



ADVANCING HEALTH EDUCATION & RESEARCH



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AVA Research Reviews provides AVA members with recent published, peer-reviewed articles in a broad array of violence and abuse topics. The goal is to highlight and disseminate violence and abuse research in a timely fashion, and to enhance healthcare providers' practice by fostering the educational mission of AVA

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AVA Research Review

ADVANCING HEALTH EDUCATION & RESEARCH

Review Title:
Intergenerational Effects of Adverse Childhood Experiences

Reviewer(s):
Thomas F Boat, MD
Professor, Department of Pediatrics
Cincinnati Children's Hospital Medical Center and the University of Cincinnati

Article: Folger, A.T., Eismann, A., Stephenson, N.B., Shapiro, R.A., Macaluso, M., Brownrigg, M.E., Gillespie, F.J. (2018) Parental Adverse Childhood Experiences and Offspring Development at 2 years of Age. *Pediatrics*, 2018, 141 (April): <http://pediatrics.aappublications.org/content/141/4/e20172826>

Introduction:
Adverse childhood experiences (ACE) are well documented contributors to unhealthy behavioral and physical outcomes that are apparent as early as the first years of life and notable across the lifespan

(Felitti, V.J., Anda, R.F., Nordenberg, D. 1996; Bethel, C.D., Newacheck, P., Hawes, D., Halfon, N. 2014). Documentation of ACE in the preconception, prenatal, and postnatal periods could provide the basis for designing interventions that foster improved parenting and child development. While a relationship between parental ACE and child outcomes is now well documented, mediating factors have not been clearly defined, and interventions to disrupt the intergenerational effects of ACE have consequently taken the form of general efforts to improve parenting skills (Briggs, R.D., Silver, E.J., Krug, L.M. 2014). Furthermore, the interaction of early adverse and protective factors as determinants of parenting skills has not been productively explored. The paper by Folger et al adds important pieces of information to the

consideration of parental ACE and early life protective factors, their identification in primary health care practice, and their role in offspring social, behavioral and physical development.

Aims/Hypotheses:

The authors designed this retrospective analysis of data on parental ACE and global child development at 2 months of age, accumulated in a suburban primary care practice with a diverse patient population, over nearly two years. The aim was to test the hypotheses that recalled parental ACE had a negative effect on offspring development at 24 months of age, that the effects of parental ACE on child development are mediated in part by maternal depression, and that effects of parental ACE on the child can be attenuated by parental early life protective factors. They further explored the question of whether paternal as well as maternal ACE has deleterious effects on child development.

Relevant Findings:

Both maternal and paternal ACE were adversely associated with child developmental outcomes in the domains of motor communication and problem solving skills at 24 months of age.

2) The presence of one parental ACE increased child need for early intervention services. For each additional parental ACE there was an 18% increase in risk for suspected developmental delay. 3) Paternal ACE had an effect on the child approximately equal to that of maternal ACE. 4) A trend was noted for worse child developmental outcomes if the maternal early resilience score was low. 5) Depressive symptoms for mothers at the child age of two months were significantly associated with ACE, but the authors were unable to document a relationship between maternal depressive symptoms and child developmental outcomes.

Strengths and Limitations of this Study:

The study was retrospective but data were gathered in an intentional mode using reliable and validated tools for child development and ACE/Resilience and maternal depression information gathered in a large suburban two site pediatric practice. Patients were both Caucasian and non-Caucasian, predominantly Hispanic and were insured through public and private mechanisms. The study data were collected from visits occurring between 12 and 24 months

features of the study that added new information to the literature in the study of fathers on earning ACE, study of both mothers and fathers on earning early life protective factors, resilience and screening of mothers for depression within the first several months of the child's life.

Potential weaknesses of the study in the limited enrollment of families within the practice / seen during the study period or failure to report how those families who were evaluated for parental ACE were identified. How many families refused to participate. Further, approximately one third of families who were assessed for parental ACE left the practice before the 24-month developmental assessment of their child. It is unclear how representative the study population was of the entire practice population. Data on paternal ACE were relatively limited. Fathers vs mothers providing some analyses such as relationship between paternal ACE and developmental outcomes. Yet another limitation of this study was the inclusion of children both of whose parents filled out the ACE survey.

