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Parental perinatal depression and offspring psychotic experiences

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Maternal depression is common, both during pregnancy and postnatally, affecting about 15% of mothers in high-income countries and more than 20% of mothers in low-income and middle-income countries.[1,2] The offspring of mothers with depressive symptoms during the perinatal period have been found to be at an increased risk of many adversities, including developmental delays, behavioural problems, and psychopathology.[3-6] The perinatal period offers a promising time window for aetiological studies and for preventive interventions to reduce the incidence of mental disorders in offspring.

In *The Lancet Psychiatry*, Ramya Srinivasan and colleagues[7] report the association between maternal perinatal depression and offspring psychotic experiences at the age of 18 years. The study is based on the Avon Longitudinal Study of Parents and Children (ALSPAC), with more than 14 000 participants. The researchers in the ALSPAC study groups have already been meritorious in perinatal psychiatric research—eg, in examining how maternal perinatal anxiety and depression might be associated with offspring depression.[8] The relationship between maternal antenatal depressed mood and offspring psychotic continuum has been previously studied in the Northern Finland Birth Cohort 1966,[6] and the current study adds valuable knowledge to these studies.

Srinivasan and colleagues[7] found that the prevalence of psychotic experiences was elevated in adolescent offspring of mothers with antenatal depressive symptoms. The findings were reported using the continuous variable of the Edinburgh Postnatal Depression Scale (EPDS; 5-point increase in EPDS score adjusted odds ratio [OR] 1·26 [95% CI 1·06–1·49], p=0·0074) and the binary variable (1·49 [0·98–2·28], p=0·065, for EPDS score of >12). Maternal postnatal depressive symptoms were also associated with offspring psychotic experiences, but only by using the binary variable (adjusted OR 1·81 [95% CI 1·12–2·93], p=0·016). Subsequent maternal depressive symptoms or offspring depression did not explain these associations.

In the appendix of their Article, the authors present some notable additional findings. They report that the original findings of the study remained significant even when including genetic risk factors—ie, schizophrenia polygenic risk score, paternal history of mental disorders, and family history of mania and mental health admission—as confounding variables. Another interesting finding was that the prevalence of psychotic disorders was elevated in the 18 year-old offspring of mothers with antenatal depressive symptoms (adjusted OR for a 5-point increase in EPDS score 1·42 [95% CI 1·00–2·03], p=0·052).

Unfortunately, the attrition rate was high in the current study, as full data were only available for 3067 (21%) of 14 541 participants from the original cohort. It is well known that participants with more adversities less often take part in research studies, which can be also seen from Table 1 in the Article. The authors did multiple imputation analyses to minimise the bias related to attrition.

Although paternal depression data were limited, it is important that paternal mood was screened in the current study[7] because previous research data on paternal perinatal depression are scarce.[9] The authors were also able to study the effects of different timepoints of maternal perinatal and subsequent depression, which is helpful in evaluating what could be the most effective time window for treatment of maternal depression to reduce negative outcomes in the offspring. Additionally, many important confounding factors were accounted for, including genetic data, which adds knowledge about shared and mediating factors between perinatal depression and offspring outcomes.

Perinatal psychiatry is a relatively new, multi-disciplinary field of psychiatry. Its aims are better detection and management of perinatal mental disorders to reduce adverse child outcomes and to decrease the intergenerational transmission of mental disorders. Although knowledge is increasing, more research is needed to clarify the associations between parental and offspring mental illness, and this study adds important information on this research area. More detailed investigation on the mechanisms of intergenerational transmission of mental disorders

might result in new innovations for perinatal psychiatric therapies. Furthermore, perinatal psychiatric intervention studies are crucial to provide evidence-based guidelines on effective treatment of perinatal mental disorders for clinicians. Clear guidelines are needed to be able to support new parents and their babies more efficiently, especially in these times of the coronavirus disease 2019 pandemic, filled with anxiety and worries.

I declare no competing interests.

Tiina Taka-Eilola
tiina.taka-eilola@kalliopp.fi

Department of Psychiatry, University of Oulu, Oulu FIN-90014, Finland; Basic Health Care District of Kallio, Ylivieska, Finland; and Department of Psychiatry, Middle Ostrobothnia Central Hospital, Kokkola, Finland

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Evidence for preventive treatments in young patients at clinical high risk of psychosis: the need for context


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Published Online
December 19, 2019
https://doi.org/10.1016/S2215-0366(19)30513-9

Cochrane reviews, as rigorous evaluations of evidence in health care, have a substantial effect on clinical and policy decision-making; however, their findings and methods need to be contextualised. These reviews are done by groups of academics who might or might not have adequate expertise or clinical experience in the field they examine, and we feel the methods can be indeterminate and conservative.

The recent Cochrane review[1] of intervention trials for patients at clinical high risk of psychosis concluded that, despite the considerable research effort in this area, the evidence base was weak and firm conclusions could not yet be drawn. The authors noted that the "strongest weak evidence" supported the ability of omega-3 fatty acids to prevent the onset of psychosis in the clinical high risk population, but that the quality of evidence overall was low to very low.

We have several methodological concerns about the Cochrane review.[1] First, a major contributor to the low-to-very-low quality rating of studies was their risk of bias (eg, randomisation and allocation concealment methods not being described, the risk of unblinding, and high attrition). However, many studies included in the review used rigorous methods of randomisation and allocation concealment without detailing these in print.[2] Moreover, most mentioned studies were psychosocial or psychotherapy trials, in which it is impossible to implement masking of therapists and notoriously difficult to maintain patient masking. High attrition is also common in all trials involving youth with mental disorders.

Second, derived from studies of medications for acutely unwell patients with psychosis, the criterion of a 50% reduction in symptoms used to judge clinical improvement might be inappropriate for the clinical high risk group and represents an unrealistic goal for a group of patients who, by definition, have symptoms of moderate intensity.[3] Even in clinical trials of pharmacological and psychological interventions for acutely ill patients with first-episode psychosis and schizophrenia, response is usually set between 20% and 50% symptom reduction.[4]

Finally, the Cochrane review compared different categories of interventions across randomised controlled trials (RCTs) with control conditions.[1] Although this