Psychosocial Stress Contagion in Children and Families During the COVID-19 Pandemic

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The COVID-19 (coronavirus disease-2019) pandemic has produced high and enduring levels of psychosocial stress for individuals and families across the world. Given the directives for social distancing and isolation, families are faced with a number of immediate concerns, including how to optimally perform remote work without child care, educate their children at home, and prevent disease transmission. Caregivers who are considered essential personnel and are engaged in tasks that put them at risk for virus contraction may be anxious about transmitting the virus to family members. There are additional short- and long-term concerns; for instance, the implications of job loss, food and housing insecurity, and concerns about children's learning and mental health.[1]

The impact of early stress and adversity on physical and mental health is a well-known concern among pediatric health care providers.[2] The current pandemic is a chronic stressor that could potentially wear and tear our bodies, resulting in long-term health consequences. In the context of families and children, the direct and indirect effects of pandemic-related stress may be exacerbated and multiplied due to a process of stress proliferation among family members. We refer to this process—the psychosocial stress experienced and proliferated by children and parents as a secondary of the pandemic—as *stress contagion*. Given its profound and unprecedented effects on pediatric health, we explore how stress contagion manifests in families and children and suggest practice considerations for pediatric caregivers, who are uniquely trusted to promote healthy relationships and coping strategies during this tumultuous time.

Stress Contagion

Stress contagion can be classified in 2 ways: spillover and crossover.[3] *Spillover* occurs when the exposure or experience of stress in one domain influences one's ability to function optimally in another domain. The stress of increased work demands or financial burdens are likely to "spill over" into parents' responsibilities as caregivers and compromise their ability to provide sensitive and responsive care. The stress that children might experience as a result of changes in routine, such as being at home rather than at school, may "spill over" into how they interact with their siblings and parents. *Crossover* refers to how stress experienced by one family member leads to increased stress for another family member, such as when stress at work leads to an argument between partners at home. Being unable to interact with their peers may in turn lead to increased frustration and tantrums in children, which parents find stressful.

Notably, the effects of stress contagion vary by several factors, such as an individual's ability to self-regulate stress. For example, parents with preexisting mental health conditions such as depression or anxiety, or those with elevated health risks may be challenged by the burdens from the pandemic. Children with sensitive temperaments may be particularly attuned to changes in daily routines, and older children who are aware of the health risks of the virus may be fearful. Furthermore, the ability of parents and children to cope with and navigate new routines and societal changes depends critically on available resources; the stresses from the pandemic likely compound the problems faced by families from socioeconomically disadvantaged backgrounds, thus widening existing health disparities.[4]

Psychosocial stress from the pandemic may undermine the ability to regulate emotions and think rationally. Moreover, the physical proximity of household members and the need for social distancing may prohibit individuals from coping in ways that they typically cope (e.g., taking a walk or going to visit a friend). Altogether, the psychosocial stress due to the COVID-19 pandemic has significant implications for pediatric health, affecting relationships between family members

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and impeding on children's sense of safety and security at a time in which it is most needed.

Practice Considerations

Considering that the pandemic may be frightening for children and caregivers due to its complex and open-ended nature, it is critical to foster a sense of calm, security, and safety within the day-to-day interactions that children have with household members and through virtual visits with loved ones outside of the home.

Depending on their circumstances, some families will benefit from more structure relative to their baseline (pre-pandemic) routines, whereas others will benefit from less structure. For all, acknowledging and regulating one's emotions are necessary for protecting family relationships, mitigating against stress contagion and staying calm. Below are some principles to consider with families during periods of crisis in both in-person and virtual encounters.

Encourage Empathy and Hope

Accepting how distress and negative moods affect family members is particularly needed at this time. Parents may need to be reminded that their children may be unable to verbalize their feelings and that behaviors such as irritability, aggression, or somatization may be by-products of psychological distress. Family members can ask each other what they like or dislike about their lifestyle changes due to the pandemic (e.g., staying at home, distance learning in older children). Future-oriented thinking such as making plans to look forward or goals to accomplish in the future can be protective.

Consider Social Engagement

Providing and receiving social support (while following social distancing guidelines) can increase emotional and cognitive capacities. Inquire children and their families about how they maintain contact with friends and family, and whether they have access to the technology to do so (by phone or through video conferencing). For some, engaging with certain family members or friends may be distressing, and electronic modes of communication (e.g., video conferencing) may actually be unnecessarily stimulating and disruptive; families may need to set boundaries in engaging with certain individuals.

Stress Reduction and Management

Reducing and managing stress promotes calmness and prevents stress contagion. Older children and adults may need to limit how much they discuss the virus or obtain information from television, online, or social media (e.g., reading only one news source). Mindfulness-based or physical exercise or trying new activities such as taking an online class or playing a family board game can increase emotional and cognitive capacities for the whole family.

The scaling of telehealth and virtual visits within pediatric practices may spur newfound assessment approaches. Virtually, providers can still assess a wide range of behaviors and attitudes yielding valuable information regarding family well-being; for instance, questions surrounding space can be helpful (e.g., Where does one go to eat, sleep, and play? What room do you like the most or least? Where does one go when feeling happy, energetic, bored, or sad?). Similar to home visiting assessments, providers can identify challenges or opportunities for building healthy relationships based on the observed environment.

Conclusion

With the end date of this pandemic unclear, health providers must seriously consider and address how current psychosocial stressors affect the health and well-being of children and their families. We encourage pediatric providers to consider stress contagion as a way to conceptualize the secondary contagion of stress due to the COVID-19 pandemic and to offer behavioral health guidance that can promote healthy family relationships and calm during this time. We acknowledge that health providers are themselves in "survival mode": balancing the enormous challenges and pressures of clinical practice on top of the personal and family responsibilities and stressors mentioned above. We hope that these basic principles can be easily adopted for supporting the health and well-being of children and families—as well as ourselves—in the long term.

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