



Silent Victims — An Epidemic of Childhood Exposure to Domestic Violence

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Since August 2012, the Affordable Care Act has required private insurance companies to cover routine screening and counseling for intimate partner violence (IPV) as an essential health service for

women at no additional cost to the patient. This requirement reflects recent, evidence-based recommendations from the Institute of Medicine and the U.S. Preventive Services Task Force and represents important forward movement in mitigating the health effects of IPV.

Discussions about health care providers' role in IPV screening and intervention, however, often fail to consider the profound effects of childhood exposure to IPV — an omission that renders these children silent victims. Although the prevalence and adverse health consequences of such childhood exposure are well researched, this public health problem is rarely emphasized. More than 15 million children in the United States

live in families in which IPV occurs, and approximately 7 million of them witness severe violence, such as a parent using a weapon in the assault of the other parent.¹ Children can be directly exposed to IPV (e.g., present in the room where the violence is occurring) or indirectly exposed — that is, affected by effects of the violence (e.g., maternal depression, trauma symptoms, or changes in parenting).

Childhood IPV exposure has been repeatedly linked to higher rates of myriad physical health problems in children. Altered neuroendocrine stress response may be one important mechanism accounting for this correlation. Highly stressful environmental ex-

posures, such as exposure to IPV, cause children to repeatedly mount the “fight or flight” reaction. Although this response may be adaptive in the short term, repeated activation of the autonomic nervous system and hypothalamic–pituitary–adrenal (HPA) axis results in pathologic changes in multiple systems over time; some experts refer to this effect as the biologic embedding of stress.²

For example, childhood exposure to IPV increases both the incidence and severity of childhood asthma by means of a mechanism related to chronic activation of the HPA axis.² Specifically, such chronic activation and the associated cortisol release may lead to an excess of type 2 helper T (Th2) cells relative to type 1 helper T (Th1) cells, which can in turn lead to airway inflammation and hyperactivity, thereby increasing the risk of an onset of asthma.² In addition, white cells may com-

pensate for a stress-related excess of cortisol by down-regulating glucocorticoid receptors. In support of this theory, Miller and Chen have reported that asthmatic children who experienced acute and chronic stress had significantly lower expression of glucocorticoid-receptor mRNA than asthmatic children who did not have such stress.³ Diminished glucocorticoid responsiveness can lead to excessive inflammatory response, increased airway reactivity, and decreased efficacy of glucocorticoid medications, which could have major implications for maintaining asthma control and treating asthma exacerbations.³

Social and emotional health are similarly adversely affected by childhood IPV exposure, and the mechanism underlying these effects is also related to the biologic embedding of stress. According to a meta-analysis, 63% of child witnesses of IPV had worse emotional health than the average child.⁴ Early childhood represents the greatest period of vulnerability to stress-related changes in the brain, because of the tremendous brain growth that occurs during this period. For example, childhood IPV exposure affects the usual pruning of infants' neurocircuitry, leading to overrepresentation of the fear-driven limbic system and underdevelopment of areas of interpretive functioning, such as the frontal and prefrontal cortexes.⁵ In addition, increased cortisol levels can result in hippocampal neuron loss and damage as well as associated learning problems and harm to emotional health.

We believe that the health care community's primary role in this arena should include early identification and treatment to prevent or ameliorate the negative effects

of IPV on developing biologic systems. The ability of pediatric clinicians to prevent or treat child health problems will be stymied if IPV is not adequately addressed; adult clinicians must recognize that a person's lifelong health trajectory is established in childhood and that efforts to improve the health of children will therefore ultimately improve the health of their future patients. When mothers who have experienced IPV are identified in adult medicine settings, clinicians should thoughtfully include in their plans strategies for addressing the needs of exposed children. For example, they might discuss with mothers positive parenting techniques, since a secure relationship with a primary caregiver is a critical buffer for the stress of childhood IPV exposure.

Within pediatrics, the American Academy of Pediatrics supports routine IPV screening at the time of well-child visits. Screening can be conducted by clinicians or by means of written or computer-based approaches. Screening questions and procedures mirror those used in adult medicine, with one notable exception. Abused women have expressed concern that verbal children who are 3 years old or older may be traumatized by direct discussions of IPV in their presence — or that they may later inadvertently repeat these conversations to the perpetrator. Therefore, when caring for mothers with older children, clinicians have the option of screening the mother alone (e.g., during hearing and vision screening) or using more general questions, such as “How do you and your partner work out arguments?” and “In general, how would you describe your relationship with your partner: a lot

of tension, some tension, or no tension?”

When the occurrence of IPV is disclosed, hospital and community IPV programs are essential partners that can help clinicians and their patients develop sound management plans that protect women and children's safety and abide by state-specific reporting laws. Reporting laws for both IPV and childhood exposure to IPV vary among states, and certain situations may need to be reported to the police, child protective services, or both; consultation with local IPV advocates or hospital-based IPV-child protection teams are important in decision making, since these situations are often nuanced and the safety of both women and children must be carefully considered. When it's appropriate, children should be referred to available mental health care providers who are informed about trauma care. There are evidence-based interventions for childhood exposure to IPV, such as trauma-focused cognitive behavioral therapy, that effectively reduce children's trauma symptoms, but too often these therapies are not accessible at the community level. Continued advocacy to expand the availability of these programs is essential.

The health care system has effectively tackled critical health problems and led the charge to address many public health problems. We now have the opportunity and obligation to identify women and children who are experiencing IPV and to promote evidence-based interventions to prevent, or at least attenuate, the health consequences of childhood IPV exposure.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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State Politics and the Fate of the Safety Net

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Only 2% of acute care hospitals nationwide are safety-net facilities, but they provide 20% of uncompensated care to the uninsured. Because most are in low-income communities, they typically generate scant revenue from privately insured patients. The Medicaid Disproportionate Share Hospital (DSH) program was established to help defray their costs for uncompensated care.¹

Currently, Medicaid DSH disburses \$11.5 billion annually to the states, which have considerable latitude in allocating these funds. Some states carefully target their DSH payments to hospitals providing large volumes of uncompensated care, but others, such as Ohio and Georgia, spread their payments broadly, transforming the program into a de facto subsidy of their hospital industry.¹

Because the Affordable Care Act (ACA) was expected to dramatically expand insurance coverage, safety-net hospitals were expected to need less DSH money. Therefore, to reduce the cost of expanding Medicaid, the ACA reduced Medicaid DSH funding by \$18.1 billion between fiscal years 2014 and 2020.² To allow time for coverage expansion to

take effect, the cuts are back-loaded — starting at \$500 million (4% of current national DSH spending) in 2014 but reaching \$5.6 billion (49% of current spending) in 2019.

The DSH cuts are so deep in part because Congress assumed that all states would expand Medicaid, providing coverage for 17 million low-income people³ and sharply reducing uncompensated care. The anticipated increased revenue from Medicaid was considered sufficient to compensate hospitals for lost DSH funds. The fiscal math changed when the Supreme Court ruled that states could opt out of Medicaid expansion. Now, only 24 states and the District of Columbia plan to expand Medicaid in 2014; 22 states, including Texas and Florida, will not, and the rest are undecided.⁴ Thus, at least 6 million Americans who were expected to obtain coverage will remain uninsured.³ Because many states that won't expand Medicaid currently receive large DSH payments, their safety-net hospitals will be hit hard when the DSH cuts kick in.

Even states that expand Medicaid will need some DSH support. After Massachusetts implemented its health care reform law, uncompensated-care costs at its

hospitals dropped by 40% but soon climbed again. In 2011, Massachusetts hospitals required \$440 million to offset their costs for uncompensated care.

Recently, the Centers for Medicare and Medicaid Services (CMS) issued a proposed rule allocating reductions in DSH payments across states for the first 2 years, on the basis of three equally weighted factors: the percentage of uninsured people in the state, how well the state targets its DSH payments to hospitals with high percentages of Medicaid inpatients, and how well it targets DSH payments to hospitals with high levels of uncompensated care.² If the rule is adopted as written, states with lower percentages of uninsured citizens will receive steeper cuts, but the biggest reductions will hit states that don't target DSH payments to hospitals providing large amounts of Medicaid and uncompensated care.

We believe the proposed rule moves DSH policy in the right direction by providing incentives to states to focus their remaining DSH funds on the hospitals that need it most. The proposed rule does not change states' authority to use DSH funds for a broad hospital subsidy, but those