

# Institute for Children and Young People's Mental Health

at King's College London & Maudsley Hospital

Our research includes studies into early identification of mental health problems in pregnancy, studies examining mental and physical health in mothers and their effects on mother-infant relationships and subsequent child health, and uses a range of methods including anonymised clinical records, cohorts, experimental studies and trials. Our teams are also investigating the effectiveness and viability of new and current treatments and services for perinatal mental illness, and perinatal intervention for parents facing negative life experiences such as childhood sexual abuse and/or domestic abuse.

Our research also looks into risk factors such as age, smoking and medication in pregnant women and how perinatal mental health can affect factors such as self-harm and response to life-threatening situations. Finally, we have also recently started to develop a programme of research into preconception care as an ideal time for addressing risk factors for adverse outcomes. This includes work with Public Health England and Tommy's Baby Charity developing a tool for women with severe mental health conditions planning a pregnancy.

Our clinical academics (psychiatrists, psychologists) work across our partnership such that clinical research questions can be addressed in our research, and our research findings can inform clinical and commissioning decisions.

Our work has informed methods for early identification of problems in pregnancy and the NHS England investment into perinatal mental health services and is cited in relevant documents such as the NHS Long Term Plan. We work across clinical partners, including the Centre for Anxiety Disorders and Trauma, and specialist perinatal mental health services. The clinical records are anonymised at the National Institute for Health Research (NIHR) Maudsley Biomedical Research Centre (BRC) and several of our clinical doctoral and post-doctoral fellows funded by NIHR, Medical Research Council (MRC), and the NIHR Applied Research Collaborations are carrying out research using this resource to examine self-harm, medication and severe life-threatening obstetric complications in women with mental health conditions.

We also have strong links with local maternity services and have recruited from services to our studies on early intervention. When we develop new interventions, we are able to include women engaged with clinical teams in the trials for these interventions and we also evaluate current interventions offered in our community and in-patient services.

We are currently developing new interventions for antenatal anxiety disorders to reduce adverse outcomes for mother and child and will continue to use digital data to examine impacts of medication and other risk factors on child outcomes. We also plan to evaluate a patient decision aid for women planning pregnancies and taking antidepressant medication. We have recently obtained funding to evaluate community perinatal mental health services nationally and this includes using "big data" (from NHS Digital) to examine outcomes, as well as for research on artistic interventions in perinatal depression, including journaling and singing. Finally, we continue to conduct follow-up assessment of the mothers with a mental health conditions, and their children age 6-8 years, that we initially assessed in pregnancy and in the early childhood.

## Key publications:



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- Nath, S, Ryan, E, Trevillion, K, Bick, D, Demilew, J, Milgrom, J, Pickles, A & Howard, L 2018, 'The prevalence and identification of anxiety disorders in pregnancy: the diagnostic accuracy of the two item Generalized Anxiety Disorder scale (GAD-2)', *BMJ Open*, vol. 8, no. 9, e023766. <https://doi.org/10.1136/bmjopen-2018-023766>
- Nath, S, Pearson, RM, Moran, P, Pawlby, S, Molyneaux, E, Challacombe FL, Howard, LM. The association between prenatal maternal anxiety disorders and postpartum perceived and observed mother-infant relationship quality. *Journal of Anxiety Disorders* 2019 vol. 68 102148. <https://doi.org/10.1016/j.janxdis.2019.102148>
- Trevillion, K, Ryan, EG, Pickles, A, Heslin, M, Byford, S, Nath, S, Bick, D, Milgrom, J, Mycroft, R, Domoney, J, Pariante, C, Hunter, MS, Howard, LM. An exploratory parallel-group randomised controlled trial of antenatal Guided Self-Help (plus usual care) versus usual care alone for pregnant women with depression: DAWN trial. *Journal of Affective Disorders*, 2019, Oct 12;261:187-197. doi: 10.1016/j.jad.2019.10.013. [Epub ahead of print]
- Lockwood Estrin, G, Ryan, EG, Trevillion, K, Demilew, J, Bick, D, Pickles, A & Howard, LM 2019, 'Young pregnant women and risk for mental disorders: findings from an early pregnancy cohort ', *British Journal of Psychiatry Open*, vol. 5, no. 2, E21. <https://doi.org/10.1192/bjo.2019.6>
- Howard, LM, Ryan, EG, Trevillion, K, Anderson, F, Bick, D, Bye, A, Byford, S, O'Connor, S, Sands, P, Demilew, J, Milgrom, J & Pickles, A 2018, 'Accuracy of the Whooley questions and the Edinburgh Postnatal Depression Scale in identifying depression and other mental disorders in early pregnancy', *British Journal of Psychiatry*, vol. 212, no. 1, pp. 50-56. <https://doi.org/10.1192/bjp.2017.9>
- Fusté M, Pauls A, Worker A, Reinders AATS, Simmons A, Williams SCR, Haro JM, Hazelgrove K, Pawlby S, Conroy S, Vecchio C, Seneviratne G, Pariante CM, Mehta MA, Dazzan P. Brain structure in women at risk of postpartum psychosis: an MRI study. *Transl Psychiatry*. 2017 Dec 18;7(12):1286. doi: 10.1038/s41398-017-0003-8. PubMed PMID: 29249808; PubMed Central PMCID: PMC5802701.
- Plant DT, Jones FW, Pariante CM, Pawlby S. Association between maternal childhood trauma and offspring childhood psychopathology: mediation analysis from the ALSPAC cohort. *Br J Psychiatry*. 2017 Sep;211(3):144-150. doi: 10.1192/bjp.bp.117.198721. Epub 2017 Jul 20. PubMed PMID: 28729357; PubMed Central PMCID: PMC5579325.
- Biaggi A, Conroy S, Pawlby S, Pariante CM. Identifying the women at risk of antenatal anxiety and depression: A systematic review. *J Affect Disord*. 2016 Feb;191:62-77. doi: 10.1016/j.jad.2015.11.014. Epub 2015 Nov 18. Review. PubMed PMID: 26650969; PubMed Central PMCID: PMC4879174.
- Bauer A, Pawlby S, Plant DT, King D, Pariante CM, Knapp M. Perinatal depression and child development: exploring the economic consequences from a South London cohort. *Psychol Med*. 2015 Jan;45(1):51-61. doi:10.1017/S0033291714001044. Epub 2014 Jun 20. PubMed PMID: 25066467; PubMed Central PMCID: PMC4341975.
- Osborne S, Biaggi A, Chua TE, Du Preez A, Hazelgrove K, Nikkheslat N, Previti G, Zunszain PA, Conroy S, Pariante CM. Antenatal depression programs cortisol stress reactivity in offspring through increased maternal inflammation and cortisol in pregnancy: The Psychiatry Research and Motherhood – Depression (PRAM-D) Study. *Psychoneuroendocrinology*. 2018 Dec;98:211-221. doi:10.1016/j.psyneuen.2018.06.017. Epub 2018 Jul 19. PubMed PMID: 30033161; PubMed Central PMCID: PMC6215770.