INTRODUCTION

Violent acts such as a school shooting, domestic violence, suicides, gang fights, sexual assault, homicides, violence seen in the media (real or fantasy), and acts of terrorism have sudden, unpredictable and dramatic effects on children and their families. In addition, the sudden death of a family member, friend, or pet can devastate a child. Acts of violence have an inordinate negative impact at a variety of levels including societal, community, family and individual. While physical losses can sometimes be reconstructed or replaced, and the accompanying pain and sorrow gradually diminish, psychological scars - including traumatic memories and horrifying images - do not heal as easily. Extensive media coverage often exacerbates the psychological impact of these events.

Despite children’s innate resilience, acute stress reactions are normal following traumatic events. A child’s individual vulnerabilities and strengths interact in developing acute and chronic psychological consequences. Children who are exposed to trauma have to deal with several developmental processes at the same time. In addition to physical growth, children are also developing socially, emotionally and academically. The often intertwined contributions of psychosocial, economic, cultural, religious and community factors have an enormous impact on child’s psychological response to stress(1).

The adverse psychological impact of trauma on children is well known, but little is known about indirect exposure, including television coverage of traumatic events. Recently, however, research has focused on the psychological consequences of media coverage on children and has found a significant effect(2,3). In general, this research has shown a positive correlation between exposure to media coverage of tragedies and symptoms of post-traumatic stress disorder (PTSD) in children. Recent studies have focused on media coverage of the 1995 Oklahoma City bombing, SCUD missile attacks during the Persian Gulf War and the World Trade Center attacks. Television viewing exacerbated the traumatic effect of the 1995 Oklahoma City bombing and was directly related to posttraumatic stress symptoms in children(3). Similarly, Ray and Malhi(4) reported that teenagers in India were negatively affected by the events of 9/11 in a survey completed within three weeks of the event. Those who witnessed the event on television were more fearful and shocked than the ones who read about the event in the print media. Further, girls experienced more fear and sadness than boys, who experienced more anger. Research into the stress reactions of children in families exposed to the SCUD missile attacks indicate that unhealthy family dynamics, including both disengaged and enmeshed family members, worsen these symptoms(5). After the World Trade Center attacks, children aged 5-18 who watched television without any restrictions had more severe stress symptoms than those whose viewing was restricted(6). Interestingly, children retrospectively report greater media consumption following a tragedy(7). It may be that children seek information on the television as a way of coping in times of stress. Alternatively, it is possible that children who have increased symptom levels may be especially likely to seek out information through the media(6).
In general, with regard to age and gender effects, older children and males report more exposure to television coverage of tragedies and more PTSD symptoms than younger children and girls(7).

### Normal Reactions to Abnormal Situations

A person’s immediate response to trauma is often described as a state of shock; impressions, memories, and feelings connected with the event are often jumbled and confusing. This is a normal result of how the brain processes overwhelming and threatening events. Children who have experienced trauma feel a loss of safety, predictability, and trust. The world, as they know it, is no longer the same and they suffer from emotional and physical insecurity. As a result, they may feel overwhelming fear, powerlessness, and a loss of control which creates a state of emotional and cognitive turmoil. In this state, survivors feel a sense of disbelief or disconnection with what is actually happening to them. It usually takes time before the reality of what has occurred sets in(8).

When the reality of the event does finally set in, a cascade of emotional reactions follows which includes some or all of the following: despair, fear, rage, emptiness, and profound loss. During the initial grief period children should be especially nurtured, loved, and supported. Children should be allowed to both experience and express emotions at their own pace. They should be met where they are emotionally, and not be told to move onto the next stage or told to “get over it”. It is often helpful to identify all the people in children’s lives who care about them and to whom they can turn for support. Bringing order to this mix of scary memories is important in working with children dealing with trauma and loss.

Tapping into children’s systems of belief may provide a source of significant comfort and support, including a sense of community and a framework for understanding what has happened. This may involve contacting a clergy member, depending upon the child’s religious tradition. However, severe trauma may temporarily or permanently cause a victim to lose faith in his or her spiritual beliefs and/or religious traditions. This is a normal reaction for some and should be handled sensitively in a way not to provoke guilt in the victim. In many cases, this is a temporary change that reverses itself over time.

### Understanding children’s responses to trauma in the context of child development

Children who witness violence directly or indirectly may experience unpredictable affronts to their sense of safety, wellbeing, and bodily integrity, disrupting the normal developmental trajectory of childhood. Such reactions to trauma typically vary by age and developmental level and should be viewed within the context of the social-cognitive processes occurring during each developmental stage.

As mentioned previously, children are often overwhelmed by their feelings after a traumatic event. As a way of coping, many children suppress these feelings, in the hope that they will go away or because they feel unable to handle them at the time. Unexpressed emotions may emerge in unexpected or indirect ways. Helping children to acknowledge and express their feelings can assist them in their healing process. These acute stress reactions are dependent on the developmental stage of the child, the level of exposure to the stressor, and the type of exposure. In addition, a child’s individual vulnerabilities and protective factors correlate with the level of risk in developing acute and long-term psychological symptomatology. At the same time, efforts should be made not to “over-medicalize” the normal reactions of children to these events(1).

**Preschool child (< 6 years):** Preschoolers engage in magical thinking, develop fears of separation and rejection, and exhibit regressive behaviors when exposed to trauma. Preschoolers are unable to make distinctions between live images and replays in television coverage. They believe that the images portrayed represent events occurring close to home. In addition, they have a difficult time understanding others’ points of view and may mistakenly think that the event is their fault. These children are unable to understand the death as permanent. They may exhibit sleep difficulties (trouble falling asleep or staying asleep, nightmares) and ‘clinging behavior’ (refusing to leave their caretaker’s side, worrying that something bad will happen).
School-age (7 to 11 years): This group of children acquire the ability to take others’ points of view, allowing them to see more than one perspective. Nevertheless, they may not understand the full impact of a traumatic event. They can display inappropriate or unpredictable behavior, deny affect and focus on details. Somatic complaints, regressive behaviors (bed-wetting, thumb sucking, baby talk, and wanting to carry a transitional object) and withdrawal may be observed. They remain concrete thinkers, often becoming fearful, confused, and anxious following a traumatic event. School-related issues are also common, such as inability to concentrate, refusal to attend school, or increased defiance, aggression, and hyperactivity. Children of this age are particularly focused on their own and their family’s safety, paying close attention to parents’ anxieties and concerns. Finally, school-age children may experience loss of interest in activities and participate in repetitious traumatic play in retelling the story.

Teenage years (>12 years): Teenagers have developed the ability to think abstractly. With this capacity, comes an increased focus on religion, morality and ethics, which can impact a teenager’s understanding of, and response to, acts of terrorism. Teens frequently have a need for time alone and may occasionally isolate themselves from their family. However, with support, they can exhibit good coping and problem solving skills. At times teenagers are likely to keep their feelings inside, making them more prone to developing feelings of sadness and apathy and withdrawal from family and friends. They may also minimize their concerns in an attempt to appear as if ‘everything is okay’. They may demonstrate concern about the community, including the risk of future attacks. Some youngsters increase their activity level and involvement with others as a way to manage their inner fear and anxiety. Irritability and defiance may also appear, as also a wish for revenge and action-oriented responses. These feelings may impact their personal view of the future.

Abnormal Responses

The unfolding of reactions to a traumatic event in a child is a dynamic process that reflects the interplay between risk and protective factors. This unfolding may take different forms over the course of development and assume a waxing and waning profile of symptom presentation over time and across situations. Some children exposed to trauma may experience immediate symptom onset while others may not manifest symptoms of distress until weeks or months later(9). Even a horrifying event experienced from a remote and relatively safe distance (distant trauma) conveyed repetitively by the media may have a psychological impact on children.

Type and Degree of Exposure

Two categories of trauma have been described by Terr(10). Type I trauma produces typical PTSD symptoms after a one-time, sudden traumatic event. Type II trauma is the result of long-term repeated exposure to trauma, similar to what many physically abused youth experience. Type II trauma often results in an array of dysfunctional coping mechanisms, such as denial and dissociation, rather than symptoms characteristic of PTSD.

Children who grow-up exposed to sustained and prolonged trauma and violence are at increased risk for mental disorders such as depression, anxiety, Acute Stress Disorder (ASD), PTSD and substance abuse (Table I). Acute stress reactions are normal and expected when they occur during the first few weeks following a traumatic event. It is only when these symptoms persist for long periods of time or are accompanied by significant functional impairment that concern is warranted.

What is the Role of Media?

Media (including television, internet and print) allows quick transmission of information to the international, national and local communities which may allow families to feel more supported in the face of disaster. Nevertheless, repeated television coverage may perpetuate fear, panic and despair associated with a disaster. A child potentially re-experiences the trauma each time it is witnessed. Many children witness these images without adult supervision. Moreover, media coverage may create anxiety in caregivers which impairs their ability to comfort children impacted by the coverage(6).While media serves an important role in delivering news and
current events, often there is a degree of sensationalism and insensitivity to such reporting. The following is an example of a tragedy and the response of the media to such an event.

A terrible tragedy such as the double murder of a teenage girl and the family servant of a well known professional family in NCR Delhi, India received a tremendous amount of media attention over the past two months. The father was initially accused of these gruesome murders. Several articles appeared in leading national newspapers and other media outlets. A reporter suggested that “this story was a bigger hit than cricket on TV”. However part of the draw to this tragic event was due to some inaccurate sensational reporting, which would have led viewers to believe that a romantic relationship existed between the girl and the family servant.

Of course, the fact that this crime occurred in an influential family coupled with the news that it was initiated by a father towards his own child (as well as the family servant) seem to contribute to the high level of interest associated with this case.

Such reports generate questions pertaining to the role of the media in propagating sensationalism while not appreciating the negative influence of such irresponsible reporting on the minds of the children who get deluged with such reports.

GUIDELINES FOR MINIMIZING THE NEGATIVE EFFECTS OF MEDIA COVERAGE ON CHILDREN

Parents should remember that it is important to talk to the child or adolescent about what he/she has seen or heard. This allows parents to lessen the potential negative effects of the news and to discuss their own ideas and values. While children cannot be completely protected from outside events, parents can help them feel safe and help them to better understand the world around them. Suggestions are highlighted in the Box.

EPILOGUE

Children are not “miniature adults”, as their brains are still developing and their understanding of the world is less sophisticated. However, like adults they must be given the opportunity to gently face the reality of what has occurred, to ventilate thoughts and emotions, to mourn with the care and support of adults and utilize effective and healthy coping strategies. It is well known that long-term emotional consequences occur when children are allowed to become anxious, frightened and confused for extended periods of time. It is important that we arm our children with the coping skills and resources so that they are not chronically afflicted by these traumatic events. Interventions should include protecting survivors from further harm, reducing psychological arousal, keeping families together, and fostering much needed communication and information during these times of distress. Media coverage and rumors are important influences on the coping ability of children and families and exposure should both be monitored and reduced. Encouragement of continued efforts for mental

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Guidelines for Minimizing the Negative Effects of Media Coverage on Children

For Parents and Caregivers

· Monitor and limit the amount of time your child watches news shows.
· Watch the news with your child.
· Make sure you have adequate time and a quiet place to talk if you anticipate that the news is going to be troubling or upsetting to the child.
· Avoid viewing or listening to graphic news, which may cause further trauma and/or desensitize a young person to violent aspects and their consequences.
· Ask the child what he/she has heard and what questions he/she may have. Question children as to how they are feeling.
· Provide reassurance regarding his/her own safety in simple words emphasizing that you are going to be there to keep him/her safe.
· Turn off the TV. Don’t let your own desire to keep up with every little detail on the news get in the way of your children’s well being.
· Even if your children are very young, the continual commentary, frightening speculation, and repeated replaying of the disasters on TV will only fuel their fears and insecurities, not to mention your own.
· Look for signs that the news may have triggered fears or anxieties such as sleeplessness, fears, bedwetting, crying, or talking about being afraid.
· Educate children about media coverage and the variety of sources available.
· Talk with your child or teenager about what you can do to help. Finding a way to connect with the community at large may be helpful. This may involve family, school or community activities.

For Socialists, Politicians, Child-Health Personnel and Journalists

· Physicians, journalists and politicians should be aware that media coverage of violence, whether local, national or international, can have negative effects on children.
· Journalists should provide warnings of graphic content prior to airing such images. The warnings should be given gently and honestly and not to further sensationalize the story.
· Sufficient time should be provided to remove young children from the room.
· Limit news promotion with graphic content.
· Media coverage should include ways to help those in need and ways to provide support for children and families suffering from the tragedy.

Future research efforts should be directed towards gaining a better understanding of the specific types of news coverage that are most likely to be associated with negative reactions in children. Most of the current literature is based on recalled viewing rather than direct viewing habits. Data on actual news consumption in addition to recollected news...
consumption would be useful. Finally, a more systematic exploration of the impact of TV coverage of tragic events across developmental levels is necessary. This research can help guide journalists, editors, and publishers to make evidence-based decisions on how to cover a tragedy in a way that will communicate the necessary information and minimize the detrimental effects on the audience and also help parents to make more informed decisions about what their children watch on television.

Finally there are opportunities to provide a voice within the community and through the media to educate and empower the public with information on how to identify the normal and expected responses to trauma in children. We can provide parents with information on how they should communicate in an age-appropriate manner with their children about past events and those to come. We can explain how to recognize and understand how grief manifests across development. Additional information for parents includes web-based information, including chats and web casts, toll-free information lines, and a list of child mental health providers. Finally, we can help promote public awareness of the potential sequelae of trauma in children through press conferences and other media outreach, broadcast of a public service campaign, as well as development of a website. Today’s problems of violence will never subside unless we invest in the physical and emotional well being of our children and as child advocates raise awareness about such issues.

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REFERENCES