

Child Maltreatment and Medical Fragility: Fatalities in the First Year of Life

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In this month's *Pediatrics*, Schneiderman et al examine infant deaths for medical causes among infants previously reported to child protective services.¹ Using probabilistically linked birth records, child protective service records, and death records, the authors examined risk of death through the first year of life. Their analyses controlled for sex, race and ethnicity, maternal age, early prenatal care, insurance status, birth weight, and prematurity. Infants reported for maltreatment had an almost twofold increase in risk of for any medical cause of death.

Are infants with serious medical conditions at higher risk for maltreatment or is maltreatment more likely to be detected among those with serious medical conditions? An increased risk for death would follow from prematurity, congenital abnormalities, or intrauterine exposure to infection.² Children with these conditions likely require careful and more frequent medical encounters. Missed appointments and lack of follow-through on medications and treatment may be life-threatening. Medical teams caring for chronically ill infants are often sources of reports for neglect for infants whose caregivers fail to keep scheduled appointments, accept referrals, or take prescribed medications. Furthermore, the increased frequency of medical visits over the first year of life for ill

children may also increase detection of sentinel injuries.³ Maltreatment may also be increased beyond failures in following medical care recommendations. Infants with chronic disease can contribute to financial and emotional stresses on their parents. Ill infants may be less capable of the responsiveness that helps create a strong bond between parent and child.⁴ Infants with chronic conditions may have high-pitched cries or disordered sleep patterns that add to parental stress. It therefore follows that infants with medical conditions are both at higher risk of maltreatment and more likely to be reported.

The data from Schneiderman et al reveal that the outcome for infant medical conditions is dramatically altered by the family situation. Importantly, infants reported to child protective services and placed in foster care had the risk of mortality decreased by half. In the unadjusted analysis, the youngest mothers (<20 years old) had a 34% increase in the risk of infant mortality compared with older mothers. Poverty increases the risk for abuse and neglect.⁵ Young parents, with less schooling and fewer years in the workforce, are at an additional economic disadvantage. Poverty impacts survival of children with chronic medical conditions because poor families have increased exposure to risky environments and decreased access to health services.⁶

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Interventions to address this additional risk of mortality must be multifaceted.⁷ These interventions include paid parental leave, increased minimum wage, paid earned income tax credits, and access to long-acting reversible contraceptives for teenagers to prevent unwanted pregnancies.⁸ Many of these approaches address poverty directly. Community engagement programs such as Strong Communities⁹ reduce child maltreatment by giving visibility to the problem of child abuse and broadly engaging community members and medical practices in programs to support new parents. Home-visiting programs like the Nurse-Family Partnership¹⁰ for young first-time mothers enrolled prenatally and SafeCare¹¹ for mothers of any parity with children enrolled in 20-week home-based educational program offer explicit and evidence-based support to new parents and have been shown to be successful.

Additional strategies are needed after reports are made to child protective services. For example, child protective service agencies should include medical expertise in treatment planning and/or form partnerships with public health

agencies to bring health expertise to judgements about the significance of missed appointments or undelivered medications.

Forewarned is forearmed. Medical conditions represent a serious threat to the lives of infants reported to the child protection system. General and subspecialty pediatricians who have reported an infant for neglect or abuse or who have a reported infant in their practice must ensure continued care for the infants after a report. Child protective service professionals need to be aware of the elevated risk of death among their charges from disease and facilitate ongoing medical care.

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