Duke SANFORD | CENTER for CHILD & FAMILY POLICY

RESEARCH BRIEF

childandfamilypolicy.duke.edu

March 2023

Children Evaluated for Maltreatment Have Higher Subsequent Emergency Department and Inpatient Care Utilization than the General Pediatric Population

Yuerong Liu, Ph.D.
Megan Shepherd-Banigan, Ph.D., MPH
Kelly E. Evans, MPH
Laura Stilwell, B.S.
Lindsay Terrell, M.D.
Jillian H. Hurst, Ph.D.
Elizabeth J. Gifford, Ph.D., M.S.

This brief summarizes the findings from "Do children evaluated for maltreatment have subsequent emergency department and inpatient care utilization compared to a general pediatric sample?" in Child Abuse and Neglect. The authors investigated acute health care utilization patterns after children were evaluated for a concern of maltreatment at a child abuse and neglect medical evaluation clinic.

Data came from the electronic health records for children from birth to three years old who underwent a medical evaluation for suspected maltreatment in an academic medical center in the U.S.

Receipt of maltreatment evaluation was associated with a higher risk of acute health service use, both for maltreatment-related injuries and illnesses and for broader conditions.

Child maltreatment is a common, serious, and costly problem in the United States, with 7.1 million children referred to Child Protective Services in 2020. Child maltreatment results in substantial adverse health outcomes, but little is known about child health care utilization after they receive an evaluation for maltreatment at a child abuse and neglect (CAN) medical evaluation clinic. Children who have been previously maltreated are at high risk of maltreatment recurrence and developing chronic health conditions due to health complications related to past maltreatment. This may lead to an increased chance for receiving acute health care services for injuries or improper use of acute health care for chronic conditions. Thus, examining patterns of high-cost, intensive care use among children with previous concerns of maltreatment would inform healthcare systems of any potential preventive support they could provide to these children and families. This study sought to examine the patterns of subsequent acute health care utilization among children from birth to age three who had undergone a medical evaluation for suspected maltreatment.

STUDY

This study used electronic health records for children who underwent a medical evaluation for suspected maltreatment in an academic medical center in the U.S. Many hospitals and health care systems have developed a specialty clinic to perform evaluations for children who are suspected victims of abuse and neglect. The maltreatment evaluation team usually consists of a board-certified child abuse pediatrician or experienced advanced practice provider and a social worker. This is considered a gold standard for assessing levels of concern about maltreatment.

The aim of this study was to understand the patterns of acute healthcare use after the maltreatment evaluation among children from birth to three years old. We assessed three aspects of health care utilization in the 18 months following a maltreatment evaluation, including (1) ED visits and inpatient hospitalization, (2) child maltreatment-related ED visits and inpatient hospitalization, and (3) ED visits and inpatient hospitalization for ambulatory care sensitive conditions (ACSCs), or conditions that would not necessarily require hospitalization if they were treated in a timely and effective manner in an outpatient setting. ACSCs include chronic conditions such as asthma or type 1 diabetes, which require regular management, and dental conditions, which typically do not require emergency treatment if an individual is receiving regular preventive care.

FINDINGS

Receipt of maltreatment evaluation was associated with a higher risk of subsequent acute health service use, both for maltreatment-related illnesses and for broader conditions. Compared to the general pediatric population who did not undergo maltreatment evaluation, those who received an evaluation experienced a greater likelihood of subsequent ED visits or inpatient hospitalizations and maltreatment-related acute health care use (see figure). This indicates that even after receiving services or referrals provided by CAN clinicians, children who received a maltreatment evaluation still had a higher risk of experiencing future harm or complications from maltreatment evaluated at the index visit. There was no significant relationship between a maltreatment evaluation and a higher risk of acute health care use for ACSCs, which could probably due to the more important role of health care inequalities driven by racial/ethnic status and socioeconomic status.

Children Evaluated for Maltreatment

Have Higher Subsequent ED and Inpatient Care Utilization

1.3X

more likely to have additional ED visit or inpatient hospitalization

4X

more likely to use the ED or receive inpatient care for maltreatment

7.8% vs 2.1%

or associated injuries, illnesses or conditions

3 in 10

children with a maltreatment evaluation were reported to Child Protective Services within 18 months of the evaluation

1 in 10

children with a maltreatment evaluation had a substantiated report of child maltreatment within 18 months of the evaluation

Overall

children with a maltreatment evaluation had a higher risk of acute health service use, both for maltreatment-related injuries or illnesses and conditions more broadly, even after potential maltreatment has been diagnosed, involvement with child welfare when mandated, and when other referrals and supports were offered

IMPLICATIONS FOR PRACTICE:

- Clinicians in CAN subspecialty clinics should:
  - Work with community partners to ensure children and families are able to access and utilize recommended or placed services. Provide appropriate health service recommendations to help reduce the need for future acute health care services, such as mental health services, developmental evaluation, referral to a subspecialty provider, or substance abuse counseling.
  - Support families through anticipatory guidance such as providing information about developmental phases that can be difficult for parents to manage (e.g., colic, toilet training, and separation anxiety), teaching parents how to cope with an infant's crying, modeling how to provide effective discipline, and sharing positive parenting techniques.
  - Pay attention to children's other health needs separate from concerns of immediate maltreatment harm, given that many children who have been evaluated for a concern of maltreatment use acute health care services not specific to maltreatment.
  - Connect these children with social workers and/or care managers who can connect families and children with a primary care medical home.
- Other health care providers in hospitals, EDs, and primary care should:
  - Check patients' electronic health records for any history of child maltreatment so they are aware of prior encounters.
  - Monitor the health of these children and proactively provide advice and guidance should there be complications of existing conditions.
  - Follow up with patients' families about any recommendations for services or supports coming from a CAN medical clinic.

For full text and references, see Yuerong Liu, Megan Shepherd-Banigan, Kelly E. Evans, Laura Stilwell, Lindsay Terrell, Jillian H. Hurst, Elizabeth J. Gifford, Do children evaluated for maltreatment have higher subsequent emergency department and inpatient care utilization compared to a general pediatric sample?, *Child Abuse & Neglect,* Volume 134, 2022. https://doi.org/10.1016/j.chiabu.2022.105938.