
Article:
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Family-wide effects of adverse childhood experiences

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Exposure to adverse childhood experiences (ACEs), including abuse, neglect, and household challenges, have harmful implications for long-term health and mental health outcomes.[1] Indeed, ACEs are one of the leading determinants of mental health disorders and are associated with increased health-care use into adulthood.[1,2] ACEs have the potential to infiltrate the family context, having implications for individual children and siblings. Yet, research on ACEs to date has largely focused on the outcomes of individuals rather than taking a family-based approach.

To address this research gap, Shabeer Syed and colleagues[3] examined whether ACEs in firstborn children in the first 1000 days of life were associated with increased risks of mental health problems, mental health-related health-care contacts, and all-cause hospital admissions for both firstborn children and their siblings, than firstborn children without ACEs. Using administrative health data, the authors applied a validated algorithm to identify clinically relevant indicators of ACEs using maternal and child electronic health records, and developed two population-based birth cohorts, one with first-time mothers and their firstborn children (n=333 048), and subsequently with firstborn children and their siblings (n=534 904). The authors found that mothers with firstborn children who were exposed, versus unexposed, to ACEs had 1·71 times as many children with mental health problems. Firstborn children with ACEs and their siblings were also more likely to have emergency department admissions and mental health-related contacts. Using rigorous analytical methods, this Article provides an important step towards a family-wide science of ACEs that considers implications across family members. This study also demonstrates how routinely collected data can be repurposed to support identification and surveillance of ACEs for individuals and families over time.

Syed and colleagues[3] concluded that firstborn children with early exposure to ACEs and their siblings were equally likely to have mental health problems. Although the exact mechanism for this result remains unclear, this finding suggests that in the absence of intervention, the effects of ACEs have widespread and entrenched effects on all children within a family. This is particularly notable because this finding demonstrates the strong influence of the shared environment, above and beyond individual-level differences, such as genetic susceptibility or differential parenting. As the field of adversity research begins to consider the implications of cumulative risk for multiple family members,[4] it will be crucial to disentangle individual (eg, genetics, temperament, or differential parenting) and family-level (eg, poverty or parental substance use) effects of ACEs on the development of mental health difficulties.

In their analysis, Syed and colleagues[3] estimated the relative incidence of mental health problems and health use while adjusting for variations in area-based deprivation. Yet, emerging research suggests complex interactions between the presence of several ACEs, their subsequent health and developmental effects, and individual and family-level socioeconomic factors.[5] The current findings therefore offer limited guidance for jurisdictions that aim to improve overall population health while reducing health inequalities, such as in the UK.[6] More research is required to understand how and to what degree ACEs affect families across differing socioeconomic profiles, including the distributional effects of both individual and cumulative ACEs. As Syed and colleagues[3] rightly conclude, such findings would support targeted interventions designed to reduce health inequalities while supporting resource allocation decisions.

Perhaps the most important implication of the current study is that intervening early with new parents might not only benefit the current child but could have effects for subsequent children. Syed and colleagues[3] focused on adversities that occurred within the first 1000 days, which represents a crucial period when rapid changes in brain development occur and the foundation for mental health across the life course are laid.[7] Many of the adversities identified in the study (ie, maternal mental health difficulties, severe maternal drug use, and maternal intellectual disability) are present before the birth of a child and can influence fetal brain development.[8] As such, interventions delivered in pregnancy, those that target parent mental health, and interventions that address parenting skills, could have the strongest effects on intergenerational cycles of risk for mental health difficulties.[9] Societies face substantial

health and financial costs attributable to ACEs.[10] Through effective early interventions at the individual and family level, a 10% reduction in ACE prevalence could result in cost savings of up to US$105 billion and annual reductions of up to 3 million disability-adjusted life years.[10] Thus, providing early interventions to families experiencing high levels of adversity has the triple benefit of being good economic policy, supporting the health and wellbeing of children and families throughout life, and potentially reducing the risk of mental health challenges across future generations.

We declare no competing interests.

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