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Are brains rewired for caring during pregnancy? Why the jury's out

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Your News Feature ([Nature 632, 22–24; 2024](#)) highlights efforts to identify how and why the human brain changes through pregnancy. The article emphasizes the hypothesis that these changes prepare pregnant people for parenthood. As neuroscientists and clinicians working with pregnant individuals and new parents to study these changes, we are concerned about the potential unintended impacts of overstressing this hypothesis.

For those at risk of depression or otherwise struggling with the challenges of caring for their child, the idea that birthing parents innately ‘know’ how to connect and respond to their newborns could be invalidating and undermine their mental health. A belief that pregnancy itself confers specialized competencies could also make the distribution of childcare responsibilities along gender lines even more unequal.

Pregnancy-related brain changes might be mainly by-products of physiological and hormonal changes to support the developing fetus, without direct implications for caring behaviours ([E. F. Cárdenas et al. Soc. Cogn. Affect. Neurosci. 15, 1097–1110; 2020](#)). Evolutionary theory provides a plausible account in which direct contact with children

and close observation of caring behaviour in others prepares people for parenthood ([R. Sear Curr. Opin. Psychol. 7, 98–103; 2016](#)).

These explanations are not mutually exclusive. A more cautious perspective is essential so as not to set unrealistic expectations for new parents.

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COMPETING INTERESTS

The authors declare no competing interests.

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