

School Disaster: Planning and Initial Interventions

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The UCLA Program in Trauma, Violence and Sudden Bereavement has provided consultation and coordination of research and clinical interventions to schools in the aftermath of violence or disaster, including natural disasters (e.g., tornadoes, earthquakes), civil or regional wars (e.g., Kuwait, Croatia), catastrophic community violence (e.g., sniper attacks, school bombings, public suicides), and isolated acts of personal violence (e.g., suicides, homicides, robberies, rape). There has been increased attention to events directly affecting schools and to the school as a site of intervention. This paper elaborates on issues of prevention and early response following children's exposure to such catastrophic events.

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The nature and course of children's recovery from traumatic reactions is determined by a complex set of interactions (Pynoos & Nader, 1992). For example, whereas level of exposure may be an indicator of initial reaction, (McFarlane, 1986; Pynoos, Frederick et al., 1987) the recovery environment is equally affected by the degree of ongoing distress in adult caretakers (Gleser, Green, & Winget, 1981; Lacey, 1972). Moreover, the ability of adults to restore the school to pre-trauma levels of functioning is influenced by their own levels of distress and recovery. Effective intervention, therefore, necessitates attention to the needs of all members of the traumatized community. Hence, this paper examines the roles and responses of administrators, teachers and staff, and parents as well as those of children following disaster. The following issues will be discussed:-

1) primary intervention; 2) secondary intervention; 3) the intervention team; 4) administrators and staff; 5) parents and children; and psychological first aid.

PRIMARY PREVENTION

The first goal of prevention is to minimize exposure to the threat of harm by violence or disaster. "Disaster proofing" as well as disaster preparedness are essentials of prevention. After the collapse of a school wall due to structural defect and the resultant deaths of 9 children, New York state instituted an inspection of all school buildings designed by the same architect (Coonan, 1990). California has instituted a program of building and bridge rehabilitation to protect against the destruction from a possible earthquake (California Seismic Safety Commission, 1992). Had this process succeeded in San Francisco, levels of death and destruction may have been reduced following the 1989 earthquake.

It is essential that a program of disaster preparedness be implemented that includes general disaster principles and specific plans tailored for a particular school. Predisaster training includes a) preparation of emergency supplies; b) familiarization with the types of disasters likely to the geographical location of the school; c) methods of physical self-protection during and after a disaster or act of violence (e.g., "duck and cover" for an earthquake; the identification of safe zones and alternative routes of escape for a terrorist or sniper attack, and identification of the safest structure areas of the school in the event of a tornado); d) well rehearsed evacuation protocols (Lonigan, Shannon, Finch, Daugherty, & Taylor, 1991) including the assignment of staff to specific tasks and duties as well as the institution of methods of early warning and prompt evacuation (e.g., intercom, "walkie-talkie" or cellular systems which permit school-wide and between-site communication despite any telephone outage); e) installation of a procedure to enlist aid following a catastrophic event (including telephone procedures); f) a system of tracking the location and safe dissemination of children and personnel during the rescue effort; g) a plan for restoration of the school facility and removal of trauma invoking imagery; and h) a mechanism for directing media response which in itself can become intrusive and distressing (e.g., directing news media personnel to a central administration representative).

SECONDARY PREVENTION

Immediate Prevention/Intervention

Mental health response presupposes efforts toward rescue, emergency medical relief and the restoration of safety. Rescue efforts immediately following a catastrophe usually include moving some children to areas of safety to wait while other children are transferred to hospitals or given emergency medical aid. When there is structural damage, children may be moved off site. Initial efforts include giving accurate and age appropriate information, protecting children from unnecessary exposure to traumatic images and scenes (e.g., blood and mutilation), reuniting separated family members, and restoring a sense of safety.

Failure to record and direct the dissemination of children immediately following the event can exacerbate the stress responses of children and adults. Minimizing the separation of family members including siblings is stress preventatives; separation is well recognized as a source of increasing postdisaster distress (McFarlane, 1987; Pynoos & Nader, 1989a). In the chaos following a crisis, school or other personnel have often failed to make note of the medical facilities where injured and dead children have been transported, thereby delaying by hours, even days, reunion with parents. Search for the whereabouts of injured children or bodies dispersed to community or regional hospitals has been described to us by several school principals as an additional stressor in the aftermath of trauma. Taking account of every child who was present at school during the trauma, noting his or her exposure and tracking to whom the child was released can enhance secondary efforts in behalf of children.

Waiting children are often concerned about the whereabouts and safety of their siblings and other family members. During this time, children may become extremely anxious and may produce their own fantasies and concerns of threat and injury to significant others. These fantasies may later become images that intrude into the child's life and may alter attachment behavior with family members and school personnel.

The reuniting of parents and children or siblings can become one of the important moments that requires attention during treatment. Schools will need a preplanned policy to provide an adequate and appropriate location for children and parents to be reunited. The first sight of a parent may cause relief or may increase stress. For example, children have often described an escalation of fear or anxiety in response to seeing the extremely distressed look on a parent's face (Pynoos & Nader, 1989b). For that reason, prior to the reunion, parents may require a brief transition period in which staff can assist parents to compose themselves before they join their children.

The Intervention Team

Following traumatic events, an outside consultant can provide important assistance and information during all phases of post-trauma response: planning, first aid, early and brief interventions, long term interventions. An experienced consultant utilizes useful knowledge about anticipating and preventing or minimizing particular aspects of traumatic response. For example, recognizing the occasions that may exacerbate symptoms permits preparation for these events. After the collapse of a school cafeteria wall and the deaths of 9 children, we identified the following dates: 1) reentry into the school for the new school year; 2) the anniversary of the collapse; 3) the 2nd Christmas after the event (the first Christmas, children were either numb or focusing primarily on trauma issues); and 4) reentry into the rebuilt cafeteria. With preparation and appropriate handling, these occasions became therapeutic events.

Forming a treatment team involves many competing interests and professional attitudes. It is essential that those who provide treatment and other interventions following trauma have a thorough understanding of children's and adults' post-traumatic reactions and treatment needs. When a school program is organized, there may be clinicians outside the treatment team who affect the outcome of interventions. For example, in one setting, a grief specialist independently approached a set of bereaved parents and focused on facilitating grief reactions and the escalation of hostilities between subgroups in the community. For example, grieving parents focused rage upon school personnel and parents of survivors. Since trauma and grief reactions overlap and interdigitate, the treatment approach must not be exclusively grief directed (Pynoos & Nader, 1990).

All clinicians involved must maintain a therapeutic stance. In one case, we observed a clinician untrained in trauma care, who adopted the rage of the parents over injuries to their children. He encouraged the expression of rage rather than its resolution and the taking of appropriate action. Clinicians who were trained in methods of trauma intervention and the interaction of trauma and grief were able to make more constructive interventions.

The psychological team responsible for the ongoing treatment of the children is assisted in monitoring the children by a centralized list of exposed individuals, with reasons for referral, symptoms and/or identified other risk factors.

The shared information among the mental health staff should include the common traumatic reminders, the frequent cognitive distortions, the most intrusive recollection, the age-specific cognitive reappraisals and meaning given to the event and the most common new or changed behaviors.

To clarify children's questions and confusions in order to promote cognitive discrimination, additional outside assistance may be brought in to give cognitive explanations of the event. For example, paramedics might describe issues related to resuscitation. The weatherman might explain how a tornado happens and is spotted. Care must be taken by these individuals not to make children even more hypervigilant than they already are. That is, if the weatherman tells them how to spot warning signals in animals, they may begin to become anxious about animal behaviors as well as about dark clouds and high winds.

Treatment Team and Issues of Supervision The treatment and screening teams may include common members. Both teams will need a basic understanding of children's post-traumatic reactions. The screening team will need thorough training in the use of screening instruments such as the Childhood Post-traumatic Stress Reaction Index (Yule & Udwin, 1991; Nader, Pynoos, Fairbanks, & Frederick, 1990). There is currently a training videotape as well as specialized instruction available from UCLA's Trauma, Violence and Sudden Bereavement Program. Training includes observation of the trainer as well as observation by the trainer prior to actual use of the instrument. The Childhood PTSD Parent Inventory (semistructured interview) is usually administered by a treatment clinician (Nader & Pynoos, 1991).

Treatment theory and direct training include didactic training, observation of treatment sessions conducted by the training therapist and observation of the trainee with subsequent feedback from the training therapist. Training has proved most successful when provided over time. A consultant may provide an additional week of training every two months or an additional two or three weeks of training every three months depending on the number of clinicians undergoing training. It takes substantial training and continued practice to maintain acquired skills, as is true of many fields of emergency medical treatment. Learning this specialized treatment requires some clinical experience and skill as well as previous training in methods of therapeutic intervention. There are individual variations in the skill to learn this type of intervention. In addition, individuals who have themselves been traumatized may find that lack of resolution of traumatic issues may interfere with the ability to learn or provide this type of intervention.

Leadership. It is essential that someone effectively oversee that the consultant's recommendations are implemented. Problems occur if during the consultant's absence, things are left undone. The task of follow-through may be assigned to an executive committee member such as the trauma team leader or his/her supervisor. The trauma team leader (e.g., clinical supervisor) will need both a clinical and political orientation. S/he must be able to supervise (supervisee clinicians) and to be supervised (by the consultant).

Treatment Atmosphere. There are many pressures that accompany treatment in the aftermath of a traumatic situation. These include state, community and mental health politics; funding issues; increased workloads as the clinicians roles expand (e.g., child advocate, classroom consultant family intervener); and multiple treatment issues (e.g., trauma, grief, injury, separation, classroom changes). Traumatic intervention with children is ongoing and demanding but also rewarding. There are both internal and external pressures. Internally, it may become difficult to remain open. The therapist must stay available to hear traumatic material over a sustained period. Externally, issues related to politics, funding, and community demands continue to require time and attention. Without regular debriefing between clinical staff, there will likely be an increase in irritability, resentment and avoidance.

Research. Research is an important part of the intervention process, and it is important to be clear from the beginning that the diagnostic and screening information gathered will be subsequently analyzed. With proper handling of this issue, we have been able to carry out concurrent clinical and research interventions. Our screening instruments measure the degree of traumatic responsive as well as the nature of variables potentially predicting response. Thus the information collected in screening and diagnosing children becomes data for analysis in the months following intervention. These screening tools permit examination of issues relevant to traumatic reactions, course and recovery such as progress made by children over time, variables affecting traumatic reactions and traumatic recovery, and comparisons at intervals of the usefulness of various reporters of children's reactions (children, teachers, parents, clinicians). For example, our observations of child-parent discordance in reporting child PTSD reactions has suggested that children's immediate self-reports provide ample information about children's subjective responses. Over time, parent reports become important in identifying continued distress in children. There are always some particular questions that arise out of the special set of circumstances of any disaster. Research inquiry into these issues of trauma brings focus onto unique features that might otherwise be overlooked.

ADMINISTRATORS AND STAFF

On-Site Administrators

Mental Health professionals continue to work closely with school or other administrators in the ongoing implementation of services. It will be necessary for Administrators a) to allocate time to their own reactions to the trauma because of their tremendous sense of responsibility; b) to address staffing issues; and c) to delegate tasks beyond their purview.

After the initial emergency response, administrators will need an opportunity to review with mental health professionals the event and their behaviors during and afterwards. Debriefings and other psychological interventions can assist or can free, administrators to attend to the posttrauma school situation. Specific individual and group work may be necessary. After a sniper attack, none of the administrators (principal, vice principals, and school psychologist) knew where the others had been during the shooting. In one earthquake, a principal heard cries of distress from children under a collapsed building and could not help. During a tornado, a principal stood frozen for a time while broken glass flew toward him as though in slow motion. A group meeting with administrators permitted sharing of their individual experiences, support from peers often not accepted from others, and discussion of issues they might not be able to discuss in front of teachers. Because of the level of their immediate responsibility, school leaders may be at risk of a delayed response after the return to normal school operations or during summer break. Early intervention is advisable, and special care has to be given to providing them appropriate psychological assistance after some return to normalcy. Programs fail if, for example, insufficient attention is given to the principal. Principals. We have observed that strong leadership by the principal in the aftermath of a traumatic event is critical to the recovery of the school milieu. Without it, parent and staff groups may remain agitated, and needed focus may be diverted from the children. We have had a chance to observe parallel staffs with two separate administrations in the aftermath of a single event. Both staffs participated in rescue efforts involving multiple deaths and mutilation. One administrator provided a gentle authoritarian leadership while the other a laissez faire leadership. In the former, school personnel felt supported and provided helpful support to one another. In the later, distrust, anger, scapegoating and ostracizing of the more traumatized members of the school community escalated.

Additionally, an administrative assistant may be needed to attend to duties outside of the range and availability of the existing administrator, for example, contending with the volume and intensity of angry behaviors, intrusions and demands of parents after a school disaster. In the weeks following the disaster, parents' anxieties about the safety of their children may be high as well as their concerns about the effects of the disaster on their child's mental health and school progress. The appointment of an assistant administrator must be made without undermining the current leadership.

Off-Site Administration

After a traumatic event school superintendents will be required not only to remain knowledgeable, but in fact to roll up their sleeves and become involved. Style of executing interventions must reinforce local school authority. In order to reduce the burden placed on the traumatized school superintendents' increased visibility and support are essential. It will be necessary to assign additional personnel, to legitimize the efforts of the principal, and to be the contact for media in order to buffer their effect on the school and on traumatized individuals. Honoring of local heroes or memorialization of the dead must be accomplished with tact and reverence both for the situation and for current levels of trauma and grief recovery. For example one school administration provided a dinner-dance to honor heroic teachers and staff. After the deaths of several children, the teachers complained that it was not a time for dancing. Regular planning meetings are essential and must include administrative representatives from all of the appropriate agencies. After one school disaster, the mental health team consisted of staff provided by the school system by the county mental health program and by state mental health. Executive summary and planning meetings included the school superintendent and members of his staff, a state mental health agency chief, the director of the county mental health program, a member of the school mental health team and the UCLA consultant with occasional visits from a funding representative. Periodic visits to school board meetings addressed issues important to the school community and informed board officials of ongoing intervention plans.

School Support Staff

The school support staff becomes extremely important to the recovery effort. Duties of office staff increase geometrically following trauma. Increased secretarial services are required and additional nursing services are indicated even when there are only psychological injuries. Increased services also are needed in the form of classroom aids. After a catastrophic event, office staff contend with an increase in phone calls and actual physical intrusions into the school by the press, distressed or anxious parents, concerned individuals and those involved in the

continued physical and psychological rebuilding effort. Paperwork increases, for example, because of restoration planning and due to an increased staff. One school instituted a newsletter to keep parents informed of new developments regarding services to children and school reconstruction as well as regarding the institution of a new disaster plan. Requests for comfort and support from children and adults as well as angry behaviors increase and are often directed at a nurturing office worker who is ill trained to respond to the distress and who may already be contending with his or her own traumatic response. A significant increase in referrals to the nursing office is expected after crisis. The school nurse plays a pivotal role in the triage system because school age children often report somatic complaints after a seriously distressing event. She carries an additional responsibility to monitor the recovery of children and may need assistance to accomplish. In addition, severe stress can increase the likelihood of illness in the aftermath of the stress (Haggerty, 1980). The school nurse will require assistance in identifying affected children and instruction about how to talk to children with somatic complaints.

After a trauma at a school, most or all teachers may themselves be traumatized to some degree. In one school the teachers who had the greatest numbers of deaths in their rooms as well as those with exposure to the disaster were among the most traumatized. It was necessary to provide additional assistance to the more traumatized teachers by using substitute teachers as classroom aids and by providing some relief from other duties such as playground supervision and lunch duty.

Traumatized teachers and staff are themselves vulnerable to traumatic reminders of the event such as the school itself, the site of destruction or reconstruction, loud noises, empty desks or injured children. These reminders may increase their own reactions, may increase weak areas and/or may interfere with their usual ability to function. Therefore, there are special requirements for existing staff who have experienced the trauma in order to assist them to be a part of the post-trauma intervention. The following will be necessary: 1) to evaluate their reaction and response; 2) to allow them ongoing, appropriate debriefing or treatment in the course of their work; 3) to minimize and/or adjust their work load; and 4) to permit them without apology to step out of the post-trauma intervention if special needs are too much for them. Renewal of symptoms from a previous trauma (e.g., war experiences) may also affect teachers and staff. In one school, the psychologist who had been on site, during the violence had to reduce the weekly number of children he tested. He took a peripheral role in assisting the post-trauma recovery effort.

Like children, adults with different experiences during the event may have significantly different reactions to the event. These differences in experience and response may have varied effect on performance. After one disaster, there were two nurses involved in the rescue effort: One administered first aid to injured children in the nursing office which she described as a war "zone." She was not exposed to the destruction and to dead and debris-buried bodies. Friends of her husband (policemen who joined the rescue effort) often stopped in to give her hugs and supportive remarks. While she recalls the day of the disaster with some tears, she basically remembers it as a day of success for herself- successful interventions with the children and much praise for her efforts and her continued calm. She became the calm zone of the school following the disaster. The other nurse who joined the rescue effort went into the area of destruction and was struck by the massive damage as well as the sight of several dead children. She and other staff were unable to stop lengthy and desperate efforts to revive one child who was already dead. She suffered from a severe traumatic response with repetitive intrusions of the sights of her experience and with a severe sense of loss and depression. Injured children became traumatic reminders for her.

As time passes, the dysynchrony among staff members in their exposure, response, needs and recovery process may become significant. Some staff begin to recover while others face a lengthy treatment process. The dysynchrony can lead to conflict among staff and undermine their continued cooperation with the overall intervention program. In one school both faculty and staff members who began to feel better and those who were still denying their traumatic responses became annoyed with those who continued to exhibit severe traumatic responses. They complained in front of traumatized teachers, e.g., "we need to get on with it" or "everyone needs to carry their share of the load."

Lines of discontent may be especially visible as an exaggeration of pre-existing divisions of staff, for example, full time teachers versus specialty teachers. In addition, parents become worried about traumatized teachers' abilities to teach well. In one school where the disparity in recovery levels resulted in the scapegoating of two severely traumatized teachers, parents attempted to remove children from the two teachers' classrooms. To everyone's surprise, at the end of the school year, the children in the most traumatized teacher's class boasted the best achievement test scores in the school district.

There are often selected staff with past experiences that compromise their functioning. These experiences include recent losses, childhood losses, of discrete past events similar to the trauma. Personal crises during or close to the time of the catastrophe, such as the death of a family member, may complicate the processing of and recovery from

the traumatic event Like parents with a past trauma (Pynoos & Nader, 1989a), teachers with previous trauma may have difficulty assisting children who are traumatized.

After a trauma, there may be teachers and staff who want to leave the school. This response may be seen as a system traumatic response. Honoring such transfers might leave the school understaffed. Leaving may constitute avoidance of traumatic reminders and emotions and may result in continued vulnerability or lack of resolution of response. It is similar to the desire to tear down the site of destruction or violence in hopes of removing the reminder and the symptoms that it triggers.

In contrast to those who want out, teachers as well as principals and administrators may become anxiously attached to the school itself and/or to each other following traumatic events. One principal anxiously avoided a promotional move to a different school following a hostage taking. The attachment of staff members to each other, of children to specific teachers and of any of the traumatized to the school must be taken into consideration when changes are made. For example, for teachers who had to be separated because of a new building and less space, the administration made special allowances for them to travel between schools in order to have time together. A particular teacher may become important to children who went through the trauma with her or who were in her class during the episode. Administrators' awareness of this psychological need becomes important, e.g., if parents insist upon moving the children from a teacher's room because s/he is traumatized. Abrupt interruption of this intensified attachment or omission of an appropriate transition to the next teacher can intensify children's distress.

TEACHERS

Factors Increasing Symptomatic Reactions

Teachers and staff often join rescue efforts. Those who join the rescue effort and those who feel responsible to reverse the damage may have a more prolonged and complicated recovery (Armstrong, O'Callahan, & Marmar, 1991). Predisaster plans may already have assigned the staff to difficult roles. Administrators and teachers may be among those who make multiple efforts to intervene, including attempts to dig children out from under heavy debris, to go onto the area under gunfire rescue children, to aid the bleeding and injured, and to identify bodies. Their efforts include intense helplessness (e.g., attempting to revive a child who is no longer breathing), horrible images, and fatiguing efforts. In contrast, some teachers are spared this exposure and may feel either relief or guilt. Guilt and increased responsibility have been found to be associated with an increase in the severity of a traumatic response (Pynoos, Frederick et al., 1987; Nader et al., 1990; Yule & Williams, 1990). Disasters vary, and staff may be forced to choose between putting their lives at risk in an attempt to rescue children or protecting their own lives, e.g., whenever one teacher attempted to go to assist children a bullet hit nearby. In other catastrophic situations, no intervention attempt was possible because of the nature and rapidity of the destruction. The issue then may become the teacher's behaviors in the immediate aftermath. For example, one teacher had to leave an area where children had been grotesquely injured because he became extremely nauseated and had to vomit. Another teacher suffered a concussion, felt dizzy and left the site. These teachers then had to address their own conflicts over their personal reactions and sense of responsibility as well as content with the reactions of their peers-some of whom judged them critically for leaving. Some individuals have cause to feel "real guilt," some injury or harm for which they have actually had responsibility (Horowitz, 1982). For example the life guard who was chatting with a friend while a child drowned. For some, guilt becomes a method of avoiding other more painful emotions. For example, it may serve to prolong denial of the nature and number of deaths. Remaining focused on "if only I had. . ." may delay focus on the futility of attempted intervention.

Impact of Teacher's Behavior on Children's Responses

Teachers' recovery is important to the welfare of the students. Children often carefully observe their teachers' responses to an event. For example, during a sniper attack, children assessed the danger to themselves by watching the teachers' responses. Moreover, teachers are faced with reinstating a sense of safety and order in the classroom. It is they who are primarily responsible for restoring the classroom itself to normal functioning. They may, like the children, have difficulties contending with traumatic reminders and traumatic emotions. After a tornado, teachers and children were anxious when the sky became dark. After a school shooting during which a white van was parked near the school, teachers became anxious when they saw a white van, especially if it was near the school. Both teachers and children became anxious when they heard loud popping noises, like a car backfiring.

Concerns and Services

An often overlooked factor is that these events (e.g., an earthquake) regularly cause teachers to be concerned about their own children's safety. Help with these concerns may improve teachers' abilities to assist the children under their care. One school now has provided for teachers a portable telephone and check in numbers just for this purpose.

Parents serve as a protective barrier for their children. In their stead the school and the school staff become a substitute protective barrier. When this barrier fails, as it does in a traumatic event, it leaves the sense with parents, teachers and children that the protective barrier is not secure.

The demands on teachers increase the following catastrophe. In addition to contending with their own traumatic reactions and senses of loss in the case of death(s), they must contend with a dramatically changed work environment. Teachers have reported a complete disruption of classroom functioning for over a month following a disaster. Children commonly exhibit changes in school behavior and cognitive performance such as increased aggression and reduced concentration. Classroom anxiety, somatic complaints, and disruptive distracting behaviors (including behavioral reenactments) by children in response to intrusive phenomena or to reminders may increase. For example, after a tornado, even nonexposed children became more disruptive or began to hide under school teachers' desks especially during strong winds. After a disaster, children more often ask "why should I", when given a directive and may have to be retaught discipline and the basic rules of conduct. Although less often noticed, non-participation and inhibited behavior also occur. Other demands on teachers may come from parents. Anxious parents may impose themselves on the classroom more frequently in response to their own fears regarding their children's safety, recovery or academic progress.

The atmosphere of the entire school may be different. A school formerly thought of as a "happy" or "up" place to go to may become "like a tomb." Feelings of victimization or even paranoia may prevail. Because of the added resources needed to deal with the catastrophe, teachers and staff may fear that essential services will be short-changed. There may be, for instance, rumors that retiring teachers will not be replaced, thus increasing the existing burden on remaining staff. If the school administrator becomes a part of a dysfunctional response, e.g., when a traumatized teacher is scapegoated, there may in fact be negative professional results such as the ill timed transfer of a teacher to another school, moving a teacher to a different grade or undermining his/her authority in a specific way.

Mental health professionals can assist teachers to return the class to its normal functioning by helping them a) to understand common behavioral and school performance changes that might occur, b) to problem solve, and c) to recognize when Referral is appropriate. A trauma consultant can help the teacher to adapt the pace and content of class materials for the individual classroom and its trauma level. S/he can assist the proper handling of information about injured, hospitalized classmates, and their reentrance into the classroom.

While it is important for teachers to remain within their roles rather than to become lay therapists, they can help to validate and and normalize children's responses as well as permit the open expression of concerns. In order to preserve the teaching function of the class, classroom discussions of the trauma or of the deceased can be kept to designated times.

Knowing when there is time reserved to address trauma related issues reduces anxiety for both teacher and students. Children can then know to "save up" reactions with the assurance that there will be a special time to address their feelings and that more positive emotional school experiences will be preserved without unnecessary intrusions.

Ample psychological services for teachers in the form of group and individual consultation will be necessary. There must be safeguards for reducing concerns that seeking such help is ill-advised. On the practical level this includes assuring appropriate confidentiality. School districts may choose to provide a specific mental health specialist for the teachers and staff as an alternative to using workman's compensation.

Care must be taken if traumatized teachers and personnel are used to supplement the existing staff. When it is necessary to use support staff with traumatic exposure, for example, after an earthquake in which the larger community is exposed, assistance will be needed to prevent complications or interference with progress. In one school, a well respected substitute teacher joined the rescue effort after a disaster. Because of her previous success as a substitute teacher, she was asked to assist a very classroom following the disaster. As a result of her own traumatic exposure, she became overprotective of the children and overly sensitive to traumatic reminders. She began to exacerbate traumatic reactions of children rather than enhance their recovery.

Professional Identity

Especially with younger children, the protective parental shield provided by parents is transferred to the school, principal and teachers. Teachers often feel that protecting children is an important part of their role as teachers. Traumatic events can be challenging to a teacher's professional identity. On the Impact of Events we, after one child in their school was shot and killed, teachers reported comparable levels of intrusion and avoidance to individuals who had lost a spouse in the past year (Pynoos & Nader, 1988b). Teachers feel responsible not only for teaching children and for their well-being but also for their development. One teacher described how she had watched a boy in her classroom blossom behaviorally and academically, especially in October. He was killed in a disaster at the school in November. Another teacher exclaimed, "If I can't protect a child from getting killed what good am I as a teacher?"

PARENTS AND FAMILIES

Parents need information regarding children's normal responses to trauma. After an initial school-wide parent meeting where general questions can be addressed, small meetings (perhaps by grade, classroom or exposure) are usually a better forum to assist parents to help their children. In these groups, common post-traumatic responses and parents' specific concerns can be addressed. We have found that the best way to help parents understand their children's responses is to encourage a group of parents to discuss their own responses and worries, and then link these with similar ones that their children are likely to experience.

Children are likely to do better when open discussion of the event and verbalization of concerns and feelings is promoted between parent and child (Bloch, Silber, & Perry, 1956; Lystad, 1985). Certain affected parents will need individual consultation before they feel they have the emotional resources to be of adequate assistance to their children. Children may also do better when parents, for a limited time, tolerate rather than punish temporary regressive behaviors. Parents must learn to meet their children at their functioning level and move them forward at their own pace. At the same time, providing adequate structure and limit setting is necessary to the child's sense of safety, self-control and recovery.

Anger and Distrust

A range of negative affects are generated from the sense of helplessness or the sense of unfairness associated with a trauma. Within these negative emotions are the seeds of a continued effort to achieve a constructive response rather than a destructive one. Ideally, the end result of a disaster is constructive action. It is appropriate for a disaster to inspire a community to take action toward prevention and recovery, for example, making sure that bridges and buildings are well-built. One of the goals of trauma intervention is to assist individuals and communities to use their traumatic rage or anger as a mobilizer for this constructive action.

Anger is common following a traumatic incident, especially one in which children are harmed. One source of parental anger may be over the school's failure to guarantee a protective shield. Both children and parents may experience the loss of the protective barrier. Parents entrusted the school with their children, often considering it a safe haven. This process was most apparent to us after a camp drowning. Often, parents had deliberated over the choice of a camp for their children including their safety record. Therefore, after the drowning, parents were not only angry at the camp but also doubted themselves and wondered how they could rely on their own judgment in the future.

In the aftermath of events, parents may have experienced their children's new anger and distrust, children may feel unsettled, even betrayed by their parents for not protecting them and/or may distrust their parents appraisal of danger and safety. For example, one family went to Disney World following the child's traumatic experience at school. When they tried to take him into the haunted house, he cried and angrily refused to enter. When his mother told him that she would not take him into a place that was not safe, he said, "You let me go to school didn't you."

Distrust may also become apparent between parents and schools, following traumatic events. Issues of accountability and a disruption to the usual open communication between school representatives and parents may exacerbate this distrust. Administrators may have both legal and public relations concerns that lead to a reduction of open dialogue. Lawyers may advise caution in view of potential lawsuits.

Students

Classrooms are made up of a group of children. The intraclassroom matrix is made up of individual children with individual sets of reactions (Pynoos, Nader, & March, 1991). Children exhibit the entire range of PTSD symptoms,

and these symptoms have a potential influence on a child's normal developmental process (Terr, 1983; Gislason & Call, 1982). The presence of these symptoms may effect a child's cognition, personality, sense of safety, self-esteem and expectations. School performance, memory, and learning may be affected. Significant alterations in personality may include both counterphobic and inhibitory features (Gislason & Call, 1982). The child may develop reduced impulse control or in inhibition, an attraction to danger or a debilitating sense of fear (Pynoos & Nader, 1990). There is often an exacerbation of preexisting behaviors such as conduct disturbances, attentional difficulties, overcautious or reticent behaviors or vulnerability to frustration. First aid includes developmental considerations. For example, preschool through second graders will need repeated concrete clarifications, consistent caregiving, help in verbalizing fears, feelings and complaints and permission for time limited regression. Third through fifth graders may need assistance with their preoccupations with their own actions and the actions of others during the event and with their confusions about their own grid and traumatic responses. Older children may need caution against an increased tendency toward impulsive behavior and risk-taking change in interpersonal relationships and changes in plans for the future (Pynoos & Nader, 1988a).

Course

The course of a child's recovery may differ from child to child and for different events or different experiences in one event. Trauma specific circumstantial factors include the severity of the tragedy, the number of horrors experienced, the extent of loss of life and the recurrence of tic reminders. We have observed that traumatized individuals become more vigilant to adverse life conditions and to other "horrific", occurrences. There can be an increase in the situations that remind of a specific event.

Aid to Children

Children will need increased assistance after the intrusion of traumatic reminders and during specific anticipated events. These dates may include one month after the event and anniversaries. Possibilities include the beginning of the new school year, the beginning of physical reconstruction, and graduation from the school knowing that the deceased did not make it to graduation. Good preparation and intervention may transform these dates into therapeutic events instead of simply times of exacerbated response. Children can be involved in decision making, for example, about how to spend the anniversary day including how to memorialize the dead. Since teacher anxiety rapidly spreads among the students, all efforts aimed at lending them a sense of preparedness also aid the children. Teachers can be prepared to use the mental health team, effectively, e.g., on the week of the anniversary, and to anticipate and respond to specific personal and child reactions.

While childhood traumatic response occurs primarily in relationship to exposure to traumatic phenomena, recovery of the adult community affects the recovery of children. There is a commonality in the level of anxiety among children and the adults in their environment Three main outside factors that affect children are 1) the recovery of the community, 2) multiple adversities, and 3) family disorganization (Pynoos & Nader, 1989a). With a disaster, the community's recovery is affected by governmental, administrative and community response (Raphael, 1986) including financial aid and rebuilding and the provision of mental health assistance, nursing help, and substitutes and aids. The therapist's role becomes that of advocate, for example, to minimize any adversity, to comorbidity or to reduce the chronicity of PTSD. Multiple adversities include economic and other loss, destruction to home, relocation, and disruption of school and peer relationships. Family disorganization may include family pathology and dysfunction such as increased drug or alcohol abuse or spousal or child abuse (Adams & Adams, 1984).

PSYCHOLOGICAL FIRST AID

Liaison with School Administrators

The first critical step in implementing an effective program is establishing a direct, open and mutually supportive relationship between trained mental health consultants and the adult authorities in charge of the site where the violence or disaster occurred. Community leaders such as church, school and public officials will have to take on additional, unfamiliar, sometimes uncomfortable, roles or activities. Their actions can either ameliorate or worsen the situation. Hesitation, lack of knowledge, political considerations, and trauma-related anxieties can undermine efforts on behalf of children. Time will be needed to gain the confidence and cooperation of community leaders. They, in turn, will need periodically to publicly reaffirm their support for the intervention team.

Immediate psychological services on or near the site of the event can provide important initial relief. The use of a local school or other easily accessible location for screening, classroom consultation and Individual or group treatment presents less of a psychological barrier for families than the local mental health facility.

Post- circumstances may disrupt the restoration of the normal school community. In the case of a disaster, structural damage to the school itself may require relocation of classrooms or school functions. Children and teachers with already reduced stress tolerance levels may be faced with the additional adjustment to a new location. Preparation in advance of the new school site so that each classroom is an approximate replica of the old site may reduce the sense of displacement. When schooling is resumed at the site of destruction, the damage zone may become a reminder of the trauma producing anxiety. Auditory stimuli can serve as reminders to teachers and children; therefore, on site construction noises may elicit symptomatic reactions. Where possible, construction workers have agreed to an adjusted schedule so that as much of the reconstruction as possible occurs outside of school hours. When disturbing construction noises are necessary during the school day, teachers and children are advised in advance in an effort to reduce startle reactions, irritability and the exacerbation of other symptoms.

Normal school routines may serve as post-trauma reminders and thus increase symptomatic responses. If the fire alarm was sounded during or after the trauma, the first fire drill may elicit traumatic reactions. In one school painters were on the grounds during a hostage taking and shooting. The next time the principal had to call in the painters was a difficult time. A few months after a sniper attack, the unexpected arrival of a celebrity to the community was accompanied by sirens and a police escort. The children and school personnel responded with renewed traumatic symptoms indicating their uncertainty if another sniper attack was in progress.

Post-event Triage, Screening and Assessment

Risk Factors. Among the incident-specific factors affecting posttrauma response is the degree of exposure, the duration, the intensity of the sights, sounds, helplessness, and horror associated with the event the personal impact and the disruption to the school community. For example, exposure to life threat, injury, bleeding, mutilation, and cries for help often lead to the re-experiencing of avoidant and arousal responses common to PTSD. In an earthquake, tornado, flood or hurricane, some children may be in an area which suffers no damage while others may, for example, be buried under rubble, exposed to fire experience the total destruction of their building or area or witness mutilated bodies floating in flood waters or crushed between floors after an earthquake.

In addition to exposure parameters, other circumstantial factors and preexisting or concurrent factors influence the emotional reactions of children. These include preexisting psychopathology, the extent of a sense of responsibility for the trauma or its outcome, family response and psychopathology, guilt, worry about a significant other, familiarity with victims, and previous trauma or loss. For example, immigrant children who had previously experienced an earthquake with high morbidity, reacted more strongly to a milder earthquake even when they were not in the epicenter or zone of destruction. Mothers who had been in the San Fernando Valley, California earthquake in the early 70's were more anxious during the Whittier-Narrows, California earthquake in the 80's than those who had not had the earlier earthquake experience (Maida, Gordon, & Straus, in press). Their children appeared to reflect this renewed anxiety. Some children and adults exhibit an increased sense of vulnerability and responsiveness to any new tragedy.

Traumatic experience tends to act as a magnifying glass for traits and behaviors. For example, children's and adults' aggressive behaviors, depressive reactions, fears or inhibitions may become intensified following trauma. Exaggerated coping behaviors may become deterrents to resolving the current trauma. The child who used confusion in order to avoid dealing with stress prior to being taken hostage and witnessing a public suicide had difficulty reprocessing the event. Unlike her peers, she became baffled in response to the therapist's questions and instructions. The teacher who became excessively self-sufficient following a traumatic death in her family when she was a teenager had difficulty, after a traumatic death at her school, allowing the support and assistance that has proven important to trauma recovery. Attention to these exaggerations in personality can lead to maintaining developmental profession and reducing maladaptive coping.

CONCLUSIONS

We have described an overall approach to a mental health disaster response for children. It begins with disaster proofing and disaster preparedness. The nature and course of children's recovery from traumatic reactions are affected both by the children's exposure and experiences and by the degree of ongoing distress in adult caretakers. Effective intervention necessitates a comprehensive post-trauma plan including attention to the needs of all members

of the traumatized community. The program requires the assembly, training and proper supervision of specialized teams of professionals. The program design must include attention to the special features of the disaster and appropriate screening, triage and group or individual interventions. The strategies of intervention with acutely traumatized children after disaster are multilayered. They require attention to various aspects of the exposure, prior vulnerabilities and the recovery environment We have discussed elsewhere a detailed approach to individual group and family treatment (Nader & Pynoos, 1991; Pynoos, 1992; Pynoos & Nader, 1988a; Pynoos & Nader, 1992).

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