methods/Approach

Data were pooled from women who gave birth between 2007 and 2017 using five datasets (c.5,000 women): women who were recorded as using heroin, street methadone or opioid substitution therapy (OST) on the Drugs Misuse Database, or on OST prescription records; women admitted to hospital, or psychiatric care, for an opioid related reason; and/or women whose children were recorded as having Neonatal Abstinence Syndrome (NAS). Data on children's neonatal outcomes will be described, including birth weight and gestation, congenital abnormalities, neonatal death and NAS treatment. Models will be fitted to investigate the associations between possible teratogenicity of prenatal opioids and developmental outcomes.

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Results

The development of this cohort using administrative data sources has been complex, requiring five different datasets to ensure all women of interest are captured. Descriptive results on outcomes will be available in the Autumn.

Conclusion

This administrative data study demonstrates the value of using linked data sources to enhance our knowledge of the trajectories of this vulnerable group of children, and the additional support that they, and their carers, may require.



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