Grief and Traumatic Grief in Children in the Context of Mass Trauma

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Abstract Children who have had someone close die as a result of a mass trauma event such as war, armed conflict, acts of terror, political violence, torture, mass accidents, and natural disasters are at risk for biopsychosocial problems. Research on how to classify when grief becomes complicated or traumatic in children is scarce, and while functioning level may provide a good indication, assessing functioning may be difficult in mass trauma environments where routines and structure are often lacking. There are promising trauma- and grief-focused interventions for children post-mass trauma, which are mostly provided in school settings. However, more advanced multi-method interventions are needed that address grief and trauma in the context of the child's overall mental health, parent/caregiver role in assisting the child, family system issues, ways to provide safe caring environments amidst chaos and change, and interventions that take into account local consumer perspectives, including the voices of children.

Keywords Children · Adolescents · Grief · Traumatic grief · Mass trauma

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Introduction

The loss of a close person is not a unique event in young people. It is estimated that approximately 4 % of children in Western countries experience the death of a parent before they reach the age of 18 [1], and this percentage significantly increases when the number of children and adolescents experiencing the death of siblings, close friends, and other loved ones is taken into account. Although the majority of children will cope with such events, the death of a parent or child in a family will usually result in a profound crisis in children and adolescents [2, 3]. It is associated with increased occurrence of mental health problems [4–8], decline in school performance, social withdrawal, behavioral problems [2, 9, 10], and somatic complaints [11]. A minority (approximately 20 %) evidence more severe problems [4, 12]. Register studies from Scandinavia have shown increased mortality following parental death, especially when death is due to unnatural causes [13•, 14, 15].

During mass trauma, children often experience the death of a loved one under especially horrifying situations. Mass trauma events include wars, armed conflicts, acts of terror, political violence, torture, mass accidents, and natural disasters. In this article, we will explore some of the consequences of experiencing the loss of a loved one under circumstances that simultaneously affect many people and situations often high

on potentially traumatizing elements, combined with disruption in everyday routines and intense media coverage.
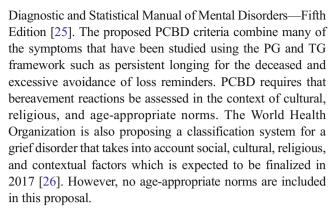
Grief and Complicated Grief in Children

We follow Stroebe [16] using the term bereavement for the experience of having lost a loved one and the term grief for the psychobiological response to bereavement. While acute grief is the immediate initial response, complicated grief refers to prolongation of the acute grief or other complications that can ensue. Complicated grief in children can be distinguished from normal grief by its intensity, persistence, and cognitive inflexibility (cf [17, 18•]). Normal and complicated grief are part of a continuum, rather than being categorically different [19]. Although children's ability to be functional in everyday life (school progress, and pleasure and involvement in leisure activities) provides a good indicator of how they are faring, this may be especially difficult to assess in mass trauma situations where the recovery environment may be chaotic and unstable. Children's ongoing development may interact with shifts in symptomatology with increasing age, adding to the complexity of understanding and studying normal and complicated reactions [20].

Few studies have been undertaken to estimate the prevalence of complicated grief in children, but studies suggest approximately 10 to 30 % of children who are parentally bereaved experience complicated grief [21, 22]. Though we are very conscious that young people's experience and expression of grief may vary widely with their developmental level, kind of death, and relation to the deceased as well as be influenced by cultural differences, previous experiences, and other factors, we will use the terms children or youth interchangeably for every person from birth to 18 years of age.

Whether there are different types of complicated grief in children has not been a major subject. It is common to distinguish between prolonged grief (PG) and traumatic grief (TG), a distinction supported by research [23]. While prolonged grief has mostly been conceptualized with adults, the TG type has originated more from research on young people. PG reflects the separation distress evidenced following the loss of an important attachment relationship. Using methodology (and scales) primarily adapted from adult studies, researchers have confirmed some of the same reactions and relationships in adolescents as in adults, i.e., association of PG reactions associated with functional impairment [24]. TG is related to the traumatic circumstances or exposure surrounding the death. These two complicated grief types are thought to reflect different processes, one having an internal or relationship-based origin (PG) while the other results more from external factors (TG).

Recently, persistent complex bereavement disorder (PCBD) was proposed as a condition for further study in the Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition [25]. The proposed PCBD criteria combine many of the symptoms that have been studied using the PG and TG framework such as persistent longing for the deceased and excessive avoidance of loss reminders. PCBD requires that bereavement reactions be assessed in the context of cultural, religious, and age-appropriate norms. The World Health Organization is also proposing a classification system for a grief disorder that takes into account social, cultural, religious, and contextual factors which is expected to be finalized in 2017 [26]. However, no age-appropriate norms are included in this proposal.

Little attention has so far been given to the suppression of grief due to young people's problem of regulating strong emotions. Further, research on grief suppression due to caregivers who in different ways create problems for the child is limited. Ways in which caregivers may contribute to grief suppression include not providing the information or caring environment necessary for processing the loss, not establishing an open climate of communication, not including children in appropriate rituals, and forcing the child to suppress their reactions.

Grief Following Mass Trauma

Losing a loved one has been evaluated as one of many stressors that children experience following mass trauma. It may be quite difficult to disentangle the effect of the loss from other stressors and changes that the child may experience or undergo. For example, following an earthquake, a child may, in addition to losing loved ones, have survived extreme danger, lost his or her house and school, been forced to live in a tent within a totally changed environment, experienced aftershocks, lacked basic necessities, etc. A mass trauma loss will always be part of a complex array of changes in the child's life. Each additional type of trauma and loss usually increases the odds for behavior problems and/or functional impairment [27•] constituting what has been called risk factor caravans [28]. Some mass trauma events also have an ongoing nature where the child has to process a loss under circumstances of continued stress or danger that may impede normal recovery processes. Instruments to measure grief or complicated grief in children were not available when early studies on mass trauma were conducted [29, 30]. Newer studies using improved methodology that include measures of grief reactions in children have documented a relation between scores on these scales and various disorders such as PTSD, depression, and anxiety, although grief reactions are distinguished from these [31].

Understandably, the overlap between TG and PTSD is greater than with PG. Mass trauma often involves exposure to life threat and violent loss, especially when the trauma is of human origin (i.e., terror, mass murder), but also in some

natural disasters such as earthquakes and flash floods where there is little or no warning. Many mass trauma situations have a large number of deaths and thus exposure to bodies with strong sensory elements such as strong visual and auditory impressions and smells. The terms used for grief following such events, such as TG, reflect the strong trauma aspect in these events. In the aftermath, children must maneuver within an environment where many trauma reminders (i.e., related to the death and circumstances), loss reminders (i.e., related to the loss and longing for the deceased), and caregiver and family reactions may complicate grief. Certain mass trauma events involve intense media exposure and sometimes judicial processes (i.e., following terror) where amount of television exposure is associated with more grief [31]. There is not a complete overlap between TG and PTSD [31], and therefore, a sole trauma focus would not be applicable. Work must continue to delineate similarities and differences between trauma and grief, including possible developmental differences, as well as what consequences this has for our interventions.

Loss of a close person is a risk factor for traumatic symptoms and other mental health problems in children exposed to mass trauma across cultures [32–34]. Most attention has been given to how loss influences depression and PTSD. Recently in a meta-analysis of risk factors for depression after natural disasters, bereavement was found to be one of the significant predictors [35••]. Compared to youth who experience trauma in the absence of death, bereaved trauma survivors report more PTSD symptoms, arousal, depression, worry, etc. (see [31]).

In an early study, Galante [36] did not find that children who suffered a loss in the family due to an earthquake were more at risk than others were. However, children were not assessed directly but by their teachers, and the measure used (Rutter Behavioral Questionnaire for Completion by Teachers) was inadequate to measure both trauma and grief reactions.

In a 6.5-year follow-up, Goenjian, Walling [37], and coworkers found high levels of depression and somewhat lower levels of PTSD among adolescents who had lost parents in an earthquake, with the highest level among those who were orphaned compared to those who lost one of their parents. The depression level was higher in those who lost a father than those who lost a mother, a finding thought to reflect the economic disadvantages resulting from losing the breadwinner. Likewise, Kalantari and Vostanis [38] found a significantly higher rate of behavioral and emotional problems in children who lost a parent in an earthquake (Bam, Iran) compared to a control group. They also found a relationship between parental and child psychopathology indicating a continuation of symptoms through the parent-child interaction.

Dawson, Joscelyne [32], and coworkers found that PG in Muslim children after the 2004 tsunami (Indonesia) was predicted by female gender, experiencing the death of a parent, the total number of deaths experienced, and a child's reliance on cognitive avoidance. Following the Nairobi bomb explosion in 1998, Pfefferbaum, North [39], and coworkers found grief associated with bomb-related posttraumatic stress (PTS), PTS related to other negative life events, and type of bomb-related loss. The authors acknowledged problems with the measure used to assess grief in the study.

Morgos and Worden [40] mention the ongoing stress and danger situation as an explanation for the high levels of TG they found among displaced children in Darfur. The ongoing conflict and disruption of their life makes the normal tasks of grief difficult. In addition, they also point to how the war situation, as often is the case in other mass trauma events, may have interfered with usual mourning practices such as attending the funeral, sharing memories, experiencing the pain, and having social validation of their reactions.

One and a half years after the terror at Utøya Island in Norway where 69 young people were killed, 75 % of bereaved siblings scored above the designated cutoff level on the Inventory of Complicated Grief [41] indicating that grief had become complicated. Their levels of symptoms in other areas (e.g., PTSD, general psychic distress) were also high and correlated with grief reactions. Around half showed high levels of functional impairment and academic difficulties were very common.

Grief reactions in children vary widely depending on the type of mass trauma, the number of deaths involved, the recovery environment, and other aspects of the situation. Although we do not have many studies delineating the course and the trajectories of grief following bereavement in mass trauma situations, we tentatively can say that there is a high potential for continuing problems over time, especially after man-made events such as terror. Both clinical experience and research have identified problems related to the interplay between trauma and grief [30, 42, 43•]. If the child witnessed a death, or created inner images of what happened, it may be very difficult to think of memories of that person without the "traumatic" circumstances invading their thoughts.

Grief Interventions Following Mass Trauma

Meta-analytic studies of bereavement interventions for children have examined grief interventions generally and found small to moderate effect sizes [44, 45]. The interventions included were very diverse as were the measures used to rate childhood grief. In general, it seems that interventions that target those who struggle with symptoms—tertiary interventions—show the most potential. In recent years, interventions have been inspired by advances within CBT treatment for trauma and loss in adults, and trauma-focused grief therapy in manualized forms has been developed for children (e.g., [46–48]).

From having a narrower focus on trauma, interventions following mass trauma have gradually broadened to encompass a wide range of general stress, trauma, and loss exposure. Mass trauma often entails a combination of exposure to trauma and loss; generally, grief interventions appear to be most successful when treatment is designed to attend to both trauma and grief [46, 49–51]. Most approaches make use of the school, as this is an arena where many children can be reached and is part of the children's natural habitat. However, a school approach demands that schools are intact or can be re-established in a new location. Following school shootings and school terror, as well as after some natural disasters such as earthquakes, the school may become the object of children's fear, demanding special intervention efforts [52]. Rapid return to school is usually prioritized by local and central authorities and by non-governmental organizations (NGOs), with schools re-established in tents and provisional buildings.

Mass trauma, with the havoc that many disasters create, can pose difficulties for registering and keeping track of the families who have lost a member. Situations vary concerning losses, countries differ in their capacity to register the extent of the suffering and their resources for this, and many families may go undetected. Chemtob [53] and coworkers proposed a registry to prevent bereaved children from "slipping through the cracks". Such a registry is a public health tool that makes proactive health surveillance possible. Following the Utøya terror in Norway, central health authorities mounted a proactive local community strategy where a designated person would initiate and stay in contact with affected families over the first year. This was a strategy very positively regarded by the bereaved [54]. While such strategies may be feasible in resource-rich countries, they may be very difficult to initiate in resource-poor countries.

Intervention Programs

Early on, Galante and Foa [36] implemented a treatment program for 300 Italian elementary children who were exposed to an earthquake that resulted in more than 4000 deaths. The intervention group met once monthly in the year following the earthquake. The treatment consisted of giving permission to communicate openly, discussing fears and sharing reactions, discussing myths and erroneous beliefs, expressing feelings, dealing with images of death, and fostering belief in their ability to cope. Compared to children from villages where no intervention was undertaken, the intervention group showed a lower "risk score" (risk of developing neurotic or antisocial disturbances) on the Rutter Children's Behavior Questionnaire completed by teachers.

Goenjian [55] and coworkers showed the benefit of a brief trauma/grief-focused therapy for adolescents following an earthquake. The intervention included construction of the trauma narrative with clarifications of distortions and misattributions, identification of and tolerance training for trauma reminders, identification of post-disaster stresses and adversities and guidance on how to cope with these, involvement in positive reminiscing about the deceased person, and reengagement in activities that promoted developmental progression. Four 90-min group sessions and two 1-h individual sessions (on average) were used over a 3-week period 1.5 years post-disaster and measured again 5 years post-disaster. PTS symptoms in treated participants improved three times that of untreated participants. Regarding depression, treated participants tended to improve, while untreated participants worsened significantly. Unfortunately, grief symptoms were not measured.

Layne [56] and coworkers developed a school-based trauma/grief group psychotherapy program used for war-exposed Bosnian adolescents. The program had a focus on traumatic experiences, trauma and loss reminders, postwar adversities, bereavement, and the interplay of trauma and grief. Though the evaluation yielded promising results on different self-report measures including PTS and grief symptoms, the study lacked a control group.

Wolmer, Laor, Dedeoglu, Siev, and Yasgan [57] showed that a teacher-mediated intervention using eight 2-h meetings following a devastating earthquake in Turkey led to a significant immediate symptom decrease that continued over 3 years (trauma, grief, and dissociation symptoms). In addition, the program improved academic performance as well as social and behavioral adaptation over the 3 years. It should be noted that in their first report on this intervention, grief reactions increased [58]. In this intervention, they first used a modified debriefing protocol for the teachers to facilitate processing and restructuring of their own traumatic experiences, normalizing their responses and enabling trauma-related effects, including grief, to be expressed and worked through. They then helped teachers to redefine their role as "educators" and "leaders" before the teachers led an introductory meeting with parents to engage them in the process and educate them about children's reactions. The child part of the intervention with the 2-h meetings included "restructuring traumatic experiences; dealing with intrusive thoughts; establishing a safe place; learning about the earthquake; mourning the ruined city; controlling body sensations; confronting posttraumatic dreams; understanding reactions in the family; coping with loss, anger, guilt, and death; extracting life lessons; and planning for the future" [58], p. 373. Later, the same developers adapted the intervention to war situations with similar positive results [59].

The Grief and Trauma Intervention (GTI) for Children [47, 51, 60–63] incorporates cognitive behavior therapy (CBT) and narrative therapy approaches. It consists of ten 1-h sessions where children learn about grief and trauma reactions, express thoughts and feelings about what happened to build a coherent narrative, and work to reduce traumatic stress

symptoms. An individual "pullout" session is included to secure meeting each child's unique needs. At least one parent meeting is included in the program. Flexibility in timing and place is allowed due to the constraints of the post-disaster environment. Children included in both individual and group GTI show a significant decrease in grief and other measures of distress [51] and treatment results were replicated 3 years post-disaster [62], but studies lack a no-treatment control group.

Other approaches have adapted the TF-CBT approaches [46, 49] to the grief area with good results for groups such as orphaned children in Tanzania following the AIDS epidemic [64•]. In this study, O'Donnell and coworkers demonstrated that lay counselors in Tanzania could effectively implement an adapted TF-CBT child traumatic grief protocol for orphaned children ($n=64$), resulting in significant decreases in child-reported grief symptoms, and child- and parent-reported child posttraumatic stress symptoms, with positive outcomes maintained at 3 and 12 months.

A manualized written disclosure protocol for children who have experienced disasters [65] has shown promise for bereaved children [66]. Based on James Pennebaker's work (cf [67]) documenting that writing about an emotional experience can have beneficial health effects, supplemented by input from a structured writing program [68], this manual was developed for use with groups of adolescents. The adolescents meet twice a day for three consecutive days. Each writing lasts for only 15 min (a total of 90 min of writing). From writing in a more unstructured way, their writing becomes more structured as sessions progress. The manual was used in Iran with bereaved Afghani adolescent refugees. In a randomized control study [66], those who received the writing intervention showed significantly less grief symptoms on the Traumatic Grief Inventory for Children than those in the wait-list control condition. If positive results are replicated in other studies, this program is easy to administer in schools, is of very short duration, and can reach many children at a low cost, all aspects of value in mass trauma situations where many children have lost a close person. However, Unterhitzenberger and Rosner [69], using Pennebaker's writing method for Rwandan adolescent orphans, failed to find the same positive results. This may be due to the use of a different, more unstructured writing method and the fact that children were between 1 and 4 years of age when the loss occurred. Only more rigorous research will show if writing methods can be of substantive help following mass trauma.

Among the programs developed to assist grieving children and their families following non-mass trauma parental deaths, The Family Bereavement Program (FBP) initiated by Irwin N. Sandler has demonstrated to be effective for children. FBP targets the putative mediators of parental demoralization, negative life events, parental warmth, and stable positive events in the family [70•, 71, 72] in separate, concurrent groups in 2-h

sessions once per week for 12 weeks. Though the results of this intervention are modest, it could be adapted for mass trauma, especially if strategies taken from trauma-focused programs are incorporated.

In sum, there are different school-based interventions that can be implemented by teachers as well as more formal therapies where locally trained personnel are available for children exposed to mass trauma. Group approaches may be the "treatment" of choice, as children within group interventions can build on feelings of belonging together and having faced the same situation. However, sessions where the individual child can process aspects of their own loss may need to be added when resources are available. Importantly, we must always underpin and support what is most important for children: their context of caring resources.

Conclusion

A child who loses a family member amid a mass trauma may simultaneously experience a multitude of stressors that makes it difficult to untangle the causes of short- and long-term reactions. Mass trauma leads to a variety of post-loss changes in the child's proximate and distal environment; children may be precluded from ordinary rituals following a death, and they can have their bereavement reactions complicated by adults having problems in communicating about what happened. This complex situation calls for interventions that are multimodal and address both the trauma and grief, interventions that help re-establish or strengthen parent/caregiver capacity for good caring, and interventions that secure continuity in their ordinary life. The focus on parental or caregiver capacity is especially important when we consider small children. Mass trauma demands interventions on many levels, including political and societal steps to secure a caring environment amidst chaos and change.

While grief is gradually receiving more focus in interventions, it is necessary to continue to explore the construct of grief and learn about different types of complicated grief that may follow in response to mass trauma. Better understanding makes for better interventions. Although much emphasis is placed on the "consumer" perspective in follow-up to trauma and disasters, children themselves are often not heard. To further this area, we must be able to listen to children and to individualize our approaches. With advancing age, children's voices should be heard regarding what we do to help, how we do this, and at what time we do it. In mass trauma situations, especially in societies where the social fabric is violated, this is a great challenge.

We may hope that the newly proposed criteria for a grief disorder will usher in a new wave of grief research on developmental variations and bereavement in the context of different types of mass-trauma-events within an ecological context.

Compliance with Ethics Guidelines

Conflict of Interest   Pål Kristensen and Kari Dyregrov declare that they have no conflict of interest.

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•• Of major importance

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