

MATERNAL DEPRESSION

Maternal Depression

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Introduction

Maternal depression poses a significant burden, both to the individual and to the broader relational context.^{1,2,3,4} When a mother is struggling with depression, important relationships are likely to suffer as well. Research has documented the pernicious effects of maternal depression on the marital relationship,^{5,6} parenting,^{7,8,9} and the mother-child relationship.^{10,11,12} Furthermore, these effects are not simply limited to the period during which the mother is depressed. The long-term effects of maternal depression extend to poor child outcomes,^{13,14} divorce,¹⁵ and even the perpetuation of this cycle with future generations.^{16,17} Because depression is particularly prevalent during women's childbearing years, and because it is a highly recurrent disorder, the public health significance of understanding and adequately treating maternal depression is high.

Subject

Approximately 33% of women will suffer from depression by the age of 65.¹⁸ Mothers who suffer from depression are subsequently more at risk for developing an insecure attachment with their children,^{19,20,21} often engage in dysfunctional parenting,^{7,8} and their children are at heightened risk for developing both internalizing and externalizing behaviour problems.^{22,23} Despite these risks, it is important to note that maternal depression does not deterministically culminate in adverse outcomes for offspring and children have been shown to evidence positive development, including

secure attachments to their depressed mothers.²⁴

Problems

Research on maternal depression and its effects on the family continues to face numerous challenges.

- Issues related to maternal depression and to the adaptation of offspring have not been *consistently* examined across investigations. However, extant research has demonstrated how certain fine-grained experiences of maternal depression (e.g., timing during offspring development,^{25,26} severity²⁷) can eventuate in very different child outcomes.
- Historically, investigations focused on main effects models that sought simply to determine whether offspring were adversely affected and in what developmental domains. Examinations of processes and mechanisms contributing to outcome are less prevalent.
- The adverse outcomes associated with maternal depression are not unique to depression, raising questions as to whether it is depression per se, or rather specific aspects of parenting that contribute to negative child development.
- Far less attention has been directed to the bi-directional influences that may maintain or exacerbate maternal depression. For example, if a child has an emotional disorder or illness, then the mother's depression may be more difficult to treat.²⁸
- While there are exceptions,^{29,30} far too little effort has been directed to preventing the adverse effects of maternal depression on children.

Research Context

Due to the wide-ranging effects of maternal depression, research on the phenomenon must address many domains. Beyond studies of the direct effects of maternal depression on parenting, the marital relationship, and child outcomes, there have been many process- oriented studies to examine, for example, how maternal depression might affect mother-child interactions or the development of mother-infant attachment security.³¹ Recent studies of maternal depression also have addressed the interaction of children's genotypes and environmental influences to determine potential mechanisms through which families in which the mother is suffering from depression are affected.³² In addition, intervention studies have been used to identify both effective treatments for maternal depression and its sequelae.³³ Such studies have been integral

to understanding the mechanisms through which maternal depression affects other members of the family. It is important to note that an increasing number of studies of maternal depression have incorporated fathers in order to capture more fully the dynamic processes that co-occur with a mother's depression.³⁴

Key Research Questions

Given the diversity of mechanisms and moderators that contribute to varied outcomes in children who have been exposed to maternal depression, it is increasingly important that investigations incorporate a multiple-levels-of-analysis perspective into understanding the effects of maternal depression on children.³⁵ Such an approach requires attention to psychological, neurobiological, genetic and contextual factors. Given the high degree of co-morbidity between depression and other mental disorders, increased effort needs to be directed toward understanding how co-morbidity affects children of depressed mothers. Additionally, models of intervention and assessments of their efficacy need to be developed with economically, racially, and ethnically diverse populations. Investigations that examine the complex transactions that occur across ecological systems (individual, family, school, neighbourhood) and that contribute to adaptive versus maladaptive outcomes in offspring of depressed mothers also are needed.

Recent Research Results

Increasingly, research on maternal depression has incorporated paternal influences on the effects of the disorder. Given the relative paucity of fathers in clinical research,³⁶ the inclusion of fathers provides a fuller depiction of how maternal depression can affect the family system. Meta-analytic research on psychopathology in mothers versus fathers suggests that maternal depression is more closely related to children's internalizing, but not externalizing problems than when fathers are suffering from depression.³⁷ Furthermore, when paternal psychopathology is present, maternal depression is significantly associated with toddlers' externalizing and internalizing behaviour problems.³⁸ In contrast, paternal involvement in infancy has been shown to moderate the relation of maternal depression and child internalizing behaviour.³⁵ More recently, paternal involvement in the family unit has been shown to moderate the association between maternal depression and family cohesion. Specifically, when fathers show greater sensitivity, low intrusiveness, and increased engagement with children, the effect of maternal depression on family cohesion appears to be dampened.³⁴

Recent research has examined the mechanisms through which maternal depression affects the family.^{9,39} With regard to the fundamental infant-caregiver attachment relationship, data suggest that attachment security mediates the relation between depressive symptoms and negative parental representations.⁴⁰ In addition, maternal depression has been found to moderate the relation between attachment insecurity and the impact of home-visiting programs for at-risk mothers and infants.⁴¹

Recent studies also have demonstrated the effects maternal depression can have on child behaviour outcomes. Reductions in maternal depression resulting from intervention have led to improvements in both child externalizing and internalizing problem behaviour after accounting for the potential mediating effects of positive parenting.⁴² More recent research also has demonstrated the transactional effects of maternal depression, such that a bidirectional relationship has been identified between maternal depression and child irritability⁴³ and child oppositional behaviour,⁴⁴ with the latter relation mediated by child inhibitory control. In addition, maternal depression has been shown to affect children's physiology.^{45,46}

In light of ongoing research highlighting racial and ethnic disparities in mental health challenges and access to care,^{47,48} there is a subset of research on maternal depression examining patterns, effects, and treatment of maternal depression in the context of race and ethnicity. Specifically, families of color have been demonstrated to disproportionately experience discrimination,⁴⁹ racism,⁵⁰ poverty,⁵¹ more limited access to healthcare,⁵² and poor pregnancy outcomes.⁵³ However, in the context of maternal depression specifically, there have been mixed results regarding risk for depression among mothers across racial and ethnic groups. Some studies suggest that Black and Hispanic mothers are at lower risk for the experience of depression relative to their white counterparts.⁵⁴ Conversely, other empirical work has demonstrated elevated rates of depression among racial and ethnic minority mothers.^{55,56,57}

Research Gaps

Despite progress in recent years with respect to understanding the mechanisms and processes through which maternal depression affects children, gaps in the literature remain. In particular, theoretically guided and developmentally informed investigations that consider the complexity associated with understanding the processes through which maternal depression influences children are needed. Specifically, multiple-levels-of-analysis approaches will lead to a more complete depiction of child development in the context of maternal depression.³⁷ Utilization of

molecular genetic methods, neuroimaging techniques and stress reactivity paradigms, in conjunction with psychological variables, will enhance the understanding of both heightened risk and resilience in offspring of depressed mothers. The incorporation of such an approach into the design and evaluation of preventive interventions is particularly important, as these methods will not only increase our understanding of the mechanisms through which interventions operate effectively, but also will shed light on the theory-driven models that are associated with healthy and pathological outcomes.^{58,59}

Conclusions

In summary, maternal depression poses a significant burden, not only to the individual affected, but also to the family system and to society more generally. Current research on maternal depression has broadened its scope from the main effects of the disorder to how it interacts and affects the larger family system. Intervention studies demonstrate that depression in mothers can be effectively treated and that its deleterious effects on significant relationships in the family and child outcomes can be mitigated and reversed. Currently, more sophisticated research methods are being used to examine how mothers' vulnerability to depression interacts with the broader environment, how the disorder might impact both the mothers' and the child's neurophysiology, and how families, and in particular children, can demonstrate resilience in the face of maternal depression. Given the stigma mothers may experience as a result of their depression and the increased likelihood of mothers being affected by the disorder, future work that addresses a mother's sense of such stigma and her access to treatment is critical.

Implications for Parents, Services, and Policy

Research coalesces to highlight the potentially pernicious effects that maternal depression may exert not only on the individual, but also on the child, family and broader social ecology. Therefore, it is critical that the stigmatization that prevents women from being screened for and receiving mental health services when a depressive disorder is present be addressed.⁶⁰ Often depression is detected in primary care settings and, as such, it is critical that practitioners recognize and address the magnitude of the problem. When treatment is provided, all too often the broader context within which a woman resides is not considered and it is rare that outreach to other family members is provided. Investigations have shown that treating maternal depression is not sufficient for addressing adverse effects on children.⁶¹ This is particularly troublesome because we know that effective prevention strategies are available.²⁹ Given the extensive research that has

highlighted the role that parenting plays with respect to child outcome, assessments of parenting skills and the provision of interventions targeted to the child's developmental level might be particularly effective in ameliorating the negative effects associated with maternal depression. Finally, policy advocates and insurance companies need to recognize the benefit of providing prevention to children with depressed mothers rather than waiting until a child exhibits a diagnosable mental disorder.

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