

## Mental health needs of mothers whose babies are admitted to a neonatal unit

March 2023

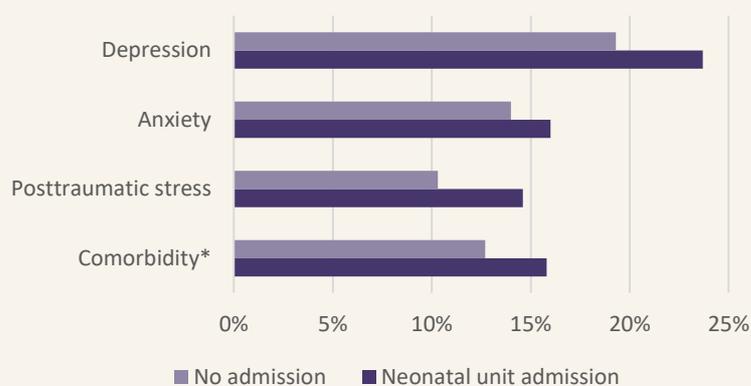
Jenny Gong, Gracia Fellmeth, Maria Quigley, Chis Gale, Alan Stein, Fiona Alderdice, Siân Harrison  
NIHR Policy Research Unit in Maternal and Neonatal Health and Care, National Perinatal Epidemiology Unit, University of Oxford  
<https://www.npeu.ox.ac.uk>

### Policy implications

- High levels of mental health problems six months after childbirth among mothers of infants admitted to a neonatal unit suggest the need for:
  - repeated mental health screening for mothers of infants admitted to a neonatal unit, beyond the universal screen for mothers six to eight weeks after childbirth
  - interventions to support mothers' emotional wellbeing as part of routine care within neonatal units

### Key findings

- Almost one in three mothers of infants admitted to a neonatal unit experienced depression, anxiety, and/or posttraumatic stress six months after childbirth.
  - 24% experienced postnatal depression
  - 16% experienced postnatal anxiety
  - 15% experienced postnatal posttraumatic stress
  - 16% experienced two or more\* (comorbid) mental health problems
- All rates were higher compared to mothers whose infants were not admitted to a neonatal unit.



- Among mothers of infants admitted to a neonatal unit, the strongest risk factors for postnatal mental health problems were having a long-term mental health problem and antenatal anxiety, while social support and satisfaction with birth were protective factors.

### How we did the research

Our recent review and meta-analysis of existing studies found that the prevalence of anxiety and posttraumatic stress was higher in mothers of infants admitted to a neonatal unit than in the general perinatal population.<sup>1</sup> Prevalence estimates varied widely across the included studies, potentially because of differences in how the studies were carried out (e.g. different participant characteristics, different assessment methods and timing). Many of the studies also included small numbers of participants.

We combined data from two large nationally-representative maternity surveys in England in 2018 (N=4,509)<sup>2</sup> and 2020 (N=4,611)<sup>3</sup>. Mothers were identified by the Office for National Statistics using birth registration records. All were at least 16 years old, had given birth in England, and were contacted six months after childbirth.

We examined the prevalence and factors associated with postnatal depression, anxiety, and posttraumatic stress six months after childbirth for mothers of infants who had been admitted to a neonatal unit.<sup>4</sup> Postnatal mental health was assessed using standardised self-report measures. All estimates were weighted to account for varying response rates among different demographic groups of women.

### Further information

<sup>1</sup> Malouf R, Harrison S, Burton HAL, Gale C, Stein A, Franck LS, Alderdice F. Prevalence of anxiety and post-traumatic stress (PTS) among the parents of infants admitted to neonatal units: A systematic review and meta-analysis. *eClinicalMedicine*. 2022 Jan; 43:101233.

<sup>2</sup> Harrison S, Alderdice F, Henderson J, Quigley MA. *You and Your Baby: A national survey of health and care*. Oxford: National Perinatal Epidemiology Unit, University of Oxford 2020b; ISBN: 978-0-9956854-5-1.

<sup>3</sup> Harrison S, Alderdice F, McLeish J, Quigley MA. *You & Your Baby: A national survey of health and care during the 2020 Covid-19 pandemic*. Nuffield Department of Population Health, University of Oxford 2021; Report No.: 978-1-8383678-4-8.

<sup>4</sup> Gong J, Fellmeth G, Quigley MA, Gale C, Stein A, Alderdice F, Harrison S. Prevalence and risk factors for postnatal mental health problems in mothers of infants admitted to neonatal care: Analysis of two population-based surveys in England. *BMC Pregnancy and Childbirth* (submitted for publication).

This research is funded by the National Institute for Health Research (NIHR) Policy Research Programme, conducted through the Policy Research Unit in Maternal and Neonatal Health and Care, PR-PRU-1217-21202. The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.