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SPECIAL ISSUE ON CHILD FATALITIES

Randell Alexander, MD, PhD, Guest Editor

FOREWORD

—by United States Attorney General Janet Reno

Children in America are dying every day from maltreatment, physical neglect, and lack of supervision. Too many of these deaths go unrecognized or are simply classified as accidents or unexplained deaths. Many of these deaths can be prevented by timely and effective enforcement action against abusers and by early intervention programs that teach parents how to supervise and care for their children. We must find better ways of identifying deaths from abuse and neglect and systematically learn from them so that we can protect other abused and neglected children and prevent future deaths.

Recently, I visited a children's hospital in Kansas City and toured their trauma unit. I talked with doctors about how they were combining a public health approach with a criminal justice and law enforcement approach to focus on what can be done with intentional abusers while, at the same time, taking steps to prevent accidents, injuries, and deaths that occur due to a lack of supervision. The problem of child maltreatment-related deaths is not a simple one, and the solutions require the coordinated efforts of many agencies and professionals as well as the commitment of the entire community. All involved agencies must work together to insure that the most complete and accurate information is available and that the right decisions are being made about how to protect children. To assist communities in establishing a multi-agency process for reviewing child deaths, the Department of Justice and its Office of Juvenile Justice and Delinquency Prevention sponsored a national training teleconference on child fatality review teams earlier this year. We will continue to provide training and information through the bureaus of the Office of Justice Programs on this important issue, to coordinate with the Department of Health and Human Services, and to participate on the Interdepartmental Task Force on Child Abuse and Neglect and the U.S. Advisory Board on Child Abuse and Neglect.

No child should die from maltreatment, but they do. We may not be able to prevent every abuse-related death of a child, but we can try. We can make sure that no child who dies in this country is laid to rest without our knowing how and why he or she died. This will enable us to design programs that teach parents how to properly supervise and care for their children and to learn when and how to intervene effectively before these tragedies occur.

Deaths of children from abuse and neglect confront us with the ultimate consequences of the failure of parents, professionals, and communities to care for and protect children. This special edition of *The APSAC Advisor* represents an important effort to focus the considerable knowledge and skills of the APSAC membership on addressing this very critical problem. I am honored to be a part of it and deeply appreciate your commitment to our nation's children.

This foreword includes remarks from U.S. Attorney General Janet Reno to the National Teleconference on Child Fatality Review Teams, February 16, 1994.

INTRODUCTION

—by Randell C. Alexander, Guest Editor

This special issue of *The APSAC Advisor* presents a broadened public health perspective on child fatalities. Child fatalities, regardless of cause, require interdisciplinary efforts in diagnosis, community response, and working with the survivors. As an organization, APSAC is strongly committed not only to understanding and reducing child abuse deaths, but also to using such knowledge to help all children.

Accidental deaths and deaths caused by child abuse or neglect can be difficult to distinguish, and at times are a matter of definition. Standards of neglect continue to shift and change, sometimes making parents more accountable for injuries to children caused by such circumstances as having loaded firearms, standing water, or matches within easy reach. Many times, the difference between death, major injuries, or no injuries is a matter of small circumstances. Parents sometimes get back to the bathroom before their young child drowns in the tub. A blow to the head often causes bruising rather than intracranial injury. We need to understand all risks to children's lives—including suicide, firearm deaths, motor vehicle accidents, drowning, SIDS, neglect, and physical abuse—in order to understand and prevent child fatalities.

Most child maltreatment, of course, is nonfa-

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PERSPECTIVES OF THE U.S. ADVISORY BOARD ON CHILD ABUSE AND NEGLECT

—by Deanne Tilton Durfee, Chairperson

In 1990, the U.S. Advisory Board on Child Abuse and Neglect declared the maltreatment of children to be a national emergency. The Board presented 31 critical steps in response to the tragic reality that each year, hundreds of thousands of our nation's children are "starved and abandoned, severely burned and beaten, raped and sodomized, berated and belittled." They are also killed.

On April 3, 1992, the Board held public hearings in Los Angeles County in what was to become the first of many subsequent hearings, meetings, and workshops focusing on the needless deaths of children through caretaker abuse and preventable accidents. Later that year, in re-authorizing the Child Abuse Prevention and Treatment Act, Congress mandated the Board to report back in two years on how our nation might develop a more reliable national data collection system on child abuse fatalities, how we might promote a better federal response to this tragedy, and what steps should be taken to prevent child maltreatment fatalities.

Child abuse fatalities represent the ultimate failure of our child protection and community systems.

Members of the Board have organized hearings and workshops, producing compelling testimony, in Denver, Pittsburgh, Chicago, Salem (Oregon), New York City, St. Louis, Dallas, and Washington, D.C.

The number of proven child abuse fatalities in this country is small when compared to the numbers of subtantiated child abuse cases. But child abuse fatalities represent the ultimate failure of our child protection and community systems. The death of any child from abuse is only a heartbeat away from the serious injuries, permanent disabilities and near-fatal experiences that thousands of children survive each year. It is clear that the children who are most vulnerable to serious and fatal child abuse are those least visible to our communities and to our educational and protective service systems. A socially isolated parent may be the only adult to witness the short and tragic life of a young preschool age victim.

Children who die from accidental causes cannot be totally separated from those who die from inflicted injuries. While it is not the intention of the Board to cause further pain to those caretakers of children who somehow find a bucket of water to drown in, a balcony to fall from, or a bottle of toxic cleanser to ingest, these tragic occurrences also can teach us about the vulnerabilities of children unnecessarily damaged and killed. Our response to both accidental and inflicted child fatalities provides an opportunity for grim, yet profoundly important, lessons in the response to child abuse prevention and treatment.

We cannot always predict or prevent fatal abuse. We can, however, improve our recognition, communication, and accountability to reduce potentially fatal risks to children, most of whom are too young to walk, talk, feed themselves, or resist a bottle of pills, an unfenced pool, or an unprepared or violent caretaker. The lessons we learn from our Board's in-depth study of fatal child abuse will hopefully provide valuable assistance in our nation's efforts to protect children, hold ourselves accountable for what we do in the name of child protection, reduce family isolation, and promote expertise, collaboration and support services that represent children's hope for a healthy future and, indeed, survival.

Deanne Tilton Durfee is Chair of the U.S. Advisory Board on Child Abuse and Neglect, and Executive Director of the Los Angeles Interagency Council on Child Abuse and Neglect.

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tal. Nearly one million children were maltreated in America in 1992, but fewer than 2,000 were killed (McCurdy and Daro, 1993). Leukemia and several other childhood diseases have a much higher mortality rate. But because deaths from accidents and child maltreatment are so tangible and dramatic, they have received much public attention. We must capitalize on this attention, using it to increase our understanding of child maltreatment, while understanding that strategies for reducing child fatalities are not the whole answer. While they may prove helpful in reducing some child abuse, they are not likely to affect rates of sexual abuse and psychological maltreatment, which also demand our attention.

At the present time, child death review teams are often considered to be the preferred process for monitoring all child deaths, detecting patterns, and proposing solutions. The preferred prevention program may be intensive home visitation, such as National Committee to Prevent Child Abuse's Healthy Family program (U.S. Advisory Board on Child Abuse and Neglect, 1993). Each effort must be evaluated critically to determine what successes can be achieved and which refinements prove useful. Universal application of such programs to all children may substantially reduce child fatalities and improve the health and well-being of children and families.

A forthcoming report by the U.S. Advisory Board on Child Abuse and Neglect (early 1995) will contain additional recommendations for professional organizations, the government, and the community. If these entities continue to collaborate in the generation and dissemination of knowledge—a collaboration exemplified by this Special Issue of *The APSAC Advisor*—an actual reduction of child fatalities by the end of the century is a realizable goal.

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HISTORY AND STATUS OF CHILD DEATH REVIEW TEAMS:

Not Mending Walls

—by Michael Durfee

Multi-agency, multidisciplinary, child death review teams have expanded rapidly in the last five years, essentially without money or mandate. The success or failure of team formation seems generally independent of laws and finance, in a way that reminds me of the Robert Frost poem, "Mending Walls." In "Mending Walls," Frost speaks about the propensity of nature to destroy the walls that separate us. In the poem, a man rebuilds the wall on his property line, following his father's adage that "walls make better neighbors." Multi-agency child death review teams are not begun so much as they already exist, and only need walls to be removed in order to function.

Multi-agency staff who are on or near the line seem naturally to know the value of working together. The death of a child creates pain that drives them to seek resources to temper the pain that comes from feeling alone with a tragedy. The impulse to create multi-agency teams is natural, sometimes concealed by agency "fathers" who have built walls to keep agencies "safe."

Among the lessons from these teams is that success seems to require a systematic multi-agency focus on the child deaths rather than a focus on monitoring the problems of a single agency.

To my knowledge, the first contemporary multi-agency team began in Los Angeles County in 1975 with the author of this paper. I realized that I may have seen children that had been suicide or homicide victims without my knowing it, and I set up a system to retrieve these cases from coroners' records. Eventually, a public health nurse with a background in child abuse joined me to review cases and to establish protocols for the review of potentially suspicious child deaths.

The nation's first multi-agency child death review team began in 1978, housed in the Los Angeles County Interagency Council on Child Abuse and Neglect (ICAN). ICAN has the unusual history of a strong county-wide multi-agency collaboration on child abuse since 1977. The team was initially chaired by representatives from mental health and child protective services, with members from the sheriff's office, the Los Angeles police, the district attorney's office, the coroner/medical examiner's office, the Department of Health, and ICAN.

Most deaths reviewed as possible child abuse/neglect were infants or young toddlers. The major cause of death was head trauma without weapons. Impoverished African-American families were overrepresented. Little has changed in the case profiles and member agency profiles since that first meeting. The major problem in case management was the failure of agencies to communicate or to follow their own protocols. Our first evidence that the system could change case outcome was in 1984, when a Los Angeles Deputy District Attorney reviewed cases from 1981 to 1983, helped change the designation of some cases from accidental and natural deaths to homicide, and sent people to prison.

To my knowledge, the second team was formed in San Diego County in 1982, chaired by child protective services and the District Attorney. By 1989, when the legislature passed a law making such teams permissive, California had about a dozen county-based teams. In the meantime, local child fatality review teams had mushroomed nationwide.

In 1985-86, teams formed in Oregon, South Carolina, and Boone County, Missouri. Oregon's team focused systematically on deaths of children and progressed to publication of the first multi-agency state report. South Carolina's team, formed by legislative mandate, focused more as a monitor of social services and has struggled some with interagency conflict. Boone County had a small, heroic "swat team" that would respond to assist agencies with deaths—the precursor of the first complete systematic state/local system in the nation. Among the lessons from these teams is that success seems to require a systematic multi-agency focus on the child deaths rather than a focus on monitoring the problems of a single agency.

Minnesota, Ohio (Franklin County), Colorado, Florida, Illinois (Cook County), Vermont, Georgia, and Iowa brought the total to 12 states with state and/or local teams in 1990. This rose to 29 states in 1992 and to 40 states, Washington, D.C., and the Department of Defense in December 1994. Teams are learning from each other through publications. Small, informal team reports were published in the early and mid-1980s. Los Angeles County, Colorado, and Oregon shared studies nationally between 1989 and 1994. About a dozen more state and local teams have joined to share their informally published work.

In addition, information about child fatalities is being shared in professional journals and at professional conferences. The National Center on Child Abuse and Neglect (NCCAN) and the National Committee to Prevent Child Abuse (NCPCA) sponsored the first national conference on fatal child abuse and neglect in 1985. Pennsylvania and the American Prosecutors Research Institute sponsored a National Conference on Child Homicide in 1987, bringing together different arms of the criminal justice system. Washington National Medical Center included a forum on fatalities at the National Child Abuse and Neglect Conference in 1988. The American Academy of Pediatrics, the National Association of Medical Examiners, the American Professional Society on the Abuse of Children (APSAC), the State of Missouri and others have made child abuse and neglect fatalities a topic at national conferences.

Journal citations have grown explosively in the last five years. "Shaken Baby Syndrome" and "Munchausen Syndrome by Proxy" have entered our vocabulary; physicians and investigators are more and more aware of the difficulties of distin-

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guishing SIDS from suffocation. In its last annual report, NCPCA published data on fatalities from 1985 to 1993. NCCAN has funded the National Child Abuse and Neglect Data System (NCANDS) that includes data on fatalities since 1990. The American Bar Association and American Academy of Pediatrics received a Robert Wood Johnson Grant in 1989-91 to build model documents for laws, policies, and protocols, and for building and implementing teams.

The popular press is beginning to recognize the phenomenon of abusive child fatalities as well. Mass media coverage on a national scale began with the death of Lisa Steinberg in 1987. The 1987 film "The Unquiet Death of Eli Creekmore" was followed by television news and documentaries, including "Who Killed Adam Mann?" in 1992. Popular books, including *From Cradle to Grave* and *A Death at White Bear Lake* have been joined by numerous publications on murders. The *Atlanta Constitution* was a finalist for the Pulitzer Prize for its coverage of child fatalities, which resulted in the Georgia state law in 1990. The Gannett News Service won the Pulitzer Prize for addressing child autopsies, and the *Chicago Tribune* won the Pulitzer Prize in 1994 (and APSAC's Outstanding Media Coverage Award) for a year-long series on violent child deaths. Many newspapers have done major stories on child abuse and neglect deaths.

What does the future hold? One hopes for a more elaborate system for the sharing of information.

A national system exists today, with a map of active teams and directories of state, national, and federal contacts maintained by ICAN since 1992. More states will start state and local multi-agency, multidisciplinary teams this year. All states may have such teams by the summer of 1995. This national system serves as the national "team" today.

What does the future hold? One hopes for a more elaborate system for the sharing of information. Cases will be managed across county, state, and national boundaries. Support systems for surviving siblings, other family members, and professionals will appear. Professional training will be more predictable and more formal. A national core database will develop. Severe child abuse and fatal domestic violence will be added to cases for review. The team focus will expand from suspicious deaths to all preventable deaths. Intervention following death will be surpassed by early intervention before death. Prevention programs will follow the young age of the victims with a focus on infants, young toddlers, and high risk pregnancies.

Instead of mending the walls that have separated us, we have been busy building bridges to each other. Let us continue our focus on this critical task, for the sake of everyone who is touched by child abuse and neglect fatalities.

Michael Durfee, MD, a child psychiatrist with the Los Angeles County Department of Health Services, helped to found the Los Angeles child death review team and has been instrumental in the creation of such teams around the US and world.

CHILD DEATH REVIEW TEAMS IN ACTION

—by Sheila M. Thigpen and Barbara L. Bonner

The last five years have seen an increasing focus on child deaths due to abuse and neglect. The National Committee to Prevent Child Abuse found a 49% increase in reports of child deaths by state CPS agencies since 1985 (McCurdy and Daro, 1993). Public hearings on child fatalities are currently being conducted throughout the United States by the U.S. Advisory Board on Child Abuse and Neglect. Despite this national attention, the actual incidence of child abuse deaths is poorly documented. It is unknown whether the increase in child deaths is due to a recent escalation in fatal violence against children or is the result of improved detection and documentation. What is known, however, is that approximately three children die each day as a result of abuse or neglect (McCurdy and Daro, 1993).

One response to the problem of abuse-related child fatalities has been the establishment of child death review teams at the state and/or local level. Currently, 39 states have state and/or local child death review boards or teams which investigate child abuse and neglect related deaths. This article will provide a brief overview of various approaches to the organization, structure, and review process currently being used by child death review boards in the U.S. and abroad.

The currently established boards are similar in that they focus on the investigation and prevention of child abuse related deaths; however, the operation of the boards varies across the United States and internationally. The main differences in state and/or local teams include (1) whether the teams are established by an informal agreement among professionals, by formal interagency agreements, or by legislation; (2) whether the teams review all child deaths or only those suspected of being caused by child maltreatment; and (3) the age range for the deaths reviewed. The review process is in the beginning stages in several countries, where the structure and operation of the teams appear to be similar to that of U.S. teams.

For the purpose of providing an overview of models of team functioning, the following sections briefly describe child death review team operations in Oklahoma, Colorado, Missouri, Canada, and Australia.

Oklahoma

The Oklahoma Child Death Review Board was created by legislation in 1991 and held its first state Board meeting in January, 1992. As mandated by law, the Board has the power and duty to (1) conduct case reviews of child deaths in Oklahoma; (2) develop accurate statistical information and identification of child deaths due to abuse and

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neglect; (3) improve the ability to provide protective services to the siblings of abused or neglected children who may still be living in a dangerous environment; and (4) improve policies, procedures, and practices within the child protection system. The Board currently receives funding from the Children's Justice Act for administrative staff.

The Board is organized at the state level and is a multidisciplinary team comprised of 20 professionals from the district attorney's office; the departments of Health, Human Services, and Mental Health and Substance Abuse Services; the Indian Child Welfare Association; Oklahoma chapters of the ABA, NASW, AAP, APA, CASA, and Association of Osteopathic Physicians; the Office of Child Abuse Prevention; the Children's Hospital Child Protection Committee; the Foster Care Review Board; and the chief child abuse medical examiner, state epidemiologist, and state medical examiner.

The Board meets monthly and conducts retrospective reviews of all deaths of children under 18 years of age with the exception of fetal deaths and children who are born and die having never left the hospital. Board members are divided into four review groups, with each group containing at least one physician. Since its inception in 1992, the Oklahoma Child Death Review Board has (1) written and approved by-laws for its operation; (2) received training from the American Bar Association, Center on Children and the Law; (3) developed a standard data collection form; and (4) reviewed 420 cases of child deaths.

It is unknown whether the increase in child deaths is due to a recent escalation in fatal violence against children or is the result of improved detection and documentation.

Recommendations have been made on a yearly basis to the Oklahoma legislature, and an annual report has been distributed. Some of the Board's recommendations to the legislature are to (1) require death scene investigations for all suspected SIDS deaths; (2) increase training efforts for all law enforcement agencies and emergency medical teams; (3) increase public awareness regarding gun safety; and (4) target education efforts to teens on motor vehicle/motorcycle safety (Oklahoma Commission on Children & Youth and The Center on Child Abuse and Neglect, 1994).

Colorado

In contrast to Oklahoma's and Missouri's legislatively created Review Boards, Colorado's Child Fatality Review Committee (CFR) was formally established in 1989 by an interagency agreement between the State Department of Health and the Department of Social Services. While the lack of legislative mandate could potentially cause problems in obtaining relevant documents and information, this has not been problematic in Colorado.

Similar to Oklahoma's, the primary goals of the Colorado committee are to (1) describe trends and patterns of child deaths in Colorado; (2) identify and investigate the prevalence of risk factors which existed in the population of deceased children; (3) evaluate service and system responses to children and families who are considered to be at high risk and offer recommendations for improvement in those responses; (4) characterize high-risk groups in terms that are compatible with the development of public policy; and (5) improve sources of data by reviewing autopsies, death investigations, and death certificates.

As in Oklahoma and Missouri, the deaths of all children under 17 years of age receive some form of review at the state level. Children who die of natural causes (neonatal deaths, SIDS, and others) are referred for expert group review, while a CFR Clinical Subcommittee reviews the remaining child deaths. If any case is questioned by either an expert group or the Clinical Subcommittee, the case is submitted to the full CFR Committee for further review.

Membership of the CFR includes professionals from the Colorado Departments of Health, Social Services, Education, Transportation, and Criminal Justice; the Colorado Medical Society, Governor's office, General Assembly, SIDS Program, Domestic Violence Coalition, District Attorney's Council, Coroner's Association, the University Health Sciences Center, Children's Hospital, and Kempe Center; and local health, coroner's, sheriff's, and police departments.

The CFR Committee has developed a standard data form to assist in the collection of specific child fatality information. On the form, the CFR members document (1) if the cause and manner of death are complete and adequate on the death certificate; (2) presence of such conditions as congenital anomalies or other medical problems; (3) quality and access to medical care; (4) prior involvement of the families with social services, public health, law enforcement, and domestic violence; (5) involvement of abuse and/or neglect in the death; (6) adequacy of the death scene investigation; and (7) preventability.

In the annual report, the Colorado CFR Committee describes numerous results associated with the Committee's work (Colorado Department of Health and Colorado Department of Social Services, 1993). Some of the results are (1) the autopsy rates for SIDS deaths have increased; (2) death scene investigation guidelines have been developed for law enforcement, coroners, and social services; (3) the Colorado death certificate has been revised to give more complete information; and (4) legislation has been passed to improve exchange of records among professionals working on child death cases.

Missouri

The Missouri Child Fatality Review Program (CFRP) is based on local, county-based teams (Missouri Department of Social Services and State

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Technical Assistance Team, 1994). Missouri has the most immediate review of child deaths of any state at this time.

The CFRP was enacted through legislation in 1991 and began its formal operation in January 1992. Missouri law mandates a CFRP panel in all 144 counties and the city of St. Louis. The CFRP panel core membership is mandated by law and includes the county prosecuting attorney, county coroner/medical examiner, and representatives from law enforcement, Family Services, juvenile court, public health, and emergency medical services. Optional members on a case specific or permanent basis may be added at the local panel's discretion.

Like the U.S., Australia has no uniform, nationwide system to collect data on child abuse-related deaths.

Unlike Oklahoma and other teams organized at the state level, the Missouri model is based on concurrent, rather than retrospective, evaluation and review by the panel. The review includes deaths of children from birth through 17 years. Every child death in this age category is evaluated by the county coroner or medical examiner, who determines whether or not the case meets the criteria for detailed review by county-based panels. The coroner or medical examiner prepares and submits a data collection form to the State Technical Assistance Team (STAT). If the case meets the criteria for review, the CFR panel completes and submits a more detailed data form at the conclusion of their review. CFRP data is then merged with selected birth and death certificate data to achieve a comprehensive report.

In 1992, 29% of all child deaths in Missouri (N=293) met the CFRP criteria to be reviewed by a panel. In 1993, this number increased to 375 (36%), although the total number of child fatalities was approximately the same (1054 deaths in 1993 compared to 1079 in 1992).

The case review process has resulted in several recommendations: (1) continue investing resources to facilitate community change; (2) improve parental/caregiver supervision through education and better access to child care services; (3) educate all investigators about the importance of accurately recording the level of supervision and circumstances immediately surrounding the death of a child; (4) closely monitor families at risk of a second preventable death or injury and provide them with appropriate services; (5) fund autopsies for the highest risk children; and (6) implement a coordinated strategy aimed at reducing injuries and preventable deaths.

The CRFP's work has resulted in increased coordination and cooperation between the multidisciplinary panel members. In addition, Missouri has seen improved determinations in the cause of child deaths that identify patterns and trends resulting in meaningful deterrent and preventive strategies.

Ontario, Canada

The Coroner's System in the Canadian province of Ontario functions with government-appointed physicians who report to the Solicitor General of Ontario through nine regional coroners acting directly under the Chief Coroner of Ontario. The coroners investigate approximately 30,000 deaths per year which occur under circumstances defined by provincial legislation entitled the Coroner's Act of Ontario.

The Pediatric Review Committee (PRC) began in 1989 to provide assistance with problematic pediatric death cases. Referrals were made following review by one of the supervisory regional coroners or by personnel in the Chief Coroner's Office. Recent expansion in the PRC's role has occurred with a greater number of case reviews. The team is chaired by the Deputy Chief Coroner for Ontario, and is composed of a neonatalogist, an intensivist, a pediatric forensic pathologist, and two community pediatricians, each of whom has special knowledge and interest in the area of child abuse. The PRC has access to assistance from various other knowledgeable professionals, and police and prosecution personnel are present when needed. This team has a predominantly medical focus at this time, as compared with the legislatively established interdisciplinary teams in Oklahoma and Missouri.

Because coroners utilize legislative powers, there is no difficulty in obtaining information required during an investigation. The Coroner's Act states that a coroner may seize anything that he or she has reasonable grounds to believe is material to the purposes of the investigation and can inspect and copy any records or writings relating to the deceased. Data collection occurs centrally, external to the PRC. However, areas of concern that are discovered may be referred to the PRC for comment and further assessment.

In the past year and a half, the PRC has moved from quarterly to monthly meetings. Committee members are funded for attendance at meetings and for pre-meeting preparation. At this time, not all pediatric deaths (age 1 day through 16 years) are reviewed by the PRC, although the vast majority of childhood deaths investigated by the coroner's system undergo an autopsy. Approximately 750-1,000 children die each year in Ontario, and over the past year nearly 70 of these deaths were reviewed by the PRC.

During its operation, Committee members have become increasingly aware of the differences in knowledge level and investigative methods among the coroners and pathologists in regard to pediatric deaths, especially those of very young children. Because of this recognition, a standardized protocol has been developed and will be released to all coroners province-wide in the near future. This protocol will have stringent guidelines to be fol-

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lowed in death investigations of children under two. The guidelines will include use of radiologic evaluation, toxicologic testing, death scene evaluation, and immediate review of the case with one of the regional coroners. Plans to locate the autopsies in regional centers have been discussed. Following a preliminary investigation, all cases will be reviewed by the PRC. These steps should further centralize the response and greatly improve the investigation of childhood fatalities in Ontario.

New South Wales, Australia

A National Child Protection Council has been established in recent years to provide a national clearinghouse for information and research in child abuse-related deaths in Australia. The Council's main focus is on primary and secondary prevention strategies, but it may have a role in coordinating national data on child abuse deaths.

Despite their differences in scope or operation, child death review teams seek to improve the investigation and disposition of possible child abuse-related fatalities through a standard review process.

Like the U.S., Australia has no uniform, nationwide system to collect data on child abuse-related deaths. The Australian Institute of Criminology is actively establishing a system to assess the extent of the problem. One valuable source of child death data is the National Injury Surveillance Unit, which collects national injury data and focuses on injury prevention. Success has already been demonstrated in areas of prevention, such as increases in the use of seat belts and bicycle helmets and improved playground safety measures.

A Child Death Review Committee was established in late 1993 in New South Wales (NSW), one of Australia's provinces. The goal of the Committee is to identify information related to child abuse-related deaths that might prove helpful in preventing future deaths. The Committee will also establish a database in order to begin defining the extent of the problem at the state and national levels in Australia.

The NSW Committee will review deaths in cases of children 14 years old and under. The categories of child deaths for Committee review include (1) all known deaths attributable to physical abuse, neglect, or failure to thrive; (2) bathtub drownings; and (3) suspicious deaths where no clear explanation is forthcoming from caretakers. After the Committee has developed its review process, additional categories may be included, such as (1) SIDS deaths in children over seven months of age; (2) poisoning deaths; (3) asphyxia deaths; (4) suicides; and (5) homicides. In order to establish a more comprehensive database, the Committee began its review by conducting a retrospective review of child deaths that occurred in 1989. The Committee is working toward the goal of reviewing cases within one month of a child's death.

Conclusion

In summary, despite their differences in scope or operation, child death review teams seek to improve the investigation and disposition of possible child abuse-related fatalities through a standard review process. The long-term goal of developing effective primary prevention programs to reduce the incidence of child abuse-related deaths can be enhanced by the establishment of a standardized review process in each state, increased interdisciplinary education and collaboration, and the implementation of state and national data collection systems.

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FIREARMS: A CULTURE OF VIOLENCE

—by Elizabeth C. Powell and Katherine K. Christoffel

Children are being killed at alarming rates. In 1993 in the Chicago area, 61 children under the age of 15 were slain. Half were younger than four years old; they were most often victims of child abuse. The single most common cause of death was from gunshot injuries (30 of 61 victims). Other causes included beating, burns, strangling, and drowning (Chicago Tribune, 1994).

Clinicians and researchers involved with child abuse should be concerned not only about the infant homicide peak due to child abuse, but also about the adolescent homicide peak due to firearms. Members of many of the same families are at risk; survivors of child abuse still face the danger of firearms before they can achieve a long life.

Epidemiology

Deaths. In the United States, firearms are the eighth leading cause of death; they are the second leading cause of death due to traumatic injury. Between 1988 and 1991, the death rate associated with firearms increased 9%, and in 1991 in the states of California, New York, Texas, Maryland, Louisiana, Nevada, and Virginia, and in the District of Columbia, firearm deaths exceeded motor-vehicle related deaths (Fingerhut et al., 1994).

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The risk to women—and so to mothers—is of particular concern to child abuse prevention and treatment experts. Women are homicide victims much less often than men. However, among women 15 to 24 years old, the homicide rate (6.3 per 100,000) is second only to that of unintentional injury (20.8 per 100,000) as a cause of death (U.S. Department of Commerce, 1993). Among females 15 to 19 years old, the homicide rate is much higher for black females (10.4 per 100,000) than it is for white females (2.0 per 100,000). Black adolescent females have higher rates as victims of homicide than white males (10.4 vs. 9.7 per 100,000) (U.S. Department of Commerce, 1993). Twice as many women are killed by spouses or other intimates than are killed by strangers (Reiss and Roth, 1993). They are killed as a result of anger, fear, or both. The use of lethal weapons, rather than the intent to kill, may dictate the outcome of these confrontations.

Clinicians and researchers involved with child abuse should be concerned not only about the infant homicide peak due to child abuse, but also about the adolescent homicide peak due to firearms.

Children and their futures are our primary concerns. The risk of firearm death occurs later than the risk of fatal child abuse. For children and adolescents (ages birth through 19 years), 80% of firearm deaths affect victims older than 14. Firearms are second only to motor vehicles as a leading cause of death for those 15 to 19 years old (Federal Bureau of Investigation, 1988). In addition, the teen suicide rate has doubled since 1970, an increase resulting in part from access to firearms (Fingerhut et al., 1991).

Children and their futures are our primary concerns. The risk of firearm death occurs later than the risk of fatal child abuse.

Injuries and Costs. Information about nonfatal firearm injury incidence is still quite limited. While U.S. society takes care to count the bodies, it does not yet obtain accurate counts of nonfatal violent injuries. One estimate is that for all ages, there are about 5.7 nonfatal injuries for each firearm death (Cook, 1991).

The estimated annual hospital costs for treating firearm injuries is $1 billion, and the estimated total annual cost to the U.S. economy, including medical and mental health treatment, emergency response, and productivity losses from firearm injuries is $14 billion (Rice et al., 1989). More than 80% of this burden is financed by taxpayers (Chicago Tribune, 1993). These costs divert finite resources from other critical health needs.

Firearms in the Environments of Children

Firearm types include handguns and long guns (rifles and shotguns). Long guns are owned in greater numbers than handguns, but account for a small fraction of gun-related injuries. Handguns are portable and easily concealed, and cause most firearm injuries. Semi-automatic weapons have large bullet chambers and are able to deliver a succession of up to 17 bullets as fast as the trigger can be pulled. Although it is not yet clear what fraction of handgun injuries are caused by semi-automatic weapons, it is clear that semi-automatic weapons are used in urban gang shootings in the 1990s (Hutson et al., 1994). Automatic weapons, which continue to fire as long as the trigger is held down, are banned in the U.S.

An estimated 67 million handguns are owned by private citizens in the U.S. Recent corporate marketing strategies have been directed at women (Gibbs, 1993). Most guns acquired from licensed dealers are purchased legally; it is impossible to know the number of handguns that changed hands in private transactions or via theft. Among teenage boys, the two most common sources for guns were "off the street" (54%) and "borrow from a family member or friend" (45%) (Sheley and Wright, 1993).

To many, gun possession confers social status and a feeling of protection in the home. However, with respect to firearm-related deaths in the home, data indicate that suicides, criminal homicides, and unintentional deaths of family members far outnumber deaths attributable to self defense. Most of this risk is due to handguns (Kellerman and Reay, 1986). Ninety percent of unintentional shootings of younger children occur in the home and involve an accessible handgun (Smith and Lautman, 1990). The availability of guns in the home also increases the risk of suicide among adults and adolescents; handguns are the usual weapon involved (Kellerman et al., 1992; Brent et al., 1988).

Causes of violent death and injuries

The National Academy of Sciences as has defined violence as "behaviors by individuals that intentionally threaten, attempt, or inflict physical harm on others" (Reiss and Roth, 1993). Weapons used in violent exchanges include guns, knives, and fists. Guns are the most lethal of these weapons, and gunshot wounds are estimated to be more fatal than knife injuries by a factor of 2-5:1 (Cook, 1991).

Many factors contribute to violent interactions. Poverty, the most important correlate of homicide risk, promotes anger and hopelessness. Males, African-Americans, and urban dwellers are at higher risk for homicide as well. Unemployment, early school failure, and low educational attainment are also correlated with violence.

Community characteristics appear to augment poverty to create areas with high rates of violence. Family disintegration, the decreased capability of the community to supervise young males, and illegal markets in guns and drugs also contribute to violence. As illegal markets in guns and drugs grow, disputes among those who control these markets often end in violence.

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Adolescents, like adults, own or carry handguns because of a perceived need for protection. Although it is illegal for vendors to sell handguns to minors, handguns are readily available to adolescents (Sheley and Wright, 1993). As a result, adolescents carry firearms on neighborhood streets and to their schools. One report indicates that more than 100,000 students take guns to school in a year (The Wall Street Journal, 1993). In the 1989-90 school year in Illinois, 5% of the students in one survey had carried a gun to school at least once (Schultz, 1993). Studies involving national samples have confirmed this figure (Harris, 1993; Division of Injury Control, 1991). Violent behaviors are learned from family role models, among peers, or from others in the neighborhood (Reiss and Roth, 1993). Adolescents may use guns to express anger, threaten others, or seek revenge. Violence peaks in adolescence and early adult life, in part because adolescents are impulsive, may be impaired from drug and alcohol use, and are subject to peer pressure and gang rules. Half of the homicides among youths in some areas were attributed to gang membership, which correlates with family breakdown, poverty, and lack of education (Hutson et al., 1994).

Violence peaks in adolescence and early adult life, in part because adolescents are impulsive, may be impaired from drug and alcohol use, and are subject to peer pressure and gang rules.

Prevention Approaches

The current epidemic of gun deaths is now recognized by U.S. citizens and public officials. Consequently, gun violence is beginning to be identified and addressed as a public health problem. Public health interventions place the value of the common good of the community above that of any one individual, and use all effective means to benefit a population. Public strategies seek to reduce gun death and injury.

Numerous laws at the federal, state, and local levels address the sale, distribution, and use of firearms in the U.S. Nevertheless, firearm homicides have steadily increased. One reason for this increase is that most of the laws act late in the "life" of a gun and affect its use, as opposed to acting early, at the point of manufacture, importation, or sale.

The recent national debate on handguns has focused on registration and waiting periods before purchasing guns. The Brady Bill (1993) introduced background checks and waiting periods; its intent is to reduce the probability that a high risk person (i.e., a criminal or someone who is mentally ill) will acquire access to a firearm. However, available information (although limited) suggests that most alleged shooters are neither known felons nor adjudicated mentally ill. Although some have acquired their guns via illegal means, most have made legal firearm purchases or have gained access to a legally purchased gun (via borrowing, private purchase, or theft) (Reiss and Roth, 1993). The impact of new legislation on homicide rates must be studied.

There is reason to expect that fewer handgun deaths and injuries will occur if fewer handguns are available. For example, in 1987 in Britain there were three handgun murders; in Australia, there were eleven. Both countries have strict laws that severely limit the availability of handguns (Fingerhut and Kleinman, 1990). In the U.S., homicides and suicides in the District of Columbia declined after possession, transfer, sale, and purchase of handguns were banned; mortality attributable to other weapons did not increase (Loftin et al., 1991). A comparison between Vancouver (where firearms are more restricted) and Seattle showed the probability of being murdered with a handgun was five times higher in Seattle. Because homicide rates with other weapons were similar in the two areas, these data suggest that handgun restriction might lower the Seattle homicide rate (Sloan et al., 1988)

Future directions

The HELP (Handgun Epidemic Lowering Plan) Network of Concerned Professionals was established in 1993 to raise awareness and to find solutions to eliminate handgun violence. In 1992, the American Academy of Pediatrics called for a ban on handguns, and in 1994 it released, with the Center to Prevent Handgun Violence, materials that clinicians can use to counsel families about the dangers of firearms (particularly handguns) in the home (Committee on Injury and Poison Prevention, 1992; STOP, 1994). Physicians and other child advocates can urge lawmakers on local, state, and national levels to support gun legislation, and can make families aware of the dangers of handguns in the home so that they can protect their children.

Reducing access to handguns will not solve the social problems of urban America, nor can it be expected to reduce all types of violence, but it should reduce the lethality of violence and thus the probability that children and adults caught in violence will be killed.

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SUDDEN INFANT DEATH SYNDROME

—by Robert M. Reece

Profound emotions are aroused when an infant dies. When an infant who was previously healthy and apparently normal dies unexpectedly and suddenly, the resulting anguish sweeps over a family in a tidal wave of grief, helplessness, doubt, suspicion, guilt, and anger. The inevitable and invariable question asked is, "Why did my baby die?" Answers are ambiguous, speculative, and shrouded in our ignorance as to the etiology of this age-old condition known variously as crib death, cot death, and sudden infant death. In this country and increasingly around the world, this phenomenon is becoming known as sudden infant death syndrome, or SIDS.

The inevitable and invariable question asked is, "Why did my baby die?" Answers are ambiguous, speculative, and shrouded in our ignorance as to the etiology of this age-old condition.

The sudden death of an infant is the most devastating of life events for young parents who, along with other family members and friends, have expectations, hopes, and dreams for the infant and his future. The typical scenario involves a previously apparently healthy infant who is put to bed after having been fed his usual diet of formula or breast milk. The child's parents, on retiring, look in on the baby and find him to be fine. In the morning, one of the parents goes to the baby's bed to get him up for a feeding and finds the baby immobile, unresponsive, often mottled in color, sometimes rigid and cold. In panic, the parent attempts to resuscitate the baby and summons help from the emergency responders in their locale. The rescue squad arrives, attempts resuscitation and then transports the baby to the hospital where the baby is ultimately pronounced dead. In some locales, support groups are available to help the parents through the initial shock and sometimes through long-term grieving. Also, depending on location and jurisdiction, a postmortem examination is conducted to ascertain the cause of death and a review is made of the death scene, medical history, and other factors surrounding the death.

The grieving reaction of parents and other family members runs the gamut from quiet resignation to uncontrolled emotional outbursts of grief, anger, and denial. Many SIDS parents blame themselves initially for doing something, or not doing something, that they feel could have contributed to the death their infant. Using parents' self-blame to raise the suspicion that they were perpetrators of infanticide is unjustified and unfair, since guilt is the norm in the excruciating first hours and days of the realization of the death.

The definition of SIDS, promulgated by the National Institutes of Child Health and Human Development in 1989, is "the sudden death of an infant under one year of age which remains unexplained after the performance of a complete postmortem investigation, including an autopsy, an examination of the scene of death and review of the case history." Another term heard in this field is Sudden Unexpected Death (SUD). This is a generic term describing an event but not suggesting a diagnostic category.

The NIH Consensus Statement on Terminol-

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ogy (1987) suggests the following terms and definitions:

Apnea. The cessation of respiratory airflow.

Pathologic apnea. A respiratory pause is abnormal if it is 20 seconds or longer or associated with: cyanosis; abrupt, marked pallor or hypotonia; or bradycardia (slowing of the heart).

Periodic breathing. A breathing pattern in which there are three or more respiratory pauses of greater than three seconds' duration with less than 20 seconds of respiration between pauses. Periodic breathing can be a normal event.

Apnea of prematurity. Periodic breathing with pathologic apnea in a premature infant. Apnea of prematurity usually ceases by 37 weeks post-conceptional age but occasionally persists for several weeks past term (40 weeks).

Apparent life-threatening event (ALTE). An episode that is frightening to the observer and is characterized by some combination of apnea, color change (usually cyanotic or pallid but occasionally erythematous (red) or plethoric (flushed), marked change in muscle tone (usually limpness), choking or gagging. In some cases the observer fears that the infant has died. Earlier terminology such as "aborted crib death" or "near-miss SIDS" should be abandoned.

Several so-called risk factors have been shown to be overrepresented in groups of future SIDS victims, but they are by no means invariable.

Apnea of infancy. An unexplained episode of cessation of breathing for 20 seconds or longer or a shorter respiratory pause associated with bradycardia, cyanosis, pallor and/or marked hypotonia. Apnea of infancy should be reserved for those infants for whom no cause of an ALTE can be identified.

Sudden Infant Death Syndrome is a recognized cause of death all over the world. It is, as yet, neither preventable nor predictable. It has been called a cause of death that is exclusionary of readily recognizable reasons for the death, but it has clinical, epidemiological, and postmortem characteristics that are typical and diagnostic.

Current statistics about the incidence of SIDS in the United States must be considered estimates. Over the past several years the annual rate of death from SIDS has remained relatively constant in the 5,000-6,000 range, representing a 1.2 to 1.5 per 1,000 live birth incidence. Incidence figures for other parts of the world vary from a low of 0.036 per 1,000 live births in Hong Kong (Davies, 1985) to 6.3 per 1,000 in Tasmania (Newman, 1986). Kraus and Bultreys, in a careful review of SIDS and socioeconomic status (SES), conclude that the evidence suggests a consistent inverse relationship between SIDS and SES, but suggest the possibility that SES acts as a confounder, effect modifier, or intermediate variable (Kraus and Bultreys, 1991).

The peak incidence of SIDS is between two and four months of age. Occasional deaths occur during the first month of life, and the deaths decrease in number after the third month of life. Ninety percent of all cases of SIDS occur by six months of age. It is more common in males, occurs more frequently in the winter months, and is seen more frequently in multiple births (twins and triplets). Recently, sleeping position has been found to influence rates of death due to SIDS, and evidence is mounting that the prone position is seen more often in babies dying of SIDS (Engelberts and DeJonge, 1990; Southall and Samuels, 1992; Wigfield et al., 1992).

Several so-called risk factors have been shown to be overrepresented in groups of future SIDS victims, but they are by no means invariable. These include maternal cigarette smoking during pregnancy, prematurity and low birth weight, and younger age of mothers. More future SIDS babies have had thrush, pneumonia, and illnesses requiring hospitalization. More have histories of episodes of rapid respiration, rapid heart rate, cyanotic spells, or vomiting during the newborn period. Autopsy findings in SIDS babies show increased blood-forming activity in the liver, and gliosis (reaction to insult) in the brainstem, but these findings have not been universal. Despite the occurrence of these factors, it is still not possible for future SIDS victims to be identified prior to the terminal event. Another potential risk factor considered in earlier speculation about etiology was that of familial propensity to SIDS. Was there a genetic or at least a familial tendency in SIDS? Several studies have examined the possibility of recurrent SIDS within families. The best studies have concluded that it is highly unlikely to have a familial recurrence of SIDS and there is no demonstrable genetic etiology.

Theories of etiology

Research into the causes of this medical mystery has involved investigation of practically every organ system of the body. Because the terminal event is a cessation of breathing and heart activity, it was only natural that these two organ systems were the focus of most serious attention in the 1970s and 1980s. Steinschneider (1972) began the quest into a respiratory etiology when he reported on two patients with prolonged apnea and cyanotic spells who subsequently died, presumably of SIDS. This report and others gave rise to the "apnea hypothesis," which stated that prolonged and recurrent apneic episodes, even when not observed, were the precursors to SIDS. If infants with these spells could be identified by pneumograms (breathing recordings) and equipped with home monitoring devices that would signal when abnormal respiratory or cardiac events occurred, then the parents could stimulate and/or resuscitate the baby and prevent death. This approach was tried in several centers for several years, but it failed change the rate of SIDS, and despite careful monitoring, there are anecdotal

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reports of infants dying while on home monitors. The belief in the apnea hypothesis began to diminish when Southall and colleagues demonstrated in a prospective study of over 9,000 infants that none of the 29 future SIDS victims had had abnormalities prior to death either clinically or by pneumogram/electrocardiogram. The current consensus is that the overlap between SIDS and apnea is at most 5% because most infants dying of SIDS have had no previous apneic spells as manifested either clinically or by pneumogram (Southall et al., 1983).

Another theory, upper airway obstruction leading to prolonged apnea, also has adherents. This theory claims that pharyngeal obstruction, caused by backward falling of the tongue, reflex laryngospasm due to gastroesophageal reflux, pharyngeal collapse during sleep, or neck flexion leads to obstruction of the airway. This in turn leads to carbon dioxide accumulation in the bloodstream. In the older child and adult, carbon dioxide stimulates the respiratory center of the brainstem to increase respiratory effort. The respiratory center in infants is relatively unresponsive to carbon dioxide levels, and this, so the theory goes, is what leads to fatal apnea. Supporters of this concept cite the presence of intrathoracic petechiae (blood spots) in the thoracic viscera seen in the postmortem examination of SIDS victims as highly suggestive of a terminal event involving high intrathoracic pressures, a condition compatible with obstruction. Although sleep-related upper airway obstruction can occasionally be responsible for cyanotic episodes, the parents of SIDS victims do not report these as part of their experience at the time of death and it would seem reasonable to expect clinical findings suggesting this.

Lethal cardiac arrhythmias (irregularities of the heartbeat) were postulated as a silent cause of SIDS, based on data showing electrocardiographic abnormalities in some future SIDS victims. Currently there is no consensus on the importance of cardiac etiologies in most SIDS cases.

All of the countries that experienced a rapid decline in prone sleeping also had reductions of approximately 50% in their SIDS rates.

The influence of toxic agents on the developing fetus has received increasing scrutiny since Naeye et al. (1976) first noted that 59% of mothers of SIDS victims smoked during pregnancy. Haglund and Cnattingius (1990) found that maternal smoking doubled the risk of SIDS in a study of nearly 280,000 infants. There is no doubt that there is an increased risk, to the extent that the National Institute for Children's Health and Human Development showed that maternal cigarette smoking during pregnancy carried the single strongest statistical association with future SIDS victims.

Substance abuse during pregnancy has also been shown to increase significantly the risk of SIDS. Infants born to mothers who use drugs during pregnancy are said to have a 5 to 10 times increased risk of dying of SIDS (Chasnoff et al., 1985; Davidson-Ward et al., 1990; Durand, Espinoza, and Nickerson, 1990). Before single agent causation is established, attention needs to be paid to confounding variables such as SES, prematurity, race, and crowded living conditions, as well as the timing and the dosage of the drugs and the presence of numerous other risk factors such as polydrug use and concomitant cigarette smoking.

Overheating and hyperthermia have been thought to be responsible for "febrile apnea." One study (Posonby et al., 1992), using a case-control method, examined 41 SIDS victims by measuring thermal conditions at the death scene and at the scene of last sleep for control infants. A questionnaire was also completed by the parents in both groups. In this study, the SIDS group had more excess thermal insulation for their given room temperatures than the matched controls.

Several retrospective studies have implicated the prone sleeping position as a contributor to SIDS (Engelberts and DeJonge, 1990; Southall and Samuels, 1992; Wigfield et al., 1992). These studies have prompted the American Academy of Pediatrics to issue a Policy Statement advising parents to place their babies in the supine (face up) position for sleep. The National Institutes of Health reported recently (Willinger, Hoffman, and Hartford, 1994) on their review of the current data regarding sleeping position and SIDS. The trends in SIDS rates from 1980 through 1992 in Australia, Britain, New Zealand, the Netherlands, Norway, Sweden and the United States were evaluated. All of the countries that experienced a rapid decline in prone sleeping also had reductions of approximately 50% in their SIDS rates. The major behavioral change in all targeted populations was in sleep position, with no significant changes being observed in the proportion of parents who smoked cigarettes or who breastfed.

If the SIDS rate does diminish over the next several years, it will be a challenge to determine whether it is due to altered sleeping position, decreased rates of prematurity, a reduction in cigarette smoking during pregnancy, changing patterns of substance abuse, an improvement in socioeconomic status, or other unknown factors.

The brainstem hypothesis postulates that SIDS occurs because of a defect in the respiratory and/or cardiovascular centers of the brainstem. Maturational factors are thought to play a role and this is consistent with the age distribution in SIDS. Kinney et al. (1991) found delayed myelination (the "insulation" layer of the nerves) in a group of SIDS infants in 25 of 62 white matter sites examined. They theorized that insults to these areas began prenatally and continued postnatally, and that delayed myelination most likely reflects a chronic underlying disorder that shares a common anteced-

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ent with sudden death, but is not directly responsible for it. Several possibilities are suggested: chronic hypoxemia; maternal cigarette smoking; nutritional deficiency; or inborn errors of metabolism inhibiting myelin formation. This theory has much appeal since it unifies the epidemiological observations, the individual and collective clinical and medical histories of SIDS cases, and the post-mortem findings into an evolving sequence of events leading to a final common pathway for death.

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ACCIDENTAL INJURIES

—by Kenneth W. Feldman

It is important for pediatricians treating abused and neglected children to be knowledgeable in unintentional as well as intentional injuries. Understanding patterns of normal childhood injury helps us recognize the exceptional patterns that result from abuse. Knowledge about unintentional injuries also provides an indirect means of understanding the forces and mechanisms of intentional injuries. Without them, we are dependent on extrapolation from animal and biomechanical studies alone. For example, studies of head injuries resulting from childhood falls and bicycle accidents have obvious implications for understanding abusive head injury thresholds. Although both accident scenarios begin with a linear deceleration, these initial forces often impart rotational decelerations on the brain similar to those causing injury in shaken and/or beaten infants. Unintentional injuries also interface with issues of child neglect. Where does the boundary between "acts of God" and caretaker negligence lie?

Understanding patterns of normal childhood injury helps us recognize the exceptional patterns that result from abuse.

Accidents are currently the leading cause of death between ages one and 24 years, although the death rate of 27.2 per 100,000 in 1989 is 29% less than that of 1975 (Hoekelman, 1992).

Motor vehicle accidents

Motor vehicle injuries continue to be the leading cause of accidental death in childhood, accounting for two-thirds of these deaths (Hoekelman, 1992). From 1975 through 1987, the death rates in auto accidents for children up through age 14 years declined slowly but steadily. It is encouraging that the rate for infants to four-year-olds declined from 4.5 to 3.7 per 100,000, associated with an increase in auto restraint use to 80% (Agran et al., 1990). However, rates in older adolescents have been more erratic, rising from a low in 1983 to 33 per 100,000 in 1987. In 1987, 31% of older adolescents involved in fatal crashes had elevated blood alcohol levels. At the same time, only 25% of older teens used seat belts. Injury rates for adolescents are 75 times the fatality rates.

A number of injury prevention strategies have been considered or implemented. Adolescent risk might be modified by raising the age at which a person may receive a driver's license or drink legally. Night driving curfews or license restrictions and lower blood alcohol laws for teens have been considered. Passenger protection has been addressed by uniform restraint laws and passive passenger protections such as air bags and automatic seat belts. Ignition lockouts could be devised to prevent starting the engine if the driver had detectable breath alcohol or was unable to complete a rapid dexterity task. Roadway design to minimize traffic conflict may also reduce injuries.

In addition to motor vehicle occupants, pedestrians and bicyclists are injured in motor vehicle accidents. An estimated 50,000 child pedestrians are injured and 1,800 die annually (Rivara, 1990). They accounted for 15% of unintentional fatal

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childhood injuries in 1985. The highest rates of fatal pedestrian injury (5.4 per 100,000) are in the early school-age child. At this age, mobility and independence are great. Often safety skills are overestimated by caretakers. Many injuries result from "dart out" events at mid-block or between parked cars. However, even marked crosswalks are not safe, seeming to provide children with more of an impression of security than really exists.

In the United States, prevention has taken the approach of educating children in safe street habits; this has been only marginally successful. Other approaches include strict enforcement of pedestrian laws for motorists and physical separation of pedestrians and motor vehicles (e.g., pedestrian overpasses).

Unintentional injuries also interface with issues of child neglect. Where does the boundary between "acts of God" and caretaker negligence lie?

Bicyclists and motorcyclists are involved in both solo accidents and collisions with motor vehicles. Estimates for fatalities and injuries are 500 and 40,000 for bicyclists and 1,000 and 45,000 for motorcyclists annually (Division of Injury Control, 1990). Other than cyclist education, safety helmets have the greatest potential for injury reduction. They have proved successful in reducing brain injuries for both bicycle and motorcycle riders, but current models have been less successful in preventing lower face injuries in bicyclists (Thompson et al., 1989). Currently used bicycle helmet designs use a 300g energy absorption threshold. However, very little data are available on optimal energy absorption thresholds and dissipation curves.

Drowning

Drowning is the second leading overall cause of accidental death in childhood, but under five years of age it surpasses both motor vehicle occupant and pedestrian injury (Division of Injury Control, 1990). Drowning causes vary dramatically with climate and socioeconomic status (Wintemute, 1992). For example, 89% of drownings in Los Angeles are in residential swimming pools, while in Seattle only 52% occur in pools, many of which are public (Wintemute, 1992). Inadequate barriers to toddlers and young children combined with lapses in caretaker supervision were the primary predispositions. Many of the victims were not swimming, but gained access to the pool while engaged in other play activity. As with pool immersions, immersions in natural bodies of water involve the unsupervised child who has unguarded access to the water. Adolescent immersions occur primarily in pools and natural bodies of water. Some degree of adolescent bravado, activity exceeding athletic capability, and/or intoxications are common predispositions.

Bathtub immersions are primarily limited to young or neurologically impaired children. They account for about 10% of immersion events (Wintemute, 1992; Lavelle et al., 1993). Most often caretakers misinterpret the safety of toddlers bathing alone or infants bathing with other preschool children. Supervising adults may also be temporarily distracted, as by phone calls. Up to two-thirds of bathtub immersions may have indication of either abuse or severe neglect (Lavelle et al., 1993; Feldman et al., 1993).

Supervisors of children with development or motor impairments may have age appropriate, but skill level inappropriate, expectations of their child's safety. Further, seizures are a risk factor for accidental submersion. Less frequent drownings occur in toilets and in buckets, especially the plastic five-gallon type. Both are the right size and height for toddlers to tip into head first and become hopelessly unable to extricate themselves. Hot tubs and spas present another risk, particularly because the intake to the pump can entrap a child's hair.

Burns

Burns and fire injuries (2.3 annual fatalities per 100,000) follow drowning as a cause of accidental childhood fatality (Division of Injury Control, 1990). Deaths due to house fires have decreased with increasing use of smoke detectors (McLoughlin and Brigham, 1992). Clothing ignition injuries also have been reduced by legislation banning flammable fabrics (McLoughlin and Brigham, 1992). Many other ignition sources remain and are potentially amenable to prevention. For example, childproofing of cigarette lighters could reduce one source of burns of exploring children. Scald burns remain the most frequent source of hospital admission in preschoolers. Seventy-two percent of admissions for burns under two years of age result from scalding, with foods and beverages accounting for the majority (McLoughlin and Brigham, 1992).

Child supervision and improved safety design of cups and cooking equipment are required for prevention. Twenty-three percent of infant and toddler scalds result from tap water (McLoughlin and Brigham, 1992). Temperature-limiting valves on faucets can prevent these injuries (McLoughlin and Brigham, 1992), but limitation of water heater temperatures through voluntary consumer action, legislation, and industry standard changes have proved effective in reducing the frequency and severity of these injuries (Erdmann et al., 1991). As water temperatures have fallen, the percentage of tap water scalds caused by abuse has risen to 50% (Erdmann et al., 1991).

Falls

Falls present the next most frequent cause of childhood accidental fatality (0.5 annual fatalities per 100,000) (Division of Injury Control, 1990). Twenty-five percent of significant head injuries in San Diego resulted from falls (Kraus et al., 1990). The interface with abuse is discussed in Dr. Chadwick's article elsewhere in this publication.

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Suffice to say that significant injury usually is the result of a significant fall. Although simple skull fractures, epidural hemorrhages, and fractures of the clavicle, distal humerus, forearm, and tibia may result from short toddler falls, subdurals, major brain injury, and rib and proximal extremity fractures rarely result (Paez et al., 1993; Thomas, 1991). Running and twisting events may result in spiral femur injuries in toddlers (Thomas, 1991). Case series of accidental falls are likely to be contaminated with abuse cases, unless injury scenarios are carefully corroborated and other evidence of inflicted injury is carefully sought and excluded. Open or unguarded upper story windows cause a particular risk for accidental falls. Building code changes requiring window grates on upper-story apartments have been successful in reducing these injuries (Bergner et al., 1971). Similarly, code regulations for porch rails can reduce falls from elevated porches. Although stairway falls usually act like a series of short and relatively benign falls, children in infant walkers are at heightened risk. The walker seems to present the infant's head to trauma. (Joffe and Ludwig, 1988) Playground equipment can allow children to climb to and fall from significant heights (Werner, 1982). Standards for energy absorbent surfaces under play equipment provide a significant countermeasure.

In many cases, evaluation of agent, environment, and victim factors may suggest prevention strategies. In general, passive strategies that do not require repetitive child or caretaker actions are more effective than active ones.

Strangulation

Playground equipment and many household infant furniture items such as cradles and high chairs present significant strangulation risk (Werner, 1982; Feldman and Simms, 1980). Clothing catch points, design cutouts, wide crib slats, defective crib side rails, and high chair trays or waist belts that allow submarining can entrap infants' heads and necks (Feldman and Simms, 1980). Children can become asphyxiated when wedged between furniture. Their necks can become entangled in dangling ropes and cords (e.g., curtain cords).

Prevention

The sources of accidental childhood injury are innumerable, but repetitive scenarios can be recognized (Feldman, 1980). They thus become not "accidents" but predictable interactions of child behavior and development with the environment. In many cases, evaluation of agent, environment, and victim factors may suggest prevention strategies. In general, passive strategies that do not require repetitive child or caretaker actions are more effective than active ones.

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ABUSIVE HEAD INJURY

—by Wilbur L. Smith

The leading cause of death among abused children is head injury. Estimates of the actual prevalence of child abuse-related head injury are imprecise and probably artificially low owing to difficulties in diagnosis, reporting, and case finding. In 70% of children documented to be suffering from abusive head injury, there is concrete evidence that the victims have suffered an injury prior to the one that brought them to attention (Alexander et al., 1990a). It is reasonable to assume, therefore, that some children's brain injuries are never detected and that there is a large degree of underdiagnosis, with an unknown number of children suffering subclinical abusive head injury, making published prevalence data artificially low.

Allowing for these difficulties, it is possible to estimate an admittedly conservative prevalence figure. Most abusive head injuries occur in children younger than two years of age; therefore, this is the population to which the prevalence figures are most germane. According to the 1992 figures available through the Department of Health and Human Services there were approximately 8 million children in the United States, age 0 - 2 years.

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Estimates for the number of fatalities owing to child abuse in the United States range from 1,500 - 3,000 per year (McCurdy and Daro, 1994), and approximately 12% of children diagnosed with abusive head injury die as a result of the injury. A calculation using an estimate of 800 head injury fatalities per year as 12% of the total prevalence of head injury puts the overall prevalence of symptomatic abusive head injury at roughly one per 2,000 in the United States population of children. The magnitude of this disorder is clearer if compared to other serious diseases in the United States. An attack rate of one per 2,000 is slightly lower than the rate of serious congenital heart disease in the United States, far exceeds the prevalence of childhood malignancies, and approaches the incidence of HIV infection in the United States. On a simple prevalence basis, an eight-week-old male child with vomiting is as likely to be vomiting from head injury as he is to be vomiting from pyloric stenosis. Looked at this way, it is apparent that abusive head injury is of epidemic proportions and represents a major source of mortality and morbidity for American children.

Serious injuries take serious trauma, and a child with serious head injury who is not involved in an automobile accident or a fall from several stories should be considered a possible victim of child abuse in the process of differential diagnosis.

The mortality figures are merely the tip of the iceberg in measuring the pain inflicted by abuse. In most series of children suffering from abusive brain injury, the majority of children who survive suffer substantial permanent neurological deficits. Even for those who survive without gross perceptible deficit, the outcome is not necessarily clear. Some of the "softer" signs of neurological injury, such as attention deficit disorders, may result owing either to the injury or the chaotic environment that facilitated the abuse in the first place. It is usually impossible to sort out cause and effect in these "lesser" injury cases. Furthermore, we do not have any prior knowledge of the intellectual potential (before injury) of abused children who suffer injury but recover. Did the injury knock 20 points off the IQ of a genius, rendering that child only high average? Often the best we can say, even with the children who are apparently normal after injury, is that suffering the injury did nothing to enhance their intellectual potential.

The early clinical diagnosis of shaken baby syndrome is frequently obscured owing to the lack of clinical history. The urgency and difficulties of caring for a critically ill child with the often ambiguous symptoms of elevated intracranial pressure are compounded by a fallacious history which further obscures the true nature of the injury. In one series, over 95% of the initial histories supplied by the caretakers of abused children were false. This certainly mirrors our experience. We have received a correct initial history in very few cases, and even in those cases the extent of trauma was minimized. The specious history often features a fall or choking event, rather than the true cause. Health care professionals are not trained criminal investigators, and are therefore reluctant to accuse individuals even though the histories correlate poorly with the severity of injury. Compounding this difficulty, the initial physician to whom the child is brought may not be well versed in the understanding of the dynamics of injury in small children. The initial diagnosis is also confused because the child often presents in a state of extreme physical distress, near death. The life support activities and immediate concerns of trying to revive the child and ensure survival take precedence over careful examination, documentation of bruising, and establishing the definite diagnosis.

Given these limitations, a few points are in order. The literature is nearly unanimous that short falls, those less than four feet, are very unlikely to cause the type of serious brain injuries seen in abused children (e.g., Chadwick, 1981). Serious injuries take serious trauma, and a child with serious head injury who is not involved in an automobile accident or a fall from several stories should be considered a possible victim of child abuse in the process of differential diagnosis. Subdural hematomas, parenchymal shearing injuries, brain parenchymal concussion, and epidural hematomas preponderantly occur owing to trauma. Other conditions causing intracranial bleeding in children are unusual; therefore, the presence of any such lesions should lead to a primary consideration of child abuse. The presence of associated injuries can be supportive of the diagnosis. Approximately half of the children who suffer an abusive head injury have accompanying long bone fractures; therefore, all children under the age of two with injuries that may have been caused by abuse should have a radiographic long bone study. The coincidental presence of long bone fractures absent a history of major trauma is highly specific for the diagnosis of abusive injury.

The possible mechanisms for inflicting an abusive head injury are multiple and include hitting the head with blunt objects, inflicting penetrating injury to the head, strangulation with resultant hypoxic ischemic injury, malnutrition affecting brain growth, and the shake/impact syndrome. The latter is the most prevalent, particularly among children less than two years of age. Shaking was first described as an explanation for the clinical findings of long bone fractures, retinal hemorrhages, and intracranial injuries without obvious external signs of cranial trauma. Guthkelch (1971) and Caffey (1972) are generally recognized as the first persons to clearly delineate this combination of injuries, leading to the label "shaken baby syndrome." After their initial description, a number of scientific works emerged which further defined the scope and type of intracranial injuries encountered

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owing to the assault and expanded the spectrum of injuries recognized as part of the syndrome. The original descriptions emphasized the subdural hematoma as characteristic; however, further experience identified subarachnoid bleeding, cerebral edema, and parenchymal shearing injuries as further manifestations of abusive head injuries. Duhaime et al. (1987) suggested that a terminal impact was necessary to cause many of the injuries reported in the shaken baby syndrome, and from their work an appreciation of the shake/impact syndrome became widespread. Several studies, including one of our own, suggest that while many infants do suffer a definable impact, shaking alone can produce a serious spectrum of injuries (Alexander et al., 1990b). Absolute delineation of the mechanism of injury awaits further research and development of better models; however, there is no disagreement among professionals in the field that the violent shaking, whether or not it is accompanied by an impact, is not a casual act but rather one that would indicate to a rational observer that severe injury was being inflicted to the infant. While the author does not advocate mild shaking of babies or throwing babies up in the air, the violence of the abusive shaking is several orders of magnitude greater than any of these playful activities.

The possible mechanisms for inflicting an abusive head injury are multiple, and include hitting the head with blunt objects, inflicting penetrating injury to the head, strangulation with resultant hypoxic ischemic injury, malnutrition affecting brain growth, and the shake/impact syndrome.

Imaging has grown to be a major factor in the diagnosis and management of abusive head injury. Early on it was evident that computerized tomography (CT) was going to play a key role in the diagnosis of abuse (Zimmerman,1978). In general, CT scans are available in any trauma center, and the initial CT without contrast enhancement is sufficient to indicate any life-threatening conditions for which neurosurgical intervention is necessary. CT also permits the visualization of bone windows so that scans can be reviewed for fracture, depressed bony fragment, and scalp and soft tissue injury. Careful review of the initial CT often provides data that allow correlation with the clinical history to precisely pinpoint the timing as well as the nature of the injury. CT data also can be of prognostic value, particularly in the area of the severe injury where brain architecture is disrupted. Visualization of extensive and severe injury on the initial CT is virtually always associated with a poor outcome. Reviewing the CT data, one must be aware that CT underestimates the severity of injury. There are a number of well documented fatal cases of abusive head injury with normal CT; therefore, a normal CT examination in no way excludes a diagnosis of abusive head injury. The converse of the situation does not pertain—rarely is an abnormal CT associated with no or minimal symptoms. In studies where Magnetic Resonance Imaging (MRI) was performed in conjunction with CT, a number of additional lesions were evident on MRI (e.g., Sato et al., 1989). Therefore, it is our policy in selected cases to follow the CT with magnetic resonance imaging, as MRI is more accurate for the diagnosis of subdural hematomas and brain parenchymal head injuries than CT. We have also found MRI valuable in instances with clinical symptoms and physical findings of abusive head injury but normal CT scans.

While MRI has proven of great value in defining injuries from child abuse, it remains a second-line imaging tool. Access to MRI, particularly for severely injured children, is much more difficult than access to CT. MRI devices are not as widely available, and life support within MRI devices requires specialized sophisticated equipment that is not widely available. An MRI scan generally takes longer to accomplish than a CT scan and is about double the price of a CT scan. Therefore, in many institutions it is impossible or prohibitively expensive to put a patient on a respirator in an MRI for scanning. However, MRI provides considerably more definition both of injury and precise anatomic location of injury than CT. Sato et al., in studying children who had suffered abusive head injury, showed that 50% more subdural hematomas were found using MRI than by CT. In the same study the investigators documented that parenchymal injuries, either concussions, diffuse axonal injuries (shears), and acute cortical necrosis were better shown by MRI than CT. At issue still is whether acute cerebral edema and acute subarachnoid bleeding is imaged to advantage by MRI. We advocate MRI as a followup to CT scanning in any instance where (1) there is clinical evidence of a severe cranial injury and the CT is normal or has minimal findings; (2) a small subdural hematoma is present but severe injury is suspected; or (3) parenchymal brain injury is an important issue and precise localization of the gyri or area of the brain traumatized is needed for establishing either the patient's prognosis or to explain the patient's symptoms.

A description of imaging would not be complete without mentioning the role of plain radiographs in evaluation of children suffering from abusive head injuries. As noted earlier, the classical descriptions of abusive head injury included the presence of bone fractures as one of the criterion of the syndrome. As understanding of the extent of abusive head injury has progressed, it has become evident that one can suffer severe abusive head injury without necessarily having long bone fractures. In fact, approximately one-half of the patients we see with abusive head injury have accompanying long bone fractures. Certainly, the presence of long bone fractures substantially increases the likelihood of abuse, while the absence of long bone fractures is not evidence against the presence of an abusive head injury. The skull x-rays are the best single modality for showing most skull frac-

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tures. Studies have shown that, in general, skull fractures do not occur in children after short falls, although theoretically it is possible to fracture a desiccated skull by a precise fall of one foot onto concrete. In fact, this rarely happens in the clinical situation. Most studies of nonabusive falls under four feet onto hard surfaces show less than a one percent incidence of skull fractures. In those rare instances where skull fracture does occur owing to these accidents, the fracture is usually in the parietal bone and usually short. Long fractures, extending the length of the parietal bone or crossing several bones, or diastatic fractures (those with widely separated edges) do not occur as a result of short falls. Stellate fractures, giving a cracked egg appearance to the skull, also occur only after very significant trauma and are not associated with short falls. It is therefore of great value to have a skull film to evaluate the nature and appearance of the fracture and to correlate these with the history given for an injury.

Retinal hemorrhages are a very important clue in the diagnosis of abusive head trauma, occurring in approximately three-quarters of children who suffer severe shaking injuries. Studies of children with very severe accidental traumatic injuries accompanied by increased intracranial pressure document an occasional instance of retinal hemorrhaging, but this finding is the exception rather than the rule after direct head trauma without shaking. Retinal hemorrhages occasionally are reported with coagulation abnormalities and vasculopathies. Sparse and scattered retinal hemorrhages have been seen with some forms of chronic meningitis, particularly tuberculosis and malaria. There are scattered reports of retinal hemorrhage after cardiopulmonary resuscitation, particularly after chest compression; however, documenting that CPR-related retinal hemorrhages followed rather than preceded CPR was not possible in most of the reports.

Most studies of nonabusive falls under four feet onto hard surfaces show less than a one percent incidence of skull fractures.

Most of these clinical co-morbid conditions are easily diagnosed, and the overwhelming majority of retinal hemorrhages in children older than 30 days result from child abuse. Ophthalmological studies have documented that retinal hemorrhages involving the periphery of the retina associated with retinal detachments, retinal tears, and large numbers of retinal hemorrhages are virtually always due to abuse. Special note should be made of the retinal hemorrhages in neonates. Somewhere between one-tenth and one-third of vaginally delivered neonates will develop scattered retinal hemorrhages. Smith et al. (1992) have looked for the association of any intracranial injuries with the retinal injuries of birth, and in fact these intracranial injuries do not happen. Therefore, in a child with a combination of intracranial injuries and retinal hemorrhages, the birth process, unless carefully documented, cannot be blamed even if the child is younger than 20 days of age.

In summary, abusive head injury is a prevalent disorder with a very high morbidity and mortality. The diagnosis in most cases is not difficult, providing that individuals with sufficient experience and understanding of the condition are involved in the case. Early case documentation involving professionals in the medical, social, and investigative fields is critical for subsequent determination of responsibility for the act. Current efforts to prevent this horrible social problem are primitive and unsuccessful. At present no effective treatment for the abusers has been found. Given the high morbidity and mortality, it is imperative that children be protected from individuals who might inflict such injury.

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PROFESSIONAL NETWORK BEGINNING

Professionals currently involved in providing support to surviving siblings, other family members, or professionals involved with children who have died can now make contact to share ideas and resources. To get involved, call or write Michael Durfee, MD, at the Los Angeles County Department of Health Services, Child Abuse Prevention Program, 241 N. Figueroa, Room 306, Los Angeles, CA 90012. Phone: 213-240-8146. See article in this issue, pg. 47, for more information.

THORACO-ABDOMINAL TRAUMA IN CHILD ABUSE

—by Dirk Huyer

Inflicted thoracoabdominal injuries are relatively uncommon but represent a serious source of morbidity and mortality in childhood (Cooper et al., 1988; Peclet et al., 1990). Blunt thoracoabdominal trauma accounts for the majority of injuries. Penetrating injuries are less common, although a higher incidence of such injuries in urban settings has been reported (Meller, Little, and Shewmeta, 1984). Abdominal injuries are second only to head injuries in causing death in inflicted childhood trauma. Between 0.5 and 8% (Cooper et al., 1988; O'Neill et al., 1973) of physically abused children suffer serious abdominal injury, with a 40-50% mortality rate (Cooper et al., 1988; McCort and Vaudagna, 1964; Sivit, Taylor, and Eichelberger, 1989). While serious inflicted thoracic trauma is observed less frequently, a 40-50% mortality rate has also been reported (Peclet et al., 1990).

Abdominal injuries are second only to head injuries in causing death in inflicted childhood trauma. Between 0.5% and 8% of physically abused children suffer serious abdominal injury, with a 40-50% mortality rate.

High mortality rates in cases of inflicted thoracoabdominal trauma may be explained in a variety of ways. Delay in medical treatment results from delay in presentation, inaccurate or misleading historical information provided by parents, and lack of information from the child. Because these features are frequently coupled with a lack of obvious external injury, a high index of suspicion is required.

Mortality rates are higher also because of unique anatomical and physiologic features of children. With smaller blood volumes, significant difficulties may occur from hemorrhagic injuries, especially when the proportionately larger size of pediatric organs is considered. Both the abdomen and the thorax are relatively small, with close proximity of major organs. A single blow may involve more than one organ, with greater consequences than in an adult. The abdominal wall offers limited protection because the muscles are less developed and only a small layer of fat is present. The thoracic wall muscles are similarly less developed, with flexible cartilaginous ribs allowing greater compressibility. These features allow for transmission of large forces to the structures within the cavities, often without evidence of external trauma.

Serious thoracoabdominal injuries result from significant force. The majority of similar accidental injuries result from falls from a great height and from motor vehicle accidents (with the child as a pedestrian more commonly than as a passenger).

Abdominal Trauma

Blunt abdominal injuries result when forces are produced (1) from direct blows, such as a punch or a kick; or (2) from indirect shearing forces generated during rapid deceleration of the body, as when a child is thrown across a room and hits a wall.

Direct blows crush organs against the immobile vertebral column or the lower rib cage with resultant laceration and hemorrhage. The hollow visceral organs (the stomach and intestine) are filled with food, liquid, air, or stool. A direct blow compresses the contents, leading to sudden overdistension, with rupture spilling the contents into the abdominal cavity. With rapid deceleration of the body, internal partially mobile organs continue in motion with resultant tearing of the intestinal mesentery.

In accidental abdominal trauma, single solid organ injuries are more frequently observed, whereas in abusive injuries hollow viscus injuries are more common, although overlap exists between the two. The kidney, spleen, and liver are most frequently injured in accidents. In contrast, kidney and spleen injuries are infrequent in inflicted trauma, with the liver being the most common solid organ injured. Pancreatic and mesenteric injury are not uncommon in cases of abuse. Improved imaging studies coupled with increased awareness have shown that nonfatal abdominal injuries may be more common than previously reported and at times are asymptomatic (Coant et al., 1992; Hennes, et al., 1990; Sivit, Taylor, and Eichelberger, 1989). This is not surprising because one of the classical findings in child abuse is the discovery of occult injuries.

Hollow Viscus Injury

Gastric rupture from abusive trauma has been reported (McCort and Vaudagna, 1964). It may be more likely to occur in children who suffer direct blows soon after a large meal. Children present in serious condition with substantial free air demonstrated on the plain abdominal radiograph.

Intestinal injuries are relatively common in children who suffer abusive injuries to the abdomen, with the small intestine being the most common location for these injuries (Ledbetter et al., 1988; McCort and Vaudagna, 1964). Perforations of the small intestine are seen most often in the jejunum (60%) with 30% in the duodenum and 10% in the ileum (Kleinman, 1987b). The frequent finding of damage in the duodenum and the jejunum, typically close to the Ligament of Trietz, suggests that the proximal small intestine is more susceptible to compression injury because of its fixed location. Deceleration forces or direct local traumatic blows are likely to be responsible for intestinal injuries in those portions suspended by mesentery.

The signs of intestinal perforation in a child are frequently subtle with a variable delay in the appearance of symptoms. Pneumoperitoneum is seen on plain radiographs of the abdomen only in a minority of children with intestinal perforations (Brown et al., 1992; Bulas, Taylor, and Eichel-

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berger, 1989) because early sealing of the perforation may occur. If clinically stable, the most sensitive radiographic view to detect pneumoperitoneum is an upright chest film. CT scan may assist in establishing the diagnosis, although false negative examinations do occur (Bulas, Taylor, and Eichelberger, 1989). Discovery of intraperitoneal fluid on CT scan, in cases of suspected abdominal trauma without evidence of other injury, is suggestive of a sealed hollow viscus perforation. The most reliable indicator of perforation is repeated clinical examinations looking for the development of peritoneal irritation.

Intramural hematomata of the intestine are frequently the result of inflicted abdominal injuries. Without definite history of blunt trauma to the upper abdomen, duodenal hematomata are highly suspicious for child abuse. Located in a fixed position close to the vertebral column, the duodenum is susceptible to crushing injuries with resultant intramural hematoma (Woolley, Mahour, and Sloan, 1978).

The clinical picture is one of vomiting, often bilious (dehydration may occur), abdominal pain, and tenderness without other observable abnormality. Appearance of some symptoms may be delayed following the injury with delays of one hour to 2.5 days reported (Woolley, Mahour, and Sloan, 1978). Because of the close association of the pancreas with the duodenum, concurrent injury is not uncommon and amylase levels should be measured. Upper GI (gastrointestinal) series is the gold standard for diagnosis of intramural hematomata. Ultrasound and CT scans may also demonstrate these.

Intramural hematomata of the intestine are frequently the result of inflicted abdominal injuries. Without definite history of blunt trauma to the upper abdomen, duodenal hematomata are highly suspicious for child abuse.

Hematoma of the intestine distal to the Ligament of Trietz are typically located at the mesenteric borders, frequently with accompanying mesenteric hemorrhage.

Pancreatic Injuries

Pancreatitis in children is uncommon and should raise the question of trauma (Slovis et al., 1975), although medical causes should be considered. Because the organ is deeply situated in the abdomen, injury is uncommon, although its fixed position immediately anterior to the vertebral column makes it susceptible to deep crushing injuries. Isolated accidental pancreatic injuries have been reported following falls onto small objects such as bicycle handlebars (Dahman and Stephens, 1981; Sparnon and Ford, 1986). Severe pancreatic trauma may result in complete transection of a portion of the organ.

Clinically, abdominal pain, vomiting, and fever are seen with pancreatic injuries. These symptoms may gradually develop after the injury, leading to occasional delay in presentation. Epigastric tenderness with an accompanying abdominal mass may be found. Serum and urine amylase levels are significantly elevated. With severe traumatic transections, chemical peritonitis may result with serious clinical implications.

Most pancreatic pseudocysts in the pediatric age group arise after blunt trauma to the abdomen (Dahman and Stephens, 1981; Kilman et al., 1964). Abdominal pain, fever, vomiting, elevation of the urinary and serum amylase levels, and the presence of an abdominal mass are the presenting clinical features. The time interval between injury and diagnosis may vary from six days to 16 weeks (Sparnon and Ford, 1986).

In acute pancreatitis, ultrasound often reveals enlargement of the gland owing to edema (Kleinman, 1987b). Ultrasound allows non-invasive repetitive evaluation of pancreatic size and for early diagnosis of pseudocyst formation (Kleinman, 1987b). Spontaneous resolution of pseudocysts occurs and is well documented with ultrasound. Computed tomography of the abdomen clearly delineates the pancreas and any accompanying pseudocysts.

Liver Injuries

The liver is the most commonly injured solid organ in cases of inflicted abdominal trauma (Coant et al., 1992). The organ is injured by a direct crushing blow, although decelerating injuries also occur. Lacerations of the liver parenchyma result from direct trauma with resultant hemorrhage. Decelerating injuries may result in damage to areas of ligamentous attachment with vascular disruption. Vascular injury and significant parenchymal lacerations may lead to serious blood loss and death prior to hospital arrival. Bile duct injury has been reported (Oldham et al., 1986). In accidental liver injuries, the right lobe is frequently injured, in contrast to the frequent left lobe injury in abusive trauma (Coant et al., 1992). This finding likely represents trauma from anterior abusive blows.

In cases of serious liver injury, the child will present in shock with marked intraperitoneal bleeding. Abdominal distention may be found as well as decreased or absent bowel sounds. Pain in the upper right abdomen coupled with tender enlargement of the liver may be observed if the child is conscious without other significant intra-abdominal injury. Minor liver injuries may remain asymptomatic (Coant et al., 1992; Sivit, Taylor, and Eichelberger, 1989).

Elevation of liver function tests (SGOT, SGPT) may predict the presence of liver injuries (Coant et al., 1992; Hennes et al., 1990; Oldham et al., 1986). Plain abdominal radiographs may demonstrate gross abnormalities in the liver size and shape as well as rib fractures. Computed tomography is the most sensitive non-invasive

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technique to assess for hepatic injury (Kleinman, 1987b) and allows survey of the entire abdomen and retroperitoneum. Scintigraphy in the form of liver-spleen scanning was previously used to assess for injury but anatomical detail is poor (Kleinman, 1987b). Ultrasound may identify hepatic hematoma but often misses small lacerations, although it has proven useful in following the progression of liver lesions (Kleinman, 1987b).

Kidney and Speen Injuries

The kidneys are the second most commonly injured solid organs in abusive abdominal trauma. These likely result from direct blows to the flanks as well as decelerating forces. Children may present with flank pain and tenderness with an accompanying mass and external bruising. Hematuria is generally present in cases of renal trauma and the quantity of blood may be predictive of the seriousness of injury.

The thorax of the child is compliant because the ribs are pliable. Because of this compliance, substantial and likely more injurious force is required to deform and fracture the ribs.

CT scans reveal the range of renal abnormalities, delineating the extent of parenchymal damage, perirenal hematoma, extravasation of urine, and renal vascular damage. Ultrasound and intravenous pyelography also have a role in imaging of renal injuries.

Splenic injuries, while common in accidental abdominal injuries, are uncommon in abusive injuries. Left upper quadrant pain and tenderness will likely be present, often accompanied by left shoulder referred pain. Plain films may document rib fractures, and displacement of the stomach medially. CT scanning of the abdomen typically delineates splenic injury.

Thoracic Trauma

Inflicted thoracic trauma represents 1% to 8% of traumatic thoracic injuries in childhood (Peclet et al., 1990; Newman and Eichelberger, 1991). Rib fractures are the most common finding of inflicted thoracic trauma (Kleinman, 1987a). Underlying injury to the thoracic viscera, while reported, is uncommon (Kleinman, 1987a).

Rib fractures represent 5% to 27% of all fractures found in child abuse (Kleinman, 1987a) with the majority found in children less than two years of age. They are frequently occult injuries discovered on skeletal surveys or through review of chest x-rays done during illness evaluation. Acute fractures, especially when posteriorly located, may be difficult to detect on plain films. Bone scintigraphy may prove beneficial in these situations.

With anterior posterior compression of the chest, the ribs are levered over the transverse spinous process with fracture along the posterior rib arc if sufficient force is applied (Kleinman, 1987a). In abuse, the fractures are predominantly posterior, with lateral fractures and anterior costochondral injuries less common (Kleinman, 1987a). Because of the anterior rib growth, injuries in this area may be difficult to detect. While front-to-back squeezing of the chest, often associated with shaking injuries, is likely the most common cause of abusive infant rib fractures, direct blows should also be considered.

The thorax of the child is compliant because the ribs are pliable. Because of this compliance, substantial and likely more injurious force is required to deform and fracture the ribs. In contrast to adults, CPR (cardiopulmonary resuscitation) has not been shown to cause rib fractures even when performed by inexperienced personnel (Feldman and Brewer, 1984; Spevak et al., 1994).

In one study, when charts of children with traumatic thoracic injuries were evaluated, 32% of these were found to have rib fractures. The presence of rib fractures was a marker for greater injury severity and increased mortality. Of those with rib fractures, 21% were the victims of intentional trauma, with 63% of the fractures in the under three age group abusive in nature (Garcia et al., 1990). A second study which reviewed charts of children admitted for rib fractures found that 24% were abuse victims. In the much younger child abuse group (mean age of three months compared with 8.6 years) the average number of fractures was 11.8 (range 3 to 23) compared with 3.5 (range 1 to 8) in the non-abuse group (Schweich and Fleisher, 1985).

In light of the frequency of abusive rib fractures and the occult nature and the increased mortality of inflicted thoracic injuries, a skeletal survey should be done in all suspicious infant and early childhood deaths (Kleinman et al., 1989).

Other Thoracic Injuries

Pneumothorax and hemothorax may follow abusive injuries but are rare. A large cylothorax was reported following disruption of the thoracic lymphatic drainage accompanying posterior rib fractures. Multiple other fractures were also present (Green, 1980).

Pulmonary contusion is one of the most frequent intrathoracic injuries found in accidental pediatric chest trauma (Newman and Eichelberger, 1991). This complication, while uncommon, does occur with abusive injuries. If medical attention is not sought, infection of the area of contusion may occur, and if severe may cause significant illness or death.

Cardiac contusions may occur but are rarely clinically significant when found in accidental trauma. An ECG, echocardiogram and CPK-MB may prove helpful diagnostically if significant concern exists. A ventricular septal defect and conduction system abnormalities have been described

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secondary to inflicted trauma (Marino and Langston, 1982; Rees et al., 1975).

Inflicted pharyngeal and esophageal perforations have been reported (Albin and Reinhart, 1990; Kleinman, Spevak, and Hansen, 1992; McDowell and Fielding, 1984). Clinically, these children develop subcutaneous emphysema and mediastinal collections demonstrated by chest x-ray findings of mediastinal widening and/or pneumomediastinum. Forceful insertion of an object (likely a penis in one case [Albin and Reinhart, 1990]) is the probable mechanism of injury.

Conclusion

Inflicted thoracoabdominal injuries, while infrequent, have significant morbidity and mortality. A high index of suspicion is required in order to reach the correct diagnosis both in the emergency room and the autopsy suite.

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FALLS AND CHILDHOOD DEATHS: Sorting Real Falls From Inflicted Injuries

—by David L. Chadwick

This article reviews the literature on children's falls, with emphasis on the contribution of falls to childhood death, and will also include a practice guideline for physicians dealing with fatally injured children with fall histories.

Falls constitute a very common cause of injury in infancy and childhood. Kravitz et al. (1969) queried 536 parents of infants and found that 255 of them recalled falls occurring prior to the first birthday. All of the falls occurred indoors and most were falls from elevated surfaces such as beds, changing tables, cribs, highchairs, and other furniture. No deaths occurred in Kravitz's series, although 15 children (2.8%) required hospitalization. In a 1985 review, Garretson and Gallagher indicate a declining mortality from childhood falls, but state that falls are still the fourth most frequent traumatic cause of childhood death, and a very important cause of injury. The relationship of fall height to mortality was not addressed in their article.

Helfer (1977) was the first author to show that short falls were unlikely to cause serious injury; his work, which utilized highly documented falls in hospitals, has been replicated by Nimityongskul and Anderson (1987) and by Lyons and Oates (1993). Studies of children's falls from heights (Smith et al., 1975; Barlow et al., 1983; Musemeche et al., 1991) indicate that deaths occur in falls from the fourth floor and up, but usually not from lower floors. In the 1960s and 1970s in New York City, these long "window falls" caused 123 deaths in four years, and accounted for 12% of all accidental deaths in children under 15 years of age. Spiegel and Lindaman (1977) described a program that controlled this problem, which is more prevalent in cities in which large numbers of children live at great heights.

Given the availability of prompt and appropriate medical care, falls contribute minimally to deaths in childhood. Death from a fall is now considered very unlikely when the fall is less than 20 feet.

Chadwick, et al. (1991) reviewed 317 cases of children less than five years of age brought to a trauma center with a history of falling. Seven deaths occurred in 100 children whose histories indicated falls of four feet or less, and one death occurred in 118 children who fell 10 to 45 feet. The authors concluded that the short fall histories associated with fatal outcome were inaccurate. Subsequent to that study, 523 additional children have been admitted to the Children's Trauma Center at Children's Hospital-San Diego with a history of a fall and a history or condition which justified hospital admission. Children with diagnosed inflicted injuries were excluded from this set. Of the children studied, 188 fell 10 feet or more, and the longest fall was 40 feet; yet no deaths occurred. The six most severely injured children had Injury Severity Scores (ISS) of 22-26, and all of these children fell 8 feet or more. ISSs in this range indicate very serious injury, but many children survive who have such scores.

In a study of multiply-witnessed falls, Williams (1991) found no deaths among 106 children who fell from one to 40 feet, and one death in a child who fell 70 feet. Chadwick and Salerno (1993) found that 35,000 children in San Diego day care centers with multiple caretakers incurred only a single head injury with an Abbreviated Injury Score (AIS) of three (and none greater) in a seven year period. The single case with an AIS of three achieved it by being unconscious for over one minute, but recovered promptly without sequelae. Other authors have observed that short falls abound in day care centers, so this observation strengthens the position that short falls rarely cause serious injury.

Hall et al. (1989) reviewed the medical examiner's files in a large county and found 44 child deaths attributed to falls in a four-year period. Eighteen of these were reported to have been falls of less than three feet; however, the historical details of these cases were not provided, and the pathology leading to death was not described. Without such details it is not possible to generalize from Hall's article. Root (1992) cites Weber's (1984) experiment, in which it was shown that the infant cadaver was likely to sustain a skull fracture in a short fall, as a reason to be cautious in excluding short falls as a cause of fatal head injury. The Weber experiment adds nothing to our knowledge of what is required to produce a fatal head injury in an infant, and Root's article blurs an area of knowledge that is becoming quite clear. Each year pediatricians and emergency physicians see numerous infants and young children with skull fractures and short fall histories. Most of these children are asymptomatic except for local swelling and some pain, and most recover uneventfully. It seems absurd to argue that this easy fracturability of the infant skull means that short falls kill.

Schutzman, et al. (1993) described 53 children with epidural hematoma diagnosed by CT scans. Twenty-four children had histories of falls of less than five feet, and 21 had exhibited "acute neurologic deterioration." It appears highly probable that serious neurologic consequences and even death might follow short falls if epidural hematoma is present; however, none of Schutzman's cases died and none had severe long-term impairment.

Conclusions

Given the availability of prompt and appropriate medical care, falls contribute minimally to deaths in childhood. Death from a fall is now considered very unlikely when the fall is less than 20 feet, and accumulating experience may soon extend that. Epidural hematoma may occur as a result of a short fall and may cause death occasionally when care is delayed or the condition is not recognized. Long free falls of young children can largely be prevented, but long falls of older children who climb to heights will continue to be a problem.

Older statistics indicating that falls are an important cause of death in children less than five

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years of age may well be substantially contaminated by cases of inflicted injuries presented as falls. This effect is probably diminishing as improved diagnosis of inflicted injury joins improved prevention and care in reducing the number of children who die from falls.

Practice Guideline

The physician faced with a young child with signs of serious or life-threatening head injury and a history of a fall of less than ten feet should first exclude epidural hematoma. CT scanning is an efficient method for the diagnosis of epidural hematoma. In some cases, it may also be desirable to exclude non-traumatic causes of intracranial bleeding such as arteriovenous malformation. The case should be reported promptly to a child protective agency and a law enforcement agency. Investigators should be advised that a careful scene description and careful and sensitive interviews with potential witnesses are likely to be needed. Investigators should proceed promptly in such cases, using the most skillful interviewers available, and collecting information from a wide range of persons who may have been near the place of the injury event.

The physician faced with a young child with signs of serious or life-threatening head injury and a history of a fall of less than ten feet should first exclude epidural hematoma.

The initial history provided by the caretaker and the injury pathology in the head and elsewhere should be thoroughly documented. The circumstances of later history changes should also be described. In many cases a syndrome of inflicted injury may be recognized on the basis of typical findings for shaken infant syndrome or from injuries at other sites or from other dates. Coagulation tests should be performed if the case is seen early, but they are almost always abnormal in children dying of head injuries once infarction of brain tissue is present.

Whenever possible, consultation should be obtained from a physician experienced in syndromes of inflicted injury. In fatal cases, autopsies are mandatory, and pathologists who are not experienced with childhood injuries should seek additional consultation.

When epidural hematoma has been excluded, and in the absence of a long fall or some other (usually obvious) event such as a motor vehicle accident, the vast majority of young children with life-threatening head injuries have inflicted injuries. The physician should provide this conclusion in written documentation.

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THE ROLE OF LAW ENFORCEMENT IN FATAL CHILD ABUSE CASES

—by Bill Walsh

The Role of Law Enforcement

A child's death places unique demands on law enforcement. The investigator's role is to investigate the death thoroughly and determine how it happened, if a crime occurred, and if so, who is responsible. Investigations of child abuse deaths are demanding, difficult, and stressful. They present the investigator with problems on both technical and emotional levels. In addition to the obstacles found in nonfatal forms of abuse (no witnesses, child's developmental level, etc.), they have issues associated with homicide cases (autopsies, cause and manner of death, etc.). Emotionally, the death of a child from abuse can affect even the most seasoned investigator. This combination of factors results in complex investigations with their own unique set of problems and solutions.

Since fatal child abuse cases are a combination of issues found in both child abuse and homicide cases, the question is often asked, Who is best to do the investigation—child abuse or homicide detectives? It has been the author's experience that these investigations require more training and expertise related to children and child abuse than they do to homicide. Detectives who work on child abuse cases know more about children. They know about Battered Child Syndrome, Shaken Baby Syndrome, head trauma, scald burns, child development, neglect, and Sudden Infant Death Syndrome (SIDS). They know how children are injured and the excuses people will offer for their injuries, and how to work jointly with CPS, a necessity the importance of which cannot be underestimated.

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Fatal Child Abuse vs. Adult Homicide

Though fatal child abuse and adult homicide share some common ground, the investigator must understand some important differences.

Fatal child abuse occurs in one of two ways. The first involves repeated abuse and/or neglect over a period of time. One or more persons may be involved or at least aware of the abuse. Examples are cases involving the Battered Child Syndrome or neglect. The second category involves a single incident of assault on the child. This would include cases of Shaken Baby Syndrome, drowning, and suffocation. The offender usually acts impulsively and alone in these cases.

The majority of fatal injuries occur in the privacy of the home at the hands of parents or caretakers. Usually there are no witnesses. As a rule, these cases are highly circumstantial in nature. Prosecution may depend on complex medical and forensic evidence, or on the suspect's confession.

Emotionally, the death of a child from abuse can affect even the most seasoned investigator.

Fatal child abuse does not involve traditional weapons. Hands, feet, violent shaking, slamming, scalding water, and neglect are commonly the cause of fatal injuries. There is no ballistic, DNA, or fingerprint evidence to identify the suspect. Crime scene processing must focus on less obvious items of physical evidence. This may include medicine not given, proof of missed doctor appointments, soiled diapers, or a lack of baby formula. These findings may indicate the child was ill, neglected, had a toilet training problem, or was not properly fed.

The injuries that cause children to die are different from those found in most homicide cases. The majority of fatalities are the result of severe head trauma (Levitt, Smith, and Alexander, 1994). These often involve closed head injuries that are not readily apparent upon external examination. Doctors may treat the child for hours or even days before the injuries are determined to be nonaccidental. Sometimes abuse may not be confirmed until an autopsy is performed.

As most children die from causes not related to maltreatment (illness, disease, or accidents), investigators must balance thoroughness with sensitivity when investigating a child's death.

Children can also die of neglect. A caretaker's failure to provide adequate nourishment, medical care and supervision can result in death. In some cases, even though the death may be ruled an accident by the medical examiner, the caretakers may still be subject to criminal prosecution. An example of this would be a case of negligent supervision. If a child, too young to be reasonably left alone, dies as a result of injuries sustained in a house fire, the parent may be culpable for failing to properly supervise that child and be charged with injury by omission. In cases such as these, the investigator is faced with the challenge of determining if the death resulted from an accident, an accident that involved negligence, or an accident that involved criminal negligence.

An Approach to Fatal Child Abuse

Faced with these complex factors, how should law enforcement investigate fatal child abuse? When a child dies of abuse, it is law enforcement's responsibility to determine what happened and who is responsible. Investigators are first and foremost fact finders. They must use all of their training, skills and resources to obtain the answers to the questions who, what, where, when, how and why? That is the objective. Standard investigative techniques (i.e., witness interviews, search warrants, crime scene processing, background checks, interrogation) must all be utilized in these cases.

As most children die from causes not related to maltreatment (illness, disease, or accidents), investigators must balance thoroughness with sensitivity when investigating a child's death. It is important that investigators maintain the proper balance of an open mind, healthy skepticism, and a resistance to jumping to conclusions. As important to identifying those who may have caused the death of a child is ensuring that charges are not brought against people when no crime has occurred. People have been wrongly accused, and even convicted, of fatal child abuse. Recently in Texas, two parents were released from prison when it was proven that their child died of injuries sustained in a dog attack and not from child abuse (Parks, 1994).

Need for Coordination

The investigator must coordinate his approach with other professionals and other agencies. Interagency cooperation and coordination are imperative for success. In addition to law enforcement, other professionals who play critical roles in the investigation include the child protection worker, physician, medical examiner, paramedic, and prosecutor. Each professional must understand how his or her respective role contributes to the team approach. Early case staffing by the professionals involved is advisable to insure coordination and the necessary exchange of information.

It is important that the medical professionals promptly notify law enforcement when they suspect a child may have been abused. An investigator's early entry into the case is best. Unnecessary delays allow the suspect time to create an alibi, pressure witnesses, or hide or destroy evidence—none of which bodes well for the investigation.

While every discipline's role is important, it must be understood by all that the ultimate responsibility for conducting the criminal investigation

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belongs with law enforcement. Unless necessary to obtain information to treat the child, medical personnel should refrain from confronting the caretakers if they offer inconsistent or implausible explanations for the child's injuries. The CPS worker, paramedic, and any other professional involved must also avoid such unnecessary encounters. These confrontations only serve to increase the caretakers' awareness that they are under suspicion, and greatly reduce any chance the investigator may have in obtaining a confession. It is more helpful to the investigator if these professionals make precise notes about anything the caretakers say to them.

Initial Interviews

Often the investigator's first contact with the case comes when the child is taken to the hospital and notification to law enforcement is made. Upon arrival at the hospital, the investigator should make sure that CPS has been contacted and begin to coordinate their response. Repetitive interviews of medical staff and the caretakers are not only inefficient but may prove counterproductive as well. The physician treating the child should be interviewed as to not only the child's injuries and prognosis, but the possibility of abuse as well. The investigator must realize that additional tests, procedures, and ultimately the autopsy will provide far more detailed and accurate information.

While every discipline's role is important, it must be understood by all that the ultimate responsibility for conducting the criminal investigation belongs with law enforcement.

If other medical staff, paramedics, or police officers were at the home or involved in transporting or treating the child, they should also be interviewed. If they are unavailable, plans should be made to interview them as soon as possible. They should be asked about what they heard the caretakers say, what they observed, and any impressions or opinions they have. Caretakers often say things in the presence of paramedics that they would not say in front of police officers.

The investigator should now be ready to turn his attention to the caretakers. If more than one caretaker is present, they should be interviewed separately in a location that affords privacy. The investigator should have them tell their story without challenging any inconsistencies or improbable explanations. It is advisable to have them reduce their account to writing in affidavit form. This locks them into their story and may prove invaluable if they later try to change it. It may also be used to prove that what they said does not correspond with the physical, medical, or forensic evidence. Audio and videotape recordings may be used, but they are likely to cause caretakers to be more circumspect in their responses.

Fact Finding

Fatal child abuse cases require that the investigator know as much about the child, the caretakers, and the circumstances surrounding the death as possible. A number of resources have been developed to aid the investigation in these inquiries. (National Center for the Prosecution of Child Abuse, 1993; Missouri Department of Social Services, 1994).

An often overlooked source of important information exists if the caretakers called the emergency number 911. A copy of the 911 audiotape should be secured and transcribed; the tape might include statements inconsistent with what the caretakers say later. Exact times when the caretakers called and when the paramedics arrived can also be learned from the 911 tape.

Who Did It?

When a child dies of fatal child abuse or neglect, the first question facing the investigator is, Who caused the injuries? The investigator should view the potential suspects as those people who were present during the time the child could have received the fatal injuries. Consultation with the medical examiner and other medical experts may provide an approximate time as to when the injuries were inflicted, although in some cases, the medical experts may be unable or unwilling to give a time frame that is short enough to narrow the field of suspects.

Another way to help the investigator determine the person responsible is to carefully review the accounts the caretakers give the medical experts. The history may narrow the field of who caused the injuries. In cases of severe head trauma that involve cerebral edema, noticeable symptoms start to manifest themselves immediately or within a short period of time. These symptoms often include the onset of vomiting and a loss of consciousness. It is therefore important to determine the last time the child was observed behaving normally. An example of this would be a caretaker reporting that she observed a child playing and appearing normal when she left for work, but found the child vomiting and sleepy upon her return. A careful several-day time line of the child's activities can be a very powerful tool.

Investigators should also carefully examine the caretakers' explanations for the cause of the child's injuries as a way to determine a possible suspect. Caretakers with something to hide will commonly do one of the following when questioned:

(1) They may offer a total denial of any knowledge of how the child was injured.

(2) They may offer a version that is basically truthful but shades or omits certain facts that they feel casts suspicion upon themselves. They hope to provide a version of the facts that

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coincides with new physical and medical evidence with which they are confronted.

(3) They will offer improbable or implausible explanations for the child's injuries. This includes variations of the "killer couches" or blaming a three-year-old sibling for shaking the baby.

Interrogation

One of the most powerful and underutilized tools that an investigator has in these cases is the proper interrogation of the suspect. It has been the author's experience that people who are responsible for fatal child abuse often admit their guilt if interrogated by an experienced investigator. Many times these suspects have no serious criminal history; they are not hardened offenders. They have acted impulsively and later regret their actions. Various strategies that highlight the impulsive nature of the incident can be useful in eliciting confessions. While a voluntary statement from the suspect admitting guilt is powerful evidence, investigators should continue to work and thoroughly investigate the case. Confessions, for reasons too numerous to mention here, may later be excluded in court. It is advisable to apply the strategy of investigate, interrogate, and investigate some more.

Summary

Fatal child abuse cases present unique problems for law enforcement. Expertise in both child abuse and investigation is necessary in these cases. Investigators must be prepared for issues and dynamics not found in typical homicide cases. While law enforcement officers should coordinate their investigation with other disciplines, they must realize that they bear the primary responsibility for the criminal investigation.

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PROSECUTING CHILD FATALITY CASES

—by Ryan H. Rainey and Dyanne C. Greer

Most prosecutors, investigators, and physicians are ill-prepared to recognize or deal with abuse-related fatalities. Among the many obstacles facing prosecutors is the need to prosecute and obtain appropriate sentences for perpetrators within a framework of state statutes that do not always take account of the dynamics of abuse-related deaths. However, the challenge begins long before the court is involved.

Identifying abuse

Proper identification of physical abuse and fatality-related injuries is the first obstacle. Since physicians might not suspect abuse when an injured child presents for treatment, especially if the family is known to them, investigators must learn the medical and psychological dynamics of abuse in order to effectively conduct a criminal investigation. Prosecutors must work with other disciplines to increase awareness of the problem. No one wants to believe that fatal child abuse occurs. Since society has been conditioned to believe that caretakers are not capable of such brutality, prosecutors must be able to persuade jurors that caretakers can and do physically beat, shake, and starve children to death.

Among the many obstacles facing prosecutors is the need to prosecute and obtain appropriate sentences for perpetrators within a framework of state statutes that do not always take account of the dynamics of abuse-related deaths.

Establishing culpability

One of the prosecutor's major tasks is to establish that the caretaker had the mental state required for criminal culpability, taking into account the caretaker's educational level and mental abilities. For example, did the individual subjectively know this behavior would be harmful to a child? In Shaken Baby Syndrome cases, the defense often tries to establish that the perpetrator was unaware of the dangerousness of his or her act. The prosecutor must counter this argument by demonstrating the extreme violence necessary to cause the extensive injuries, thus equating this excuse to a defendant's saying, "I did not know a gun could kill."

Recognizing children's rights

Parental rights and family preservation policies can be barriers to establishing that a possible crime has taken place. Children do not have the same rights as adults in our society. When one adult assaults another, the crime is ordinarily investigated regardless of the relationship between the parties. Assaults on children, however, are frequently dismissed as simple discipline. This view of parental rights and family privacy is especially evident in less serious physical abuse cases, but is also present in serious injury or death cases.

Facilitating prompt investigation

The prompt investigation of all child deaths of undetermined cause should be a priority for all jurisdictions. When a child dies suddenly or unexpectedly, authorities are usually hesitant to intrude on the assumed grief of a family. When it is determined that a possible nonaccidental death has occurred, it is often too late for a thorough investigation, as many pieces of evidence may already be lost. Professionals must learn to investigate undetermined deaths with sensitivity and understanding without sacrificing the importance of prompt investigation. A good scene investigation is as useful as an autopsy in determining if a child's death is natural, accidental, or a homicide.

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Charging and trial strategies

Despite problems these cases present, investigators and prosecutors are using creative charging and trial techniques to obtain convictions. Legislative reform may also assist a prosecutor. Model penal codes for child abuse and fatalities can provide guidance to states in developing appropriate and substantial statutes to protect our youngest citizens.

Once a death or physical abuse case is identified, the prosecutor must decide what crime to charge. Most states have a wide range of possibilities, from misdemeanor child abuse to premeditated murder. Some of the charges available are standard murder as defined in statutes, felony murder, manslaughter, and charges under child abuse statutes including neglect and endangerment statutes. "Common murder" statutes require mental states such as "purposely," "knowingly," and "premeditated"; "lesser murder" statutes might require that homicide be committed under circumstances manifesting extreme indifference to the human life, and would not require premeditation.

In recent years, states have begun to realize the difficulty in proving the requisite intent to obtain murder convictions in these cases, and have responded by developing specialized child homicide statutes.

"Felony murder" statutes apply to homicides committed during an attempt to commit, or during flight from, an inherently dangerous felony. In states that have legislatively delineated child abuse as an underlying felony contributing to felony murder, felony murder is a possible charge. In states without such legislative intent, the merger doctrine might operate to make a felony murder charge unavailable. The merger doctrine requires that the elements of the underlying felony (e.g., armed robbery) differ from elements of the homicide. In child abuse cases, the only difference is the death of the child. The child abuse elements merge with the homicide, and felony murder is not chargeable.

"Manslaughter" occurs when a criminal homicide is committed recklessly or under the influence of extreme mental or emotional disturbance for which there is a reasonable explanation or excuse. "Negligent homicide" requires that the homicide be committed with criminal negligence.

In recent years, states have begun to realize the difficulty in proving the requisite intent to obtain murder convictions in these cases, and have responded by developing specialized child homicide statutes. In these statutes, the "intent to kill" requirement has been eliminated when a child's death results from abuse. Instead, the prosecutor must show the perpetrator physically abused the victim and that the abuse caused the child's death. Alaska Statutes section 11.41.100 (1988) provides a good example of this type of statute:

> A person commits the crime of murder in the first degree if the person knowingly engages, under circumstances manifesting extreme indifference to the value of human life, in a pattern or practice of assault or torture of a child under the age of 16, and one of the acts of assault or torture results in the death of the child; for the purpose of this paragraph, a person "engages in a pattern or practice of assault of torture" if the person inflicts serious physical injury to the child by at least two separate acts, and one of the acts results in the death of the child.

A few states have added neglect and endangerment to their specialized homicide statutes. West Virginia Code section 61-8D-2 (1988) reads as follows:

> If any parent, guardian or custodian shall maliciously and intentionally cause the death of a child under his or her care, custody or control by his or her failure or refusal to supply such child with necessary food, clothing, shelter or medical care, then such parent, guardian or custodian shall be guilty of murder in the first degree.

Charging multiple caretakers

Since infants and children are unable to care for themselves, they may have many caretakers. It is not uncommon for a child to have multiple caretakers during the period of injury. Many times we see one caretaker inflict abuse while the other fails to intervene. In order to combat the failure to act, states have also developed statutes and case law to allow prosecutors the tools necessary to bring these people to justice. Many states now make failure to intervene a felony. For example, the 1991 Florida case Leet v. State, 595 So. 2d 959 (Fla. Dist. Ct. App.), held that the defendant—in this case the boyfriend of the murdered child's mother—had been properly convicted of simple child abuse and third-degree felony murder in the death of a two-year-old boy. The boyfriend had allowed the mother and her son to move into his home and he exercised many caretaker responsibilities. Under Florida's felony murder statute, felony child abuse applies to acts of omission as well as acts of commission. It was not necessary, therefore, for the state to prove the defendant had personal knowledge that his omission would lead to the child's death or great bodily harm: "So long as his conduct would be gross and flagrant, evincing a reckless disregard for human life if committed by the ordinary reasonable man, the issue of guilt must be submitted to a jury. The law does not protect a person from his choice not to notify the authorities in order to protect the victim's mother." Some state statutes go further. West Virginia Code section 61-8D-2 (1988) reads:

> If any parent, guardian or custodian shall cause the death of a child under his or her care, custody or control by knowingly allowing any other person to maliciously and intentionally fail or refuse to supply such child with necessary food, clothing, shelter or medical care, then such other person and such parent, guardian or custodian shall each be guilty of murder in the first degree.

Generally a person has no duty to act to stop a crime, and neither passive acceptance of a criminal

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act nor mere approval subjects a person to criminal liability. This principal fails to take into account the special relationship between a caretaker and child wherein the child is by nature dependent on and usually weaker than the parent/caretaker. Therefore, there are strong public policy reasons for imposing a duty on a caretaker to protect children from abuse. When a parent or caretaker has knowledge of abuse and fails to take action to prevent it, this leaves the child victim with no effective means of securing help. In some cases when specific language of state statutes fails to sanction a caretaker for failing to give aid, some courts have interpreted them to make such conduct criminal. Examples include Arkansas Code Ann. section 5-27-221 (1985), which reads:

> A person commits the offense of permitting abuse of a child if, being a parent, guardian, or person legally charged with the care or custody of a child, he recklessly fails to take action to prevent the abuse of a child who is less than eleven (11) years old.

See also Nevada Revised Statutes section 200.508 (1989), which makes culpable a person who:

> [W]illfully causes a child who is less than 18 years of age to suffer unjustifiable physical pain or mental suffering as a result of abuse or neglect or to be placed in a situation where the child may suffer physical pain or mental suffering as a result of abuse or neglect....

Another method of charging multiple caretakers is the use of accomplice liability and/or complicity statutes. An accomplice is a person who is subject to prosecution for the identical offense as the perpetrator. Complicity is determined by the conduct of a second person for which the charged person is legally accountable. Under the California penal code, a person becomes an accomplice to a crime when he or she:

(1) with knowledge of the unlawful purpose of the perpetrator and

(2) with the intent or purpose of committing, encouraging, or facilitating the commission of the crime, by act or advice aids, promotes, encourages or instigates the commission of the crime.

Many times we see one caretaker inflict abuse while the other fails to intervene. In order to combat the failure to act, states have also developed statutes and case law to allow prosecutors the tools necessary to bring these people to justice.

Under Washington's criminal code, a person is legally accountable for the conduct of another person when:

(a) Acting with the kind of culpability that is sufficient for the commission the crime, he causes an innocent or irresponsible person to engage in such conduct; or

(b) He is made accountable for the conduct of such other person by this title or by the law defining the crime; or

(c) He is an accomplice of such other person in the commission of the crime.

Other charging options

Even without new legislation and specialized child homicide laws, prosecutors still have tools that may help to obtain appropriate outcomes. While these are seldom used, they should be considered. Many jurisdictions have statutes that deal with torture and mayhem. These statutes are usually associated with adults, but are applicable to many severe child abuse and fatality cases. The torture statute in California Penal Code section 206 reads:

> Every person who, with the intent to cause cruel or extreme pain and suffering for the purpose of revenge, extortion, persuasion, or for any sadistic purpose, inflicts great bodily injury...upon the person of another, is guilty of torture. The crime does not require any proof that the victim suffered pain.

If death occurs during the torture, the charge automatically changes to first degree murder. For most child abuse cases, the applicable element of the statute would be for "sadistic purpose"; physical beatings of children are often so severe they could only be labeled as sadistic. California includes mayhem and aggravated mayhem in its penal code (sections 203 and 205). Since typical child abuse statutes often do not contemplate serious injury or death these statutes help fill these gaps:

> Every person who unlawfully and maliciously deprives a human being of a member of his body or disables, disfigures, or renders it useless, or cuts or disables the tongue, or puts out an eye, or slits the nose, ear, or lip, is guilty of mayhem (section 203).

A person is guilty of aggravated mayhem when he or she unlawfully, under circumstances manifesting extreme indifference to the physical integrity or disfigurement of another human being, deprives a human being of a limb, organ, or member of his or her body. For purposes of this section, it is not necessary to prove an intent to kill. Aggravated mayhem is a felony punishable by imprisonment in the state prison for life with the possibility of parole (section 205).

Conclusion

The complexity of child homicide cases calls for special local agency policies and attention by prosecutor's offices. Development of new partnerships along with increased staff training will result in more thorough investigations, ensuring justice in these heinous crimes. By charging appropriate crimes, advocating for changes in legislation, and being creative, we can take the first steps in mounting a broader community effort to prevent the physical abuse and killing of children.

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THE ROLE OF CHILD PROTECTIVE SERVICES IN RESPONDING TO AND PREVENTING CHILD DEATHS

—by Susan J. Wells

Introduction

The National Center on Child Abuse and Neglect (NCCAN) (U.S. Department of Health and Human Services, 1994) reports that 1,068 child deaths were known to child protective service (CPS) agencies in 1992 (44 states reported fatality data for that year). This number does not include deaths which were recorded by law enforcement agencies as murder, but not reported to CPS; nor does it include many deaths that may have resulted from maltreatment but have gone undetected by the community. Using a combination of law enforcement data and current research on other records of fatalities, e.g., CPS, medical examiner, health services, public safety, McClain et al. (1993) estimated annual child maltreatment death rates based on three different models. The results of their work suggest that anywhere from 949 to 2,022 children die from abuse and neglect each year, depending on the definition and model used, and that the number has been relatively stable over time.

In the Second National Incidence Study of Child Abuse and Neglect (NIS-2), Sedlak (1989) found that, of the children known to the professionals in the community as abused or neglected (N=1,025,200 for the United States), 57% were abused and 49% were neglected (some children were both abused and neglected). Of 1,100 children who were known fatalities in this study, 54% died from physical abuse. The number of actual cases for deaths from neglect were too small to make reliable national estimates. One can conclude, however, that the remaining fatalities, 46%, were from causes other than physical abuse.

Understanding data on child maltreatment deaths

The difficulty in determining the actual number of child maltreatment deaths locally or nationally is at the center of the movement to establish interagency, multidisciplinary, child death review teams. Studies of child deaths have consistently shown that the number of children who die at the hands of their caretakers is not known to any one agency, whether it is the police, child protection, hospitals, or even the coroner or medical examiner (e.g., Shapiro and Lescohier, 1989; Ewigman, Kivlahan, and Land, 1993). This is due not only to lack of cross reporting, but also to lack of initial identification. So many cases may go unidentified due to each agency's or person's having only one part of the story, lack of precision in our current technology and science (e.g., inability to detect some forms of murder such as suffocation of infants), lack of systematic investigations at the time and scene of death, and lack of agreement with respect to what constitutes a death due to abuse or neglect. For example, if a parent leaves a 13-year-old at home alone, in the same house with available liquor and a loaded gun, and that child dies in a scuffle with a friend over the gun, is the death attributable to neglect by that parent? How would and should it be recorded by the various agencies involved? Finally, any professional may be unable, at one time or another, to fully comprehend the meaning of the available evidence. The thought that a parent or caretaker would actually kill a child is so foreign to most people that it is often not considered as a possibility.

CPS definitions

This lack of clarity and precision in identifying the cause of death of children is particularly troubling because lack of accurate information as to cause hinders prevention efforts. The issue is compounded when looking at the role of child protective service agencies in responding to child deaths. Each state defines child abuse and neglect somewhat differently. For example, some states explicitly include infants born with a positive drug toxicology as abused children, while others may specifically exclude them (National Clearinghouse on Child Abuse and Neglect Information, 1992).

The same is true with respect to child deaths. In some states, CPS agencies only investigate reports of a child's death if (1) that child had an open case with the agency or (2) the family was referred to CPS because those responding to the death thought other children in the household might be at risk of abuse or neglect. In other states, CPS would be called to investigate a case if there was any suspicion that the child died due to abuse or neglect. Further, the recording of a child's death as due to abuse or neglect by the CPS agency could depend upon a host of factors. Some of these are: (1) whether the case was open at the time of the child's death, (2) the identity of the suspected perpetrator (the perpetrator must be a caretaker to trigger CPS involvement, and the definition of who is a caretaker varies from state to state), or (3) whether there was a finding of maltreatment in the investigation by the CPS agency. Therefore, the child deaths recorded by a CPS agency in North Carolina are not likely to be the same types of cases recorded as child abuse deaths in Oregon or Georgia.

CPS knowledge of potential risk

When determining which children have died due to child maltreatment, the specific cause of their deaths, and how to prevent future child deaths, it is important to remember that many children who die at the hands of their caretakers have never been reported to a CPS agency. Of children in the U.S. known by community professionals to have been fatally or seriously injured by abuse or neglect in 1986 (N=158,200), only 35% had been investigated by CPS (Sedlak, 1989). The other 65% of these children either were not reported to the CPS agency (Zellman, 1990), or were not investigated by CPS when a report regarding their welfare was made. The decision not to investigate is usually due to a judgment that the case does not fit within the legal definitions which mandate CPS involvement (Wells, Fluke, Downing and Brown, 1989).

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State and local reviews of child deaths have had similar findings. In these studies, the review usually begins with those cases that become known to CPS at the time of the child's death. One of the first state studies of child abuse deaths indicated that of those deaths known to CPS in Texas from 1975-77 (N=267), approximately 75% were unknown to CPS before the report of the death (Region VI Child Abuse and Neglect Resource Center, 1981). In a study of 73 deaths in New York City that were substantiated upon investigation in 1984, 75% were previously unknown to the city's CPS agency (Mayor's Task Force, 1987, Appendix A, Table 77). More recently, of 58 children who were known to have died of abuse or neglect in South Carolina from 1989 through 1991, approximately 60% were not known to child protective services before the report of the death (Christophillis & Riley, 1993).

These studies suggest that of children known by professionals in the community to have died of maltreatment, only a small percentage are ever investigated and recorded by CPS. Further, of those known to CPS as a result of a death, most of these had not had prior contact with the protective service agency.

The conclusions of the Mayor's Task Force report were that (1) fatal and non-fatal CPS cases are more alike than different; and (2) fatalities cannot be predicted. The findings of this study, published seven years ago, remain valid today.

Children with a history of CPS involvement

Even though most children who die from maltreatment are not known to CPS prior to the child's death, cases in which deaths occur after a CPS investigation often become widely known. The public wonders how this case could have been missed, how this child could have been forgotten by society and left to die. Lisa Steinberg of New York City is a name recognized across the country. Every state can readily name fatally abused children who were known to the system, children who should have been protected from their caretakers. For some of these children there was no way to predict the violence they would suffer. Yet for others, systematic intervention by the state and court system could have made a difference.

In just one example, in 1986, the Ft. Lauderdale *News/Sun-Sentinel* reported that 74% of children killed while on CPS caseloads did not receive monthly visits from CPS workers. There was additional concern that the law requires CPS workers to preserve or reunify families even when the child has been seriously or repeatedly injured (Bergal, Bochi, and Schulte, 1986). This latter point is clearly a misreading of the law, but it suggests that workers, supervisors, and lay persons might not have a clear understanding of the goals and procedures to be used in executing general child welfare policies while protecting children.

In an effort to determine whether it is possible to identify which children known to CPS are likely to be fatally injured, the New York City Mayor's Task Force on Child Abuse and Neglect (1987) undertook a study with the support of the National Center on Child Abuse and Neglect to identify possible risk factors. The findings of this study, published seven years ago, remain valid today.

The researchers examined all known maltreatment fatality cases (N=73) from 1984 and a random sample of 114 nonfatal cases that were substantiated during the same time period. Data were gathered from a number of community agencies, e.g., hospitals, public health, drug treatment facilities, schools, and others. The factors most likely to be associated with the fatal were the young age of the child, presence of a father or father substitute in the home, paternal drug use, prior court-ordered removal of the child, absence of a maternal grandmother in the home, ethnicity, and a sibling with medical problems. These factors correctly classified 71% of the fatality cases, but incorrectly identified 17% of the nonfatal cases.

The conclusions of the Mayor's Task Force report were that (1) fatal and nonfatal CPS cases are more alike than different; and (2) fatalities cannot be predicted. They recommended that in order to prevent fatalities, child abuse and neglect in general must be prevented, more research should be done to identify more precise warning signs, workers should focus more on father and father substitute perpetrators, workers should monitor the family closely when only one child is removed [Author's note: or is returned], agencies must enhance cross-agency sharing of information, availability of drug treatment services for caretakers should be increased, the preventive roles of schools should be enhanced, prenatal and postnatal screening should be conducted, and more focus should be given to prevention and treatment efforts with very young children. More recent work by children's services death review teams have echoed several of these findings (see, e.g., Schirner & Griggs, 1993).

Role of CPS in responding to child deaths

The role of CPS in responding to child deaths will vary according to state law. Generally, the agency may be called upon to participate in the immediate investigation, working with law enforcement in determining the cause of death. In addition, CPS may be called upon to review whether they have had past contacts with the child or family. Finally, CPS may be asked to intervene on behalf of the children remaining in the home, to make a safety determination, and to take protective measures if necessary. When a child dies, CPS work in the case is often just beginning. Information on the nature, cause, and circumstances surrounding the child's death may be helpful to CPS planners in reviewing current practices and developing new procedures.

Child death review teams

Most models for child death review teams are currently promoted as multi-agency, interdisciplinary efforts that may be local or statewide in their

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orientation. The local teams generally focus on coordinating investigative work, while the state teams tend to be retrospective, examining the causes of child deaths and determining ways in which community systems can be enhanced to prevent these deaths.

In addition to these interagency efforts, in fact preceding them in many cases, CPS agencies have been undertaking internal reviews of child deaths to examine their own response system and determine how they can improve service delivery. These internal reviews are as critical to the effective functioning of CPS as the interagency teams are to the entire community. The reviews may be conducted by the agency's CPS specialists or may be conducted by an interdisciplinary panel.

In a 1990 national survey of child death review policies, Wells (1991) found that 33 state child protective service agencies had a formal policy or administrative practice of reviewing child abuse deaths. These policies may be concerned with internal agency functioning or be purely investigative in nature. In 1993, 20 states reported state-level teams that meet regularly to review child deaths (Wells, Benedict, West, and Chipman, 1993).

Oregon has proposed the following questions which are useful for internal and interagency reviews (Oregon Department of Human Resources, Children's Division, 1991):

(1) Could the fatality have been prevented?

Review: warning signals, community awareness, state agency response, court system response, community resource availability.

(2) Was the public agency's intervention provided in accordance with the state statutes and departmental rules, regulations and procedures?

Review: investigation, response time, assessment, services provided.

(3) Are the state statutes and departmental rules, regulations, and procedures adequate?

Review: assessment procedures, gaps in law, guidance to workers, emergency procedures, interface between laws, procedures and practices.

(4) Was the worker adequately prepared to provide protective services?

Review: educational background, agency training, support, ability to assess risk.

(5) Was there adequate communication between social service agencies?

Review: community networking, interagency staffing, training for community agencies, holistic approach to child and family.

(6) Commendable or outstanding work done by workers or supervisors.

Of children known by professionals in the community to have died of maltreatment, only a small percentage are ever investigated and recorded by CPS. Further, of those known to CPS as a result of a death, most had not had prior contact with the protective service agency.

Confidentiality

Confidentiality of case records after a child's death has been the subject of much debate. Some information sharing is essential in the process of promoting interagency cooperation. In addition, reporters and some child advocates believe that the public's right to know about the public agency's functioning supersedes all considerations of confidentiality when a child has died. CPS agencies cite the need to protect their clients and confidentiality provisions in legislation as a reason for not releasing information, while the public accuses CPS of hiding its culpability in child deaths behind the shield of confidentiality. Physicians, schools, and drug treatment programs are under similar constraints in sharing case information in case conferences due to similar legislation and ethical considerations affecting their practice.

The National Center on Child Abuse and Neglect has taken one step toward resolution of this problem by specifically suggesting that for the purposes of multidisciplinary review teams, CPS be allowed to share case information (David Lloyd, personal communication, 1994). The proposed new rules will free states from the threat of loss of federal dollars when participating in multidisciplinary review teams which follow federal standards with respect to confidentiality. This is a major step forward for team building and one that should encourage other disciplines to follow suit.

The issue of releasing information to the public, however, is more difficult. In 1990 Georgia passed legislation allowing the release of case information by the death review team, including names of victims (Georgia Code Ann. section 19-15-1 et seq.). Such a release is highly problematic for the families involved and for the protection of the rights of alleged perpetrators before any arrests have been made. In fact the statute establishing the child fatality review team and permitting the release of such information is subject to another state statute limiting the release of information if such release would result in the loss of federal funds for the state (Ga. L. 1990, section 2) as cited in Editor's notes, Georgia Code Ann. section 19-15-1 et seq.). Because federal law has strict provisions regarding confidentiality, this in effect nullifies such release.

In every state, laws govern the degree to which medical examiners, law enforcement, and prosecutors can release information to the public. These laws were created to protect the rights of the innocent and at the same time give the public full access to information regarding those arrested for, or judged guilty of, crimes against society. Ensuring accountability of public agencies does not arise from holding them to account on individual cases, no matter how vivid or shocking. Rather, it follows from a systematic accumulation of data over time that indicates how agencies are functioning, whom they are serving, and the degree to which they are meeting their mandates. This data informs us only

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in the aggregate, over many cases, and over time.

Child protective services is one of the few positions of public responsibility in this country that can rise and fall on the public report of one case, no matter how the agency has functioned for the thousands of other children served. To protect against the politicization of CPS, it is critical to institute mechanisms of quality assurance, to implement mechanisms of accountability and sound management, and to put leadership in the hands of those best trained to do the job.

In lieu of releasing case-specific information, the agency also has an obligation for self study and to release the results of these internal investigations in the aggregate. This enables the public to understand the use of their tax dollars in protecting children and gives the agency a complete structure of accountability which should be the same for all publicly-funded agencies.

Child protective services is one of the few positions of public responsibility in this country that can rise and fall on the public report of one case, no matter how the agency has functioned for the thousands of other children served.

Conclusion

The risk of child homicide has been well studied. Younger children of poorly educated mothers who are unmarried at the time of the child's birth, and children who reside in metropolitan areas are more likely to be killed than other children (Winpisinger et al., 1991). Being African-American appeared to be an independent risk factor but was largely explained by the mother's marital status. Variables associated with pregnancy and congenital malformation have not been consistently associated with child homicide.

These risk factors suggest that society as a whole has an obligation to better provide services and supports to this high-risk population. When coupled with the finding that, among CPS cases, it is not possible to predict child fatalities, the roles of society at large and CPS in particular become more clear.

Agencies must make clear to their workers and to the courts that family preservation and reunification are only desirable ends when the child is judged to be safe in the home.

Only by enhancing services to the entire at-risk population can fatalities be effectively prevented. The role of CPS is to refine their management and supervision of service delivery, to consistently examine their policies and procedures as well as the effect of legislation on practice, and to work with other agencies and organizations in the community to ensure a coordinated investigation and service delivery system. Further, agencies must make clear to their workers and to the courts that family preservation and reunification are only desirable ends when the child is judged to be safe in the home (Administration for Children, Youth, and Families Program Instruction 94-01).

The role of the public, and therefore the legislators, is to understand that for the most part it is impossible to predict which children will die. Whether or not CPS has acted in accordance with all current procedures, the community must also look to itself. Cross agency reporting practices, systematic sharing of case information for the purpose of child protection, the development of ongoing investigation teams, and support of each other in the pursuit of the final goal of child protection are essential and often overlooked.

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DISCRIMINATION DE JURE: RELIGIOUS EXEMPTIONS FOR MEDICAL NEGLECT

—by Rita Swan

Laws that discriminate against certain classes of adults are rare in the United States today. They offend the American spirit of fairness. But a large body of laws that discriminate against certain classes of children is accepted as perfectly normal by most policy makers and the child welfare bureaucracy.

Among these discriminatory laws are religious exemptions from parental duties of medical care. These exemptions are found in the child abuse and neglect laws of 43 states and in the criminal codes of 20 states.

Forty-eight states have religious exemptions from immunization laws, despite the increased risks and costs to the public. There have, for example, been four large-scale measles outbreaks at Christian Science schools in the St. Louis area during the past nine years. The first took the lives of three young people. The fourth spread to the general population, became the largest measles outbreak in the country during the past two years, and cost St. Louis County $100,000.

The Centers for Disease Control and Prevention reported that over 50% of the measles cases reported to it between January 1 and May 21, 1994, were among two groups of persons claiming a religious or philosophical objection to immunizations (King, 1994).

Forty-eight states have religious exemptions from immunization laws, despite the increased risks and costs to the public.

The majority of states have religious exemptions from metabolic testing of newborns. Some states have religious exemptions from prophylactic eyedrops for newborns; some even offer religious exemptions from tuberculosis testing of public school teachers.

No court has ruled that these religious exemptions are mandated by the Constitution. In 1903, the conviction of a parent who withheld lifesaving medical care on religious grounds was upheld by the highest court of New York in *People v. Pierson*. In 1944, the U.S. Supreme Court ruled in *Prince v. Massachusetts* that "the right to practice religion freely does not include liberty to expose the community or child to communicable disease, or the latter to ill health or death." Twice in recent years the U.S. Supreme Court has declined to review convictions of parents who withheld lifesaving medical care from their children on religious grounds (Commonwealth v. Barnhart, 1985).

Nevertheless, policy makers have given what courts and case law do not give. In 1974, at the urging of the Christian Science Church, the U. S. Department of Health, Education, and Welfare (HEW) placed the following regulation under federal mandate:

> A parent or guardian legitimately practicing religious beliefs who thereby does not provide specified medical treatment for a child, for that reason alone shall not be considered a negligent parent or guardian; however, such an exception shall not preclude a court from ordering that medical services be provided to the child, where his health requires it (Code of Federal Regulations, 1974).

All states had to enact a religious exemption from child abuse and neglect charges in order to receive federal money for abuse and neglect prevention and treatment programs.

Arriving at the same time as a revitalization in charismatic faiths, the religious exemption laws have contributed to many preventable deaths of children. Parents and public officials have assumed that parents had the right to withhold medical care on religious grounds.

In 1983, the U.S. Department of Health and Human Services (HHS) required that states add failure to provide medical care to their definitions of child neglect and removed the religious exemption from federal mandate (Code of Federal Regulations, 1983). By then, however, virtually every state had passed a religious exemption to child abuse and neglect charges.

Since 1987, HHS has required about a dozen states to make changes in their religious exemption laws. The HHS viewpoint is that states can have a religious exemption from adjudicating the parent as negligent, but cannot have an exemption from finding the child to be neglected. Furthermore, the statutes must not have even an implicit exemption from reporting, investigation, or court ordering of medical treatment for a child in need (Moman, 1987).

Many child advocates find this posture confusing. If a child is neglected, someone is neglecting the child. A religious exemption from a negligence charge indicates to a mandatory reporter that parents have the right to withhold medical care on religious grounds and there is no abuse or neglect to report. Such a law creates an implicit exemption from a duty to report.

Even if a reporting requirement clearly applied to children deprived of medical care on religious grounds, many would still consider religious exemptions offensive. Parents have custody of children and therefore should have a legal duty to care for them. A law that exempts one group of parents from the general duty to provide necessary medical care makes a group of children second-class citizens. These children have no right to medical care unless a report is made to protective services and even then the agency might not have a legal duty to provide it (DeShaney v. Winnebago, 1989).

HHS's stated policy is, to say the least, conceptually awkward. Madeline Nesse, an attorney with the HHS Office of General Counsel, has testified to the U.S. Advisory Board on Child

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Abuse and Neglect that the Child Abuse Prevention and Treatment Act (CAPTA) requires that children be provided with medical care in situations of harm or threatened harm, but is "silent" on "the status of the parent" (U.S. Advisory Board on Child Abuse and Neglect, 1993). But how can a definition of child abuse and neglect be "silent" about parents? Our society cannot provide for children without asking their parents to assume some responsibility for them. Indeed, HHS itself does not allow exemptions from parental duties in any area but religiously based medical neglect. For example, HHS tells states that they cannot have religious exemptions from abuse unless the abuse exemption is clearly limited to medical neglect. Parents cannot beat or molest children in the name of religion, but they can withhold medical care on religious grounds. As an example, HHS wrote to the Mississippi Department of Human Services that "the state's definition of 'abused child,' in section 43-21-1-5(m) of the Mississippi Code, includes an exemption for religiously motivated conduct in the context of abuse, whereas federal standards allow for such a provision only in the context of medical neglect" (Horn, 1993).

Not only is there no constitutional mandate for the exemptions, they may also be themselves unconstitutional. Several courts have ruled that a religious exemption for one type of religion offends the Establishment Clause.

Even the modest improvements in the religious exemption laws that HHS has called for in recent years have been met with strong protest. Rather than making any effort to obtain statutory changes requested by HHS, the California Department of Social Services filed suit against HHS for injunctive relief (People v. Shalala, 1993).

On June 29, 1994, the U.S. House passed an HHS appropriations bill with the following section promoted by the Christian Science church:

> None of the funds made available by this Act may be used to require States as a condition of receiving funding under the Child Abuse Prevention and Treatment Act to restrict, condition, or otherwise qualify a State's authority to determine (i) whether and under what circumstances a parent's decision to provide non-medical health care for a child may constitute negligent treatment or maltreatment, and (ii) the circumstances under which it is appropriate to order medical treatment for a child who is receiving non-medical health care (Congress HR4606).

Thus, the House bill broadens the exemption to include anything that a parent or lawyer wishes to characterize as "non-medical health care" for all diseases of children. The bill prevents the federal government from requiring medical care of children, even through court order. Although the religious exemptions were imposed on the states by the federal government to the detriment of a certain class of children, the House bill prohibits the federal government from taking any action to protect these children. The U.S. Senate dropped the section, but imposed a moratorium on HHS policy pending congressional hearings on the reauthorization of CAPTA in 1995.

The reach of religious exemption laws varies widely from state to state. Between 1974 and 1982 no charges were filed involving religiously based medical neglect of children, in part because some public officials believed the exemptions prohibited prosecution. From 1982 to 1993, however, criminal charges were filed in 42 such cases. To date, convictions have been won in 32 of these cases, with eight upheld on appeal and four overturned on appeal. Among the remaining ten cases, there have been six acquittals and three dismissals of charges, while one case awaits trial. All of the dismissals, three of the appellate overturns, and some of the acquittals were due to religious exemption laws.

Some state courts have ruled that the religious exemptions did not obviate the parents' duty to care for their children by reasonable community standards because the exemptions were not in the criminal code or were not exemptions to the crimes charged (Walker v. Superior Court, 1988). Other courts have ruled that the exemptions violate the fair notice rights of the parents (Hermanson v. State, 1992). Only two states, Iowa and Ohio, have a religious defense to manslaughter, but exemptions in other states have, nevertheless, been held to violate fair notice rights of parents when children die because of religiously-based medical neglect (State v. McKown, 1991).

CHILD Inc., a private organization headquartered in Sioux City, Iowa, has 166 cases in its files of children who died since January, 1975, after medical care was withheld on religious grounds. These include 27 stillbirths in sects that avoid prenatal care and medical attendance at childbirth. Some of the deaths might not have been preventable with appropriate medical care, but many of the children died of diseases that physicians have treated successfully for generations. The actual number of deaths since the federal government began requiring religious exemptions may be much higher .

Beyond the unknown numbers are the grisly facts of how these children die. Ashley King, age 12, died of bone cancer in Phoenix in 1988. She was out of public school for seven months. School officials knew she was sick and knew the family were Christian Scientists, but let them set up a home study program for her. Finally, neighbors alerted child protective services. The agency obtained a medical examination by court order. A tumor on Ashley's leg had grown to about 41 inches in circumference. Her skin was stretched so thin around the tumor that she bled almost from

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being touched. Her genitalia were partially rotted away from lying in her own excrement. Because the disease was by then terminal, the state allowed her to be placed in a Christian Science sanitarium staffed by unlicensed providers. She received no sedatives and died three weeks after her arrival (People v. King, 1988).

Sometimes the intervention process breaks down after the case is reported to protective services. In 1991, a principal in Olathe, Colorado, promptly reported when seven-year-old Angela Sweet, whose parents belonged to a Pentecostal faith-healing sect, stayed home sick from school. Her appendix ruptured and peritonitis set in. A protective services worker visited the emaciated child at home three times during her six-week illness, but did not seek a court order because of his understanding of Colorado's religious exemption statute. She died without medical care (People v. Sweet, 1991).

The religious exemption laws are an injustice both to parents and children. Parents do not comprehend the risk they are taking with their child's life when they believe that the state has endorsed their behavior. The Christian Science church, in particular, tells parents that legislatures gave them the exemptions because Christian Science heals all disease just as effectively as medical care (Christian Science Board of Directors, 1959).

The religious exemption laws are an injustice both to parents and children. Parents do not comprehend the risk they are taking with their child's life when they believe that the state has endorsed their behavior.

Not only is there no constitutional mandate for the exemptions, they may also be themselves unconstitutional. Several courts have ruled that a religious exemption for one type of religion offends the Establishment Clause (Dalli v. Board of Education, 1971). Four state courts have ruled religious exemptions from parental duties of care unconstitutional on Fourteenth Amendment grounds because they deny one class of children "the equal protection of the laws" (Brown v. State, 1979). Only one of the four rulings was at an appellate level.

Despite the deaths and suffering of children, the misleading messages to parents, the confusion among public officials, and the lack of constitutional foundation for the exemptions, many policy makers support them. Having one group of children designated in law as second-class citizens does not offend them. Some rationalize that it is a "price we pay for religious freedom" and conveniently overlook the fact that it is children who pay the price. Some argue that the state will still be able to intervene and provide the care that the parents have no legal obligation to provide, but do not explain how the state will become aware of the needs of these children in a timely manner.

Legislatures would not enact a religious defense to manslaughter that allowed others to recklessly cause the deaths of adults. But some allow it when children die painful and preventable deaths. Resistance to repealing religious exemptions is strong; eight years of child advocacy work in Ohio and Iowa failed to get such defenses repealed.

Our society needs more respect for the awesome responsibilities of parenthood. Children cannot assert their own civil rights. Parents have custody of children up to 24 hours a day. They must, therefore, have a legal duty to care for them. This simple truth—what the Pierson Court called a "law of nature" in 1903—should not be so difficult for policy makers to understand.

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FATAL NEGLECT

—by Donna Rosenberg

Parents have a duty to their children. When a parent omits to carry out that duty and the child dies as a result, the child is said to have died in circumstances of fatal neglect. Obviously, parents cannot prevent all fatal events that might befall their children and they are not legally held to a standard of perfect care. Rather, most laws hold parents to the standard of a "reasonable" or "prudent" parent. The law does not explicitly define what constitutes a reasonable or prudent parent; that definition, presumably, is the consensus opinion of the community, as variously represented by the schools, doctors, social services, a civil court judge, or a jury of the parents' peers.

Obviously, parents cannot prevent all fatal events that might befall their children and they are not legally held to a standard of perfect care. Rather, most laws hold parents to the standard of a "reasonable" or "prudent" parent.

What precisely are parental duties? (Throughout, I refer to "parental duty," but the duty applies equally to any person or agency that is *in loco parentis*.) The duties are to provide, supervise, and to intervene; the failure to fulfill any of these duties may result in a child's death. Each of these forms of fatal neglect is definable and will be discussed below. Space does not permit a discussion here of investigative strategies, but the reader should be aware that such strategies exist for each category of fatal neglect. If logically undertaken, these investigative strategies will maximize the amount and quality of evidence gathered, whether for civil or criminal court purposes.

Failure to Provide

Children might die because their parents fail to provide one or more essentials for survival: food, fluid, and medical care.

Failure to provide food

Failure to provide food results in acute starvation and/or failure to thrive. Acute starvation is the result of lack of food on a short-term basis. The child might not appear malnourished. Failure to thrive is the condition in which the child fails to gain weight as expected for normal growth. When failure to thrive is the result of inadequate nutrition combined with emotional deprivation, it is called non-organic failure to thrive. The child appears profoundly malnourished and emaciated. Because non-organic failure to thrive is a serious form of neglect, often accompanied by other neglect or abuse, a child so afflicted is at heightened risk of death. He or she might die of failure to thrive itself, with failure to thrive but of some other cause to which the malnourishment has made him peculiarly susceptible, or having at one time had failure to thrive.

The diagnostic criteria for non-organic failure to thrive in a deceased child are:

(1) Low weight for age.

(2) Height and head circumference usually normal, though occasionally also decreased.

(3) Low total body protein and fat stores (as measured by mid-arm circumference and triceps skin fold thickness).

(4) Thinness and emaciation evident on visualization and palpation.

(5) Absence of an organic disease that would fully account for the failure to thrive.

Apart from the medical records review that must obviously be done, it is especially important that several medical findings be sought at postmortem examination. • Is there evidence of abuse—bruises, broken bones, head injury, burns, sexual abuse, etc.? A skeletal survey must be done. A rape kit may be indicated. How much food is there in the gastrointestinal tract? What is its location? What is the child's weight at death? How does this weight compare with the expected weight for age? Are there other findings at autopsy that suggest longstanding nutritional neglect, such as edema, effusions, atrophy of muscles or organs, or swelling or ulcerations of the intestinal wall? What are the results of the toxicology tests performed on blood, urine, or vitreous to detect any drugs, toxins or poisons? What are the child's electrolytes, specifically the sodium, chloride, and urea nitrogen, which may give an indication of the child's hydration status?

The pathologist should be asked the following questions: Can you approximate how long the child had been without food? Can you tell the approximate time of death? Based upon what criteria? Finally, some children with severe failure to thrive are so malnourished that they succumb to minor infections because they have little immune resistance. If this is the case, ask the pathologist if the child would have died of the immediate cause of death (e.g., viral pneumonitis) if the underlying condition (failure to thrive) did not exist.

Failure to provide fluids

Failure to provide fluids results in dehydration. Dehydration occurs when there is insufficient quantity of fluid in the body to maintain normal physiologic functioning. There are many disease-driven causes of dehydration. However, in cases of child neglect, the most common ways a child becomes dehydrated are as punishment for a toileting accident or some other perceived offense, or from traveling or staying for long periods in arid country with insufficient fluids.

The diagnostic criteria for failure to provide fluids include: dry eyes, dry mouth, tenting of the skin, vascular collapse, and thromboses (blood vessel clots). Other disorders must be excluded as the cause of these findings. Postmortem sodium, chloride, and urea nitrogen drawn from the vitreous may help characterize the dehydrating events prior to death.

Failure to provide medical care

Medical care neglect occurs when parents do

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not make certain that their child is receiving the medical care he or she needs. Obviously, there is a spectrum of seriousness as to the consequences of failing to seek medical care for the child. Some parents fail to seek medical care for their children because of their own religious beliefs. The American Academy of Pediatrics has strongly eschewed this practice. Other parents have abused their children and fear being apprehended. Still others fail to seek medical care because of the costs, because they underestimate the severity of the problem, or because they lack judgment or motivation.

In searching the medical and autopsy records of a child who has died of a treatable medical illness that has gone insufficiently attended, four general areas should be addressed:

(1) Were the signs and symptoms of the child severe and related to the underlying illness?

(2) Were any prescribed drug levels decreased in the child?

(3) Were there increased toxic metabolites in the child as a result of the disease going unchecked over an acute period of time, usually hours to days?

(4) Is there physical evidence of chronic failure to give medical care over weeks to months?

Failure to intervene exists when one parent watches another adult abuse or neglect a child and could, but does not, intercede to protect the child at the time.

Few fatal illnesses will yield data in all four categories, but all illnesses should yield data in at least one. In assessing whether medical neglect existed, the following questions should be asked of the pediatrician and the forensic pathologist:

(1) What were the potential benefits of medical care?

(2) What were the potential risks of medical care?

(3) What was the expected outcome in the child without the medical treatment? Did the parent know, or should the parent have known, about the probable outcome?

(4) What was the likely tempo of the illness? How obvious would the symptoms of the illness have been?

(5) What was the parent's track record, over time, in getting needed medical care for the child?

(6) Was the child's death causally and specifically related to the parental omission, or were there other factors that contributed to the child's death?

Failure To Supervise

Supervision neglect is the failure to provide attendance, guidance and protection to children who, lacking experience and knowledge, cannot comprehend or anticipate dangerous situations. The parent may be in the home but impaired, as a result of drugs, alcohol, mental illness, physical illness, immaturity, or low intelligence. On the other hand, the parent may be out of the home and the chosen baby sitter may be obviously inadequate for any of the above reasons or because the baby sitter is known to be physically or sexually abusive. The oldest child might be left to care for the younger siblings, but not capable of adequately supervising them. The types of fatal incidents most likely to be associated with supervision neglect are fire (resulting in smoke inhalation and/or burns), falls, drownings, poisonings, and ingestions. When children are left unattended in cars and other places, hypothermia, hyperthermia, dehydration, kidnap, or assault may result.

Since none of the above examples in and of itself constitutes supervision neglect, one must make a careful inventory of the context in which the child's death occurred. Both for civil court (protection of surviving children) and criminal court purposes, the following questions are useful:

(1) What was the age and developmental stage of the child? (These might not be the same. A seven-year-old might only have the developmental capability of a three-year-old.)

(2) Over what period of time was the child unsupervised?

(3) What were the circumstances in which the child was unsupervised? What was the potential hazard? How obvious was it?

(4) What was the physical and mental condition of the parent?

(5) Was there a history of chronic supervision neglect?

(6) What is the acceptability of the parental behavior within his or her own ethnic group? Does this group promote or condone a duty that is less stringent than that of the general community?

(7) If the parents are poor, was the supervision neglect causally or coincidentally related to the coexisting poverty?

Failure To Intervene

Failure to intervene exists when one parent watches another adult abuse or neglect a child and could, but does not, intercede to protect the child at the time. Failure to intervene is also seen when one parent could, but does not, seek medical care for a child who has been abused or neglected by another adult.

Sometimes, a battered woman realistically fears her own torture or murder if she intercedes on the child's behalf. In other instances, the history of being battered is manufactured or grossly exaggerated and is devised to minimize her duty and, therefore, her culpability. Parents might also fail to intervene because they fear arrest, or they might claim that the child did not appear ill or injured. Every illness or injury has its usual tempo, or rate

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of progression. Furthermore, most children with a given illness or injury demonstrate particular symptoms and signs. Therefore, the physician should be asked: What is the usual tempo of this injury? Would the child have had visible or audible signs of illness? What would they have been? When would they have occurred?

The distinction must be made between neglect unavoidably caused by financial poverty, and the neglect which coexists with poverty but which is not caused by it.

Neglect and Poverty

Poverty may be causal or coincidental in a neglectful family. The distinction must be made between neglect unavoidably caused by financial poverty, and the neglect which coexists with poverty but which is not caused by it. Certain forms of fatal neglect commonly exist with poverty but are not caused by it:

(1) Failure to feed or hydrate the child adequately, though food and fluids are provided or available.

(2) Chronic and/or egregious failure to supervise the child.

(3) Failure to ensure that the child is receiving appropriate medical care, though that care is affordable or free, and accessible.

Intervention

When a child has died in circumstances of fatal neglect, the most important consideration is the future protection of surviving children in the family. Almost always, whether or not there is a formal record of it, the other children in the family are seriously neglected, sometimes abused. When parents chronically and severely neglect their children, the outlook for their becoming even minimally adequate parents in a timely enough way to benefit the children is dim. Mere compliance with a "treatment program" does not reliably measure parental improvement. The fact that we have inflicted a good treatment program upon a family does not mean they have benefited. Child safety should be realistically, not idealistically, evaluated and must not be sacrificed to wholesale efforts to preserve families.

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SEXUAL HOMICIDE OF CHILDREN

—by Kenneth V. Lanning

To discuss and analyze a topic as emotional and complex as sexual homicide of children is not an easy task. Good, reliable research and data are hard to find. Americans tend to have stereotypical concepts about the innocence of children and the malevolence of those who victimize them. Americans also seem to find it difficult to openly and explicitly discuss even normal sexual behavior, much less deviant sexual behavior or homicide. This discussion will focus on defining terminology and evaluating the limited available data. Adding what I have learned in 14 years of professional study and investigation of the sexual victimization of children, analysis and recommendations will be set forth in what I hope will be an objective, clear, and useful manner.

Definitions

One impediment to any productive and intelligent discussion of sexual homicide of children is the lack of a uniform and consistent definition of the term. The definition problem is most acute when professionals from different disciplines come together to work or communicate. To avoid confusion, certain basic but key terms will be discussed and defined for the purposes of this discussion.

Homicide. For purposes of this discussion, homicide will be defined simply as the unlawful killing of another person. Unlawful homicide or murder can include causing the death of a person while committing another crime, and manslaughter.

Sexual. Defining "sexual" is not easy. Is "sexual" a function of motivation or of specific acts performed? Some would argue that a sexual homicide is one motivated by sexual gratification. But how does an investigator determine motivation? Can a crime or homicide have more than one motivation? If there are multiple offenders, whose motivation defines the crime? Can we even determine motivation from the offender?

Looking solely at the nature of the acts performed does not make matters much easier, however. A sexual act for one person (e.g., certain paraphilias) might not be a sexual act for others, and might not even be illegal. For some individuals, the act of killing itself brings sexual arousal and/or gratification. Seemingly nonsexual behavior (e.g., stabbing, shooting, killing, etc.) can be in the service of sexual needs. Seemingly sexual behavior can be in the service of nonsexual needs (e.g., power, anger, etc.). Unfortunately, in homicide cases, the primary criteria most often used by investigators and prosecutors in determining sexual assault are body orifice penetration and presence of

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seminal fluid on or in the body or at the crime scene.

Children killed (even "accidentally") before, during, or after sexual assaults or killed to prevent the disclosure of their sexual assaults should and will be considered victims of sexual homicide. Sex offenders who are children and are killed by their child victims to prevent or stop sexual assault will, however, not be considered victims of sexual homicide of children.

Children. The legal question of who is a child has more significance to the sexual rather than homicide issue of this crime. Other than emotional jury appeal and community outrage, there is no legal difference between child and adult homicide. Age matters in determining sexual assault, however. If the sexual acts are without the victim's consent, a sexual assault has occurred whether the victim is a child or not. With a child victim, however, sexual assault can occur even with "consent."

One impediment to any productive and intelligent discussion of sexual homicide of children is the lack of a uniform and consistent definition of the term.

The answer to the seemingly basic and simple question, "What is a child?" can be confusing and complex. It is not clear by either legal or societal standards when childhood begins and when it ends. Legal definitions of who is a child vary from state to state and even statute to statute, especially when dealing with adolescent victims. Generally, but with many exceptions, children are defined as individuals who have not yet reached their eighteenth birthday. One of the problems in using this broad, but sentimentally appealing, definition of a child is that it lumps together individuals who may be more unalike than alike. In fact, 16-year-olds may be socially and physically more like 28-year-old young adults than four-year-old children. To determine who is a child, law enforcement officers must turn to the law. But they must still deal with their own perceptions as well as those of the jury and society as a whole. The main difficulty is with children in the 13- to 17-year-old age group. Those are the victims who most likely look like adults, act like adults, and have sex drives like adults, but who may or may not be considered children under all laws or by society. Sympathy for child victims is often inversely proportional to their age and sexual development.

Another related definitional issue concerns the age difference between the child sexual homicide victim and the perpetrator. The general perception is that the offender is a significantly older adult. This is often not true, especially with adolescent victims. Recently, there has even been considerable media attention about cases involving child murderers under ten years old. Children murdered in a sexual context by an offender who is a child and peer should and will be considered victims of sexual homicide. Children murdered by a jealous or angry boyfriend or girlfriend peer will not be so considered.

Summary. For purposes of this discussion, sexual homicide of children is generally defined as the unlawful killing of a person who has not yet reached his or her eighteenth birthday, by one or more others of any age, primarily or in part for either sexual arousal or gratification, or in connection with unlawful sexual activity. Although important for communication and understanding, no definition of complex human behavior is perfect and this one will be applied with room for using common sense and good judgment.

Nature and scope of problem

A second impediment to this discussion is the lack of reliable studies that, using this or a similar definition, estimate the number and nature of sexual homicides of children that occur each year. There are very limited crime statistics on the victimization of children under 12 years old. Some studies and crime reports estimate the occurrence of the sexual victimization of children, and others estimate the occurrence of the murder of children, but we have not much else to go on. Conclusions will be drawn concerning the nature and scope of the sexual homicide of children in part from these separate studies and in part from my personal experience and contact with criminal justice professionals dealing with these types of cases. Future research and incidence studies may show some of these conclusions to be misleading or incorrect.

Homicide data

The FBI Uniform Crime Reports (UCR) estimates that there were 23,760 murders in the United States in 1992. Of these, there were supplemental data on 22,540 murders. Of that total, 2,428, or 10.8%, involved victims under 18 years old. It is estimated, however, that this figure does not include two thirds of the 1,200 child abuse and neglect fatalities (Ewigman, Kivlahan, and Land, 1993). UCR estimates that of murders of victims under 18 years old, 29 murders were committed during the course of a rape and 8 during other sex offenses. The most common method of death in these clearly sex-related homicides was strangulation (7) for victims less than 12 and cutting or stabbing (7) for victims 12 to 17.

The homicide rate for children is highest between birth and age 4 and between age 13 and 17. From 0 to 4, the most likely perpetrator is a family member and the least likely is a stranger. From 13 to 17, the most likely perpetrator is an acquaintance and the least likely is a family member (Finkelhor & Dziuba-Leatherman, 1994).

A survey of murders disposed of in 1988 in large urban counties representing the nation's 75 largest counties with 8,063 victims (Bureau of Justice Statistics, 1994b) disclosed similar findings. Children under 12 represented 19% of family murder victims versus 2% of nonfamily murder victims. When a person under 12 is murdered, a

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family member is the best suspect. Family members killed 63% of the child murder victims. A family member is an unlikely suspect in murders of persons in their teens.

More related to the discussion of sexual homicide, the survey found that for all murder victims under age 12, death was often (57%) preceded by child abuse. Among offspring murder victims under age 12, before their death 79% had suffered abuse by the assailant. Even more pertinent to this discussion is the finding that rape or sexual assault preceded the death of 6% of all murder victims under age 12. When the assailant was a parent, however, sexual assault preceded the death of victims under 12 only 1% of the time.

When thinking about sexual homicides of children, missing children and stranger abductions immediately come to the mind of most people. The facts, however, are significantly different from most people's perceptions of this issue.

When thinking about sexual homicides of children, missing children and stranger abductions immediately come to the mind of most people. The facts, however, are significantly different from most people's perceptions of this issue. The 1990 National Incidence Studies of Missing, Abducted, Runaway, and Thrownaway Children in America (NISMART) (Finkelhor, Hotaling, and Sedlak, 1990) is the best available research on this topic. An estimated 3,200 to 4,600 short-term nonfamily abductions occurred in 1988. Of these "only" an estimated 200 to 300 were stereotypical kidnappings with the child victim gone overnight, killed, transported 50 or more miles, ransomed, or with the perpetrator intending to keep the child permanently. Teenagers (50%) and girls (75%) were the most common victims of nonfamily abduction. Blacks and Hispanics were heavily overrepresented among victims compared to the U.S. population. Two-thirds or more of the short-term abductions involved sexual assault. Over 85% involved force and over 75% involved a weapon. Surprisingly, a more recent analysis of the NISMART data found that the stereotypical abductions (by definition those involving murder) tended to involve more young (preteen), white, male children taken by white perpetrators for reasons other than sexual assault (76%) (Asdigian, Finkelhor, and Hotaling, submitted).

NISMART also estimated, based on analysis of FBI data, that there were 43 to 147 stranger abduction homicides annually between 1976 and 1987 with no discernible change in the rate. The characteristics of children murdered in the course of stranger abductions tended to parallel the findings on other nonfamily abduction. Older teens were by far the most common victims of stranger abduction homicide, with young children at only one-fourth the risk or less. Data conflict on whether girls or boys were at greater risk of abduction murder.

In early 1994, the FBI did an unpublished analysis of 55 kidnapping investigations initiated from October 1, 1992 through December 31, 1993 involving only female victims under the age of 13. It found that sex was the main motivation more often when the victim was white (39%) than when the victim was black (33%) or Hispanic (24%). Four of the 62 victims have not been located. Of the 44 girls found alive, 10 were sexually molested. The dead bodies of 14 of the victims were located, with "physical evidence of sexual molestation" present in five of these cases.

Why do some child molesters abduct their victims and others do not? To try to answer this question, the FBI, in conjunction with the University of Pennsylvania and the National Center for Missing and Exploited Children, conducted research involving 97 abducting and 60 nonabducting child molesters in a state treatment facility (Prentky et al, 1991). Child abductors, when compared to nonabducting child molesters, were found to be (1) lower in social competence, (2) lower in amount of nonoffense contact with children, and (3) higher in presence and use of weapons during offenses, but not higher in amount of aggression or victim injury. The study suggests that the use of abduction may stem from their poor interpersonal and social skills and their inability to otherwise control their victims.

Data on sexual victimization of children

For a variety of obvious reasons (i.e., inconsistent definitions, unreported cases, lack of national central data collection, etc) we do not know with certainty how many children are sexually abused each year. But better data collection and more retrospective surveys of adults are improving our ability to estimate more accurately the incidence and nature of the problem. The biggest void in the data is probably still in the area of extrafamilial sexual abuse by noncaretakers.

In a recently published article, David Finkelhor summarized the current information on the scope and nature of child sexual abuse (Finkelhor, 1994). His review found scientific data to support the following. Approximately 150,000 confirmed cases of sexual abuse were reported to child welfare authorities during 1993. Considerable evidence exists to show that at least 20% of women and 5% to 15% of men experienced some form of sexual abuse as children. Most sexual abuse is committed by men (90%) and by persons known to the child (70% to 90%), with family members constituting one-third to one-half of the perpetrators against girls and 10% to 20% of the perpetrators against boys. Around 20% to 25% of the sex abuse cases involve penetration or oral-genital contact. The peak age of vulnerability is between 7 and 13.

In discussing sexual homicides, data on forcible sexual assaults against children might provide more insight. The FBI UCR defines forcible rape

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as the carnal knowledge of a female forcibly and against her will, but currently maintains no data on the age of victims. A recent survey on child rape victims identified 15 states with data on victims' ages in forcible rape cases reported in 1992 (Bureau of Justice Statistics, 1994a). In 12 of these states, 51% of the female rape victims were under age 18. An estimated 16% of rape victims, or 1 in 6, were under age 12. The survey estimates that nationwide about 17,000 girls under age 12 were raped in 1992.

Interviews with victims in three states and with incarcerated rapists in 1991 provided additional information on child rape for this survey. Regardless of the source, when the victim was under 12, the likelihood of a family relationship was relatively high: 46% of victims and 70% of imprisoned rapists reported victimization involving familial relationships. The three-state survey also revealed that 20% of victims under 12, 11% of victims ages 12 to 17, and 1% of those 18 or older were raped by their fathers. In summary, the older the victim, the less likely that victim and offender were family members and the more likely they were strangers to one another.

Opinions and analysis

A third impediment to this discussion is the use of the broad umbrella term, "sexual homicide of children." A psychopath who "inadvertently" kills his girlfriend's 2-month-old daughter by vaginally penetrating her, a pedophile who abducts and tortures to death a 7-year-old boy to satisfy his sadistic urges, a father who suffocates his 12-year-old daughter to prevent her from disclosing his years of sexual abuse, and a sexually motivated serial killer who strangles to death a prostitute who turns out to be 17 years old, have all committed a sexual homicide of a child. The dynamics and investigation of these cases may, however, bear little resemblance to each other.

Perpetrators of sexual homicide of children appear to be a widely diverse population of offenders.

Perpetrators of sexual homicide of children appear to be a widely diverse population of offenders. This may be due in part to the broad definition of the term. The use of physical violence and deadly force is usually not necessary to sexually victimize a child. In many cases, the use of such force and violence may be due to the poor social and interpersonal skills of the offender. Children may be targeted not because of a true sexual preference, but because they are weak, vulnerable, or available. In other cases, the violence may be a carefully planned component of the assault such as with a sadistic pedophile who is sexually aroused and gratified by the suffering of his child victims. The deadly force can occur before, during, or after the "sexual" acts or can itself be a sexual act.

For purposes of criminal investigative analysis, the deadly force can be divided into three categories: inadvertent, indiscriminate, and intentional.

Although the word seems inappropriate and inadequate considering the result, the "inadvertent" category is used to describe a death caused by the offender's selfish need to be sexually gratified with little concern for the child victim. Inadvertent child sexual homicide is seen most often when there is a significant size difference between the offender and the child and when the offender views the victim as an available, non-threatening orifice or partner rather than as a child. It frequently involves a very young child or child who resists and a socially and sexually inadequate offender who may not intend to kill, but just does not care.

The "indiscriminate" category is used to describe a more organized offender who selects a sexual assault victim who might happen to be a child and whom he might kill if need be. The term "indiscriminate" refers more to the selection of the child victim than to the violence or death. Most of these offenders are not pedophiles, but are manifesting morally indiscriminate or psychopathic tendencies (Antisocial Personality Disorder).

The "intentional" category is the most varied. It includes sex offenders who kill their victims to avoid detection (probably the largest category of sexual homicides of children), sadists and serial killers who kill for sexual pleasure, pedophiles who kill because of misguided "love" or ambivalent hate, and extreme inadequates who are intimidated by interpersonal contact.

Organized sexual child killers tend to be psychopaths, pedophiles, and/or serial killers who indiscriminately or intentionally (thrill, sadism, fear of discovery, hate) kill their child victims. They are more cunning and tend to better plan their crimes. They dispose of their victims' bodies more carefully in a way or place to limit evidence or discovery or by displaying them where they will be found to shock and outrage society.

Disorganized sexual child killers tend to be individuals who are younger, more socially inadequate, and/or alcohol and drug abusers, or those who have more mental problems and who inadvertently or intentionally (love, inadequacy) kill their child victims. They have difficulty with interpersonal relationships and tend to kill closer to their home or "safe" area. If they dispose of their victims' bodies, they do so by quickly "dumping" them or burying them in shallow graves where they are more likely to be found.

In fact, maybe one of the best indications of whether a sexual child killer is organized or disorganized is how quickly and where you find the victim's body. Parents who murder their children and attempt to cover it up by reporting them missing or abducted often wrap the children in plastic and bury them in a place with which they are familiar.

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They may even try to discreetly lead the investigators to the place of burial so the body will be "discovered" and properly buried.

Recommendations and conclusions

This article is not intended to be a detailed manual on the investigation of sexual homicides of children. Basic investigative techniques, case management, and the proper collection and preservation of evidence obviously apply to these cases. Based on the above analysis, I would, however, also recommend the following general strategies:

(1) Deciding whether a particular homicide is or is not a sexual homicide may be a matter of semantics and may not be necessary in every case. Recognizing the sexual components or aspects of a homicide may, however, be crucial to solving it.

(2) Whether the homicide involves a murderer who happened to sexually assault his victim or a molester/rapist who happened to murder his victim can be important. The end result for the victim may be the same, but the focus of the investigation might be significantly different.

(3) Both the "sexual" acts and the motivations must be considered in sexual homicide investigations. As part of the evaluation process, the definition of what constitutes a sexual act or assault should not be limited to a narrow legal definition. Multiple motivations and perpetrators must also be considered.

(4) Although anyone under 18 years of age may be considered a "child," it is clear there are major differences between the victimization of older and younger children. The younger the child victim, the more likely it is that the murderer is a family member. However, parents who kill their young offspring seem to be less likely than other murderers of children under 12 to sexually assault them prior to the murder. Although the task is difficult and unpleasant, parents must be carefully evaluated, even in cases where they report their child missing or abducted. With adolescent victims, acquaintances and peers must be considered as likely offenders and both heterosexual and homosexual relationships need to be evaluated.

(5) The investigation of sexually motivated homicides of abducted children, especially pubescent children, should not be limited to or even automatically focused on individuals with a history of sex offenses against children. Individuals with a history of social inadequacies (e.g., multiple jobs, failed relationships) and sexual behavior problems (e.g., nuisance sex offenses, failed assaults of adults) would be better suspects in most cases.

(6) Evidence of a preferential interest in children (Lanning, 1992) or sexual sadism (e.g., victim tortured while kept conscious and alive, sexual bondage) would change the suspect focus. Preferential child molesters with a demonstrated ability to nonviolently seduce and control children rarely abduct them, but they may kill them to avoid detection. Sexual sadists are likely to abduct and usually have good interpersonal skills.

(7) In sexual homicides, physical evidence is crucial. Investigators and evidence technicians must be aware of and trained in the latest procedures in the collection and preservation of evidence, especially biological trace evidence for DNA analysis.

(8) Participation in child fatality review teams increases the likelihood that evidence will be properly evaluated and that all viable explanations will be explored, especially in intrafamily cases.

(9) Unsolved abductions and murders should be entered in state and FBI ViCAP systems by completing the necessary forms. This will aid in evaluating the possibility of serial offenses. Assistance can be requested from the FBI National Center for Analysis of Violent Crime (NCAVC) Investigative Support Unit for investigative analysis, and from the new Child Abduction/Serial Killer Unit for investigative support. The nearest FBI office can assist in these efforts.

(10) Assistance should be sought from the National Center for Missing and Exploited Children (800-843-5678) in cases involving missing children.

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PERPETRATORS OF FATAL CHILD MALTREATMENT

—by Jill E. Korbin

Each day in the United States, three to four children die as a result of a repetitive pattern of maltreatment (e.g., Daro, 1987). Homicide is among the five leading causes of death in children in the United States, and is high in comparison to other industrialized nations (Christoffel and Liu, 1983).

A major source of frustration and concern in dealing with child maltreatment fatalities is that a significant proportion of these deaths occur in families that were previously known to helping agencies and professionals. Depending upon the study, from one-fourth to approximately one-half of child maltreatment fatalities occur among families previously known to social service agencies or helping professionals (e.g., Anderson et al., 1983; Daro, 1987; Resnick, 1969).

A major source of frustration and concern in dealing with child maltreatment fatalities is that a significant proportion of these deaths occur in families that were previously known to helping agencies and professionals.

The frustration of child deaths occurring in families previously known to social service agencies is compounded by the fact that few factors have been identified that differentiate fatal from nonfatal maltreatment, and thereby allow prediction and prevention. In a study comparing 73 fatally and 114 nonfatally maltreated children during 1984 in New York, one of the few differentiating factors was a previous out-of-home placement due to abuse or neglect, indicating serious abuse prior to the fatality (Fontana and Alfaro, 1987).

Who, then, are these parents that may be known to and involved with social service professionals, but who nevertheless fatally maltreat their children? And who are the other one-half to three-fourths of maltreating parents who never come to our attention until their child has died? Understanding of the dynamics of physical abuse, neglect, and child sexual abuse has been greatly enhanced by research directly with perpetrators. Similarly, intensive research with women who kill their mates has provided new and enhanced understanding (e.g., Browne, 1987). In contrast, research directly with perpetrators of fatal child maltreatment has been limited.

What we know about perpetrators of fatal child maltreatment has been drawn from case studies, largely in the psychiatric literature, records of investigation and prosecution subsequent to the fatality, and national health and crime data bases (e.g., Daly and Wilson, 1988; Finkelhor and Dziuba-Leatherman, 1994; Krugman, 1985; Resnick, 1969; Goetting, 1990; Silverman and Kennedy, 1988). A few research studies employed interviews with fatally maltreating parents, and these most often involve women (e.g., Korbin, 1989; Totman, 1978).

Child homicide is not a homogeneous entity, and various typologies have been proposed. Child maltreatment fatalities result from both abuse and neglect (e.g., Daro, 1987). Epidemiologically-based typologies reflect developmentally related vulnerability and circumstances (Christoffel, 1984; Jason, 1983; Finkelhor and Dziuba-Leatherman, 1994). In these typologies, young children are vulnerable to intrafamilial homicide with the use of physical force rather than weapons. The precise circumstances surrounding these homicides are often poorly described for these young victims. Pictures of perpetrators of child maltreatment fatalities that emerge reflect related characteristics, such as young parental age. Other psychiatrically based typologies rely on motivation or pathology of the perpetrator and generally include a category that reflects circumstances of repetitive maltreatment (e.g., Resnick, 1969). Pictures of perpetrators that emerge reflect varying degrees and types of pathology. Typologies of homicide also have been posed based on the relationship of perpetrator and victim, usually stranger, spouse, or child (e.g., Goetting, 1988; Silverman and Kennedy, 1988).

Characteristics of perpetrators of fatal child maltreatment have been suggested that too frequently echo characteristics of nonfatally maltreating parents that themselves have been subject to critical appraisal (e.g., National Academy of Sciences, 1993). These characteristics include poverty, stressful life circumstances, abuse in childhood, substance abuse, young parental age or young age at first pregnancy, domestic violence, single parenthood, prior abuse in childhood, and stepparents. Unfortunately, the combinations of risk and protective factors are poorly understood, and most characteristics identified for fatally abusing parents do not differentiate fatal from nonfatal maltreatment, and in fact are not particularly good predictive factors in differentiating maltreating from non-maltreating parents.

A life history study with nine women incarcerated as a result of fatal child maltreatment (Korbin, 1989) suggested the pivotal importance of prior incidents of maltreatment that are known to others. The women in my study gave signs and signals to others that they were maltreating their child(ren). This is consistent with studies cited above that many fatally maltreating parents were previously known to child protection agencies, and that a prior placement was one of the few factors discriminating fatal from nonfatal maltreatment in the New York study. This is also consistent with Totman's (1978) study with women incarcerated for killing mates or children.

More attention has been directed in the literature to the prior involvement of families with professionals than to the involvement of lay persons in parents' social networks. That we know about perpetrators' prior contacts with social service agen-

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cies and health professionals reflects the tendency towards research that reviews files and records or is limited to investigatory interviews subsequent to a fatality. That we know little about the impact of others on their behavior reflects the fact that we rarely talk to perpetrators.

Missed incidents of abuse by professionals may be inevitable. These missed diagnoses, however, held significant meanings for the women in my study. If a physician did not recognize maltreatment, the women in my study were reassured that it must not be, in fact, abuse or neglect. If a representative of a child protection agency did not remove or returned a child, the women were reassured that they were not bad parents or why would their children be returned to them? The women whose children had been removed from their care and returned were able to rationalize that they been wrongly accused or misjudged. This facilitated the woman's denial that an injury was serious or purposively inflicted, minimizing her sense of culpability.

Unfortunately, the combinations of risk and protective factors are poorly understood, and most characteristics identified for fatally abusing parents do not differentiate fatal from nonfatal maltreatment, and in fact are not particularly good predictive factors in diffentiating maltreating from non-maltreating parents.

Individuals in the social networks of these nine women were aware of incidents of abuse prior to the fatality. These individuals offered a high level of support to the women. Reassurance was offered that the women were good mothers, and that their behavior was understandable and even within the normal or acceptable range. This reassurance, while perceived as supportive by the women, minimized and rationalized their behavior and, in part, allowed them to continue their abusive actions that eventually resulted in the death of their child.

Our thinking about the construct of social support needs to expand to examine how social networks and perceived social supportiveness can exacerbate the risks for adverse outcomes such as child maltreatment. A high level of perceived support sustained, probably unintentionally, these women in their pattern of abusive behavior. A low level of perceived support that did not bolster the woman's self-concept as a good mother might have acted against the continuing abuse.

While social networks are generally and uncritically regarded as positive, the question must be posed as to whether one's social network can exacerbate the risk for child maltreatment. Are some networks composed of problematic individuals who support and reinforce one another's attitudes and behaviors? Women in the study reported that their friends and siblings exhibited parenting skills and attitudes much like their own.

Gelles (1991) has suggested that fatal child maltreatment may be a different phenomenon than nonfatal maltreatment, and that markers must be sought to differentiate potential fatalities. The markers we have at present are clearly inadequate to differentiate fatal from nonfatal child maltreatment, or, in most cases to even differentiate maltreating from non-maltreating parents.

Our knowledge base reflects the fact that perpetrators of fatal child maltreatment are rarely research subjects. Those studies that exist either have small samples (Korbin, 1989) that make generalization difficult or describe characteristics from larger data bases that shed little insight on the actual dynamics involved. That we know about the mode of death, but not about the circumstances surrounding both prior incidents and the fatal incident also reflects the fact that we review case records but rarely talk to perpetrators. The field must move to research directly with perpetrators and find a way to overcome the difficulties in doing so.

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THE REST OF THE STORY: PSYCHO-SOCIAL ISSUES

—by Michael Durfee

Elizabeth Kubler-Ross made death an official part of social science with her 1969 book, On Death and Dying (Kubler-Ross, 1969). We have learned something about unavoidable natural child death since the publication of that book. We have not learned how to address the helpless rage that comes with the violent death of a child, particularly at the hands of a caretaker.

This rage affects many people who knew and loved the child, including immediate and extended family members, friends, neighbors, teachers, pastors, and professionals who may have been involved with the family. Those who have seen, heard and touched the living child often experience particular pain on the child's death.

Law enforcement, fire, and emergency medical technicians are the first scene responders and must make almost impossible decisions about initiating life support for the child and human support for the family, services that may conflict with preserving a potential crime scene and making an arrest. Questions arise for which there is no training, such as "Should the family be allowed to hold the baby to say good-bye?" "Should I return for an interview tomorrow after the mother has stopped crying or is this a criminal suspect that I need to arrest now?" "Do I call a detective or a priest?"

Child protective services, law enforcement, and other agency line staff are often left to explain to family, friends, and themselves that they did what they could, that they are not responsible for the child's death. CPS staff may need to plan the funeral. Law enforcement officers may need to attend the autopsy to assist in the investigation. Public health nurses share the isolation of all professionals who make solo contacts with a child and family in their home away from the support of a clinic, office, or hospital. While they are trying to deal with their own grief, all of these professionals are a common target for a news media that is angry and looking for someone to blame for another child death.

We have not learned how to address the helpless rage that comes with the violent death of a child, particularly at the hands of a caretaker. Questions arise for which there is no training.

Predictable, systematic support for line staff who must deal with child fatalities is rare. Law enforcement may have counseling services for other problems, but not for the death of a child. Medical professionals, coroners, medical examiners, and court staff may direct personal support to comforting the immediate family, but do not direct support to their own line staff. CPS staff may be ignored or asked to reassure the agency that their paperwork is in order, working without direction to arrange funerals, explain the death to siblings, or find resources for the surviving family and for themselves. Staff who have to deal alone with the death of a child may quit, take anger home or to the next client, lose sleep, overeat, smoke, drink, or otherwise damage themselves.

We have limited literature on which to draw in creating programs and policies to assist professionals and surviving family members. Most studies on child fatalities focus on the deceased victim and the perpetrator. Graduate schools and agency training curricula generally ignore death, particularly the death of a child client, as a significant issue for their profession. We have to glean what we can from literature and experience with SIDS (National Institute of Mental Health, 1980), PTSD (Eth et al., 1985), and hospice programs, and from the general literature on children and death (Fitzgerald, 1994; Fitzgerald, 1992; Grollman, 1990). We must translate that knowledge to the experience of fatal child abuse and neglect.

Some agencies have developed support programs for professionals. The Los Angeles County Fire Department has a "critical incident debriefing" after the death of a child. Staff who were at the death scene are brought together with a senior fire department staff member and a mental health consultant to share experiences at the death scene and emotions that followed. Staff report relief and the agency reports less stress retirements. Other models include individual counseling, monthly open support groups and multiagency line support meetings. Meetings of multiagency child death review committees may also be therapeutic, particularly because they demonstrate that individuals do not have to be alone. However, most supervisors who wish to provide support for professionals and surviving family members, will have to innovate. APSAC is helping the author of this network of these professionals by publicizing his effort to do so (see box, p. 19).

The rest of this article outlines some of the considerations for supervisors who find themselves in this position.

When providing support to professionals:

- It is useful to have protocols and procedures in place before the problems occur.
- The management of the case should be assessed so the supervisor is informed and ready to deal with the line staff's doubts, questions, and possible failures.
- The staff member's relationship with the child should be assessed. How well did the worker know the child? How often had the child been seen? What sort of attachment, if any, had been formed? Touching and verbal and nonverbal communication are important experiences to assess.
- The worker should be assisted in making funeral arrangements. If the worker attends the funeral and visits the grave, he or she needs support, perhaps accompaniment, in these activities.
- Supervisors and peers should offer frank and immediate support, being willing to listen to help the line worker process the experience, no

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The Rest of the Story: Psychosocial Issues

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matter how painful.

- Support should be ongoing, both from supervisors and peers and, when possible, from a good therapist.
- Expect that the worker can continue to function; assume competence. The worker may appreciate being temporarily relieved of work; on the other hand, being relieved of duties can send the wrong message and deprive the worker of a sense of continuing competence.

When working with surviving family members:

- Be aware of their actual experience at the time of the death; the circumstances of the death, their relationship to the victim, their relationship to the perpetrator, their involvement in the death.
- What is the developmental level of the surviving children; how was the abuse/neglect was explained to them?
- How was the individual and the family as a whole functioning before the death? Is there any evidence of psychopathology or adaptation before, during, or after the death?
- Is there support within the family? Are other supportive social systems in place, including extended family, friends, neighbors, clergy, agency professionals?
- Has the family participated in the funeral and other ceremonies? What other significant deaths or losses has this family endured? How much time has passed between the death and interventions designed to help?
- What has the impact of the investigation been? Has it supported or damaged family functioning?

When working with families and professionals:

- Ensure the immediate and ongoing basic safety of all individuals.
- Provide peer support groups when possible.
- Provide ongoing support of all kinds during the funeral and official mourning, during any court or investigative process, through at least a year to monitor the first anniversary response.

Qualities to seek in therapists or other support personnel working with children after the death of a sibling:

- basic knowledge of child abuse and neglect, domestic violence, substance abuse.
- knowledge of child development, family dynamics, PTSD, and dissociative phenomena.
- a willingness to work with CPS, law enforcement, and the courts.
- experience with family violence intervention.
- experience with death, dying, mourning, and grief with emphasis on children.
- experience working with children of the age of the sibling.
- ongoing availability for at least a year.

Many, if not most, surviving siblings, other family members, friends, and professionals receive little or no formal intervention when a child dies. Our knowledge base for psychosocial intervention is limited. We need to share experiences and develop a literature to ensure that the survivors of fatalities receive the support they need.

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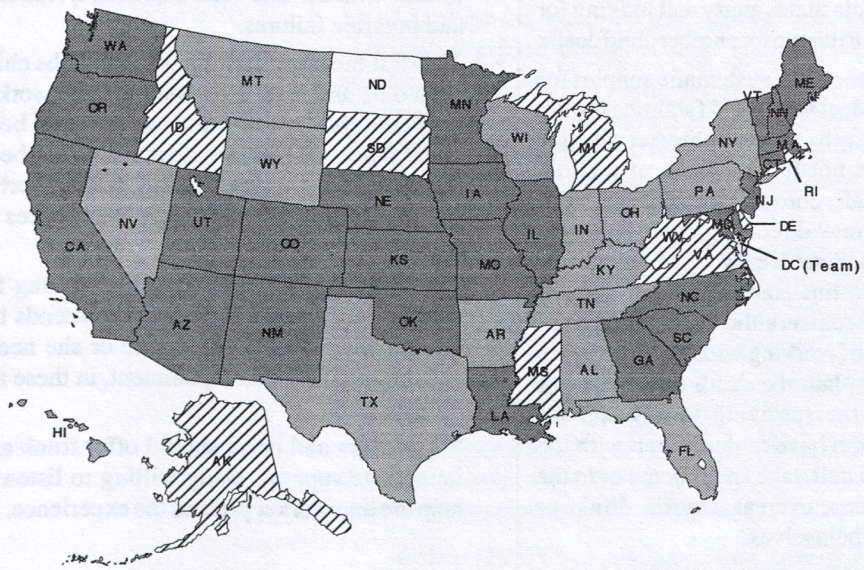

State Team

Local Team Only

Formal Planning

No Team

Survey - Michael Durfee MD - November 28, 1994

PREVENTING CHILD ABUSE FATALITIES: MOVING FORWARD

—by Deborah Daro and Randell Alexander

Until the last century, children tended to die before attaining adulthood. With improvements in sanitation and better food supplies, life expectancy and the likelihood that children would become adults dramatically improved. A strong argument could be made that child abuse and other causes of child death could only be addressed when the great plagues and epidemics of the past were brought under control, and children were more highly valued. Along with the anticipation that children would live has come a greater emphasis on measures to prevent and treat life-threatening conditions.

All causes of death can be arrayed along a spectrum of preventability. Whereas leukemia may be difficult to avoid, child abuse deaths are inherently preventable, even if prevention is difficult. In third world countries, infant diarrhea diseases are a leading cause of death. A simple oral dehydration solution, costing pennies, can dramatically reduce the rate of such deaths. In the United States, car accidents were considered largely unavoidable until the advent of car restraint legislation which has reduced child fatalities by about one-third. In some localities, it is now considered child neglect if children are hurt in car accidents and their injuries would have been less serious had they been properly restrained. What is preventable, and how difficult it is to prevent, changes over time. Advances in genetics, changes in lifestyles (e.g., use of firearms), and other factors will continue to alter our approach to prevention of child deaths.

All causes of death can be arrayed along a spectrum of preventability. Whereas leukemia may be difficult to avoid, child abuse deaths are inherently preventable, even if prevention is difficult.

A public health approach to all child deaths may prove useful, if all causes of death are considered in a rational epidemiological fashion. Congenital defects and SIDS are major risks of the newborn and early infancy period. Child abuse, car accidents, and other accidents are major contributors to childhood deaths. Suicide, homicide, and automobile accidents are the major risks of teenagers (and may sometimes have child abuse as an underlying antecedent). Prevention of child fatalities should begin with common causes.

Child Abuse

Repeated evaluations of child abuse prevention and treatment programs suggest that the most successful of efforts are ones that are intensive, comprehensive, and flexible (Daro, 1993a). These three characteristics—intensity, comprehensiveness and flexibility—also need to be developed within child welfare practice.

Federal efforts. While child welfare systems are primarily a matter of local initiative and subject to local legislative forces, action is needed at all levels of government and within all communities (Kamerman and Kahn, 1990). Specifically, federal agencies interacting with local child welfare systems should adopt the following guidelines:

- Increase resources for child welfare to put foster care and family support on equal footing.
- Reward states for the development of interagency and interdisciplinary teams to respond to critical child welfare problems, including child fatalities.
- Encourage state experimentation in the area of reporting and case planning to examine the effects of early intervention systems on child abuse reporting rates and fatalities .
- Design a data collection system that will insure that the information gathered across states with respect to child abuse reports and child abuse fatalities are consistent and comparable.
- Encourage all states to evaluate their innovations and to disseminate their findings.

State and local efforts. In addition to these federal efforts, reforms in local child welfare policies and procedures, criminal justice systems, health care systems, and professional education efforts are equally central. Quality training and quality supervision must be the watchwords of child welfare staffing plans in the coming decade. Intervention systems will only be as effective as the front-line staff. Beyond expanding the revenues available to those agencies responsible for a child's safety, concerted efforts need to be placed in increasing public awareness of the problem and motivating greater community-based support for at-risk families.

Since there is no vaccine to guarantee that all families will protect their children, every community must be made aware of its responsibility to protect children from all forms of maltreatment. The identification of all questionable deaths of children will only come when there is an awareness that fatal child abuse or neglect is a possibility. Most people, including many professionals, are not willing to believe or even suspect that parents would willfully or even unintentionally kill their children. Community education campaigns should stress the importance of even a single abusive incident, emphasizing the need to report and become involved.

While a comprehensive approach to prevention involves a large number of efforts, it makes sense to start with just a few. In 1991, after a year of study of how the United States should respond to the national child abuse emergency, the U.S. Advisory Board on Child Abuse and Neglect declared that while there are dozens of important things to do, a logical place to start is with new

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Preventing Child Abuse Fatalities

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parents, helping them get off to a good start before abuse patterns begin (U.S. Advisory Board, 1991). With new parents, especially first time parents, the opportunity exists to encourage and, if necessary, to teach good parenting practices before bad patterns are established.

Recognizing the potential of home visitation for new parents, in January, 1992, the National Committee to Prevent Child Abuse, in partnership with the Ronald McDonald Children's Charities (RMCC) launched Healthy Families America (HFA). Building upon two decades of research and the experiences of the Hawaii Healthy Start program, Healthy Families America is an initiative to prevent child abuse and other poor childhood outcomes by establishing a universal, voluntary home visitor system for all new parents through state level organizations. At present, activities are underway in all 50 states, and 58 pilot programs are operating in 18 states. The early success of HFA is encouraging and suggests a willingness on the part of policymakers and the general public to support new parents. The challenge facing the field is to capitalize on this support as discussed in an earlier issue of *The APSAC Advisor* (Daro, 1993b).

Since there is no vaccine to guarantee that all families will protect their children, every community must be made aware of its responsibility to protect children from all forms of maltreatment.

Other Child Fatalities

Are any accidents truly accidental? One can grimly and accurately predict which types of cars cause more child deaths and which street corners are most dangerous. Swimming pool death rates decrease with effective zoning laws requiring fences, but not with public education. Prevention of "accidental" injuries requires an assessment of whether there is a knowledge, skills, or motivation deficit before designing specific interventions. The first step is the identification of the cause of death and factors that contribute to it.

National efforts. Continued federal efforts should include increased passive passenger safety requirements for automobiles, funding for perinatal fatality research and prenatal programs, even greater incentives/sanctions regarding motorcycle helmet use, and greater efforts in achieving universal immunizations for children. New federal initiatives could include elimination of religious exemptions and making significant federal appropriations to states contingent upon state acceptance, increased research on firearms and implementation of procedures to greatly reduce youth access, greater aggressiveness by the Consumer Product Safety Commission to eliminate unsafe products and hold manufacturers more accountable, funding of fellowships and research in the area of family violence and child abuse, and aid for development of state child death review teams. The Centers for Disease Control and Prevention should be charged with maintaining an accurate data base of child deaths and making it available to legitimate researchers.

For several years, the American Medical Association has advocated that all patients be quizzed about violence in the home and that medical schools develop curricula about family violence. It is time for other professions to join in such a major initiative. APSAC's Child Fatality Task Force is one effort in this direction. The American Academy of Pediatrics has had a very successful educational program about injury prevention (TIPP) that is available to every pediatrician. Continued research is needed on birth defects (e.g., the March of Dimes funds many studies), substance abuse, domestic violence, and SIDS. Media could be much more helpful in demonstrating appropriate nonpunitive discipline techniques.

State and local efforts. Every community should develop a state child death review team, end religious exemptions, require motorcycle helmet use, tighten laws exempting children from immunizations, and develop creative laws designed to reduce teen drinking and driving. Death certificates should be amended to reflect underlying contributing causes (e.g., some suicides are committed by children who are abused). Some states still have a coroner system with non-medical personnel determining the cause of death (e.g., the local funeral director). Switching to a medical examiner system would help to correctly determine the cause of death. However, there are a limited number of forensic pathologists and some adjustments in health care planning, and action by the National Association of Medical Examiners, will be necessary to implement such a goal. Building codes, zoning regulations, bicycle regulations, and analysis of traffic/pedestrian patterns are substantial efforts that can be accomplished at the state and local level.

Summary

Child fatalities can be prevented in many ways. Professionals and communities should address both abuse related and non-abuse related causes of child death, and each approach should be carefully evaluated for its effectiveness.

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CHILD MALTREATMENT RESOURCES

ABA CENTER ON CHILDREN AND THE LAW
1800 M St. NW, Washington, DC 20036
202/331-2250

AMERICAN ACADEMY OF PEDIATRICS
141 NW Point Blvd., PO Box 927
Elk Grove Village, IL 60009-0927
800/433-9016

AMERICAN HUMANE ASSOCIATION
American Association for Protection Children
63 Inverness Dr. East, Englewood, CO 80012-5117
303/792-9900 or 800/277-5242

AMERICAN PROFESSIONAL SOCIETY ON THE ABUSE OF CHILDREN (APSAC)
407 S. Dearborn St., Suite 1300, Chicago, IL 6065
312/554-0166

AMERICAN PUBLIC WELFARE ASSOCIATION
810 1st St. NE, Suite 500, Washington, DC 20002
202/682-0100

CHILD WELFARE LEAGUE OF AMERICA
440 1st St. NW, Suite 310, Washington, DC 20001
202/638-2952

CHILD, INC.
Attention: Rita Swan, PhD
PO Box 2604, Sioux City, IA 51106
712/948-3500

CLEARINGHOUSE ON CHILD ABUSE AND NEGLECT INFORMATION
PO Box 1182, Washington, DC 20013-1182
800/FYI-3366

FAMILY VIOLENCE RESEARCH AND TREATMENT PROGRAM
University of Texas - Tyler
3900 University Blvd., Tyler, TX 75701-6699
903/566-7130

FEDERAL BUREAU OF INVESTIGATION TRAINING ACADEMY
Behavioral Science Unit
Quantico, VA 22135
703/640-6131

INTERNATIONAL SOCIETY FOR THE PREVENTION OF CHILD ABUSE AND NEGLECT
322 S. Michigan Ave., Suite 1600
Chicago, IL 60604
312/663-3520

JUVENILE JUSTICE CLEARINGHOUSE/NCJRS
PO Box 6000, Rockville, MD 20850
800/638-8736

NATIONAL ASSOCIATION OF COUNSEL FOR CHILDREN (NACC)
1205 Oneida St., Denver, CO 80220
303/322-2260

NATIONAL ASSOCIATION OF SOCIAL WORKERS
7981 Eastern Ave., Silver Springs, MD 20910
301/565-0333

NATIONAL CENTER FOR MISSING AND EXPLOITED CHILDREN
2101 Wilson Blvd., Suite 550
Arlington, VA 22201
703/235-3900

NATIONAL CENTER FOR PROSECUTION OF CHILD ABUSE
99 Canal Center, Suite 500, Alexandria, VA 22314
703/739-0321

NATIONAL CENTER FOR STATE COURTS
300 Newport Ave.
Williamsburg, VA 23287-8798
804/253-2000

NATIONAL CHILD ABUSE COALITION
733 15th St. NW, Suite 938, Washington, DC 20005
202/347-3666

NATIONAL COALITION OF HISPANIC HEALTH AND HUMAN SERVICES ORGANIZATIONS
1030 15th St. NW, Suite 1053
Washington, DC 20005
202/371-2100

NATIONAL COMMITTEE TO PREVENT CHILD ABUSE (NCPCA)
332 S. Michigan Ave., Suite 1600, Chicago, IL 60604
312/663-3520

NATIONAL COUNCIL OF JUVENILE AND FAMILY COURT JUDGES
PO Box 8970
Reno, NV 89507, 702/784-6012

NATIONAL COURT APPOINTED SPECIAL ADVOCATE ASSOCIATION
909 NE 43rd St., Suite 202
Seattle, WA 98105
206/547-1059

NATIONAL INDIAN JUSTICE CENTER
7 Fourth St., Suite 28, Petaluma, CA 94952
707/762-8113

NATIONAL JUDICIAL COLLEGE
University of Nevada - Reno
Reno, NV 89507
800/25-JUDGE

NATIONAL ORGANIZATION FOR VICTIM ASSISTANCE
1757 Park Rd. NW, Washington, DC 20010
202/232-6682

NATIONAL REGISTRY FOR ACCREDITATION IN CHILD PROTECTIVE SERVICES
2323 S. Troy St., Suite 202F
Aurora, CO 80014
303/337-4576

NATIONAL RESOURCE CENTER ON CHILD ABUSE AND NEGLECT
63 Inverness Dr. East
Englewood, CO 80112-5117
800/227-5242

NATIONAL INDIAN CHILD WELFARE ASSOCIATION
3611 SW Hood St., Portland OR 97201
503/222-4044

PARENTS AGAINST CHILD ABUSE (PACA)
Attention: Cheri Robertson
PO Box 1262, Temecula, CA 92390
714/699-4800

U.S. ADVISORY BOARD ON CHILD ABUSE AND NEGLECT
200 Independence Ave. SW
Washington, DC 20201
202/245-0877

U.S. NATIONAL CENTER ON CHILD ABUSE AND NEGLECT (NCCAN)
Department of Health and Human Services
PO Box 1182, Washington, DC 20013
202/245-0586

NEWS

APSAC Offers New Agency Subscription for CPS and Law Enforcement

—by Theresa Reid

APSAC has long sought greater involvement by professionals in child protective services and law enforcement. To fulfill APSAC's mission of ensuring that professionals in these pivotal groups are very well-trained, APSAC's Executive Committee voted at its October 1 meeting to offer to CPS and law enforcement agencies an "agency subscription" to *The APSAC Advisor* and APSAC guidelines for practice. To qualify for the program, agencies must buy a minimum of ten subscriptions, which will be offered near cost. Through the agency subscription, we hope to reach a great many more of those professionals who may most need the information APSAC offers.

The agency subscription was developed by APSAC's staff and Membership Committee with the assistance of members from several states who served as consultants. In addition to national Board members, these consultants included David Cory, MSSW, and Donna Massey, from Texas; Eduardo Diaz, PhD, and J.M. Whitworth, MD, from Florida; Doris Zattich, MSW, from Illinois; and Diane DePanfilis, MSW, from Maryland.

We will be field-testing the agency subscription over the next two years. Members' assistance in bringing this new resource to the attention of child protective services and law enforcement leaders in their states will be crucial. If you can help by introducing CPS or law enforcement colleagues to APSAC's agency subscription, please call Betty Johnson, Membership Services Manager, at 312-554-0166.

Members at large participate in 1994 Nominating Committee

Late last summer, APSAC President Patti Toth and I wrote to all state chapter leaders asking for nominations for people to sit on APSAC's 1994 Nominating Committee. The outcome could not have been better. Several chapter leaders nominated themselves and their colleagues, and the following professionals were selected to serve as 1994 Nominating Committee members at large: David Doolittle, PsyD (MA), Rochelle Hanson, PhD (SC), Sgt. Nick LaManna, MPA (AL), Susie Samuel, MSW (KY), and Robert Sewell, MD (OR).

All but one of these state chapter representatives were able to participate in the September 26 conference call of the Nominating Committee in which the final slate of ten candidates for election and two for appointment was selected. APSAC's Executive Committee and I were thrilled by the thoughtful and collegial nature of the 1994 Nominating Committee's work, and look forward to ongoing state chapter participation in that important committee in the years to come.

Membership satisfaction assessment underway

APSAC has undertaken its first large-scale, formal effort to assess members' satisfaction with existing services and to help chart the organization's future course. A membership satisfaction survey was mailed to all members with the 1994 ballot, and "mini-surveys" will be included with invoices for dues and in other member communications. In addition, we are surveying state chapter leaders to learn how we can strengthen services for APSAC's growing chapter network. We hope you will participate fully in the surveys that come your way, and will encourage your colleagues who are members to do the same.

APSAC's future is very exciting. APSAC's members, Board members, and staff are brewing ideas as never before. With the active involvement of so many of its members, APSAC can only prosper. Please send us your input, so we can be maximally responsive to your needs and ideas.

WASHINGTON UPDATE

- by Tom Birch

Elections affect legislative outlook

With the Republicans firmly in control of Congress for the first time in 40 years and the Republican leaders in the House and Senate decidedly more conservative than their Democratic predecessors, the Clinton administration's agenda for children faces an uncertain future.

Recalling the passage of the Family and Medical Leave Act at the start of the Clinton presidency, and the collaboration between the executive branch and the Congress in developing and passing the Family Preservation and Support Act, the fate of similar legislative initiatives once the 104th Congress convenes next year seems less sure.

Much will depend on the selection of committee and subcommittee chairs who decide the shape and direction of legislation, including the reauthorization of the Child Abuse Prevention and Treatment Act (CAPTA), which expires in 1995. Sen. Nancy Kassebaum (R-KS) and Rep. Bill Goodling (R-PA), in line to chair the Senate Committee on Labor and Human Resources and the House Committee on Education and Labor, respectively, have given their moderate support in the past on CAPTA issues. The likely chairs of the two subcommittees handling CAPTA reauthorization—Sen. Dan Coats (R-IN) and Rep. Cass Ballenger (R-NC)—are decidedly more conservative in outlook than their predecessors, Sen. Christopher Dodd (D-CT) and Rep. Major Owens (R-NY).

Family preservation/family support regulations proposed

Congress OK'd the President's budget to increase the funding for the new family preservation and support program to $150 million, just getting underway this year with $60 million to states for planning grants and services support. Regulations to implement the new family preservation and support program have been proposed by the Department of Health and Human Services (HHS) Administration for Children and Families (ACF).

In order to receive the $150 million in funding in FY 1995, states are required to submit five-year

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Washington Update

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plans developed jointly by the state and ACF after broad consultation with public and private nonprofit agencies and community-based organizations experienced in family support and preservation services.

The proposed regulations reveal the Administration's interest in consolidating programs with similar missions and serving similar populations, especially where the grantees are the same agency. Specifically, the regulations proposed consolidating the plan for the new Family Preservation and Support Services (Title IV-B, Subpart 2) with Child Welfare Services (Title IV-B, Subpart 1), leading to the development of a consolidated five-year plan for the two Title IV-B programs.

In addition, HHS proposed that the plan include information about services provided under the CAPTA basic state grants and Baby Doe state grants, and the Independent Living Program under Title IV of the Social Security Act. The regulations also proposed that the plan include child abuse prevention programs, such as those funded by state Children's Trust Funds, among the coordinated services to families.

The background discussion published with the proposed regulations identified a variety of symptoms which have prevented the realization of the goals implicit in the Adoption Assistance and Child Welfare Act of 1980, the goal of which was to protect children and improve services to children and families. Those symptoms included substance abuse, community violence, homelessness, poverty, rising rates of child abuse and neglect, a focus on intervention with less attention to prevention and treatment, shortage of services, inability to keep up with caseloads, and the isolation of the child welfare service system from other services needed by vulnerable families.

It is hoped that the measures outlined in the proposed regulations and the consolidation of similar programs will help agencies more effectively address some of these seemingly intractable problems.

Congress boosts child abuse prevention and treatment funds

On September 30, President Clinton signed into law the legislation setting appropriations in FY 1995 for HHS and consolidating funding for prevention programs in CAPTA. The final appropriations bill provides $31.363 million to state Children's Trust Funds as prime grantees. Last year's funding for community-based prevention grants at $5.27 million, combined with CAPTA's emergency protection grants and the family resource grants, plus new funds, raises prevention spending to a higher level.

Most child welfare programs, including NCCAN, saw very little change in funding in the appropriations bill from the previous year: NCCAN's basic state grants are held even at $22.854 million, and the discretionary grants for child abuse research and demonstrations took a dip in funding from $15.577 million to $15.438 million.

The budget for children's mental health services, which went from $4.9 million in FY93 to $35 million in FY94, received $60 million in the final bill for 1995, good news for advocates of treatment and prevention of child abuse.

Funding increased in the FY 1995 appropriations to the Department of Justice for programs authorized under the Victims of Child Abuse Act (VOCA) and the Juvenile Justice and Delinquency Prevention Act (OJJDP). The total budget for VOCA increases from $8 million to $11.25 million, with the bulk of additional funds targeted at establishing more local advocacy centers and expanding CASA programs. Funding for OJJDP grants was increased from $107 million in FY94 to $144 million in FY95.

The bill signed by the President provides some of the increases for children's services requested by the Administration in its proposed budget. Head Start gets $210 million in additional funds in 1995, and child care funds are increased by $42 million. Congress increased funding for Healthy Start by $12.5 million, which the President had targeted for a slight cut. First-time funding of $10 million for federal grant support to Parents as Teachers, a family support and parenting program, is provided in the appropriations for the Department of Education.

Status quo on religious exemptions

The final version of the bill also takes the Senate's position on religious exemptions in state child abuse reporting laws. The legislation invokes a one-year moratorium on withholding CAPTA funds from states that fail to intervene in cases of medical neglect due to parents' religious beliefs. The issue will be taken up next year by Congressional authorizing committees considering the extension of CAPTA.

Crime prevention funding vulnerable in 1995

Crime prevention funding will not fare as well as child abuse prevention and treatment funding. New funds for crime prevention programs recently authorized in the crime bill and included in appropriations bills passed in 1994 by Congress for the Departments of Education, Justice, and HHS are among programs targeted for elimination by Republican leaders in the House and Senate. When the 104th Congress convenes in January, the Republican majority is expected to propose cuts in the prevention programs recently enacted. The House Republicans' "Contract with America" includes a proposal called "The Taking Back Our Streets Act," which would cut "social spending" from the new crime bill to fund prison construction and additional law enforcement personnel.

Grant support is in jeopardy for crime prevention activities included in FY funding bills for the following programs: Ounce of Prevention ($1.5 million), Family and Community Endeavor Schools Grant Program ($11 million), Community Schools Youth Services and Supervision Grant Program ($25.9 million), and National Domestic Violence Hotline ($1 million).

Tom Birch, JD, is Director of the National Child Abuse Coalition, and a member of APSAC's Advisory Board.

STATE CHAPTER NEWS

-by Claudia Soldano

All it took was lots and lots of hard work for our New Jersey members to pull together a chapter! In October, **APSAC-NJ** was officially formed, with interim Board officers **Marsha Heiman**, **Susan Cohen Esquilin**, **Tara Donnelly**, and **Marty Krupnick** selected to lead the organization. Thanks to all the APSAC members (a record number of 54 petitions were returned by the group) who lent their support to the formation of our twenty-ninth chapter. **APSAC-NJ's** enthusiastic undertaking of a chapter is one more step in ensuring that APSAC's message reaches all professionals in the field of child maltreatment.

APSAC now has 29 formal chapters serving 31 states. Many members are finding active involvement in their chapters one of the most rewarding aspects of APSAC membership.

In other news from the chapter front:

- The **AZPSAC** conference, ***"Voices for the Children,"*** which featured local and national faculty, was very successful for the **Arizona** chapter. Congratulations to the Board officers elected during the event: **Caryl Ainley**, President, **Anna Binkiewicz**, Vice President, **Angela Ashley**, Secretary, and **Linda Gray**, Treasurer.

- Our **Idaho** members have big plans for organizing a chapter in their state. They hope to generate support for a chapter at an interested parties' meeting on February 28, 1995. The meeting will be held in conjunction with ***"Working Together for Idaho's Children,"*** a multidisciplinary team development conference, February 27 - March 1, 1995. Featured speakers include former APSAC president Charles Wilson, MSSW; Donna Pence, a current Board member; longtime APSAC member Karen Saywitz, PhD; and Don Bross, JD, a member of APSAC's founding Board. Contact Doug Graves (208/334-4545) for more details on the conference.

- A new Board was recently installed for the **Illinois** chapter **(IPSAC)** with officers **Cheryl Wolf**, President, **Kathy Schimpf**, Vice President, **Betsy Pope-Goulet**, Secretary, and **Erin Sorenson**, Treasurer. The chapter has begun planning their next annual meeting, scheduled for February, 1995. More information can be found in their latest chapter newsletter.

- **New Mexico** members **(NMPSAC)** were treated to a fun and educational chapter meeting in October. APSAC Board member Paul Stern, JD, and local experts presented "Court School for Professionals," detailing the preparation of children for the courtroom and ways of securing and presenting expert testimony. Particularly interesting was a discussion on forensic interviewing of children with disabilities. **NMPSAC** conducted a benefit raffle of a hot-air balloon ride and was able to attract several founding members during the event. Planning for a February 1995 workshop is underway.

- The first annual meeting of **NYPSAC**, the **New York** chapter, will take place on April 7, 1995, in New York City. The keynote presentation will be ***"Child maltreatment: The primal wound,"*** by James Garbarino, PhD. Afternoon sessions will address the topics of child fatalities, child witnesses to domestic violence, and suggestibility and false memory in child sexual abuse. A general membership meeting will also be a part of the day. Contact Anne Meltzer (914/722-0042), Leah Harrison (718/920-5833), or Eileen Treacy (718/823-5988) for more information.

- The **South Carolina** chapter, **SCPSAC,** has joined with the National Crime Victims Research and Treatment Center and the Lowcountry Children's Center to sponsor the first annual ***South Carolina Professional Colloquium on Child Abuse***. The event is scheduled for February 23-25, 1995, in Charleston, and will feature a distinguished faculty of local and national experts in the field. Contact Vickey Craft (803/792-9782) to receive more information on the event.

- The **APSAC-WA** Board has been hard at work producing a new membership recruitment brochure that describes the goals and accomplishments of the **Washington** chapter, which include working effectively with Washington's legislature and media, offering stellar educational programs, and producing a regular newsletter. The local impact of the chapter is highlighted for potential members. The annual **APSAC-WA** Board election will be take place in December 1995, with ballots being distributed with the next chapter newsletter.

- The annual meeting of the **Wisconsin** chapter **(WIPSAC)** was held in October, when the results of the recent election were announced. Officers include **Linda Marinaccio Pucci**, President, **Thomas Fallon**, Vice President, **Raelene Freitag**, Secretary, and **Jill Cohen Kolb**, Treasurer. Congratulations all.

These are only some of the activities which our chapters are sponsoring. To learn more about what your chapter has in store for you, consult the following page for the contact people in your state. They can tell you about the latest happenings and how you can get involved

Claudia Soldano, MSW, MBA, is Director of State Chapter Development for APSAC.

STATE CHAPTER CONTACTS

No chapter in your state? Take the lead! Call APSAC's office at 312-554-0166, and ask for information on how to start a state chapter.

States with approved charters:

AL - ***Michael Taylor, MD***
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MEDIA REVIEWS

***The backlash: Child protection under fire*, edited by John E.B. Myers. Sage Publications, 1994. 125 pp. $35.00 hardcover, $16.95 paper.**

–Reviewed by Thomas F. Curran

In *The backlash: child protection under fire*, Professor John E.B. Myers presents a timely "report from the front" on various efforts to suppress society's awareness and recognition of child abuse and to discredit certain allegations of its victims. The reader is provided, in only eight short chapters, with several different perspectives on the backlash against child protection, each containing recommendations for responding.

Myers quite correctly notes in chapter two that "It is no exaggeration to say that at least 50% of the backlash is a self-inflicted wound."

In chapter one, David Finkelhor provides a fascinating examination of the backlash from the study of social movements and social issues. Finkelhor's analysis is unique because of its sociological perspective and its detail. This chapter is arguably the most insightful in the entire book, and the reader would be wise to give it careful study.

Myers explores the origins of the backlash is chapter two. This chapter takes an honest look at the sources of the backlash, particularly against child sexual abuse allegations and investigations, and at some of the shortcomings of child protective services (CPS). Myers is to be commended for his criticism of certain aspects of CPS and for his call for the professional community to meet the backlash by getting its own house in better order.

Chapter three, which views the backlash from the perspective of a county CPS administrator, is followed by a chapter by Lesley Wimberly, the president of the National Association of State VOCAL Organizations. The perspective of VOCAL (Victims of Child Abuse Laws) should have provided one of the most important chapters in this book. Surprisingly, rather than providing CPS professionals with a useful understanding of one of its most consistent and outspoken critics, this chapter is remarkable for its exposure of just how poorly informed many of VOCAL's positions really are. After reading this chapter, however, CPS professionals should give serious consideration to how VOCAL has come to have such a large, well-organized, and influential voice in American CPS practices and policies.

Charles Wilson and Susan Caylor Steppe review the backlash from a state CPS administrator's perspective in chapter five. In chapter six, Karl Pyck describes the backlash in Europe, reviewing in detail one high-profile child sexual abuse investigation from a small city in the Netherlands.

Myers analyzes backlash literature in chapter seven, providing an interesting look at some of the most hyperbolic and vitriolic media coverage of child abuse and CPS practices. Myers counters some of the most consistently inaccurate and biased critics of children's allegations of abuse, CPS, and certain legal aspects of child maltreatment. At the end of this chapter and in chapter eight, Myers outlines various recommendations for responding to the backlash. Each recommendation deserves serious study and debate, but professionals, especially academics, should pay particular attention to Myers's suggestion that they devote more energy to writing about child abuse for the popular media.

The backlash addresses an important, controversial, and multi-faceted problem. Overall, however, with the exception of the chapters by Finkelhor and Myers, it could be stronger. Perhaps my greatest disappointment about the book is that it often safely glosses over what possibly is at the heart of the backlash and continues to fuel its fire: the shortcomings of CPS and, in particular, the indefensible failure of professional practice with abused children to keep pace with the current knowledge base. Indeed, Myers quite correctly notes in chapter two that "It is no exaggeration to say that at least 50% of the backlash is a self-inflicted wound." The ways in which child abuse cases are sometimes investigated and managed deserve objective scrutiny and even criticism, but, with the noted exception of chapter two, these legitimate concerns are not sufficiently examined.

The book could also be strengthened with the representation of more diverse points of view. Perhaps no group, for example, has done more to expose the flaws in CPS and inspire the backlash than the criminal defense bar. A chapter outlining a criminal defense attorney's perspective of CPS would be invaluable, since CPS practices and policies nationwide have been shaped as much by defense attorneys during the past several years as by social work administrators. A judge's view of CPS and the backlash, and the views of an attorney who represents children in dependency court as guardian ad litem would have provided still other valuable perspectives. Finally, a debate format would have provided a more comprehensive examination of this controversial subject.

Although it is my opinion that *The backlash* is a disappointing treatment of this highly charged and important issue, it does contain some very important observations about individual and institutional CPS practices and policies. These observations, one hopes, will generate continued and more extensive debate, both within the professional community and between CPS professionals and their critics.

Thomas F. Curran, MSW, JD, is an attorney in the Child Advocacy Unit of the Defender Association of Philadelphia, where he represents abused and neglected children in court. He is also a member of APSAC's Board of Directors.

JOURNAL HIGHLIGHTS

Edited by
Thomas F. Curran

The purpose of Journal Highlights is to inform readers of current research on various aspects of child maltreatment. Selected articles from journals representing APSAC's multidisciplinary membership are represented in an annotated bibliography format. APSAC members are invited to contribute to Journal Highlights by sending a copy of current articles (preferably published within the past six months), along with a two or three sentence review, to Thomas F. Curran, MSW, JD, Child Advocacy Unit, Defender Association of Philadelphia, 121 N. Broad Street, Philadelphia, PA 19107-1913.

PHYSICAL ABUSE AND NEGLECT

Benedict, M., Zuravin, S., Brandt, D., and Abbey, H. (1994). Types and frequency of child maltreatment by family foster care providers in an urban population. *Child Abuse and Neglect, 18*(7), 577-585.

Data on abuse incidents in foster homes were abstracted from child protective services records for 1984 through 1988 in Baltimore, Maryland. Results indicated that foster families had a threefold increased frequency of maltreatment compared to the non-foster families. Report frequency was highest for physical abuse. Overall, 20% of foster care reports were substantiated, compared to 35% of non-foster reports.

Daro, D. and McCurdy, K. (1994). *Preventing child abuse and neglect: Programmatic interventions. Child Welfare, 73*(5), 405-430.

A detailed overview of child abuse and neglect prevention programs is presented. This article discusses what is currently known about the efficacy of prevention programs and identifies elements of prevention programming that are most promising; it also examines critical research questions surrounding prevention. Three categories of prevention efforts are discussed: those efforts seeking to enhance parental capacity; child sexual abuse prevention programs; and those prevention efforts focused on victims of abuse or children vulnerable due to inadequate parental supervision or skill.

Hay, T. and Jones, L. (1994). Societal intervention to prevent child abuse and neglect. *Child Welfare, 73*(5), 379-403.

The theoretical framework presented for examining child maltreatment is an ecological developmental one which offers various ways to look at priorities in abuse prevention at the community and societal levels. Three areas with potential for broad social intervention efforts are discussed in this article: increasing economic self-sufficiency of families, enhancing communities and their existing resources, and discouraging corporal punishment and other forms of violence.

Prino, C.T. and Peyrot, M. (1994). The effect of child physical abuse and neglect on aggressive, withdrawn and prosocial behavior. *Child Abuse and Neglect, 18*(10), 871-884.

This study examines aggressive, withdrawn, and prosocial behavior in physically abused (N=21), non-abused, neglected (N=26) and non-abused, non-neglected (N=21) children aged five to eight years. Physically abused children showed significantly more aggressive behavior than the neglected and non-abused; neglected children were significantly more withdrawn than the physically abused and non-abused; and non-abused children exhibited significantly more prosocial behavior than the abused and neglected.

Schwartz, I.M., Rendon, J.A., and Hsieh, C.M. (1994). Is child maltreatment a leading cause of delinquency? *Child Welfare, 73*(5), 639-655.

The popular assumption that child abuse is a major cause of juvenile delinquency is examined in this thought-provoking article. Following a review of the research literature that has examined this relationship, it is concluded that the available empirical evidence does not support child maltreatment as a leading cause of delinquency.

Wells, S.J. (1994). Child protective services: Research for the future. *Child Welfare, 73*(5), 431-450.

The legal basis for child protective services and how it affects virtually every aspect of practice is discussed in this detailed look at CPS. The author's analysis of the urgent need to develop consistent definitions of child maltreatment and evaluate service delivery are especially useful. Overall, this article offers valuable guidelines for child welfare researchers and administration, child advocacy groups, and legislators.

SEXUAL ABUSE

Dahlenberg, C.J. (1994). Making and finding memories: A commentary on the "repressed memory" controversy. *Journal of Child Sexual Abuse, 3*(3), 109-118.

A balanced and thoughtful examination of the controversy surrounding "repressed memory" is presented. The author considers and challenges some of the more extreme criticisms of memory repression, then presents a well-researched position supporting the reality of memory retrieval within the context of therapy. The observation that causal memory reconstruction is an inherent part of psychotherapy offers an interesting argument in the "repressed memory" controversy.

Freund, K. and Kuban, M. (1994). The basis of the abused abuser theory of pedophilia: A further elaboration on an earlier study. *Archives of Sexual Behavior, 23*(5), 553-563.

This study investigates pedophilia in 303 heterosexual male sex offenders to determine whether the self-report of having been sexually abused before age 12 (or before age 16) by an adult is significantly more frequent in pedophiles than in other male groups. An earlier study found that sexual abuse in childhood by an adult male or female was significantly more often reported by pedophilic sex offenders than by controls who erotically preferred physically mature females. Although this study clearly found a close connection between pedophilia and a self-report of childhood seduction,

continued on next page

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Please note: *In renewing a membership, APSAC members certify their continuing compliance with the standards of conduct appropriate for APSAC members, including, but not limited to, the professional and ethical standards of, and all laws and regulations relating to, their respective professions.*

APSAC is pleased to participating in **"Child Abuse and Neglect: The People of Color Leadership Institute" (POCLI).** The goal of POCLI is to promote the leadership of people of color in child protective systems and to improve the cultural competence and sensitivity of those systems that affect families of color. As part of the effort to evaluate the effectiveness of POCLI, APSAC would like to gather information on the cultural diversity of its membership. Your participation is strictly voluntary.

I consider my cultural group identification to be: _____ (please specify)

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