

Recognizing Psychosis in Nonverbal Patients With Developmental Disabilities

by Ruth Ryan, M.D.

Psychiatric Times • December 2001 • Vol. XVIII • Issue 12

People with developmental disabilities (e.g., mental retardation, autism) are vulnerable to the same psychiatric conditions as the general population (Szymanski et al., 1990). Fortunately, for the most part, *DSM-IV* criteria can be adapted easily to permit accurate diagnosis (Aman, 1991; Ryan, 1994b). However, these individuals may exhibit some unusual behaviors that seem indicative of psychosis yet are actually almost never reflective of psychosis. In addition, even when indications of psychosis are present, epidemiological issues, such as comorbid conditions, may lead to a different final diagnosis than otherwise would be expected.

Symptoms and Indicators

In patients who do not communicate verbally, there are many cues that can lead a psychiatrist to recognition of psychosis. The following list was compiled from observing patients with psychosis who were able to communicate verbally. After observations, patients later explained the psychosis content. This information is valuable in that the results might be extrapolated as possible indicators in people who do not use verbal communication.

- Patient stares to the side, nods and gestures as though listening to a conversation others do not hear. It is important to note that some people have been trained to do this or have learned to do this to occupy themselves ("self-talk"). If the patient seems to be in complete control of this activity or is using this activity for self-soothing purposes, the presence of true psychosis is less likely.

- Patient seems to be shadow boxing with unseen others (unless, as in above, the patient is in total control of the activity or doing so for soothing purposes).
- Patient brushes unseen material off themselves. Conditions that could produce paresthesias are more common in individuals with developmental disabilities than in psychosis and should be considered first.
- Patient wears multiple layers of clothing. It is important to note that some people do this to self-treat sensory integration deficits. In addition, some people learn this as a coping skill in some congregate facilities, as a way to keep one's possessions.
- Patient covers eyes or ears as though shutting out stimuli, with the caveat that this can be an expression of anxiety or physical pain.
- Patient places unusual wrappings (e.g., feminine hygiene products) around their ankles, sleeve ends, ears or collars, also keeping in mind this could be an expression of anxiety or physical pain.
- Patient glares with an out-of-context, angry or intensely fearful expression at strangers or previously liked others.
- Patient wraps bandannas or extra scarves around the head and ears when this is not congruent with the weather or the rest of the person's clothing.
- Patient wears costumes that are associated with a false role (e.g., wearing full firefighter gear when the patient is not a firefighter); caveat: the person may be expressing a wish rather than a false belief.
- Patient inspects food and beverages with new and out-of-context intensity.
- Patient grimaces or winces as though smelling or tasting something foul.

Similarly, there are symptoms that are just as important to recognize which are almost never indications of psychosis. They include the following:

- Volitional self-talk.
- Vocal tics. Tourette's syndrome and other tic disorders are much more common in individuals with developmental disabilities than in the general population. When someone is making nonsensical noises, this possibility should be considered.
- Phenomena that are modeled directly from other people.
- Phenomena that the person can start and stop at will.

- Phenomena thought to be purely taught by circumstance or program. (Consultation with a behavior specialist and completion of a functional analysis [this refers to the process used by modern behaviorists, not a listing of the person's skills] can make this distinction.)
- Displays of aggression, agitation, shouting or self-injury.

Epidemiology Considerations

Between 70% and 85% of people with developmental disabilities referred for psychiatric consultation have one or more untreated, undertreated or undiagnosed medical problems influencing their behavior (Ryan and Sunada, 1997; Sundheim et al., 1998). Many of these conditions can produce delirium, which may include psychosis (Ryan et al., 1998). Therefore, it is essential to conduct a thorough search for secondary medical conditions that contribute to or possibly cause the apparent psychosis (Szymanski et al., 1990).

Between 60% and 100% (depending on sample) of individuals with developmental disabilities have experienced trauma, usually repeated incidents of abuse (Sobsey, 1994). Since many symptoms that resemble psychosis are actually dissociative phenomena, careful evaluation for posttraumatic stress disorder and other sequelae of trauma should be considered.

Due the nature of their disabilities, patients commonly develop habits that could lead to suspicious behaviors. For instance, some people were given medications hidden in their foods; this may cause them to inspect food with extreme intensity. Others touch themselves in unusual ways or look at people with suspicion or anger in relation to flashbacks. Careful assessment of the rest of the patient's symptoms should assist with the diagnostic distinctions.

Mood disorders with psychotic features are more common in people with developmental disabilities than are conditions in the schizophrenia spectrum (Szymanski and Crocker, 1989). Support staff and/or family members may not be attuned to monitor symptoms such as sleep problems, appetite problems and other neurovegetative signs of mood disorders; and the examiner will need to probe very carefully to establish these criteria.

Individuals with pervasive developmental disorders and autism often have sensory integration deficits that can produce a variety of physical discomforts. Some people self-manage these discomforts with unusual gestures, postures or withdrawal. Evaluation of sensory integration status by an occupational therapist can help avoid misattribution of these symptoms to psychosis (Sundheim et al., 1998).

When updated criteria are used, it appears that schizophrenia spectrum conditions are as rare in this population as in any other. Thus, even if the presence of psychosis is established, schizophrenia may still be the least likely diagnosis. By observing problems with initiation, gating deficits and affect inconsistent with content, clinicians can clarify the diagnosis and the long-term treatment plan. Specific clinical questions might include ascertaining if the person has a hard time getting started in preferred familiar activities, if the person appears to have more confusion and psychosis in preferred stimulating situations, or if the person seems to laugh at things that are frightening or gruesome. Individuals with schizophrenia tend to have more symptoms of psychosis in situations that are stimulating, even if it is something the person likes. If the symptoms resembling psychosis occur more often in low stimulation situations or in association with reminders of previous trauma, dissociation may be the more accurate diagnosis (Ryan, 1994a).

Olfactory or gustatory hallucinations are much more common in certain forms of epilepsy and posttraumatic stress disorder than in schizophrenia spectrum conditions (Neppe and Tucker, 1988; Ryan, 1994b). One man, for example, was known to repeatedly wrinkle his nose and look at others as though smelling flatus. It was eventually discovered that he had complex partial seizures with a temporal lobe focus and ictal violence. Treatment of the epilepsy produced a remission of ictal violence as well as a remission of this frequently seen gesture.

Certain physical gestures can be easily mistaken for psychosis. A person who bats out with their hands as though something were there might be experiencing visual hallucinations; in my clinical experience, however, the last several times this was a symptom, the cause turned out to be uncorrected myopia. Similarly, individuals who wave fingers in front of their eyes or bang their heads are more likely to have headaches or depression than psychosis.

Of course, it is reasonable to attempt to interview all individuals, even those who do not use speech. Many understand more than they can express and can give very helpful answers via gestures, nods, drawings and non-speech vocalizations (Ryan, 2001; Stavrakaki and Klein, 1986; Trumble, 1993).

Conclusion

Gathering observational data from the patient and from those who know the patient very well (i.e., family, caregivers and so on), as well as from videotaping and spending unstructured time with the patient, is essential to correctly identifying psychosis in nonverbal patients with developmental disabilities (Ryan, 2001; Szymanski, 1977). All observational data should be augmented with a complete database regarding family history and all physical signs and symptoms. The environmental context of a symptom of

possible psychosis is essential in understanding its significance and meaning, if any. The time spent in these initial assessments is richly repaid in better quality of life and clinical outcomes for the patient. If, despite all attempts to gather complete data, the clinical outcome is not favorable, restarting the process with particular attention to unstructured observation may be helpful. Guides and other reading material ([Table](#)) are also helpful to the psychiatrist encountering such patients.

Dr. Ryan works full time with people with developmental disabilities, is clinical assistant professor of psychiatry at University of Colorado Health Sciences Center, and directs a non-profit research and education foundation.

References

Aman MG (1991), Assessing psychopathology and behavior problems in persons with mental retardation: a review of available instruments. Publication No. (ADM)91-1712. Rockville, Md.: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute of Mental Health.

Neppe VM, Tucker GJ (1988), Modern perspectives on epilepsy in relation to psychiatry: behavioral disturbances of epilepsy. *Hosp Community Psychiatry* 39(4):389-396.

Ryan R (1994a), Posttraumatic stress disorder in persons with developmental disabilities. *Community Ment Health J* 30(1):45-54.

Ryan R, Sunada K (1997), Medical evaluation of persons with mental retardation referred for psychiatric assessment. *Gen Hosp Psychiatry* 19(4):274-280.

Ryan RM (1994b), Recognition of psychosis in persons who do not use spoken communication. In: Schizophrenia: Exploring the Spectrum of Psychosis, Ancill RJ, Holliday S, Higenbottam J, eds. New York: Wiley Press.

Ryan RM (2001), Handbook of Mental Health Care for Persons with Developmental Disabilities. Quebec: Diverse City Press Inc.

Ryan RM, Sundheim STPV, Voeller KKS (1998), Medical diseases. In: Textbook of Pediatric Neuropsychiatry, Coffey CE, Brumback RA, eds. Washington, D.C.: American Psychiatric Press, pp1223-1274.

Sobsey D (1994), Violence and Abuse in the Lives of People with Disabilities: The End of Silent Acceptance? Baltimore: P.H. Brookes Publishing Co.

Stavrakaki C, Klein J (1986), Psychotherapies with the mentally retarded. Psychiatr Clin North Am 9(4):733-743.

Sundheim STPV, Ryan RM, Voeller KKS (1998), Mental retardation. In: Textbook of Pediatric Neuropsychiatry, Coffey CE, Brumback RA, eds. Washington, D.C.: American Psychiatric Press, pp649-690.

Szymanski L, Madow L, Mallory G et al. (1990), Report of the task force on psychiatric services to adult mentally retarded and developmentally disabled persons. Washington, D.C.: American Psychiatric Association.

Szymanski LS (1977), Psychiatric diagnostic evaluation of mentally retarded individuals. J Am Acad Child Psychiatry 16(1):67-87.

Szymanski LS, Crocker AC (1989), Mental retardation. In: Comprehensive Textbook of Psychiatry, vol. 2, 5th ed., Kaplan HI, Sadock BJ, eds. Baltimore: Williams & Wilkins.

Trumble S (1993), Communicating with people who have intellectual disabilities. Aust Fam Physician 22(6):1081-1082.