Journals Blog
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When Parents Have Experienced Adverse Childhood Experiences, What is the Effect on Their Children?

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Our journal and others have published a myriad of studies on the deleterious effects of adverse childhood experiences (ACEs) on the developmental and physical well-being of infants and children. But what about the generational effect on offspring of parents who experienced ACEs growing up? Two studies we are early releasing this week shed some light on answering this question. First Racine et al. (10.1542/peds.2017-2495) present the results of their examination of maternal ACEs on the development of their offspring in terms of biologic risk of the infant due to mother's health risk in pregnancy as well as psychosocial risk due to maternal stress during and after pregnancy. The authors followed almost 2000 women and their infants in a prospective longitudinal cohort. The pregnant mothers completed self-report questionnaires defining their own psychosocial risks and how they viewed their infants at 4 months of age, and then at 12 months of age completed a developmental questionnaire. The results of their study suggested that the prime contributor to developmental issues in infants was the psychosocial risks brought to pregnancy as a result of maternal ACEs. To make the point even more about the role of maternal and paternal ACEs contributing to infant outcomes, Folger et al. (10.1542/peds.2017-2826) opted to study parental ACEs and share with us their results in a retrospective cohort study being early released this week in our journal. The authors looked at the relationship between self-reported parental ACEs experienced as parents were growing up and whether developmental delay was identified when a child of these parents with or without ACEs reached 24 months of life. The results of their analysis are quite concerning in that they show that there is an 18% increase in the suspected risk of developmental delay for each maternal or paternal ACE identified in reviewing data on over 300 mother-child dyads and 122 father-child dyads. Developmental areas that were negatively impacted, if there were parental ACEs, included problem solving, communication, and personal and social motor skills.

So what does this mean for those of us who see the children of parents who might have experienced ACEs? Do we normally ask about parental ACEs? Should we be doing so? To answer these questions, we invited Dr. James Hudziak, professor of child psychiatry and pediatrics, who is a staunch advocate for pediatricians helping to care for parental wellness as well as the wellness of their children, to provide some

commentary on this study (10.1542/peds.2018-0232). His wise words encourage us to ask about parental ACEs and to be prepared to help parents regain their parenting strengths during pregnancy or after a child is born, which in turn can prevent the intergenerational effect on development as seen in both the Racine and Folger studies. Read both studies and the commentary, and we suspect you will do more to better understand the role of parental ACEs in the growth and development of the patients in your practice.

- Systematic Review of Pediatric Health Outcomes Associated with Adverse Childhood Experiences (aces)*
- Adverse Childhood Experiences Among Hispanic Children in Immigrant Families Versus US-Native Families
- Adverse Childhood Experiences and Adult Well-Being in a Low-income, Urban Cohort
- Facebook

Parental Adverse Childhood Experiences and Offspring Development at 2 Years of Age

Alonzo T. Folger, Emily A. Eismann, Nicole B. Stephenson, Robert A. Shapiro, Maurizio Macaluso, Maggie E. Brownrigg, Robert J. Gillespie

Abstract

OBJECTIVES: The study objective was to determine if maternal and paternal exposure to adverse childhood experiences (ACEs) have a significant association with negative offspring development at 24 months of age in a suburban pediatric primary care population.
METHODS: A retrospective cohort study was conducted of 311 mother-child and 122 father-child dyads who attended a large pediatric primary care practice. Children were born from October 2012 to June 2014, and data were collected at the 2-, 4-, and 24-month well-child visits. Multivariable Poisson regression with robust error variance was used to model the relationship between self-reported parental ACEs and the outcomes of suspected developmental delay at 24 months and eligibility for early intervention services.
RESULTS: For each additional maternal ACE, there was an 18% increase in the risk for a suspected developmental delay (relative risk: 1.18, 95% confidence interval: 1.08–1.29). A similar trend was observed for paternal ACEs (relative risk: 1.34, 95% confidence interval: 1.07–1.67). Three or more maternal ACEs (versus <3 ACEs) was associated with a significantly increased risk for a suspected developmental delay that affected multiple domains. Similar effects were observed for early intervention services.
CONCLUSIONS: Parental ACE exposures can negatively impact child development in multiple domains, including problem solving, communication, personal-social, and motor skills. Research is needed to elucidate the psychosocial and biological mechanisms of intergenerational risk. This research has implications for the value of parental ACE screening in the context of pediatric primary care.

- Accepted January 9, 2018.

Maternal Adverse Childhood Experiences and Infant Development

Nicole Racine, Andre Plamondon, Sheri Madigan, Sheila McDonald, Suzanne Tough

Abstract

OBJECTIVES: To examine the prenatal and postnatal mechanisms by which maternal adverse childhood experiences (ACEs) predict the early development of their offspring, specifically via biological (maternal health risk in pregnancy, infant health risk at birth) and psychosocial risk (maternal stress during and after pregnancy, as well as hostile behavior in early infancy).
METHODS: Participants were 1994 women (mean age = 31 years) and their infants, who were recruited in pregnancy as part of a prospective longitudinal cohort from 2008 to 2010. Pregnant women completed self-report questionnaires in pregnancy and postpartum related to psychosocial risk and a questionnaire about hostile behavior when their infant was 4 months of age. Health risk in pregnancy and infant health risk at birth were obtained from health records. Mothers completed the Ages and Stages Questionnaire when infants were 12 months of age.
RESULTS: Path analysis revealed that the association between maternal ACEs and infant development outcomes at 12 months operated through 2 indirect pathways: biological health risk (pregnancy health risk and infant health risk at birth) and psychosocial risk (maternal psychosocial risk in pregnancy and maternal hostile behavior in infancy).
CONCLUSIONS: Psychosocial risks in pregnancy, but not in early infancy, contribute to the transmission of vulnerability from maternal ACEs to child development outcomes in infancy via maternal behavior. Maternal health risk in pregnancy indirectly confers risk from maternal ACEs to child development outcomes at 12 months of age through infant health risk. Maternal health and psychosocial well-being in pregnancy may be key targets for intervention.

- Accepted November 22, 2017.

- Parental Adverse Childhood Experiences and Offspring Development at 2 Years of Age
  Alonzo T. Folger, Emily A. Eismann, Nicole B. Stephenson, Robert A. Shapiro, Maurizio Macaluso, Maggie E. Brownrigg, Robert J. Gillespie

  Pediatrics Mar 2018, e20172826; **DOI:** 10.1542/peds.2017-2826

- Parental Adverse Childhood Experiences and Resilience on Coping After Discharge
  Anita N. Shah, Andrew F. Beck, Heidi J. Sucharew, Stacey Litman, Cory Pfefferman, Julianne Haney, Samir S. Shah, Jeffrey M. Simmons, Katherine A.Auger, on behalf of the H2O Study Group

  Pediatrics Mar 2018, e20172127; **DOI:** 10.1542/peds.2017-2127

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- Maternal Adverse Childhood Experiences and Infant Development
  Nicole Racine, Andre Plamondon, Sheri Madigan, Sheila McDonald, Suzanne Tough

  Pediatrics Mar 2018, e20172495; **DOI:** 10.1542/peds.2017-2495

- ACEs and Pregnancy: Time to Support All Expectant Mothers
  James J. Hudziak

  Pediatrics Mar 2018, e20180232; **DOI:** 10.1542/peds.2018-0232