Origins and Clinical Relevance of Child Death Review Teams

Michael J. Durfee, MD; George A. Gellert, MD, MPH, MPA; Deanne Tilton-Durfee

Interagency child death review teams have emerged in response to the increasing awareness of severe violence against children in the United States. Since 1978, when the first team originated in Los Angeles, Calif, child death review teams have been established across the nation. Approximately 100 million Americans or 40% of the nation’s population now live in counties or states served by such teams; most have been formed since 1988. Multiagency child death review involves a systematic, multidisciplinary, and multiagency process to coordinate and integrate data and resources from coroners, law enforcement, courts, child protective services, and health care providers. This article provides an introduction to the unique factors and magnitude of suspicious child deaths, and to the concept and process of interagency child death review. Future expansion of this process should lead to more effective multiagency case management and prevention of future deaths and serious injuries to children from child abuse and neglect.

OVER 1000 American children die each year of intentional injuries at the hands of a caretaker (P. W. McClain, MS, J. J. Sacks, MD, MPH, R. D. Froehlke, MD, A. D. Ewigman, MD, oral communication, April 1992).1 Most are infants or young toddlers.44 No single health, social service, law enforcement, or judicial system exists to track and comprehensively assess the circumstances of child deaths.3 This article describes the expanding national implementation of interagency multidisciplinary child death review teams in response to the critical need for systematic evaluation and case management of suspicious child deaths.

MAGNITUDE OF THE PROBLEM

It is difficult to estimate the incidence of fatal child abuse using traditional data systems.4 Available statistics reflect varied levels of competence in detection, evaluation, and recording of child deaths and variation in definitions used by different agencies. The National Committee for Prevention of Child Abuse, which annually surveys all states, reported a national incidence of 1393 child abuse fatalities for 1991.1 The National Committee for Prevention of Child Abuse survey does not utilize a rigorous case definition and excludes cases not known to social service departments or other child abuse agencies. The Centers for Disease Control uses vital statistics and Federal Bureau of Investigation Uniform Crime Reports to arrive at an annual national figure of about 2000 child fatalities from abuse or neglect (P. W. McClain, MS, J. J. Sacks, MD, MPH, R. D. Froehlke, MD, A. D. Ewigman, MD, oral communication, April 1992). In Los Angeles County, California, 14 years of multiagency child death review suggests that the numbers will increase as abuse-related fatalities are more accurately identified and reported.

UNIQUE FACTORS IN CHILD DEATH

Death scene investigators evaluating adult victims may follow protocols fairly objectively. First responders to an imminent or actual child death scene, however, may be swept up in an intense focus on providing life support for the victim and emotional support for the victim’s family. Even when it becomes apparent at the hospital that the circumstances of death are suspicious, delays may occur before an investigator returns to the scene of the event, or investigators may visit only the hospital and request that the medical staff interpret the death.

Criminal investigation of a child death caused by a caretaker is unique for investigators, since the perpetrator is legally responsible for the child and has continuous access to the victim. This contrasts with the majority of adult homicides where the victim and perpetrator are not cohabiting at the time the injury causing death is perpetrated. Child deaths may also result from the neglect of children by caretakers who are expected to provide for the child victim’s biological needs. The concept of not feeding, protecting, or otherwise providing for the unique needs of a young child may be difficult to comprehend for a homicide detective with no child abuse training.

Most suspicious child deaths occur among very young children. Studies of “fatal child abuse” or of “homicide by...
Table 1.—Evolution of Child Death Review Teams in the United States*

<table>
<thead>
<tr>
<th>State</th>
<th>Status of First Team Year</th>
<th>Location</th>
<th>Present Status†</th>
<th>Population Covered by Teams, In Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>1978</td>
<td>Los Angeles County</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>South Carolina</td>
<td>1985</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>1986</td>
<td>Boone County</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>1986</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>1987</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>1988</td>
<td>Franklin County</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Colorado</td>
<td>1988</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>1989</td>
<td>Local/State</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Illinois</td>
<td>1989</td>
<td>Cook County</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>1989</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>1990</td>
<td>State/local</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Iowa</td>
<td>1990</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td>1991</td>
<td>Marion County</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>1991</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>1991</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td>1991</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td>1991</td>
<td>State/local</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Washington</td>
<td>1991</td>
<td>Spokane County</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Hawaii</td>
<td>1992</td>
<td>Honolulu County</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td>1992</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>1992</td>
<td>State</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>103</td>
</tr>
</tbody>
</table>

*States having state and/or local teams including (1) Interagency teams including health, human and social services, and criminal justice representatives; (2) inclusive intake of potentially suspicious child deaths from coroner’s or health databases, or from local referrals; and (3) team review of cases.
†Status as of April 1992.

CHILD DEATH REVIEW TEAMS

Multigency child death review teams lend greater clarity and coherence to case management and help define intra-agency and interagency problems. The core team includes at least five members with representatives from the coroner—medical examiner’s office, law enforcement agencies, prosecuting attorneys (municipal, district, or state), child protective services, pediatricians with child abuse expertise, and health professionals, including public health nurses.13,14 In most states, the coroner—medical examiner or health department supplies a list of child death cases selected through an established protocol designed to include all deaths with suspicious causation. Colorado and Missouri state teams and some local teams review all child deaths from any cause.15,16 Confidentiality of medical records is maintained within the team process. The medical examiner or other medical professionals interpret autopsy findings and medical history for nonmedical team members. Law enforcement assures the role of case manager if criminal investigation is warranted. Prosecutors educate the team on criminal law pertaining to individual cases and pursue litigation as appropriate. Child protective services provides records from previous contacts with the victim’s family and coordinates efforts to protect surviving siblings. Medical professionals access and interpret clinical records of trauma or physical neglect, educate the team on pertinent medical issues, and may assist in referrals for direct health care evaluation and services for surviving family members. Public health specialists may provide vital records and can develop epidemiological risk profiles of families for early detection and prevention of child death and serious injury.

Other team members can include representatives from mental health agencies, fire department emergency medical personnel, probation and parole departments,14 substance abuse treatment providers, local school and preschool educators, sudden infant death syndrome experts, and state or local child advocates. Private hospitals may participate if they are actively involved with child abuse prevention or have involvement in a case under review.13,14 Most team members are employed at the direct service level, although senior managers and political appointees may be a part of some mandated state teams. Most teams have grown in the number and diversity of members during the first year of reviewing cases. Teams may function at the state and/or local jurisdictional level. Some large

HISTORY OF CHILD DEATH REVIEW TEAMS

Child abuse prevention and intervention are relatively new phenomena. “Child abuse” was not indexed in Index Medicus until 1965 and “infanticide” was not indexed until 1970. Much of the limited medical literature on fatal child abuse has been published within the last 3 years. The preponderance of medical and other data are available only from uncirculated sources.10—12

Los Angeles County began the nation’s first interagency child death review team involving criminal justice and health and human service professionals in 1978. This team evolved from the experience of clinical teams conducting “death review” rounds on internal medicine wards. Weekly review of all adult deaths on a busy hospital service demonstrated the educational benefits of a systematic review of death as a way to improve services to the living. Child death review adapted the process of review to the premature deaths of children in the community. By April 1992, interagency, multidisciplinary child death review teams drawing cases systematically from agency referrals, coroner–medical examiner records, or vital statistics had been established at the state and/or local level in 21 states (Table 1), covering 100 million Americans or 40% of the nation’s population.

JAMA, June 17, 1992—Vol 267, No. 23

Child Death Review Teams—Durfee et al 3173
states have local teams but no state teams. The trend is toward establishing both local and state teams (Table 1). Missouri has the first state to establish a complete functioning network of state and local teams in all jurisdictions (March 1992). The various teams began through individual initiative, state-initiated legislation, or administrative mandate. Some county teams gather in regional clusters and the southern states scheduled the first regional multistate meeting in South Carolina in April 1992. Most teams function with little or no specific funding; resources for team management come from the member agencies. A few teams receive additional funding for staff support. All teams save costs through increased effectiveness of interventions and reduced duplication of efforts.

Table 2 summarizes several of the potential outcomes of multiagency child death review. Few data are currently available but should become more so in the next few years. One of the first tangible changes in case outcome in Los Angeles County occurred in 1988. Seven child death cases chosen from a systematic team review from 1981 through 1988 that were designated as natural or accidental in causation were modified at a coroner's inquest to "death at the hands of another." Several of these cases resulted in criminal actions and referrals of surviving siblings for protective services. Another case reviewed by the team was reclassified from homicide to natural death.

The multiagency team process is more vigorous than the single agency process, more capable of clearly identifying a case that is suspicious, and more able to deal with special challenges, such as the difficulty of identifying the perpetrator out of multiple caretakers, separating out physical findings that confuse the determination of cause of death,17 or distinguishing sudden infant death syndrome from suffocation.18 The results are more focused, more complete, and the process is more accountable. Outcome reports from the team add to that accountability.

Child death review also creates an opportunity for a systematic review of agency actions (and inactions). This has been particularly important with respect to improving and integrating interagency communications, and allowing agencies the opportunity to address deficits in their own systems. Surviving siblings can be identified and referred for protection, evaluation, and service. Health professionals with previous contacts with the child or family can improve their clinical judgment and case management skills by learning retrospectively from the follow-up information obtained through child death review.

Small case numbers in rural counties and the ability of the involved agencies to focus extensively on each case offers an opportunity for some teams to develop specifically targeted local preventive actions for childhood injury. Such action may involve various multiagency prevention programs, including child safety seats for automobiles, drowning prevention, and suicide prevention.

Law enforcement, child protective services, coroner's investigators, and public health nursing team members all conduct home visits and investigations. These professionals thereby possess outreach capability for families that are beyond the coverage of mainstream community medical systems. Team education allows health professionals to become a resource for detecting and referring medical and social problems that predispose a family to violence. High-risk problems that may be detected include pregnancies involving maternal substance abuse, pregnant women exposed to domestic violence, failure-to-thrive infants, and homes lacking basic child safety measures.

SPECIAL POPULATIONS

Other special populations could benefit from review, including spousal homicides with surviving children, child siblings as perpetrators, children killing parents, and homicides of disabled adults and the dependent elderly by family members. The team process may be extended to live children with the addition of children with severe nonfatal injuries.

Child and adolescent suicides with a history of prior child abuse represent another potential population for multiagency review and management. In Los Angeles County, 28% of all suicides under the age of 18 years in 1989 (n=43) were found to have a history of previous child protective services. The incidence of previous child abuse was inversely related to age (86% of 14-year-olds).1 This has resulted in the formation of a multiagency task force to address child and adolescent suicide.

The Los Angeles County coroner investigates approximately 40 fetal deaths annually from a countywide total of over 1000 fetal deaths per year. Most of the coroner's cases appear to result from maternal substance abuse, usually cocaine. Several fetal deaths each year result from homicide or assault of a pregnant woman.4 Fetal deaths traditionally receive intervention only at the hospital. Team intervention with fetal deaths from maternal substance abuse may include a public health nurse referral to help the mother and other family members prevent such behavior in the future. Fetal deaths from assaults on the mother may be followed by criminal justice investigation and prosecution.

SIGNIFICANCE FOR MEDICAL PROFESSIONALS

The child death review team is an activity with significant impact on basic health care. Physicians and other health professionals contribute to and benefit from the child death review team process. Physicians assure that medical records are made available to review teams, explain and interpret medical findings for nonmedical team members, and assist with case referral and management. Participating clinicians may improve their access to other agencies and thereby achieve a broader base for health care service provision to children, and increase their sensitivity for management of high-risk families.

Medical team members are exposed to extensive clinical material, including Munchausen syndrome by proxy,19 sudden infant death syndrome, apnea and suffocation,18 drowning,11 burns,32 neglect,32 abdominal trauma,27 neonaticide,27 shaken baby syndrome,30,32 and head trauma.26 Clinical pathological conferences, even for unusual presentations, may include child abuse in the differential diagnosis.45

Medical team members have special value as liaisons with other health care providers who cared for the child before the incident that caused death. Occasionally, previous caretakers will have noted injuries or family problems that may assist in defining a pattern of abusive behavior. Previous caretakers may also have failed to report suspected child...
abuse or neglect and may benefit from peer support and consultation.

FUTURE ISSUES AND CONCLUSIONS

The US Advisory Board on Child Abuse and Neglect has made specific recommendations to the Secretary of Health and Human Services about the development of child death review teams and held a national hearing on fatal child abuse in Los Angeles in April of 1992. The US Department of Health and Human Services is heading an interagency task force to address implementation of this process nationally. The US Public Health Service objectives for the year 2000 include recommendations for state-level child death review teams in 45 states.\(^{10}\) The task for the 1990s will be to build a national network of teams to integrate that network with health care providers to establish a prevention system for families and children before they are injured or killed.

Child death review began initially as a method to address suspected child abuse or neglect fatalities. Many teams have expanded this focus to address all coroners’ cases including suicide, accidental deaths, and natural deaths. Prevention of child abuse fatalities involves early detection of families at risk and coordinated multagency intervention directed at those risk factors. Factors that elevate risk in a particular locality can be identified through the study of past child deaths. The team process facilitates more competent and predictable intervention through agencies that have learned to work together more effectively.

The interagency child death review team is clearly an idea whose time has come. Child death review teams have grown rapidly in the last 3 years with little or no external funding and limited national leadership. Federal and state funding and support of child death review teams would greatly facilitate the expansion of review across the nation. A national data registry could quantify and demonstrate the impact on detection, management, and prevention of fatal child abuse on an ongoing basis.

References