Preparing for the COVID-19 paediatric mental health crisis: A focus on youth reactions to caretaker death

Clinical Child Psychology and Psychiatry 2022, Vol. 27(1) 228–237 © The Author(s) 2021 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/13591045211061802 journals.sagepub.com/home/ccp

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Abstract

To promote clinician preparedness for working with children and adolescents who lost or will lose a parent or caretaker to COVID-19, findings from a review of the literature concerning youth reactions to parent and caretaker death and incapacitation were integrated with recent and emergent data concerning the COVID-19 pandemic. Children and adolescents who lose a parent or caretaker are at an increased risk of anxiety and depressive reactions and disorders, externalizing and health-risk behaviours, and substance use disorders. Particular aspects of the COVID-19 pandemic may influence these presentations and the risk of complicated grief. Youth with prior histories of adverse childhood experiences as well as boys and young men may require special considerations in formulation and planning. Tailored paediatric care based on the evidence advances accurate formulations and effective interventions for children and adolescents who suffer such a loss.

Keywords

COVID-19, bereavement, parental death, youth, men's mental health

Introduction

Though paediatric emergency department visits for mental health emergencies declined in the early stages of the COVID-19 pandemic, they have subsequently steadily risen (Davico et al., 2021; Leeb et al., 2020; Ougrin et al., 2021). Paediatricians may increasingly find a pressing need to expand their attention from the general medical risks and manifestations of COVID-19 in youth to the pandemic's mental health complications, while child mental health specialists may find increasing clinical importance to focus on youth reactions to the aftermath of COVID-19. Much has been discussed by mental health providers concerning maintaining access to services via new

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applications of telehealth technologies (Chen et al., 2020), but less attention has been focused on characterizing the new mental health problems created by the pandemic, particularly within children and adolescents. Although the pandemic has had both positive and negative effects on different aspects of youth mental health, multiple studies have found evidence of an overall worsening of anxiety, mood and post-traumatic stress symptoms in children and adolescents across various settings during the pandemic, attributed to isolation, strained family finances, inter-family discord, increased screen time and loss of the structured and supportive environment of schools (Cost et al., 2021; Ford et al., 2021; Marques de Miranda et al., 2020). Models for understanding the impact of the COVID-19 pandemic on child and adolescent mental health are needed.

One specific area of importance is child and adolescent bereavement. As youth are generally medically resilient to COVID-19 (Cavallo et al., 2020), the most severe medical complications of COVID-19 on a family may be on parents and older relatives, who may become disabled or die from COVID-19 infection. In an American sample, almost one in ten (7.8%) COVID-19 deaths leaves a child or adolescent aged 0 to 17 parentally bereaved (Kidman et al., 2021). Worldwide, a recent modelling study estimated that over a million youth have lost a primary caregiver (Hillis et al., 2021). These harsh findings may carry significant mental health burdens: under preCOVID-19 pandemic conditions, studies estimated that one child in five is likely to develop a psychiatric disorder following the death of a parent (Dowdney, 2000). However, youth who lose a parent due to COVID-19 face additional risks for complicated grief, including suboptimal social support due to virtual schooling and restrictions on social gatherings, the ongoing threat that other family members could die of the same virus and guilt that they might have played a role in spreading the virus to their deceased parent. Rates of psychological impairment may be higher in our current era, and developmentally tailored discussions with children following the death of a parent or caretaker due to COVID-19 are warranted (Rapa et al., 2020).

As the overwhelming mental health needs wrought by the pandemic upon limited mental health resources may lead to more youth receiving mental health services through non-mental health specialists, there is a need to highlight the presentations and needs of children and adolescents who may not present with characteristic patterns of bereavement. This may help to increase their recognition, referral and management by available health professionals. For example, children with higher levels of adverse childhood experiences (ACEs) and those with lower neighbourhood support, such as those from inner-city environs where the effects of COVID-19 may be most pronounced, are known to present with higher levels of externalizing disorders (Khanijahani & Sualp, 2021). Because bereavement following parental death is associated with an increased rate of psychiatric problems in the first 2 years following a parent's death (Cerel et al., 2006), many of these youth may present their problems as externalizing disorders such as oppositionality, defiance and antisocial conduct. Despite the well-established history of understanding these types of presentations as manifestations of deprivation and emotional disturbance (Winnicott, 2016), the negative feelings in the healthcare provider that these youth's behaviours can evoke may lead to the misrecognition of needs for specialist support.

Similarly, boys and young men may be at an increased risk of such failure to correctly identify externalizing problems as the products of bereavement. A men's mental health perspective in child and adolescent populations (Rice et al., 2015, 2018) stresses the importance of male-specific considerations in formulation and care delivery. Gender affects a child or adolescent's means of responding to death (Shulla & Toomey, 2018). Boys and young men may present with symptoms and behaviours following adversity that do not fit traditional conceptualizations of grief, bereavement and post-traumatic reactions: Following adversity, externalizing symptoms are common in boys and young men (Rice et al., 2015). Because these presentations can evoke strong reactions in

families as well as providers, the traumatic aetiology of these behaviours can be overshadowed, and tailored treatment planning can be complicated. Boys and young men may miss opportunities for optimal care, potentially with severe and long-lasting complications: For example, in one population-based matched cohort study with a 40-year follow-up, the death of a parent raised the risk of suicide (IRR = 1.67, 95% CI = 1.49-2.09), and at 25-year follow-up, males experienced double the absolute risk of suicide relative to girls (Guldin et al., 2015).

To advance this goal, this narrative review highlights the potential manifestations in children and adolescents of grief and bereavement through specific attention to boys and young men to equip the clinician to optimally formulate and respond to youths' needs.

Method

A review of the literature was initiated on September 19, 2020, and concluded on July 8th, 2021. The review surveyed the pre-existing literature concerning youth reactions to parent or caretaker death and integrated emergent data concerning COVID-19. The search strategy included appropriate controlled vocabulary and keywords for (1) youth, (2) COVID-19, (3) bereavement, (4) parent loss and (5) male and female sex and gender. Manuscripts known to be relevant to child and adolescent development and men's mental health were also reviewed. While we await forthcoming anticipated studies on the specific circumstances of COVID-19, existing data guided an understanding of currently available preliminary observations and recommendations for interventions.

Anxiety and depressive reactions and disorders

Children and adolescents are at an elevated risk of psychiatric disorders following the death of a parent or caregiver, particularly depressive disorders, including major depressive disorder (MDD) and post-traumatic stress disorder (PTSD) (Melhem et al., 2008). Prior studies have suggested that younger children more frequently experience PTSD and anxious symptoms, while adolescents more commonly exhibit predominantly depressive symptoms (Geronazzo-Alman et al., 2019; Melhem & Brent, 2019). Grief reactions may be more severe in children in relation to adolescents (Pham et al., 2018).

The addition of persistent complex bereavement disorder (PCBD) in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013) and of prolonged grief disorder (PGD) in the ICD-11 (World Health Organization, 2018) highlight the distinct nature of depressive and anxiety symptoms in complicated bereavement. Problems include a persistent preoccupation with the deceased, difficulty accepting the death, experiencing a loss of part of one's self, numbness and an inability to experience any positive mood. In children, both disorders are associated with PTSD and depressive symptoms (Boelen et al., 2019).

Distinguishing between normal and pathological bereavement in children and adolescents requires a sensitive and developmentally informed approach. The grieving process is often nonlinear and marked by periods of regression (Revet et al., 2020). Coping with loss may complicate traversing the phases of normative socioemotional development (Gill, 1987) and produce reactions unique to the developmental stage at which the loss is suffered and capability to appreciate the permanence of death (Barba & Miller, 1971). Common reactions include denial of the loss; identification with the deceased parent; the assumption of symptoms associated with the death, reunion and restitution fantasies; the development of hostile feelings towards the surviving parent and related guilt; and attempts at reliving and mastering the loss through hobbies, interests and later career choice.

Several factors can help to identify youth at highest risk for grief that transforms into mental health problems. For example, the closer the child's relationship to the deceased, the higher the risk

of depression (Melhem et al., 2008). Youth with pre-existing depression are more likely to experience prolonged grief reactions following the sudden death of a parent (Melhem, 2011), justifying a special focus on this youth group for potential complications. Importantly, in consideration of the context of the COVID-19 pandemic, lower depressive symptomology in the surviving parent associates with better outcomes (Cerel et al., 2006). As the COVID-19 pandemic increased the rates of depression and other disorders across the globe (Clemente-Suárez et al., 2021), the risk of depression in the surviving parent wrought through the effects of the pandemic may be higher.

Bereaved youth often struggle academically and socially. Bereaved children are significantly more withdrawn and prone to attention and thinking difficulties in the classroom (Dowdney, 2000). Overall youth attainment of appropriate competencies, such as peer relations, educational aspirations and future and occupational aspirations, decreases as a product of bereavement (Brent et al., 2012), a fact which may be particularly damaging for youth during COVID-19 as the virtual setting of school places greater demands on students' attention and executive function capacities.

Bereaved children may require additional support in the home, yet after parental death as well as during the COVID-19 pandemic, these resources may be strained: children and adolescents may also suffer the loss of the surviving parent's full availability owing to the surviving parents' own reactions to the death of their spouse or partner. High levels of informal social support are protective against depression following the death of a parent (Gray, 1987), a fact which also suggests problems in the age of COVID-19 when social distancing and societal lockdowns may deprive the bereaved youth from access to a larger supportive community.

While it can be difficult to distinguish normal and disordered bereavement in children following the death of a parent (Furman, 1986), grief symptoms are independently associated with functional impairment, even after controlling for depressive and PTSD symptoms (Geronazzo-Alman et al., 2019). This suggests that any child with grief symptoms may benefit from referral to counselling and additional care.

Externalizing and health-risk behaviours: Considerations for boys and young men

Oppositionality. In addition to anxiety and depressive reactions, externalizing and health-risk behaviours may also manifest as products of youth reactions to parental loss. Externalizing behaviours include oppositionality, aggression and behavioural outbursts; if behaviours meet threshold severity and persist over 6 months, they constitute a diagnosis of oppositional defiant disorder (ODD). Children with PTSD often present with such behaviours, with ODD comorbidity estimated to be as high as 75% (Scheeringa et al., 2003). Because externalizing behaviours are often more visible than the highly varied symptoms of PTSD, children with externalizing reactions to the death of a parent or caregiver may not always receive responses from adults that recognize the traumatic nature of their grief experience

Amongst grieving adolescents, females report higher levels of internalized grief responses and higher levels of traditional PTSD symptoms than their male counterparts, potentially positioning providers to experience greater difficulty with accurate identification of grief among male youth where expressions of distress may not match traditional conceptions of grief (Shulla & Toomey, 2018). Bereaved male adolescents show higher rates of overall psychological disturbance and display more aggressive and delinquent behaviours relative to female adolescents (Dowdney, 2000). Male youth depression often manifests through irritability and externalizing behaviours, including oppositional behaviour such as aggression, delinquency and impulsivity (Dowdney, 2000), which can lead to health-risk behaviours such as driving without a seatbelt, unprotected sex, substance abuse and others.

Conduct problems and delinquency

While oppositional and physically aggressive boys may grow out of potentially problematic behaviours, some young men continue to struggle to regulate physically aggressive impulses, leading to delinquency in later life (Nagin & Tremblay, 1999). Some youth react to parent or caregiver loss with increased risk taking, such as not wearing seatbelts, reckless driving, risky sexual behaviour, weapon carrying, alcohol and other substance use, and fighting (Hamdan, 2012). In particular, oppositional and physically aggressive boys tend to demonstrate more persistent patterns of conduct disorder than girls (Hamdan, 2012; Nagin & Tremblay, 1999). Failure to provide tailored interventions, such as cognitive therapies targeting hostile attribution biases and family-based behavioural therapies, can have long-lasting implications (Blair et al., 2014). Without early intervention, these difficulties can reinforce a persistent pattern of maladaptive responding and influence later psychological adjustment.

Substance use

Some youth turn to substance use in the wake of a parent or caregiver loss (Hamdan et al., 2013). Boys, older adolescents (over 13 at time of parental death) and youth with a history of externalizing disorders are at increased risk of alcohol and other substance abuse or dependence after parental death (Hamdan et al., 2013). Recent data show that adolescents engage in greater substance abuse during the COVID-19 pandemic, and male adolescents relative to females engage in solitary drinking to a greater degree (Dumas et al., 2020). While substance use can adversely affect the brain at any age, children and adolescents are at heightened risk because of both the typical pattern of heavy, episodic substance use (Deas et al., 2000) and the vulnerability of the developing brain (Squeglia et al., 2014).

Summary and therapeutic recommendations

Children and adolescents who lose a parent or caregiver to COVID-19 may constitute a unique group of youth vulnerable to mental health problems. Boys and young men may express grief differently from mainstream conceptions of grieving. Further research is indicated to better characterize this group. For example, the manner of parent death impacts the grief reactions of children, with prolonged death from illness engendering greater maladaptive grief and post-traumatic stress symptoms compared to sudden natural deaths (Kaplow et al., 2014), and youth bereaved by COVID-19 parent or caretaker incapacitation or death may present a unique group. In addition to the specifics of the time course of death, the context of surrounding societal changes and limitations of contact with surviving extended family or community supports may predispose these children to be at unique risk.

Past studies suggest that supportive interventions after a parent or caretaker dies help prevent children from developing traumatic grief and improve emotional well-being (Bergman et al., 2017). Interventions vary between those targeted directly at the bereaved child in the form of support groups or camp activities, or at both the child and their remaining caregiver in the form of family therapy. The experience of grieving may be influenced by gender-based coping responses expected of children and adolescents by others, and family members may enact traditional gender roles to cover up emotional discomfort after a significant loss and uncertainty (Williams et al., 2020). This may be particularly important after the loss of a mother to young men. Some children may avoid discussing their problems or showing their feelings in order to protect the remaining parent or

caregiver. A review identified key aspects of psychosocial interventions for children with a critically ill parent as providing age-appropriate information; supporting children in communicating with their parents, family members and professionals; and providing an environment for children to feel comfortable sharing both positive and negative emotions (Ellis et al., 2017). Evaluations of supportive interventions show that support for the children's caregiver strengthen their perceived ability to support their children; furthermore, targeted sessions are sometimes the first occasion that the caregiver and child have to talk about the loss and their feelings (Bergman et al., 2017).

COVID-19 will become a formative experience for many children and adolescents. What is important is that we help youth with losses to process grief and learn to handle difficult experiences and emotions in a healthy way. Paediatricians are often the first health professionals to encounter youth with bereavement difficulties and recognize youth in need of referral to specialists, while behavioural health clinicians of all disciplines must be equipped to assess and plan effective supports for these children and adolescents. While we await further studies to better understand this cohort and means of providing care, we make the following observations and recommendations:

- Familiarity with the varied presentations of youth grief, which may include predominantly
 anxiety in children and depression in adolescents, may increase identification of disorders such
 as PTSD and MDD and facilitate early intervention.
- Youth with pre-existing mental health problems, and in particular those with depression, may
 be at heightened risk for complicated bereavement and warrant careful assessment and close
 follow-up.
- Externalizing and risky behaviours may be exacerbated by parental loss and should garner trauma-informed therapeutic responses and attention with referral to specialists as needed. This may be particularly relevant among youth with higher pre-existing rates of adverse childhood experiences as well as within male children and adolescents.
- Substance use is heightened amongst adolescents during the COVID-19 pandemic, and adolescents who lose a parent may be at particular risk of problematic use.
- Awareness of bereavement-related mental health issues must be increased to change avoidant
 behaviours and discomfort discussing death and loss among providers and family members.
 Depending on their sociocultural conditions, male youth may also be influenced by engendered expectations of emotional detachment and silence to deflect discomfort and sadness,
 and this group should be targeted for support.

Conclusion

Children and adolescents who lose a parent or caretaker to COVID-19 are at risk of a variety of mental health problems. Pre-existing evidence suggests that anxiety and depressive reactions and disorders, externalizing and health-risk behaviours, and substance use disorders may be common outcomes of grief. While recommendations are made based on our current understanding of COVID-19, further studies on this unique cohort will further advance our knowledge and guide the construction of effective interventions for support.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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