

COMMENT



Implications of parental stress on worsening of behavioral problems in children with autism during COVID-19 pandemic: “the spillover hypothesis”

Adrien A. Eshraghi ^{1,2,3,4}✉, Leylane Cavalcante ¹, Emily Furar ¹, Michael Alessandri ⁵, Rebecca S. Eshraghi ¹, F. Daniel Armstrong ⁴ and Rahul Mittal ¹

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The emergence of the COVID-19 pandemic has been acutely detrimental to individuals' mental well-being and has led to long-term psychological distress for adults and children from all walks of life. The implementation of stay-at-home orders and the transition to working from home, along with social distancing guidelines and other pandemic regulations, have presented a new set of circumstances and challenges. This transition has been particularly difficult for individuals with autism spectrum disorder (ASD) and their families, as those with ASD tend to fixate on routines and predictability, oftentimes displaying resistance to change. There is much anecdotal evidence that COVID-19 has altered many aspects in the life of a parent/caregiver of a child with ASD, yet documentation resulting from well-designed studies is minimal. When compared to those of typically developing children, caregivers of children with ASD have overall higher levels of stress and anxiety. Common stressors for these parents include the dependency of their child, lack of effective support systems, concerns about societal acceptance, understanding the needs of their child, bolstering their child's development, and managing ASD-related problem behaviors [1, 2]. These parents are also more prone to isolation and reduced socialization as a result of their child's disruptive behaviors. The disruption of therapy services and the transition from in-person to virtual services during the pandemic has posed additional hurdles for the ASD community. This interruption of in-person services not only can lead to increased ASD symptoms in children but can also negatively impact the mental well-being of their parents. For these families, in-person therapies mean more than just direct care to improve the condition of their loved ones; they are also a much-needed respite for parents/caregivers from full-time care, as the constant need to monitor aspects of their child's daily care can become increasingly overwhelming and stressful. There is emerging evidence supporting the “spillover hypothesis” [3], which suggests that high levels of stress and anxiety in parents, especially during the pandemic, can “spill over” to their children with ASD, leading to worsened autism symptoms, increased behavioral challenges, and decreased mental well-being of these children.

The increase in parental stress levels may alter parenting behaviors which, in turn, can have an effect on their child's ASD symptoms and behavior problems [1, 2]. As parents of children with ASD have demonstrated higher stress levels, these children may have heightened levels of sensitivity toward negative parenting responses that come from parenting stress, thus exhibiting more exacerbated behavior problems [1]. These elevated stress levels in the parents of children with ASD have only intensified further with the onset of the pandemic, due to the resulting circumstances such as working from home, isolation from family and friends, disruption of natural social supports, loss/change of employment, and concerns about familial health. In addition, parents/caregivers of school-aged children with ASD are experiencing higher levels of stress than those of other age groups [4]. It is suggested that these differences may be related to the co-morbidities these children tend to face, such as ADHD and anxiety, which can be exacerbated by increased stress [4]. Due to the adverse effects, these parental stress levels can have on children with ASD, it is imperative to provide mental health supports to these families at this time of the pandemic in order to preserve the overall well-being of the entire family.

Parental stress also places strain on parent–child relationships, often leading to uncharacteristic reactions from parents and increased occurrences of parent–child conflicts. Although it is unequivocal that autism is a neurobiological disorder, there are environmental and other family system factors that can impact outcomes. For example, poor mental health in parents can interfere with responsive parenting and instead lead to displays of withdrawn and unavailable interactions with their child, affecting the child–parent relationship [3]. As children tend to adopt their parents' coping strategies, negative symptomatology in a parent can adversely affect their children's coping mechanisms. The evidence has indicated that neurotypical children with caregivers who are considered to be highly distressed have worse outcomes following the disaster, attributed to the fact that children use modeling coping responses as their primary source of coping techniques [3]. Since some individuals with ASD are prone to mimicking or imitating the behaviors of others and they are

¹Department of Otolaryngology, Neurotology Division, University of Miami Miller School of Medicine, Miami, FL, USA. ²Department of Neurological Surgery, University of Miami Miller School of Medicine, Miami, FL, USA. ³Department of Biomedical Engineering, University of Miami, Coral Gables, FL, USA. ⁴Department of Pediatrics, University of Miami Miller School of Medicine, Miami, FL, USA. ⁵Department of Psychology, University of Miami, Coral Gables, FL, USA. ✉email: aeshraghi@med.miami.edu

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already experiencing their own stress as a result of pandemic-induced disruptions in their routines and services, these trends are likely to persist with even stronger correlations in ASD populations. In addition, differences have been determined between partnered (married or living with a significant other) and non-partnered parents (single, divorced, or widowed), in that partnered parents reported significantly higher parent-child conflict rates, anxiety, depression, and perceived child stress [3]. It is likely that difficulties regarding co-parenting and disagreements between parents about the care of their child result in marital/relationship strain. Not only is it worrying for a child to observe parental clashes, but these marital complications are also yet another source of stress on the parents that is likely to spillover to negatively impact the child's stress levels and the parent-child relationship.

Due to the high likelihood of a "spillover" of negative attitudes and behaviors from parent to child, there is an urgent need to develop strategies for alleviating the negative symptomatology experienced by the parents of children with ASD. High demands placed on parents of children with ASD take a toll on these parents, leading to both physiological and mental fatigue. One potential solution is family training to alleviate the emotional burdens and practical demands of the entire ASD family system during this time [5]. Another potential approach can be to implement parental interventions for mitigating stress along with the therapy services provided for the child. The therapy providers can incorporate programs that focus on the mental well-being of the parents of children with ASD. Just as therapy services for individuals with ASD have transitioned to telemedicine during the pandemic, these types of parent programs can be administered via virtual platforms to ameliorate stress without risking COVID-19 exposure.

In addition to providing these parents with direct mental health support and stress-reduction interventions, we recommend the implementation of parent/family training programs in order to help caretakers of children with ASD to develop effective techniques for handling their children's problem behaviors. These types of training not only instill appropriate parenting methods but have also been shown to improve feelings of caretaking confidence and overall mental well-being [6]. The family interventions involving positive behavior support and cognitive-behavioral therapy have been correlated with benefits such as decreased problem behavior of their children, decreased irrational beliefs and pessimistic thoughts, decreased parental stress, and increased self-efficacy [6]. While the effectiveness of such interventions will require parental/familial commitment to the programs in order to reap the full benefits, we believe that implementing such programs will be valuable for families who may be struggling and seeking additional support. Since families are likely spending more time together due to the pandemic guidelines, familial support and overall family dynamics can be especially vital in managing individuals with ASD, creating reduced perceived parent/caregiver stress [7] and positively impacting the family quality of life [8]. It is important, however, to ensure that these parent training approaches do not place additional pressure and burden on the parents/caregivers. As such, therapists should collaborate effectively with the parents in order to deliver caretaking advice that will be received positively and leave them feeling empowered. Based on the notion of the spillover hypothesis, it is reasonable to speculate that improving

parental mental health will likely have consequential positive effects on the family during this pandemic, so that as the parent feels more supported and less stressed, their child may have increased benefits and response to therapy. Thus, we urge therapy providers to provide stress management and training opportunities for parents of children with ASD in order to allow for the spillover of more positive feelings and behaviors to their children and to allow for their continued progression within therapy. By reinforcing the progress of these children with ASD now, we can ensure a more independent and positive future for the ASD community as these individuals continue to grow, allowing for improved quality of life into adulthood.

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COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

Correspondence and requests for materials should be addressed to Adrien A. Eshraghi.

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