before subscribing to any particular treatment. Counseling for the families of people with autism also may assist them in coping with the disorder. While the public has become more aware of ASD in recent years, it still remains one of the lowest funded areas of medical research by both public and private sources.

Educational & Behavioral Interventions

Educational and behavioral approaches are often a core feature of the overall treatment plan for children with ASD. These strategies emphasize highly structured and often intensive, skill-oriented training that is tailored to the individual child. Therapists work with children to help them develop social and language skills. Recent evidence suggests that early intervention has a good chance of favorably influencing brain development. Applied behavior (ABA) is the most well known of the behavioral approaches.

Medication- Doctors may prescribe a variety of drugs to reduce self-injurious behavior or other troublesome symptoms of ASD, as well as associated conditions such as epilepsy and attention disorders. Most of these drugs affect levels of serotonin or other signaling chemicals in the brain. The medications most often used in the treatment of ASD can generally be placed in one of the following groups: antipsychotic drugs, antidepressants, and stimulants.

How to Get Help

No insurance? Call the NAMI Southern Arizona office to help guide you to access mental health services.

If you have ASD or a child with ASD:

- Seek medical care through a psychiatrist and/or your primary care physician.
- Find the right combination of treatment and skill-oriented training that works for you or your child (may include medication, therapy, support groups, etc.).
- Take NAMI's Peer-to-Peer course and/or join the NAMI Connection support group (as abilities permit).
- LEARN about your illness. The more you know, the more you are able to help yourself. Start with NAMI today!

If you are a family member with a loved one who has mental illness:

- Take care of yourself.
- Take NAMI's Family-to-Family course, join a Family & Friends Support Group and/or take NAMI Basics if you have a loved one who is a child or adolescent.
- Learn about your loved one's illness.

Additional Resources:

Autism Society Greater Tucson
(520) 770-1541
www.autismsocietygreatertucson.org

Tucson Alliance for Autism
(520) 319-5857
www.tucsonallianceforautism.com

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NAMI Southern Arizona
6122 E. 22nd St.
Tucson, AZ 85711
520-622-5582
NAMIsa@NAMIsa.org

COMMUNITY-WIDE CRISIS LINE:
520-622-6000 or 1-866-495-6735

NAMIsa.org

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Educational information and local support provided by:

NAMI SOUTHERN ARIZONA
National Alliance on Mental Illness

What is Autism Spectrum Disorder?

Autism Spectrum Disorder (ASD) is a complex developmental disorder of brain function. ASD now encompasses the previous DSM-IV autistic disorder (autism), Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified. ASD is characterized by

1) deficits in social communication and social interaction, and
2) restricted repetitive behaviors, interests, and activities (RRBs).

Because both components are required for diagnosis of ASD, social communication disorder is diagnosed if no RRBs are present.

Symptoms are typically recognized during the second year of life (12-24 months of age) but may be seen earlier than 12 months if developmental delays are severe, or noted later than 24 months if symptoms are more subtle. ASD strikes males about four times as often as females.

In recent years, reported frequencies for autism spectrum disorder across U.S. and non-U.S. countries have approached 1% of the population, with similar estimates in child and adult samples. It remains unclear whether higher rates reflect an expansion of the diagnostic criteria of DSM-IV to include subthreshold cases, increased awareness, differences in study methodology, or a true increase in the frequency of autism spectrum disorder. ASDs are "spectrum disorders" that affect individuals differently and to varying degrees. They do not discriminate against racial, ethnic, or social backgrounds. The most severe cases are marked by extremely repetitive, unusual, self-injurious, and aggressive behavior. This behavior may persist over time and prove very difficult to change, posing a tremendous challenge to those who must live with, treat, and teach these individuals. The mildest forms of autism resemble a personality disorder associated with a perceived learning disability.

Autism spectrum disorder is not a degenerative disorder, and it is typical for learning and compensation to continue throughout life.

Rett syndrome. Disruption of social interaction may be observed during the regressive phase of Rett syndrome (typically between 1-4 years of age); thus, a substantial proportion of affected young girls may have a presentation that meets diagnostic criteria for autism spectrum disorder. However, after this period, most individuals with Rett syndrome improve their social communication skills, and autistic features are no longer a major area of concern. Consequently, autism spectrum disorder should be considered only when all diagnostic criteria are met.

What are common signs of ASD?

Children diagnosed with an ASD do not embrace the typical patterns of child development. Some hints of future problems may be apparent from birth, while in most cases, signs become evident when a child's communication and social skills lag further behind other children of the same age. Some parents report the change as being sudden, and that their children start to reject people, act strangely, and lose language and social skills they had previously acquired.

ASD is defined by a definite set of behaviors that can range from very mild to severe. Children with ASDs may fail to respond to their name and often avoid eye contact. They also have difficulty interpreting tone of voice or facial expressions and do not respond to others' emotions or watch other people's faces for cues about appropriate behavior. Many children will engage in repetitive movements such as rocking and hair twirling, or in self-injurious behavior such as nail biting or head-banging. They tend to speak later than other children and may refer to themselves by name instead of "I" or "me." Some speak in a sing-song voice about a narrow range of favorite topics, with little regard for the interests of the person to whom they are speaking..

In summary, children do not outgrow ASDs, but studies show that early diagnosis and intervention lead to significantly improved outcomes.

Signs to look for include:

- Lack of or delay in spoken language (does not babble, point, or make meaningful gestures by one year; does not speak one word by 16 months; does not combine two words by two years; does not respond to his or her name; or loses language or social skills)
- Repetitive use of language and/or motor mannerisms (e.g., hand-flapping, twirling objects)
- Restricted, repetitive patterns of behavior, interests, or activities
- Little or no eye contact
- Lack of interest in peer relationships, little or no initiation of social interaction and no sharing of emotions, along with reduced or absent imitation of others' behavior
- Lack of spontaneous or make-believe play
- Persistent fixation on parts of objects
- Does not smile

Symptoms of ASD do not remain static over a lifetime. About a third of children with ASD—especially those with severe cognitive impairment and motor deficits—will eventually develop epilepsy. In many children, symptoms of ASD improve with intervention or as the children mature. Some eventually lead normal or near-normal lives. ASD in adolescence could worsen behavior problems in some children as they may become depressed or increasingly unmanageable. Parents should be aware and ready to adjust treatment to fit their child's changing needs.

How is ASD treated?

At present here is no cure for ASD, but with appropriate early intervention, a child may improve social development and reduce undesirable behaviors.

Therapies or interventions are designed to remedy specific symptoms in each individual. The best-studied therapies include educational/behavioral and medical interventions, but these remedies do not ensure substantial improvement. The lack of proven treatments prompts many parents to pursue their own research, often using "trial and error." Parents should use caution