Anxiety in autism spectrum disorder: Diagnosis and therapy
By Karen Cammuso, Ph.D., ABPP, and Valerie Vorderstrasse, Psy.D.

Autism spectrum disorder (ASD) affects approximately one in 59 new births in the United States. This neurodevelopmental condition is associated with increased risk for comorbid psychiatric conditions. Anxiety is particularly common, with a prevalence rate of nearly 40% for children and teens with ASD. In contrast, the Centers for Disease Control and Prevention estimates that 7.1% of children aged 3–17 in the general population have been diagnosed with anxiety. There is evidence that anxiety in individuals with ASD tends to be characterized by more significant symptom presentation than community populations. Further, findings suggest that anxiety may persist as the most common comorbid condition in adults with ASD.

Here, we summarize diagnostic issues and characteristics of ASD that can complicate the diagnosis and psychotherapeutic treatment of anxiety in this population.

Diagnosis
The diagnosis of anxiety in children/teens with ASD can be complex due to the presence of symptoms that overlap. For example, in some cases, the ASD diagnosis may overshadow that individual’s anxiety, as challenges can appear to be characteristic of the disability rather than an additional psychiatric concern. Exacerbation of ASD symptoms such as problems with transition and change, increased externalizing behaviors, and difficulties with

Helping siblings of children with behavioral health disorders weather the COVID-19 storm
By Wendy Plante, Ph.D.

In the United States, there are over 4.5 million people who have special health, developmental, or behavioral health concerns. Most of these people have typically developing, relatively healthy brothers and sisters. Over recent decades, more attention has been paid to these siblings in clinical settings, schools, and research studies. Siblings are both impacted by and have an impact on their brothers’ and sisters’ conditions. While a range of positive and negative effects have been reported for siblings, we know that they are at greater risk for developing academic, emotional, and behavioral problems than siblings of typically developing, healthy children.

As schools and outpatient clinics shut their doors in the spring of 2020 in response to the COVID-19 pandemic, children with developmental disabilities were being taught at home, with their parents helping to facilitate their education and many of their special services, sometimes with professionals on the other end of a screen and sometimes not. Children with vulnerable health conditions were often foregoing some of their medical appointments or doing them through telehealth, while their parents worried about whether they might be at greater risk for COVID-19 infection and severe illness. Many
the individual therapy session. A visual schedule of what to expect, visual supports for spoken language (workbooks, pictures, videos), and reinforcement such as talking about special interests or earning a snack are all helpful strategies that promote involvement in the session.

A careful appraisal of the child’s understanding of the concepts presented are important. Given challenges with generalizability that are inherent in ASD, repetition of CBT concepts over time and across situations is crucial. The individual with ASD often needs support in order to recognize that the same processes, such as using cognitive restructuring, relaxation, and exposure therapy, will apply to different situations.

This challenge of generalization is in part why psychotherapy with these children and teens often has a much longer course than expected in those who have neurotypical development. In addition, one-on-one sessions with parents can be beneficial to achieve buy-in, address parental anxiety and parental excessive protection, and maintain motivation throughout treatment. Even in older adolescents, their parents, teachers, and other adults are often involved in all aspects of treatment for longer than is typical in traditional psychotherapy. This is critical in promoting generalization and providing long-term support as additional fears and anxieties arise.

Patrick was a teenage boy who had been diagnosed with ASD as a preschooler. Though he made substantial language and learning gains, he continued to have significant social and sensory impairments. When overwhelmed by sensory and social experiences, he had multiple occasions of running away, from school and from other community settings. He had aggressive behavior toward staff when approached unexpectedly. A reevaluation including developmental history and ADOS-2 confirmed the ASD diagnosis. Clinical assessment with questionnaires and interview indicated that he had significant generalized and social anxiety. A psychiatrist prescribed medication to address anxiety, and a therapist began CBT with Patrick. In therapy, he came to understand that his elopement was a “flight” response and aggression a “fight” reaction to anxiety triggered by his social and sensory impairments. Therapy continued for 2 years, moving to a lower frequency as anxiety declined. Therapy for Patrick included reinforcing CBT concepts by applying them to situations that arise at school, at home, and in the community. Parent psychoeducation to support this approach was an important component of the treatment. Frequent contact with school support staff ensured coordination of strategies to address anxiety. While Patrick still has occasions when he becomes anxious and makes negative self-statements, he recognizes that it is a means of communication he is working on replacing. He continues to work on identifying early signs of anxiety so that he can respond proactively and use relaxation and cognitive strategies.

Conclusion

Individuals with ASD are at high risk for anxiety. Diagnosing anxiety in ASD can be challenging due to factors such as diagnostic overshadowing as well as social challenges and behavioral rigidity that can become exacerbated with anxiety. A comprehensive clinical interview, including developmental history, anxiety questionnaires, and collateral reports, is critical in assessing anxiety symptoms in individuals with ASD.

CBT has the most empirical support as the treatment for anxiety in ASD. While few manualized treatments exist for anxiety in ASD, adaptations can be made to existing curricula to effectively treat children and adolescents with ASD, using visual, social, and experiential supports as illustrated in a group therapy curriculum with empirical support, Facing Your Fears.

Last, involvement of caregivers in group and individual treatment is crucial, and the treatment trajectory of this population tends to be longer than that of neurotypical individuals due to difficulties generalizing skills to new situations. Overall, treatment for anxiety in ASD can be effective. Early diagnosis of anxiety and involvement in treatment is critical for achieving positive outcomes. More research is needed to further explore therapeutic interventions in individuals with anxiety and ASD.

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who often reacts aggressively toward him when he tries to take on a teaching role with her.

Needs of siblings

Siblings want to know what is happening with their brothers/sisters and they do best when they have accurate information about their brother/sister’s diagnosis, treatment, and course. Due to their age and role in the family, siblings often do not have access to the information parents receive and they rely on parents and other adults in their life for general and specific information about their brother/sister. Siblings’ access to accurate information may vary during quarantine. Some siblings may have increased access to information about their brother/sister due to increased time together and direct observation of their brother/sister’s virtual time with their teachers and medical/behavioral health providers. Depending on age and developmental level, this information will be more accessible and less likely to be misinterpreted if parents or other caregivers can help siblings to make sense of what they are hearing and seeing with regard to their brother/sister’s health and behaviors and their virtual interactions with care providers. It will also be important for siblings to have accurate information about COVID-19 and how it may affect their family members. Information should be honest and accurate, at a developmentally appropriate level, along with reassuring messages about what family and professionals are doing to keep people safe.

Positive and negative interactions

Siblings are often the target when children with developmental and behavioral disorders are having problems with impulse control and aggression. This can be heightened when families are isolated at home and children with these concerns are receiving fewer services. An increase in behavior problems in children with developmental disabilities is associated with more negative adjustment for siblings (e.g., Sikora et al., 2013). In addition, siblings may have fewer outlets for time away from home and for reducing stress if they are out of school and not able to engage in typical extracurricular activities and peer interactions. In some cases, siblings who are home more than usual due to the pandemic may also be witness more than usual to their brother/sister’s distress. This distress could be due to medical treatments that occur in the home, reactions to treatment (e.g., chemotherapy side effects), and, in the case of developmental/behavioral disorders, emotional distress (e.g., anxiety, depressive symptoms, distress in reaction to completing schoolwork or engaging in therapies) that might usually be happening while siblings are at school, doing activities, or out with friends.

Quarantining at home may also be a time for siblings to spend positive time with their brother/sister. There are siblings pre-pandemic who spent very little time with their brother or sister because they go to separate schools due to their brother/sister’s special academic needs, because their brother/sister spends so much time outside of the home receiving medical therapies or with in-home therapies, or because their interests were so different and they were out of the home engaged in extracurricular activities and spending time with peers. Siblings often report warm relationships with their brothers and sisters with medical, developmental, and behavioral health conditions, or the desire for more time and for a warmer relationship. For some sibling dyads, increased time at home may allow for increased time in engaging in shared activities, whether meals at home or recreational activity.

Caretaking

Siblings frequently engage in caretaking with brothers and sisters. Even siblings who are chronologically younger than their brother/sister can be involved in caretaking related to physical needs, learning, and adherence to medical regimens. There is diversity in the impact on siblings of being engaged in this role and there may be some differences related to gender, age, and cultural beliefs. For girls, younger siblings, and those whose cultures value family bonds and caring for family members, the caretaking role may be a significant positive source of identity. In situations in which siblings are sacrificing their own learning opportunities and social interactions, and are feeling pressured to do so, and in which their brothers and sisters are reacting with resentment or aggression, caretaking can be associated with more negative outcomes. During the pandemic, there may be a greater opportunity and greater need for siblings to become involved in caretaking. This is especially true as families juggle multiple roles with schools and daycares closed and with fewer supports available. Families also may feel they need to decline services in the community and in the home to reduce exposure to the virus.

Parent stress/support

Consistent with the broader literature on child risk and resiliency, siblings’ adjustment to their brother/sister’s diagnosis and related stressors is correlated with parental stress and family support (e.g., Hesse et al., 2013). An increased number of families are experiencing stress related to the COVID-19 pandemic and the economic downturn, and this may be especially true for families of children with disabilities (UNICEF, 2020) and racial/ethnic minority status (e.g., Webb Hooper et al., 2020). We can expect socioeconomic and acculturative stress and parent stress to negatively impact siblings and parent and family social supports to ameliorate the negative effects of COVID-19-related stress on siblings. Policies that support children with medical and behavioral health disorders and their families during this crisis are likely to help siblings (e.g., paid parental leave, supplementary income, and access to respite services).

Anabel, age 9, a girl of Dominican descent, has an 11-year-old brother, Angel, who has spina bifida, and a 3-year-old typically developing brother, Juan. Anabel worries about her brother contracting COVID-19 because she knows it could be more dangerous for him. Her mother is likely to keep her home when students return to school because of Angel’s health. She did not go to summer camp as she usually does this summer, although her camp was open with new coronavirus precautions. Anabel has mixed feelings about this. She misses her friends and teachers but knows that her whole family has to help keep Angel safe. She feels good knowing that she can help her mother take care of Angel and Juan while she does distance learning.

Interventions

- Parent consultation and sibling resources: Educators, therapists (e.g., speech/language, OT, PT), and medical and behavioral health professionals can be instrumental in supporting parents as they parent more than one child through this pandemic. Periodically asking parents about how their other children are doing and providing informational resources...
to parents for siblings (e.g., books and websites designed for siblings specifically, those that provide child-friendly information about the child’s condition and about COVID-19) can be a way to increase siblings’ access to information and to highlight for parents accessible ways they can support siblings’ needs while families are more isolated. These professionals can also help to answer parents’ questions about communicating sensitive information with siblings and can help parents make decisions about siblings’ involvement in caretaking. Academic, medical, and behavioral health providers can help parents work through the difficult decisions they must make as they consider siblings’ engagement in academic and social opportunities outside the home, weighing risks associated with COVID-19 infection for various family members and academic and social emotional risks associated with continued quarantining. When possible, more formal screening procedures may be administered virtually in order to identify siblings who require professional attention.

- **Increased social support:** Families and schools can help to recruit increased support for siblings through extended family; community organizations, many of which are operating virtually (e.g., scouting programs, religious institutions); and community organizations devoted to families of children with medical, developmental, or behavioral challenges. In addition, parents who know other families with children with similar challenges can help siblings connect with one another informally through virtual platforms.

- **Virtual support groups:** Over the past decade, there has been an increase in the number of programs designed to foster the well-being of typically developing, healthy children. They are provided through hospitals, schools, and community agencies. In addition, there are programs with experience prior to the COVID-19 pandemic in providing support intervention to siblings over the internet, in the form of virtual support groups, listservs, and social media groups. Over the past few months, programs that were providing in-person intervention have been pivoting to provide similar services using telehealth platforms. Overall, interventions for siblings have been shown to have a positive effect on well-being.

- **Individual/family therapy:** While the majority of siblings do well, the number of siblings experiencing increased stress and distress may increase as their families cope with COVID-19, recent instances of racial inequity and violence, and increased socioeconomic stress. Screening measures and discussions with parents about sibling functioning during contacts with parents focused on their other child can help to identify those siblings who require further evaluation and treatment. Recommendations may include a telehealth or in-person pediatrician visit, or referral to local behavioral health providers who can see siblings in person or via telehealth.

Rodney is a Black 13-year-old boy whose 16-year-old sister, Jacy, has experienced increased anxiety and depressive symptoms over the past year, culminating in a psychiatric hospitalization for suicidality right before the pandemic. Now Jacy is at home, seeing her behavioral health providers via telehealth, after her intensive outpatient programs went virtual. After Jacy’s therapist asked Rodney’s parents how he is doing, they checked in with him and discovered that his worry about Jacy has increased over recent months. He has also been more worried about things he is hearing in the news about COVID-19 and police brutality. He is worried about his parents when they leave for work. Jacy, Rodney, and their parents participate in a family session with Jacy’s therapist that allows Rodney to voice his worries about Jacy’s well-being and allows Jacy to tell Rodney about her progress. Rodney is also able to connect with a therapist of his own who can help address his increased level of stress and generalized anxiety.

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**Research**

**Vaping nicotine and marijuana more than doubles among college-age students**

By Alison Knopf

The annual Monitoring the Future (MTF) report from the National Institute on Drug Abuse (NIDA) on 19–22-year-olds revealed dramatic increases in vaping of marijuana and nicotine among college students and young adults. The study shows that marijuana use is almost at its highest level in the past 4 decades.

In particular, 19–22-year-olds have more than doubled their vaping of marijuana and nicotine from 2017 to 2019, according to the study, which is conducted for NIDA by the University of Michigan.

Between 2017 and 2019, the percentage of 19–22-year-olds who vaped marijuana at least once in the past 30 days increased from 5% to 14% among full-time college students, and from 8% to 17% among those not in college. The 30-day prevalence of vaping nicotine increased from 6% to 22% among college students and from 8% to 18% among 19–22-year-olds not in college.