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ASD—Communication, Social Skills, and Sensory-Motor Supports and Services

Children with autism spectrum disorder (ASD) have difficulties navigating everyday situations. Here is information from the American Academy of Pediatrics about communication, social, and sensory supports and services.

Communication Supports and Services

Children with ASD may not understand the purpose of verbal and nonverbal communication. Thus, most, if not all, children will benefit from formal speech and language supports and services.

The range of communication skills is quite variable and depends on the severity of ASD. Some children may have an age-appropriate vocabulary and use of grammar but a delay in or lack of using language socially, such as in conversation. Some children can't express themselves at all. They may need intensive supports and services that include teaching a nonverbal means of communication, such as using the Picture Exchange Communication System (PECS) or other picture-based systems or using electronic communication devices, such as speech-generating devices.

Many children with ASD who develop speech may communicate in unusual ways (see Language Delays on page 3). Speech therapy can address these difficulties at different levels. Therapy is provided or directed by a trained speech-language pathologist. Family and other members of the team are also involved in the therapy plan. Therapy is aimed at using any effective means of providing communication while working to increase all levels of communication, including verbal output or speech. For children who do not use words, therapists will promote the use of natural gestures, teach sign language, or use pictures or a device to communicate. Some parents worry that these methods will prevent their child from learning words. Research supports the opposite conclusion: children who have developed some means of communication, even if it is nonverbal, may develop speech skills more quickly.

The communication program is usually part of a larger developmental- or behavioral-based program. The speech-language pathologist should help the other team members make sure communication goals are included in the service plan and addressed in the educational setting.

The goals of all supports and services should include the use of social language, back-and-forth conversation, and building social skills and relationships. All supports and services should also include frequent reassessments of progress, and goals should be adjusted as needed.

Social Skill Supports and Services

Many children with ASD learn to interact through communication. Joint attention is a building block for later social and communication skills. In fact, research studies have shown that functional language often begins to develop about 1 year after a child has mastered joint attention. Joint attention and communication are most efficiently learned in daily interactions with the family. Learning experiences should be incorporated into a child's regular daily activities and these activities should begin as early as possible, ideally as soon as language delays are identified.

Outside the family, the most important strategy in improving social skills is providing children with ASD with as many opportunities as possible to play and interact with typically developing peers. As children with ASD get older, they will likely need explicit teaching to learn how to interact appropriately with peers at school and in the community. This should include direct social skills therapy sessions as well as coaching and support during class and less structured times such as lunch and recess. Two approaches that may be used during therapy are called *theory of mind* and *social stories.*

Sensory-Motor Supports and Services

Many children with ASD seem to have unusual sensory aversions or cravings. They may dislike touch, hugging, certain sounds such as motors or machinery, textures, and the consistency of certain foods. It is difficult to understand the meaning of such aversions for these children. There may be other behaviors that children do, like actively seeking certain sensations, such as smell or deep pressure. Some children engage in repetitive self-stimulating behaviors such as rocking back and forth, spinning, self-injurious behavior (such as self-biting, head banging, and skin picking), and repetitive oral exploration (mouthing) of nonedible objects.

It has been suggested that children with ASD may have difficulties with sensory integration. Basic brain research is starting to show that people with ASD may have difficulty processing information that comes in through visual, hearing, and other sensory pathways at the same time. Sensory overload has been cited as a potential cause of meltdowns or disruptive behaviors. Children with ASD may seem to ignore or crave sensory input. It is important to know that sensory processing difficulties are symptoms of central nervous system problems common in people with a variety of developmental disabilities; they are not unique to ASD.

Current sensory integration therapy provided by occupational therapists uses procedures such as deep pressure, brushing, wearing a weighted vest, and swinging to regulate sensory input. These therapies seem to have a calming effect on some children and are often cited as proof that they are effective. Although such supports and services are widely practiced and currently being studied, there are little data to support the claims of benefits of such supports and services at this time.

Other supports and services, such as sound therapy (one example is called auditory integration training [AIT]) or visual therapy (one example is called behavioral optometry), are also used to regulate or change a child's response to sensory input. However, there are currently a lack of data to support these supports and services.

Visit HealthyChildren.org for more information.

Adapted from the American Academy of Pediatrics patient education booklet, *Understanding Autism Spectrum Disorder (ASD)*.