



ADVANCING HEALTH EDUCATION & RESEARCH

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

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Review Title: Risk of Fatal Injury in Young Children Following Abuse Allegations: Evidence from a Prospective, Population-Based Study

Reviewer: Janet Yuen-ha Wong, PhD, RN, Assistant Professor, School of Nursing, LKS Faculty of Medicine, The University of Hong Kong

Article: Putnam-Hornstein, E., Cleves, M.A., Licht, R., Needell, B. (2013). Risk of fatal injury in young children following abuse allegations: evidence from a prospective, population-based study. *Am J Public Health*, 103(10): e39-44.

Article Summary:

Brief Overview of issue:

In 2011, it was estimated that 6.2 million children were referred to child protective services (CPS) for abuse and neglect in the United States. Previous research indicated that children with a history of CPS referrals have a higher

risk of death by injury and other causes. However, whether the referred children had immediate threat or consequential risk was unclear. A possible differentiation of the threat faced by the child is the type and severity of alleged maltreatment. In practice, a child younger than 5 years old with a physical abuse allegation may be a reliable marker of sufficient safety concerns to necessitate further CPS intervention. However, there has been no evidence to show such link. In addition, no study has examined the fatality risk differences by maltreatment type. Thus, the authors propose the need to investigate whether children previously referred for physical abuse had an increased risk of both unintentional and intentional fatal injury compared with children referred for neglect or other forms of maltreatment by using a prospective design.

Aims of the article:

The authors address these issues by conducting the first prospective study to examine whether children previously referred for physical abuse had an increased risk of both unintentional and intentional fatal injury compared with children referred for neglect or children referred for other forms of maltreatment including emotional abuse, sexual abuse - exploitation, and abuse of a sibling.

Relevant Findings:

Employing a prospective design, all children born in California between 1999 and 2006 (n = 4,317,216) and died before their fifth birthday between 1999 and 2007 (n = 25,987) were matched by obtaining birth and death records from the California Department of Public Health. In total, 98.1% of death records to a birth record were able to be matched. The birth records were also matched with the extracted CPS records involving children born between 1999 and 2006 and referred for maltreatment before age 5 years (n = 596,962) from the California Department of Social Services. Finally, 86.6% of children referred for maltreatment to a birth record were able to be matched. The authors explained that the unmatched CPS records were possibly children born in another state

and then referred for maltreatment in California and those who gave incomplete information when acquiring CPS.

The results showed that 392 children who were referred for maltreatment were fatally injured before the age of 5, and most fatal injuries (63%) were unintentional. Compared to other referred children, children who were fatally injured had significant differences in previous physical abuse allegation (24.2% vs 16.7%) or neglect allegation (70.2% vs 64.3%) and other forms of maltreatment allegation (5.6% vs 19.0%).

By using Multivariable Cox Proportional Hazard Modelling, the main results showed that a previous allegation of physical abuse was associated with more than a 4-fold increase in the risk of children's intentional fatal injury compared to children referred for reasons of neglect (HR = 5.22; 95% CI = 3.61, 7.57). However, for children's unintentional injury deaths, children referred for physical abuse were significantly less likely to die than children referred due to neglect (HR = 0.59; 95% CI = 0.39, 0.90).

Authors' Conclusions:

The authors concluded that children with a previous

allegation of physical abuse had significantly higher risk of an intentional fatal injury before age 5 than children with a previous history of neglect from the data in California. Findings should inform child-serving providers about the need for ongoing investigation, monitoring, and serving young children with physical abuse allegations in order to protect children from physical harm in the future.

Reviewer's Comment:

One of the major limitations was that the maltreatment allegations were categorized into physical abuse, neglect and other forms of maltreatment. It was possible that the children who suffered from physical abuse also experienced other forms of maltreatment. In addition, intentional injury fatalities could be underestimated in this study. The authors could not rule out the possibility that children had history of neglect-related intentional injuries. However, this study involved a representative sample in California and was the first study to examine all manners of fatal injury with respect to different maltreatment types. The findings of this study make a significant contribution to public health research and child protection services. Early intervention to address the needs of children is a sound practice to prevent harmful

risks that may lead to fatal injury.