Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
In their own words: Child and adolescent perceptions of caregiver stress during early COVID-19

Yuan He a,b,c,*, Robin Ortiz a,b,c, Rachel Kishton a,c,e, Joanne Wood a,b,c, Michelle Fingerman d, Larel Jacobs d, Laura Sinko a,c,f

a University of Pennsylvania Perelman School of Medicine, National Clinician Scholars Program, United States of America
b The Children’s Hospital of Philadelphia, PolicyLab and Department of Pediatrics, United States of America
c Leonard Davis Institute of Health Economics, University of Pennsylvania, United States of America
d Childhelp National Child Abuse Hotline, United States of America
e University of Pennsylvania Perelman School of Medicine, Department of Family Medicine and Community Health, United States of America
f Temple University College of Public Health, Department of Nursing, United States of America

ARTICLE INFO

Keywords: Child maltreatment
COVID-19
Pandemic
Parenting
Stress

ABSTRACT

Background: The coronavirus disease 2019 (COVID-19) pandemic has exacerbated multiple stressors for caregivers of children in the United States, raising concern for increased family conflict, harsh parenting, and child maltreatment. Little is known regarding children's perceptions and experiences of caregiver stress during the COVID-19 pandemic.

Objective: To examine how children and adolescents identify and experience caregiver stress during the early COVID-19 pandemic.

Methods: We analyzed 105 de-identified helpline text and online chat transcripts from children under age 18 who submitted inquiries to the Childhelp National Child Abuse Hotline from March to June of 2020, with COVID-19 as a presenting issue. Inductive, thematic analysis was used to identify how child helpline users: 1) perceived and experienced drivers of caregiver stress and 2) used words to describe manifestations of caregiver stress during the COVID-19 pandemic.

Results: Children experienced multiple drivers of caregiver stress during COVID-19, including intrapersonal (e.g. caregiver health concerns), interpersonal (e.g. parental discord, perceived dislike of child), and extrapersonal (e.g. financial insecurity, sheltering in place) stressors. Regardless of the driver, caregivers' stress was internalized by children. “Anger,” “control,” and “blame” were most commonly used to label manifestations of caregiver stress, which were often externalizing behaviors, including yelling, name calling, and blaming of others.

Conclusion: In text and online chat inquiries to a national child helpline during the COVID-19 pandemic, children described multiple drivers of caregiver stress, often feeling as though they were to blame. Providers serving children should address household stress spillover effects by including caregivers and directly acknowledging children's concerns using their own words.

1. Background

As a result of the COVID-19 pandemic, families face increased financial strain and decreased support, especially as business closures

* Corresponding author at: 423 Guardian Drive, Blockley Hall, Philadelphia, PA 19104, United States of America.
E-mail address: yuan.he@pennmedicine.upenn.edu (Y. He).

https://doi.org/10.1016/j.chiabu.2021.105452
Received 19 April 2021; Received in revised form 26 November 2021; Accepted 15 December 2021
Available online 22 December 2021
0145-2134/© 2021 Elsevier Ltd. All rights reserved.
threaten job security, stay-at-home orders limit social activity and connection, and school closures place an increased childcare and education burden on parents. In particular, family physical and mental health concerns, homeschooling challenges, economic stress, marital conflicts, and intensified parent-child relationships uniquely impact those serving in caregiver roles during COVID-19 (Kerr et al., 2021; Wu & Xu, 2020). In addition, disruptions to work and learning and changes to social and daily personal care routines are heightened for caregivers (Park et al., 2020; Russell et al., 2020), which can lead to increased caregiver stress and spillover effects to others in the family, particularly children (Curtis et al., 2000; Nelson et al., 2009; Saddighi et al., 2021; Wood et al., 2016).

Family stress theory (e.g. Wu & Xu, 2020) provides one framework to understand how parental stress can impact children within the home during the COVID-19 pandemic. During times of crisis, particularly when resources are limited, caregiver emotional states can manifest into negative behavioral patterns, often impacting caregivers’ effectiveness and patience with those for whom they are caring. This can not only impact family dynamics and child and caregiver well-being (Brown et al., 2020; Patrick et al., 2020), but can also result in a greater risk of child maltreatment (Lawson et al., 2020; Wood et al., 2016; Wu & Xu, 2020). Particularly during periods of school closures associated with health emergencies, as well as times of economic hardship and uncertainty, children are at high risk for experiencing both abuse and neglect (Conrad-Hiebner & Byram, 2020; Gostin et al., 2014; Schneider et al., 2017; Wood et al., 2016). At the same time, school and child care center closures have led to decreased contact with teachers, childcare professionals, and other mandatory reporters (Rapoport et al., 2021), groups of people who are legally required to report instances of suspected child maltreatment (Child Welfare Information Gateway, n.d.). While there is concern for under detection of child maltreatment cases (Baron et al., 2020; Humphreys et al., 2020; Rapoport et al., 2021), data is mixed regarding the incidence of presentations and hospitalizations for child abuse. Some studies reported more severe cases of abusive injuries (Sidpra et al., 2020) and/or increased hospitalizations (Swedo et al., 2020), while others demonstrated decreases in hospitalizations for abusive head trauma (Maassel et al., 2021) and in hospital encounters for physical abuse (Kaiser et al., 2020).

Previous studies have illustrated the complex impacts of caregiver distress and shared traumatic exposure on children's psychosocial functioning, with evidence that increased caregiver distress following disaster predicts greater child stress (Kerns et al., 2014; Morris et al., 2019) and risk of child maltreatment (Curtis et al., 2000; Lawson et al., 2020; Saddighi et al., 2021). In particular, many recent studies have highlighted the psychological effects of COVID-19 on children (Babore et al., 2021; Bhogal et al., 2021; Jiao et al., 2020; Korte et al., 2021; Kudinova et al., 2021), with important insights on the relationship linking children's well-being with that of their caregivers (Babore et al., 2021; Bate et al., 2021; Kerr et al., 2021; Uccella et al., 2021). Surveys of caregivers have reported an increase in harsh parenting including yelling and spanking during the pandemic (Lee & Ward, 2020). However, findings have been limited to caregivers' reports and descriptions of children's distress, rather than children's own experiences of caregiver stress. Therefore, there is a gap in understanding how children perceive, experience, and describe caregiver stress associated with COVID-19, particularly during times of family crisis and conflict.

Child helplines can serve as critical windows into the home, helping to make child distress and maltreatment more “visible” during a time when educational personnel, daycare providers, and physicians have limited contact with at-risk children. In particular, texts and online chats (hereafter referred to as “chats”), which are accessible to school-age children and provide more privacy than traditional calls, are an important mechanism by which children can sound the alarm and reach out for help. Transcripts from child helpline texts and chats provide a unique opportunity to understand how children and adolescents experience and describe caregiver stress, particularly during this acute period of heightened stress during the COVID-19 pandemic. This qualitative study uses text and chat transcripts from a national child helpline to examine how youth (i.e. children and adolescents) perceive, experience, and describe caregiver stress, including both drivers and manifestations of caregiver stress. Findings can help elucidate the impacts of COVID-19 on families, particularly facilitators and barriers to fostering resilience during a stressful time, and may inform interventions for clinicians and policymakers to better support the needs of youth and their caregivers in this time of crisis.

2. Methods

2.1. Data source

The Childhelp National Child Abuse Hotline is a program of Childhelp, a non-profit organization dedicated to supporting the needs of abused, neglected, and at-risk children and adolescents of all ages. The helpline is staffed 24 h a day, 7 days a week with professional crisis counselors who provide crisis intervention, information, and referrals to emergency, social services, and support resources by confidential phone calls, text conversations, and online chats (Childhelp National Child Abuse Hotline, 2020; Ortiz et al., 2021). The helpline serves children and families from all over the United States and provides assistance through interpreters in 170 different languages. Helpline users are asked to provide optional demographic information prior to connection with a counselor. Following the conversation, counselors are asked to complete a survey to describe the interaction and user, including the primary presenting concern (s). Helpline counselors can select from 50 different presenting concerns, and can apply as many as they feel are relevant to each transcript. Presenting concerns range from emotional, physical, and sexual abuse to child protective service (CPS) issues and parent-teen conflict. In March 2020, the helpline also added “COVID-19” as a presenting issue. Defined as “providing support, resources, and educational information to help seekers experiencing fear, worry, stress, or other questions related to COVID-19,” the helpline team was trained to select “COVID-19” as a presenting issue when it was mentioned by a helpline user. This included mention of COVID-19 in relation to social and/or emotional issues and/or circumstances related to the impact of restrictions (e.g. childcare issues, not having support because of school closures, limited access to services, housing issues, financial issues, etc.).

For this study, text and online chat transcripts from Childhelp were included if they originated from children and adolescents who were 18 years of age or younger during the time period of March 1 and June 1, 2020, and included COVID-19 as one of their presenting
concerns (Childhelp Acceptance of Terms and Conditions, 2020; Childhelp Safety & Confidentiality User Agreement, 2020). Phone conversations are neither recorded nor transcribed and were therefore excluded from this analysis. The study was submitted for review by the University of Pennsylvania Institutional Review Board and was deemed exempt, given the use of de-identified data.

2.2. Analysis

An inductive, thematic analytic approach was used to identify content themes. This approach was used to ensure that themes were data-driven (Braun & Clarke, 2006), given the unprecedented pandemic situation and lack of theory surrounding it, with minimal influence from the preconceived notions of the researchers.

The study team developed codes by having the first and senior author independently read each transcript line-by-line, then meeting to develop consensus definitions for each code. Next, in order to verify coding accuracy, an additional team member (author initials removed for blinded review) independently coded a randomly selected 10% of the transcripts. Reconciliation meetings (n = 2) were then held and mediated by the senior author to discuss and clarify coding discrepancies. Code definitions were revised and refined as needed until team consensus was reached. Once a consensus was reached, the first and senior author re-coded the transcripts using the revised coding definitions. Coded transcript sections representing the research questions were reviewed by the study team to identify key themes. Direct quotations were selected to illustrate the key themes. Code definitions and representative quotes are represented in Tables 2 and 3.

The study team that conducted the analysis of these data consisted of three physicians, one with training in family medicine and psychiatry and the others with training in pediatrics. The senior author, who guided the study team throughout this process, is a PhD prepared nurse with a background in child and adolescent psychiatry and forensic nursing has conducted and supervised numerous analyses of narrative data. Interest in this analysis was driven by shared interests in childhood trauma, family conflict, and mental health, as well as concerns regarding the COVID-19 pandemic’s impact on these things within the home. The team used self-reflection to maintain awareness of biases they may have had looking at these data through a clinical lens, and thematic categories were reviewed with the Childhelp team for verification of accuracy. The team also maintained analytic, theoretical, and personal memos in a journal, to audit their process and provide a place for reflexivity (Levitt et al., 2018).

3. Results

3.1. Sample characteristics

In the study period of March through June of 2020, 146 text and chat transcripts from Childhelp were extracted. Of these, 105 met inclusion criteria based on age 18 years or younger and COVID-19 as one of the presenting issues. Forty-one transcripts were excluded. Participants included children and adolescents from 10 to 18 years old, with a mean age of 15.1 years (SD 1.8 years). Transcripts consisted primarily of chats (n = 78, 74%), with a minority (n = 27, 26%) of texts. Conversations lasted an average length of 51.7 min (SD 24.1 min). Inquiries came from across all regions of the United States. Aside from COVID-19, the most common presenting concerns labeled by helpline counselors were emotional abuse, parent-teen conflict, physical abuse, CPS issues, and mental health issues. Detailed sample characteristics are provided in Table 1.

| Table 1 |
| Sample characteristics. |
| --- |
| **Mean [SD]** | **Range** |
| **Age (years)** | 15.1 [1.8] | 10-18 |
| **Length of Communication (minutes)** | 51.7 [24.1] | 14-135 |
| **Communication type** | Chat | 78 |
| | Text | 27 |
| **Gender** | Female | 66 |
| | Male | 26 |
| | Non-binary | 7 |
| | Transgender male | 2 |
| | Intersex | 1 |
| | Other | 2 |
| **Region** | Midwest | 14 |
| | Northeast | 11 |
| | South | 16 |
| | West | 17 |
| **Common presenting concerns** | Abuse-Emotional | 73 |
| | Abuse-Physical | 45 |
| | Mental Health Issues | 25 |
| | Parent-Teen Conflict | 51 |
| | CPS Related | 39 |

---

a Percentages do not add up to 100, as not all users indicated gender or region.
b Note that categories are not mutually exclusive. All (100%) transcripts included COVID-19 as a presenting concern, given inclusion criteria.
Fig. 1. Drivers of caregiver stress as perceived and experienced by children.
3.2. Perceived drivers of caregiver stress

The children and adolescents in our sample experienced multiple drivers of caregiver stress during COVID-19, categorized here in terms of extrapersonal stressors that describe drivers of stress external to the family unit; interpersonal stressors deriving from family relationships and conflict; and intrapersonal stressors deriving from caregivers’ behavior, health, or other characteristics. Fig. 1 depicts how codes were abstracted into themes, and Table 2 elaborates on code definitions with representative quotes.

3.2.1. Extrapersonal stressors

Several sources of caregiver stress deriving from outside the family unit were identified and described by children during the early COVID-19 pandemic. Two prominent themes were financial insecurity, including recent unemployment, and COVID-19-related stress, particularly related to “sheltering-in-place,” official orders that direct individuals to stay indoors unless necessary (“Shelter in Place,” 2021), and increased time together in the home.

3.2.1.1. Financial insecurity. Financial insecurity emerged as a prominent perceived driver of caregiver stress, with multiple youth (n = 16, 15.2%) describing different ways that financial pressures impacted them and/or led to increased conflict. For instance, a 16-year-old described, “Today, after taking my phone away two days ago, she threatened to sell it because I was ‘working too slow,’ claiming she could use the money from it” (Participant 251). Others (n = 3, 2.9%) described how caregiver unemployment exacerbated tensions at home. A 16-year-old described his concern that his family might have difficulty affording and accessing counseling services: “Money is tight however and I don’t know if that [counseling] service is expensive…[my mom] doesn’t have a job right now so we’re stuck at home” (Participant 554).

Table 2

| Code | Definition | Example |
|------|------------|---------|
| Perceived drivers of caregiver stress that are external of the family unit | Financial insecurity | Any reference to a family’s difficulty paying for a service, material goods, or not having enough money driving stress | “They say I’m a disappointment…I’m the problem why they don’t have enough money every week” 13-year-old, Participant 948 |
| | Unemployment | Any reference to a caregiver’s unemployment as driver of stress | “My mom hasn’t been working because of the [pandemic] and she seems to be getting bored and taking it out on me” 17-year-old, Participant 506 |
| | COVID-19-related sheltering in place | Any reference to lockdown, quarantine, or sheltering in place as a driver of caregiver stress or increased violence | “Due to the current situation of the world, we have been stuck together…the past few weeks have been the worst [my father]’s ever been” 14-year-old, Participant 620 |
| Perceived drivers of caregiver stress that derive from relationships within the family unit (e.g. between caregivers, or between the caregiver and child) | Conflict between/ among caregivers | Any reference to caregivers fighting or in disagreement as a driver of stress | “My parents always argue with each other and when I try to speak to them it’s always the wrong time and sometimes they even lash out on me.” 16-year-old, Participant 593 |
| | Intimate partner violence | Any reference to intimate partner or domestic violence among caregivers in the household | “My mom and dad are fighting a lot and it’s starting to scare me. My dad [threw] a pot at her yesterday and it almost hit me.” 11-year-old, Participant 992 |
| | School performance | Any reference to child’s schoolwork or performance as a contributor or driver of caregiver stress | “My mom just very recently threatened to hurt me, as in giving me a spanking for each missing assignment I have, which is a lot because I haven’t been able to do well with the online schooling” 15-year-old, Participant 806 |
| | Household chores | Any reference to household chores or tasks as a contributor or driver of caregiver stress | “She’s getting mad that I’m not going outside enough during quarantine for one, that I don’t do enough around the house for my age either” 16-year-old, Participant 554 |
| | Perceived dislike of child | Any reference to a caregiver’s specific dislike of the child, especially in relation to others | “She’s told me that she wish I would stop existing and that I bring her to her lowest point” 16-year-old, Participant 103 |
| Perceived drivers of caregiver stress that derive from caregivers’ behavior, health, or other characteristics | Caregiver physical health concerns | Any reference to a caregiver’s poor physical health contributing to stress | “My mom doesn’t wanna talk to me. My dad’s sick. It’s like everything is going down on me” 15-year-old, Participant 614 |
| | Caregiver mental health concerns | Any reference to a caregiver’s mental health concerns and conditions contributing to stress | “She’s threatened me with physical abuse and blames her actions on her mental illness” 16-year-old, Participant 103 |
| | Caregiver substance use | Any reference to a caregiver whose substance use drives stress | “He has been drinking so much to the point new full bottles of whisky or wine would be half or almost completely empty…and sometimes he’s irrational or very angry” 16-year-old, Participant 805 |
| | Caregiver’s personality characteristics | Any reference to specific personality characteristics of a caregiver that drive stress | “He’s very insecure and seems to have a lot of anxiety along with his anger issues” 15-year-old, Participant 591 |
3.2.1.2. COVID-19-related stress. Many children ($n = 31, 29.5\%$) experienced caregiver stress resulting directly from the COVID-19 pandemic and the related sheltering-in-place restrictions. One 17-year-old noted that “[my mother]’s always been this way, but she’s also under extra stress. The pandemic seems to really be toying with her head” (Participant 675). Others described increasingly frequent and/or intense arguments that sometimes led to violence. One 16-year-old described, “Ever since quarantine started…there have been more occurrences of [my dad] shouting and yelling at us at small things” (Participant 641).

3.2.2. Interpersonal stressors
Most caregiver stress perceived and experienced by youth was related to interpersonal conflict within the home. Children often described caregiver discord, including intimate partner violence, that was sometimes exacerbated by sheltering-in-place restrictions. In addition, certain expectations surrounding children’s school performance and household chores were frequent triggers for caregiver stress. Finally, a few identified perceived dislike of him/her by the caregiver as another stressor.

3.2.2.1. Conflict between caregivers. Discord between and among caregivers was commonly identified and experienced as a source of caregiver stress ($n = 35, 33.3\%$). In some circumstances, the conflict seemed to be aggravated as a result of the pandemic. One 16-year-old shared, “[My mom] isn’t only abusive to me and my brother, but she is also to my dad. It has gotten so bad now that my dad no longer is who we once knew him as. All he does is drink and smoke weed, and he now seems like a ‘lights are on but nobody’s home’ type of person” (Participant 676). It was apparent that some youth internalized the conflict between their parents, such as this 16-year-old: “I have no idea I just woke up this morning and all they were doing was arguing and what hurts the most is seeing my mom in pain” (Participant 749). One 11-year-old described being directly blamed for intimate partner violence: “The person who beat her says that it’s my fault [that] he’s beating my mom. He also said that I made her stupid” (Participant 404).

3.2.2.2. Child behavioral triggers of stress. During the study period, children were the recipients of increased harsh parenting attributed to unmet expectations related to school performance ($n = 11, 10.5\%$) and household chores ($n = 5, 4.8\%$). For instance, one 12-year-old described, “My parents beat me every time I do bad at school. Since the coronavirus things were happening I kept [forgetting] about online school… When my parents see [an email from the teacher] they get really mad and start to beat me” (Participant 387). A 16-year-old explained, “Sometimes my sister and I will talk to [my mom] about how we feel she expects too much of us and how it stresses us out… Usually, she’ll respond with something about how she works all day (she’s a doctor) and shouldn’t have to come home and do more work” (Participant 626).

3.2.2.3. Perceived dislike of child. Finally, some youth ($n = 19, 18.1\%$) described how their caregivers seemed to specifically dislike them, and how this dislike translated into caregiver stress, conflict, and even maltreatment. For instance, one 17-year-old described, “She knows that hitting me is not right, but she really just can’t control herself and it just keeps getting worse and worse, especially since she really doesn’t like me” (Participant 055). A 14-year-old said, “[My mom] tells me she hates me and wishes she only gave birth to my brothers. I feel like I wanna be 2 or 3 again when she used to like me” (Participant 127).

3.2.3. Intrapersonal stressors
Youth also identified several caregiver-specific concerns that drove caregiver stress, labeled here as intrapersonal stressors. Most prominent were caregivers’ health concerns, which included acute and chronic physical and mental illnesses as well as medication side effects, followed by specific personality traits that were identified by children to further exacerbate caregiver stress.

3.2.3.1. Caregivers’ physical health concerns. Several children and adolescents described caregiver stress that derived from or was exacerbated by caregivers’ physical health concerns ($n = 9, 8.6\%$). A few were related to medication side effects, for instance a 13-year-old who said, “Hello my mom has a cancer…and takes these pills that help the pain but make her made and she hits me and I am just scared” (Participant 565). A 17-year-old shared, “My mom had very severe brain cancer like 30 years ago so she has had tons of radiation which has messed with her thinking and she also has to take medication. The top side effects of the medication are all along the lines of aggression and aggravation. Because of this, I get that it’s not entirely her fault…” (Participant 439).

3.2.3.2. Caregivers’ mental health concerns. Caregivers’ substance use emerged as another exacerbator of caregiver stress and conflict ($n = 16, 15.2\%$), with one 15-year-old describing, “I have a mother who drinks over the top and when she does, she takes it to the extreme calling me a ‘bitch,’ threatening to drag me and beat me, gets into my face…I don’t know what to do, I feel like I wake up everyday constantly going through this with a drunk mom” (Participant 107). Others noted how their caregivers’ underlying and often untreated mental health conditions aggravated their stress, for instance this 13-year-old: “my dad has NPD [narcissistic personality disorder] and is on the [autism] spectrum but doesn’t know about it…he’s just trying his best but he is abusive and doesn’t even realize it and…I have PTSD [post-traumatic stress disorder] symptoms when I’m around him” (Participant 768).

3.2.3.3. Caregivers’ personality characteristics. Finally, children and adolescents named certain personality traits that were noted to increase the likelihood of caregiver stress, for instance insecurity ($n = 5, 4.8\%$). One 13-year-old observed that her father’s insecurity seemed to be a trigger for stress and conflict: “…if I don’t say good morning or screw the cap on the milk correctly he gets really mad for the whole day… I have to constantly lie to him so he doesn’t feel insecure” (Participant 768). A 15-year-old described how her father’s insecurity combined with anxiety and anger drove conflict with her mother, “…on many occasions even if I am with her, [my dad]
Fig. 2. Manifestations of caregiver stress as described and labeled by children.
accuses her of cheating. He’s very insecure and seems to have a lot of anxiety along with his anger issues” (Participant 591).

3.3. Manifestations of caregiver stress as described by children

Youth helpline users labeled manifestations of caregiver stress during COVID-19 using the words “anger,” “control,” and “blame,” most often describing externalizing behaviors to helpline counselors. Fig. 2 depicts how codes were abstracted into themes, and Table 3 delineates code definitions and representative quotes that illustrate how children described manifestations of caregiver stress.

3.3.1. Anger

Anger was the most commonly identified manifestation of caregiver stress (n = 50, 47.6%). Youth most often described some form of yelling or screaming, for instance a 14-year-old reported that “my dad yells a lot and is always angry…this morning he poured water on my face while I was sleeping because I [wasn't] down stairs before 6 am this morning” (Participant 707). A 14-year-old shared, “For years it’s mostly just been my mom yelling at me when she's upset. That's the worst of it. She just screams at me, I usually block it out later, but at the time it’s terrifying” (Participant 666). Others described their caregivers “blowing up” or “blowing out of proportion,” for example a 16-year-old who notes, “I tend to try my best and be a mediator… but at the same time it does not seem to affect her responses which, at the time of discussion, are usually illogical or blown extremely out of proportion” (Participant 251). Name calling was another common manifestation of caregivers’ anger. One 14-year-old described, “She is also verbally abusive as well… like for example I am African American and she is white…and she calls me the n word sometimes” (Participant 550). A 13-year-old recounted: “They say I’m a disappointment constantly, that I’m an a-hole. Also a dumb*ss, and they yell at me saying I’m the [reason that] they don’t have enough money every week. They never pay any attention to me and threaten me. Saying stuff like, if you don’t do this or that I’m going to smack you across the mouth” (Participant 948).

3.3.2. Blame

Children named and described blame as another common manifestation of caregiver stress (n = 25, 23.8%), often presented as either “blaming everything on me” or that they “can’t do anything right.” One 15-year-old described, “Everyone’s always so angry and if I couldn't do anything right before the quarantine I for sure can’t now…I get yelled at… and they go from simple things to personal attacks just to be brought back down by guilt tripping’’ (Participant 281).

3.3.3. Control

Finally, children used the word “control” to describe manifestations of caregiver stress, most frequently describing caregivers who “try to control” them or the situation (n = 17, 16.2%). For instance, one 17-year-old described, “Since my mom died, things have gotten worse for me and my sister... We’ve experienced firsthand my dad’s authoritarian, controlling nature now more than ever before”

Table 3

| Code definition and representative quotes related to manifestations of caregiver stress |
| Code | Definition | Example |
| --- | --- | --- |
| Anger as a described manifestation of caregiver stress | “Blowing up” - Any reference to a caregiver “blowing up” or “blowing out of proportion” as a manifestation of anger or stress | “She sort of blew up screaming, slamming things, breaking things... even threatened to take my cat back to the shelter” 17-year-old, Participant 765 |
| | “Yelling/Screaming” - Any reference to a caregiver yelling, screaming, or shouting as a manifestation of anger or stress | “…if we get into an argument he tells me to talk but when I do he yells at me and tells me to shut the hell up and to stop talking back” 14-year-old, Participant 707 |
| | “Calling me names” - Any reference to caregiver name calling as manifestation of anger | “There are times when they call me worthless and I am nothing... and it stays with me... they always hit me and curse out at me” 13-year-old, Participant 068 |
| Blame as a described manifestation of caregiver stress | “Blames everything on me” - Any reference to a caregiver blaming or saying child is at fault for things out of the child's control, “blames _ on me” | Counselor: When she is blaming you for things, what is she saying to you? Child: She tells me that I am the reason she has lost friends, or I am the reason that... her and my step dad got a divorce |
| | “Can’t do anything right” - Any reference to a caregiver’s blame making the child feel that they “can’t do anything right” | “I try to but I never can do anything right. There’s always something... I’m just tired. I try my best to make her happy but it never works.” 14-year-old, Participant 666 |
| Control or lack of control as a described manifestation of caregiver stress | “Tries to control things” - Any reference to a caregiver exerting control over someone else or a situation as a manifestation of stress | “My dad also likes to control things in the house. Sometimes I have issues with that, and I try to confront him about it. He gets mad and he starts doing whatever he wants.” 14-year-old, Participant 620 |
| | “Acting like a child” - Any reference to a caregiver “acting like a child” and lacking or ceding control in a situation as a manifestation of stress | Counselor: It is more about her lack of self-control and inability to control her reactions than it is about you. Child: Yeah she’s like a child sometimes to be honest |
4. Discussion

During the COVID-19 pandemic, many families are experiencing exacerbated acute and chronic stress, with important implications for children. Building on prior studies that describe increased self-reported parental stress and burnout during the pandemic (Brown et al., 2020; Griffith, 2020; Patrick et al., 2020; Russell et al., 2020), this study identified several drivers and manifestations of caregiver stress as perceived and experienced by child and adolescent helpline users during the early months of the COVID-19 pandemic. COVID-related stressors derived from extrapersonal (e.g. financial insecurity), interpersonal (e.g. conflict between caregivers) and intrapersonal sources (e.g. caregiver health concerns), many of which were also identified by caregivers describing challenges in parent-child relationships during the early pandemic (Vaterlaus et al., 2021). Notably, text and chat transcripts illustrate how children experienced their caregivers' stress in two primary ways: as containers who internalized their caregivers' stress, and/or as targets who were direct recipients of external manifestations of stress.

In addition, youth most commonly used the words “anger,” “control,” and “blame” to label manifestations of caregiver stress, which were more likely to comprise of externalizing behaviors. These findings build upon previous work that elucidated children's perceptions of parenting behaviors through questionnaires (Kenigsberg et al., 2016; Smith et al., 1999; Young et al., 2011), and provide greater insight into how children perceive and label caregiver stress, and particularly how caregivers' responses to acute and chronic stressors during the COVID-19 pandemic have immediate impacts on children in the home. Patrick and colleagues' study surveying perceptions by caregivers, taken together with our study assessing perceptions by children, both demonstrate that family stress is related to financial constraints (such as increased experience of food insecurity and loss of medical insurance coverage), interpersonal issues (related to child behavioral issues), and associated mental health concerns of parents (Patrick et al., 2020). Though prior work has demonstrated that social and economic challenges increase risk for distress as we also observe in our study (Nelson et al., 2009; Park et al., 2020; Russell et al., 2020; Wood et al., 2016; Wu & Xu, 2020), we demonstrate actual accounts of children (n = 31, 29.5%) perceiving the stress of COVID-19 as an additional, potentially independent, driver of caregiver stress. However, it remains to be elucidated whether the experienced stress from COVID-19 is truly independent of, or interdependent with, physical and social determinants of health, such as personal health and economic distress, and the stress of the pandemic.

In addition, this work provides insight into how acute and chronic stressors may translate into an increased risk of family violence and child maltreatment. Harsh parenting style with corporal punishment in the face of challenging child behavior or poor school performance may lead to child abuse and maltreatment (Bright et al., 2019). Separately, the level of parenting stress is associated with physical child abuse potential (Crouch & Behl, 2001). Based on such understanding of the impact of inter- and intra-personal stressors on child abuse, recent reviews in the literature have also hypothesized that social and economic disruption specifically due to COVID-19 may increase risk for child maltreatment (Fegert et al., 2020; Liu et al., 2020; Thomas et al., 2020). Therefore, child maltreatment during the COVID-19 pandemic has been a significant concern for child and family advocates (Brooks et al., 2020; Bullinger et al., 2020; Humphreys et al., 2020; Wu & Xu, 2020), as multiple stressors—extra-, inter-, and intra-personal—compounded with prolonged quarantine have been shown to increase the risk of interpersonal conflict and child maltreatment (Griffith, 2020; Lawson et al., 2020; Rodriguez et al., 2020). Our study offers evidence that this hypothesized concern may truly be occurring in the home environment, at least as perceived and experienced by children. These concerning findings, overlaid by structural and societal confounders such as decreased access to school mandated child abuse reporters, puts children during the pandemic at an ultra-heightened risk of under-reported abuse (Curtis et al., 2000; Ortiz et al., 2021; Rapoport et al., 2021).

These results help illuminate the impacts of early COVID-19 on families, particularly in how caregiver stress has been amplifed and experienced by children, and suggest a few possible areas for intervention. Caregivers must be well-supported and feel connected in order to be perceived by their children as emotional and instrumental support (Kenigsberg et al., 2016), and children's negative perceptions of parental neglect and control are correlated with an increased risk of subsequent diagnosis of psychiatric disorders (Young et al., 2011). Given the dynamic interplay between caregiver distress and child well-being (Babore et al., 2021; Bate et al., 2021; Kerr et al., 2021; Vaterlaus et al., 2021), policies and programs that aim to improve children's mental and behavioral health should include family-based therapies that address caregiver stress and promote mental health of the family, rather than treat children in isolation. The complex systems in which children interact including their family environments and further layered social, built, and natural environments can be leveraged to foster multisystemic resilience (Ungar & Theron, 2020). For example, funding should prioritize resources to alleviate economic hardship, and access to counseling services should be expanded for both children and their caregivers to promote healthy coping strategies and improved communication among household members. In addition, this study highlights the potential value for text- and chat-based modalities to expand children's access to support and counseling services, particularly given reduced exposure to mandated reporters and in households facing family conflict and/or risk of family violence (Fish et al., 2020). These platforms also allow for counselors and advocates to use and mirror children's own words that better acknowledge and validate their experiences and perceptions.

Limitations of this study include the sample, which is restricted to text and online chat inquiries to a child helpline from March through June of 2020. Only school-age children who have access to a phone or computer and are able to communicate via text or chat are represented. The experiences and perceptions of younger children and children with limited access to technology may be very different, including those who are reliant on landlines and shared computers and may be unable to reach out or limited by the amount of information safely shared. Experiences of youth who use phone calls are also excluded from this analysis. The level of maltreatment, in some cases, may therefore be underestimated. While this sample may not be representative of all children during the COVID-19 pandemic, it illustrates the acute nature of stress and how it translates into children's understanding of the world.
pandemic, the majority of children who access Child Help services reach out via text and chat (Ortiz et al., 2021), such that these modalities were uniquely suited for this study. Second, the study period reflects the perceptions of children and adolescents in the early period of the COVID-19 pandemic; experiences among youth today in the ongoing pandemic likely differ and warrant further study. Third, while texts and chats were not designed to capture children’s experiences of caregiver stress, such information was nevertheless shared by helpline users, offering an opportunity for this analysis of a large, national dataset. Lastly, while some of the participant accounts present an obvious, reported link to COVID-19, others do not. Therefore, future research should aim to better understand the magnitude of maltreatment that is a direct result of COVID-19. Despite these limitations, our study exemplifies the importance and impact of conducting research through the lens of children’s own words.

Declaration of competing interest

The authors have no conflicts of interest to disclose.

Acknowledgements

We would like to express our appreciation for the National Clinician Scholars Program at the University of Pennsylvania for their generous fellowship funding that supported this work.

References

Babore, A., Trumello, C., Lombardi, L., Candelori, C., Chirumbolo, A., Cattelino, E., Baiocco, R., Bramanti, S. M., Viceconti, M. L., Pignataro, S., & Morelli, M. (2021). Mothers’ and children’s mental health during the COVID-19 pandemic lockdown: The mediating role of parenting stress. Child Psychiatry, 13. https://doi.org/10.1007/s10578-021-02320-6

Baron, E. J., Goldstein, E. G., & Wallace, C. T. (2020). Suffering in silence: How COVID-19 school closures inhibit the reporting of child maltreatment. Journal of Public Economics, 190, Article 104258. https://doi.org/10.1016/j.jpubeco.2020.104258

Bate, J., Pham, P. T., & Borelli, J. L. (2021). Be my safe haven: Parent-child relationships and emotional health during COVID-19. Journal of Pediatric Psychology, 46(6), 624-634. https://doi.org/10.1093/jpepsy/jsab046

Bhagol, A., Borg, B., Jovanovic, T., & Marusak, H. A. (2021). Are the kids really alright? Impact of COVID-19 on mental health in a majority Black American sample of schoolchildren. Psychiatry Research, 304, Article 114146. https://doi.org/10.1016/j.psychres.2021.114146

Brass, K., & Ehrke, V. (2006). Using qualitative research in psychology. Journal of Research in Psychology, 39(2), 77–101. https://doi.org/10.1111/j.14780876.2006.0630a

Bright, M. A., Lynne, S. D., Masyn, K. E., Waldman, M. R., Graber, J., & Alexander, R. (2019). Association of Friday school report card release with Saturday incidence rates of agency-verified physical child abuse. JAMA Pediatrics, 173(2), 176. https://doi.org/10.1001/jamapediatrics.2018.4346

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. The Lancet, 395(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8

Brown, S. M., Doon, J. R., Lechuga-Peña, S., Watamura, S. E., & Koppels, T. (2020). Stress and parenting during the global COVID-19 pandemic. Child Abuse & Neglect, 104699. https://doi.org/10.1016/j.chiabu.2020.104699

Bullinger, L., Raisain, K., Feely, M., & Schneider, W. (2020). The neglected ones: Time at home during COVID-19 and child maltreatment. Child & Family Behavior Therapy, 42(3), 143–149. https://doi.org/10.1080/07368793.2020.1777220

Jiao, W. Y., Wang, L. N., Liu, J., Fang, S. F., Jiao, F. Y., Pettoello-Mantovani, M., & Somekh, E. (2020). Behavioral and emotional disorders in children during the COVID-19 epidemic. Journal of Affective Disorders, 264, 226–236. https://doi.org/10.1016/j.jad.2020.03.013

Kenigsberg, T. A., Winston, W., Gibson, P. A., & Brady, S. S. (2016). African American caregivers’ resources for support: Implications for children’s perceived support from their caregiver. Children & Youth Services Review, 61, 337–344. https://doi.org/10.1016/j.childyouth.2016.01.008

Kerr, M. L., Fanning, K. A., Huyhn, T., Botto, I., & Kim, C. N. (2021). Parents’ self-reported psychological impacts of COVID-19: Associations with parental burnout, child behavior, and income. Journal of Pediatric Psychology, 1–10. https://doi.org/10.1093/jpepsy/jsab089
