Exposure to intimate partner violence and parental depression increases risk of ADHD in preschool children

doi:10.1136/eb-2013-101411

QUESTION

Question: Does exposure to parental depression or intimate partner violence (IPV) during the first 3 years of life have an effect on a child's subsequent mental health?

People: A total of 2422 children (52% boys, Hispanic/Latino 45.5%, Black 40.6%, White 10.5%) visiting health centres served by the Child Health Improvement through Computer Automation (CHICA) paediatric primary care system, from birth to age 3 years, and again when aged between 37 and 72 months.

Setting: Four community health centres, Indianapolis, Indiana, USA; November 2004–June 2012.

Risk factors: Exposure to IPV and parental depression within the first 3 years of life. This information was collected using screening questions presented in a prescreener form which parents completed in the clinic waiting rooms. To screen for depression, The Patient Health Questionnaire (PHQ-2) was used until 2010, and then replaced by the anxiety subscale of the Edinburgh Postnatal Depression Scale (EPDS-3). IPV was screened using the questions 'Has your partner kicked, hit or slapped you?' and 'Do you feel safe in your home?'

Outcomes: Child mental health diagnosis or psychotropic drug treatment received between the ages of 3 and 3. Diagnoses were identified using International Classification of Diseases-9 codes for attention deficit hyperactivity disorder (ADHD), disruptive behaviour disorder, depression, anxiety, sleep disturbance or adjustment disorder. Prescription information was taken from the Indiana Network for Patient Care and Regenstriel Medical Record Systems databases.

METHODS

Design: Prospective cohort study.

Follow-up period: Three years.

MAIN RESULTS

Within the first 3 years of the child's life, 1591 (65.7%) of parents reported neither IPV nor depression, 704 (29.1%) reported depression only, 69 (2.8%) reported IPV only and 58 (2.4%) reported IPV as well as depression. Between ages 3 and 6 years, 48 (2%) of children had received psychotropic medication, 80 children (3.3%) were diagnosed with ADHD, 209 (8.7%) with disruptive behaviour disorder, 9 (0.4%) with depression, 17 (0.7%) with anxiety, 7 (0.3%) with sleep disturbance and 41 (1.7%) with adjustment disorder. Prevalence of ADHD was higher in children exposed to parental depression compared with those not exposed (4.5% vs 2.8%, $p \leq 0.03$). Psychotropic drug prescriptions were higher in children exposed to parental depression compared with those who were not exposed (2.9% vs 1.6%, $p \leq 0.03$). Multivariate regression analysis revealed that increased exposure to IPV as well as depression was associated with increased risk of ADHD diagnosis compared with non-exposure (OR 4.0, 95% CI 1.5 to 10.9; see table). Exposure to parental depression was also associated with increased risk of child psychotropic medication prescription (OR 1.9, 95% CI 1.0 to 3.4). There were no significant associations with exposure to IPV only or with both exposures for any other mental health condition.

CONCLUSIONS

Exposure to parental IPV and parental depression within the first 3 years of life is associated with increased risk of ADHD diagnosis prior to 6 years. Early exposure to parental depression is associated with increased risk of psychotropic medication prescription.

ABSTRACTED FROM

Bauer NS, Gilbert AL, Carroll AE, *et al*. Associations of early exposure to intimate partner violence and parental depression with subsequent mental health outcomes. *JAMA Pediatr* 2013;**167**:341–7

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Sources of funding Agency for Healthcare Research and Quality, National Library of Medicine.

Competing interests None.

► Additional material is published online only. To view please visit the journal online (http://dx.doi.org/10.1136/eb-2013-101411).

COMMENTARY

A substantial body of research has documented that exposure to childhood adversity, including witnessing intimate partner violence (IPV) and parental depression, influences millions of children annually, and is associated with elevated psychopathology in youth.[1] However, much of the existing research is limited in ways that impede causal inference and clear clinical implications. Bauer and colleagues should be commended for their study, which found that children whose parents reported IPV and depressive symptoms before age three had increased risk of developing attention deficit hyperactivity disorder (ADHD) between 3 and 6 years of age, and children whose parents reported depressive symptoms (in the absence of IPV) were more likely to be prescribed psychotropic medications. This study overcomes many common limitations by incorporating valuable design characteristics, including: (1) a prospective design to establish temporal ordering; (2) recruitment from primary-care clinics, resulting in findings that are broadly generalisable; (3) a preschool-age sample, representing a developmental period for which prospective research is limited; (4) use of billing codes and pharmacy claims to ascertain outcomes, which avoids biases associated with parental report and (5) simultaneous consideration of IPV and parental depression, as these adversities often cluster together.

This study has important implications for clinical practice because it demonstrates that simple surveillance strategies in clinics are able to identify families experiencing risk factors for mental health problems or psychotropic drug treatment in preschool-age children. Clinicians can use this information to identify families in need of intervention and children who would benefit from prevention-oriented interventions to mitigate risk for psychopathology. Future research is needed to understand whether early identification can be improved by using more robust brief screening measures. It will be important for future studies to evaluate the specificity of these findings for ADHD; it is currently unknown whether this is a developmentally specific outcome that broadens to other forms of psychopathology as children develop. Identifying the psychosocial and neurobiological mechanisms underlying these associations may facilitate the development of novel interventions.

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REFERENCE

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