

Aquatic Consulting & Education Resource Services



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Autism Spectrum: Focused Therapeutic Aquatics

Depending on the statistics cited, between 1 in 150 and 1 in 100 children have some form of autism. It could be incidence of autism is actually increasing. It could also be that as the definition of autism has evolved it has broadened to include more individuals. It could also be that more children are diagnosed at an earlier age, thus increasing the entire population of individuals with autism. Whatever the case, autism has become a condition deserving of attention by aquatic therapy professionals.

The water environment is engaging. Presence of water on the skin is a unique tactile experience. Submersion and the resulting water pressure enfold the body. Warm water can create a sense of comfort, just as cooler water can stimulate alertness. Evaporation of water from the skin tingles. Because focus of attention and interaction with the environment are two common problems for an individual with autism, activities in water can be of great therapeutic value.

But, autism isn't a single, discrete disability. It is a complex mix of conditions resulting in a wide range of behaviors inconsistent with appropriate functioning in daily life. A person with autism may communicate, interact, behave, and learn in ways different from most people. Thinking and learning abilities of people with ASDs can vary - from gifted to severely challenged. Understanding those behaviors is key to therapeutic intervention.

What is Autism?

Autism is more appropriately referred to as autism spectrum disorders (ASDs). Its definitive explanation is provided in the *Diagnostic and Statistical Manual* of the American Psychological Association (DSM-IV). Briefly, autism is diagnosed - or ruled out of a diagnosis - by evaluating behavior. Doctors may perform other physiological tests, usually to rule out other medical conditions. But, autism has no known cause and no cure. Individuals with ASDs look just like everyone else. Autism cannot be seen. However, autism-like behavior can be identified. It is that behavior that is the focus of therapeutic intervention.

The category of autism spectrum disorders has subdivisions, including, but not limited to -

- Autistic disorder (classic autism)
- Asperger syndrome
- Childhood disintegrative disorder (CDD)
- Pervasive developmental disorder (PDD)
- Pervasive developmental disorder - not otherwise specified (PDD-NOS)
- Rhetts syndrome

The over-riding problems that create the shell for the autism diagnosis is behaviors that exhibit problems with social skills and communication. Additional traits common to autism include -

- Insistence on sameness; resistance to change; agitation at change or interruption in routine.
- Preference to being alone.
- Little or no eye contact.
- Not play pretend games.
- Perseveration on spinning objects, lights, or reflective objects.
- No real fear of danger.
- Unresponsiveness to teaching methods, verbal cues, spoken directions.
- Not wanting to be touched, held, or cuddled.
- Inappropriate responses such as laughing or crying for no known reason.
- Ecolalia, in isolation or in substitution for normal spoken language.

- Obsessive attachment to objects.
- Not be able to point to objects or to look at objects others are pointing at.
- Over or under-sensitivity to pain.
- Difficulty in expressing needs.
- Inability to govern exertion level
- Inability to interact with the outside world.
- Self-injurious behavior.

Clearly, this is an exhausting list. The ultimate diagnosis is made by ruling out other physiological conditions, deafness, for example, as a reason for not responding to verbal interaction, as well as by documentation of exhibited behaviors. Autism is more common in boys than in girls and more prevalent in Caucasians than in African Americans. While a diagnosis might seem a negative label, to obtain early intervention services, some type of definitive diagnosis must be made. This is possible as early as 3 months of age, thus enabling early intervention and the best possible outcome.

Add to this, a child may NOT be diagnosed as autistic, but be characterized as having autistic-like behaviors. Hummm, that could be almost everyone! A key factor is the extent the assessed behaviors interfere with the ability of the individual to meet normal developmental milestones and carry on an age appropriate daily life. While this diagnosis is best made during early childhood, so intervention can begin immediately, that diagnosis can be made at any point in life.

Autism can also exist in combination with other disorders, including *sensory modulation disorder* (SMD), dyspraxia, and almost any other disability. Autism is a life-long disability. The end result is impaired communication, impaired social skills, and challenging behaviors.

Therapeutic Intervention

Challenges for the aquatic professional are many. First, and foremost, is maintaining the safety of the individual, as well as any other aquatic participants, during any aquatic participation. Directly affecting safety in the aquatic medium is the possible inability to govern exertion level, inability to follow verbal directions, inability to assess danger, further complicating the therapeutic process may be inability to make eye contact, unresponsiveness to verbal cues, perseveration, inability to interact with the outside world, potential to be self-injurious, and difficulty in expressing needs.

Does every individual with an ASD exhibit all of these characteristics? No, absolutely not. While some characteristics are more common in some forms of autism than others, there is no predictability to what behaviors will be manifest in any specific individual. In addition, on any given day a known behavior may, or may not be prevalent.

This means two things for the professional in therapeutic aquatics. Gather ahead of time as much information about the individual as possible. Second, have a wide variety of responses for any and all anticipated behaviors.

Information can help in forestalling interfering behavior. Information can also assist in planning ways of dealing with presenting behavior once a session is in motion. If there is a specific ASD diagnosis, find out as much as possible about the specific form of autism the individual has, as well as the characteristics of the individual himself. As the incidence of autism appears to be on the rise, be sure the information you find is current. The internet is an excellent source – but – remember, anyone can post to the internet. Validate the credentials of the sources you use. Start with the internet sources at the end of this article and use the links provided. General searches will yield thousands of sources, most of which will NOT be credible.

Communicate with the individuals currently working with the individual to find out as much as possible about the individual. This might be a parent, teacher, other therapist, medical professional, or caregiver. Ask about —

- “Trigger” events, what sets off inappropriate behaviors
- Communication signs
- Preferred ways of interacting and expressing needs
- Fears and phobias
- Preferred rewards
- Ways to focus attention
- Distractibility

- Prior experiences with water, i.e. bathing, showering, and washing, as well as pool and/or lake
- Responses with afraid
- Potential for self-injury

Summary

Individuals with autism can benefit greatly from aquatic intervention. Being able to deal with the behaviors associated with autism is the key to making the aquatic session beneficial for the individual with an ASD. The more methods and techniques an aquatic professional has in his or her treatment repertoire, the more likely he or she will be able to meet the challenges presented by individuals with autism. For each and every autistic-like behavior, the therapist needs at least a half dozen responses. Being prepared with those responses is the mark of a true aquatic professional. With the number of individuals with autism on the rise, most likely anyone working in the therapy industry will encounter an individual with an autism spectrum disorder or autistic-like behaviors. Focus therapeutic aquatics and meet the challenges associated with autism.

Resources

American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders IV-TR* (DSM-IV-TR) Fourth Edition. Arlington, VA: The Association.

National Dissemination Center for Children with Disabilities (NICHCY): 800-695-0285; www.nichcy.org.

Centers for Disease Control (CDC): www.cdc.gov/ncbddd/autism/facts.html/index.html.