

Editorial

Parental depression and the challenge of preventing mental illness in children†

Paul G. Ramchandani and Susannah E. Murphy

**Summary**

Parental depression is a risk factor for psychiatric problems in children and adolescents. Exciting scientific developments have elucidated potential early mechanisms of intergenerational risk transmission and new models of intervention may help to prevent some childhood problems.

However, caution is needed in interpreting such associations as causal and in targeting interventions appropriately.

Declaration of interest

None.

Paul Ramchandani (pictured) is a reader in child and adolescent psychiatry at Imperial College, London, and a consultant psychiatrist at Central and North West London NHS Foundation Trust. His research focuses on mood disorders in children and the impact of parental mood disorder on very early child development. Susannah Murphy is a senior research fellow in the Department of Psychiatry, University of Oxford. Her research focuses on interactions between cognitive and neurophysiological accounts of depression and anxiety. They co-lead the Perinatal Psychopathology and Offspring Development (pPOD) research group examining the mechanisms by which parental illness may affect children's development (www.ppod.org.uk).

Causal mechanisms of risk transmission

The repeated finding of an association between parental depression and adverse child outcomes over the past 40 years has led many to the belief that the association must be causal. However, there are a number of problems with this assumption. First, we are at risk of forgetting that depression is associated with many other adversities in life, and so may be acting as a risk marker, rather than a causal risk factor.⁴ The peril of this is that it can lead to simplistic, and usually only partially effective, solutions, as treating the parental depression alone may miss other key difficulties that need addressing. Indeed, the recent finding, published in this issue (Sellers *et al*), that even in a group of mothers with recurrent depression, additional psychopathology, such as alcohol use and antisocial behaviour, adds significantly to the risk for adolescent depression, serves as a timely reminder of the complexity of factors that interact to determine vulnerability in offspring. Second, much of the evidence linking parental depression and adverse child outcomes is correlational. Given the challenges of doing experimental work in this area, it is difficult to unpick the genetic and environmental contributions to such associations.

The transmission of risk of psychiatric disorder across generations represents both an opportunity and a challenge for the prevention of mental illness. A well-established risk factor for mental illness is parental depression; which is associated with an increased risk of adverse outcomes in the children of affected parents, including depressive disorder and other psychosocial difficulties.¹ The study by Sellers *et al* in this issue,² describes a sample of mothers with recurrent depression and their adolescent offspring. Consistent with previous reports, maternal depression is associated with higher rates of psychiatric disorder in their adolescent offspring. In addition, the study highlights that there is additional increasing risk where other maternal comorbid psychiatric problems are present. These associations are demonstrated in a large sample, with the advantage of longitudinal follow-up and a rigorous clinical assessment of morbidity.

The study by Sellers *et al* examines risk in adolescents, when rates of mood disorders in particular begin to increase substantially. However, it is increasingly recognised that the heightened risk of adverse outcomes associated with both maternal and paternal depression is present from the very early days of a child's development – through pregnancy and the postnatal months.¹ These early experiences, including exposure to parental depression and stress, can set in train developmental trajectories that have life-long consequences for the health and development of the child.³ This knowledge provides us with the opportunity to identify young people who are at heightened risk and raises the possibility of early intervention. However, such associations also raise some significant challenges, both scientific and clinical. Two key questions arise; first, is the association causal and second, is it helpful to use parental depression as an opportunity to screen in order to prevent psychological disturbance in developing children?

Intervention trials are clearly the best way to establish clear causal influences. However, these are challenging to undertake and the findings to date are somewhat mixed. To complement this, there have been some very elegant studies that have added strength to the notion that parental depression can directly have an impact on child outcomes. Novel designs such as those using *in-vitro* fertilisation (IVF)⁵ have helped to begin the long task of establishing what is, and what is not, inherited through direct genetic transmission. Animal studies using cross-fostering designs have added to this, highlighting the importance of early maternal care (which is often disrupted in postnatal depression).⁶ Unravelling the key mechanisms by which parental depression may influence child development is a final way of substantiating the causal argument. Here again, animal studies, including the work of scientists such as Meaney and colleagues, have meant that the science of epigenetics, which has excited many fields of medicine, also has increased relevance for those of us working in psychiatric research.

Clinical interventions

One key clinical benefit of an increased awareness of the impact of parental depression on child development is the potential to

†See pp. 108–114, this issue.

identify a group of children who are at an increased risk of adverse outcomes. In turn, this offers the opportunity to intervene and so potentially break the pattern of transfer of risk of depression from one generation to the next. The widespread screening of women for depression in the postnatal period, and increasingly during pregnancy in some countries,⁷ has been a significant development. Clearly, identifying and treating parents with depression is of considerable worth, but the potential additional benefit of also improving outcomes for children is attractive. The challenge then is to intervene in an effective and timely manner to reduce both parental depression and also the associated risk in offspring. Evidence from some studies of older children suggests that the treatment of parental depression can lead to improvements in children's psychological functioning,⁸ and programmes focused on both parents and children in families where a parent has depression have also shown promising outcomes.^{9,10} Examples of the development of services for parents with mental illness, such as the NSPCC Parkside Parental Mental Health Service in London, UK, or the Children of Parents with a Mental Illness (COPMI) initiative in Australia (www.copmi.net.au), are still too few in number, but offer hopeful signs of more joined-up patterns of mental healthcare that may benefit children whose parents have more severe mental illness. However, it is worth noting that evidence supporting the impact of interventions for improving outcomes in younger children is less convincing.¹¹

Although there have been these positive clinical and research advances made in our understanding of the impact of parental depression on children and adolescents, there are some potential pitfalls associated with an increased focus on the wider-reaching impact of parental mental health. For example, the public health success of raising the profile of postnatal depression, so that it is now screened for, and frequently spoken about, has had undoubted benefits for the many women now receiving treatment. However, the impact in terms of understanding that the children of women with postnatal depression are at increased risk of cognitive, emotional and behavioural problems has had a perhaps more mixed outcome to date. The repetition of the maxim that children of women with postnatal depression are at increased risk for a range of problems, from lower IQ to antisocial behaviour, has in some cases had a stigmatising effect, leading to increased worry in women already experiencing anxiety and depression. The loose use of explanations of risk has led to some blindness to the fact, that although there may be an increased risk for such children, the vast majority of children of mothers with depression (probably over 80% for most outcomes) are relatively or completely unaffected.

The right response

So what are we to make of parental depression? Clearly there is some way to go in our understanding of the processes of risk transmission, and exciting scientific avenues are waiting to be explored. Further delineation of whether and when parental depression has a causal impact on child outcomes, and what the

key mechanisms are, will lead to a better focus for our preventive efforts. But what should clinical services be doing in the here and now? Despite the challenges that we highlight, the realisation that one of our adult patients has children, should lead to consideration of the effect of that illness on the children at home and a more family-focused approach to treatment. Supportive interventions exist for children who are affected,⁹ and these can run alongside existing effective treatments for the parent. We can and should be implementing these today.

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Paul G. Ramchandani, MRCPsych, DPhil, Academic Unit of Child and Adolescent Psychiatry, Imperial College, London; **Susannah E. Murphy**, DPhil, Department of Psychiatry, University of Oxford, Oxford, UK.

Correspondence: Paul G. Ramchandani, Academic Unit of Child and Adolescent Psychiatry, 3rd Floor, QEOM Building, Imperial College, St Marys Campus, Norfolk Place, London W2 1PG, UK. Email: p.ramchandani@imperial.ac.uk

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