“DUAL DIAGNOSIS”: YOUNG CHILDREN WITH INTELLECTUAL DISABILITIES AND BEHAVIOR PROBLEMS

SUSAN VIG, ED.M., PH.D.

Dylan, a handsome 4-year-old boy, attends a community preschool. He runs, jumps, and climbs enthusiastically during outdoor play. His classroom adjustment, however, is poor. His teacher reports that, when his classmates are learning to write the letters of their names, Dylan scribbles on paper, then quickly loses interest. When the teacher reads a story to the children, or leads a group discussion, he is apt to leave the group and wander around the room, taking toys off the shelves. When the teacher tells him to come back and sit down, he screams, “No!” and starts to run for the door. The teacher is especially concerned about Dylan’s difficulties interacting with other children. He frequently barges into small groups of children who are playing together, grabs toys, does not share his own toys, and sometimes hits or kicks the other children.

A comprehensive multidisciplinary evaluation, including formal psychological assessment, shows that Dylan has an IQ of 62. This means that, at the age of 4 years, he functions developmentally like a child of 2½ years. Dylan has both a mild intellectual disability and significant behavior problems (oppositional and aggressive behavior, attentional difficulties, and very poor social skills).

Like Dylan, many preschool children have a “dual diagnosis,” including both intellectual disabilities and behavior problems. Both issues need to be addressed in planning intervention for them.

INTELLECTUAL DISABILITY (ID)

In thinking about the behavior problems of young children with dual diagnosis, it is important to understand the cognitive component of the diagnosis. The American Association on Intellectual and Developmental Disabilities recently published the following definition of intellectual disability:

“It is not a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior, which covers many everyday social and practical adaptive skills. This disability originated before age 18.”

The term “mental retardation” is being replaced by “intellectual disability.” For young children, the term “developmental delay” is sometimes preferred. All of these terms mean the same thing.

Intellectual disability (ID) occurs in approximately 2 ½ % if the population. More males than females have ID (1:3 to 1 ratio). The risk of ID in children whose parents have IQs below 75 is 40%. ID is often classified by IQ ranges: mild (IQ 55-69), moderate (IQ 40-54), severe (IQ 25-39), and profound (IQ below 25). Approximately 89% of people with ID function within the mild range. According to the current multifactorial model, the causes of ID are thought to involve complex interactions among multiple risk factors: genetic, biological, environmental, and psychosocial.

Children with ID are at greater risk for maltreatment than those without ID. The risk of physical abuse is greater for children with mild ID than for those with severe ID. The reason for this is that, because children with mild ID look and move like other children, their ID may not be recognized. Adults may blame them for willful misbehavior, rather than recognizing that expectations for them may be too high. Child neglect has been associated with maternal ID.

ID is identified on the basis of a standardized IQ test, administered by a qualified psychologist, and a formal measure of adaptive behavior (skills of daily living). Many longitudinal studies, following preschool children into later childhood, adolescence, and adulthood, have shown that IQs obtained in early childhood remain stable over time for the majority of children.

Young children with ID present with developmental delays. Those with mild, moderate, severe, and profound ID function at approximately ½, ¼, ¼, and ¼ of their chronological ages. Behavioral characteristics of children with ID go beyond what can be explained by developmental delay. The children are apt to be less curious, and to engage in less exploration to discover the function of objects than other children. When handling toys and other objects, they may engage in general manipulation (holding passively, touching nonspecifically, banging, sliding across a surface, dropping), rather than more purposeful actions. Children with ID learn slowly, do not easily generalize what they learn, and are apt to forget what they have been taught. They have trouble forming goals and organizing their behavior to meet...
those goals. Because of this difficulty, they may not easily initiate or sustain involvement in play activities.

Both delays and other characteristics associated with intellectual disabilities contribute to behavior problems in young children with dual diagnosis. For example, 4-year-old Dylan, who has ID and functions like a 2 ½-year-old, will not be capable of writing the letters of his name. Instead of participating in a classroom activity that is developmentally too demanding, he may protest loudly, crumple the paper, grab another child’s pencil, crawl under the work table, or wander around the classroom. Other characteristics associated with ID can also contribute to behavior problems. Even when developmentally appropriate tasks are presented, a child with ID is apt to learn slowly and forget quickly. This means that the child will need much practice, encouragement, and review for task mastery and maintenance.

Myths about ID sometimes prevent accurate identification and implementation of developmentally appropriate services for young children with ID. One myth is that children with ID have an unusual or stigmatized appearance. In reality, although syndromes associated with ID sometimes involve an unusual appearance, the great majority of children with ID look just like other children. A second myth is that children with ID are clumsy. In reality, many children with ID have good motor skills. They run, jump, and climb well, though they may have trouble with motor activities that involve a cognitive component (for example, walking heel-to-toe along a line). A third myth is that children with ID are delayed in all areas. In reality, some children with ID (particularly those with concurrent autism spectrum disorders) have “splinter skills”: rote counting; alphabet recitation; and number, color, letter, or shape naming. These splinter skills bear little relationship to cognitive abilities. A pleasant physical appearance, good motor skills, and the presence of splinter skills should not preclude a diagnosis of ID.

**BEHAVIOR PROBLEMS**

A large body of literature shows that approximately 30 to 50% of children, adolescents, and adults with ID have concurrent behavior problems or psychiatric conditions. This means that many preschool children with ID also have behavior problems. Many empirical studies have shown that the behavior problems cause more stress for families than the children’s intellectual limitations.

Different kinds of behavior problems have been associated with different degrees of intellectual impairment. Mild ID in children is associated with disruptive or oppositional behavior, anxiety, mood disorders, and attention-deficit hyperactivity disorder. More significant ID (IQs below 50) is associated with aggression, general overactivity, self-injury, autistic behavior, sleep problems, and atypical eating patterns.

**Autism/ID Overlap.** Extensive research has shown that approximately 70 to 75% of children with autism have concurrent ID. Although few children with mild ID (IQs 55 and above) have autism, over 40% of those with moderate to severe ID, and over 80% of those with profound ID, have concurrent autism.

The overlap between ID and autism accounts for some kinds of behavior problems seen in preschool classrooms. Children with both autism and ID may refuse involvement in tasks introduced by teachers, either because of a strong preference for solitary, self-chosen activities, and/or because the activities are developmentally too demanding. The children may resist making transitions from one activity to another. This may be due to insistence on sameness associated with autism, and/or poor understanding of what is expected as associated with ID.

The crucial first step of intervention for children who have both autism and ID is the accurate identification of both conditions. Empirically supported treatment approaches, such as applied behavioral analysis (ABA), may be useful if the child’s developmental level is taken into consideration when forming treatment goals. Information, resources, and guidance for understanding and managing children’s behavior should be available to those parents who seek these kinds of supports.

**Other Behavior Problems.** Young children with and without ID may experience emotional disturbances: anxiety, mood disorders, and traumatic stress disorders. In young children, tantrums, hyperactivity, irritability, emotional arousal, and low frustration tolerance may be attributable to temperament or reactive to psychosocial stressors, but are sometimes caused or worsened by mood disorders. Aggressive behavior (hitting, biting, kicking other people) has many different causes, but may be due to mood disorders. For children with ID, problem behaviors should be interpreted within the context of developmental age. Whether strong emotions are due to temperament, mood disorders, or other causes, they interfere with children’s behavioral self-regulation. An intervention goal should be to help the child control his or her emotions and emotional arousal.

**Social Difficulties.** Research has shown that many young children with ID experience difficulties with peer socialization. The children may be rejected by peers, or assigned roles as mascots or babies. The children have trouble initiating play activities, entering peer groups, and maintaining play. Their play is apt to be more intrusive and disruptive than the play of other young children. Young children with ID have fewer emotional regulation strategies than other children. Their ability to resolve conflicts is apt to be poor. (See Guralnick, 2006, for further information.)

Why do young children with ID have so much trouble with peer socialization? One reason is that children with ID function developmentally like much younger children. Their play choices may be considered “babyish” by other children of their age. The children with ID lack an age-appropriate capacity for abstract thought, and may not be able to form goals and organize their behavior to meet those goals. This means that they have trouble initiating and
sustaining peer play. Due to their cognitive limitations, young children with ID are apt to have poor information-processing skills. As Guralnick and others have pointed out, peer play is highly unpredictable. Peer interaction requires rapid and complex social information processing. In a play situation, a child must maintain attention and focus in order to encode social information, must remember the social information, and then integrate the social information to solve social tasks. Children with ID may be confused or overwhelmed by these kinds of simultaneous social demands.

Young children with ID are apt to have difficulty with behavioral self-regulation. Due to their cognitive and language delays, verbal mediation (thinking about a situation, using internalized self-talk) may not be available to them. In situations involving peer conflict, they may not be able to understand the conflict from the peer’s perspective, and may therefore lack the cognitive prerequisite for negotiating a solution for a conflict.

As an example, consider the challenges facing 4-year-old Dylan, who has mild ID and functions developmentally like a 2½-year-old. In his preschool classroom, a small group of children are playing with toy animals, pretending that they are at the zoo. Kayla holds a toy giraffe. Dylan sees the giraffe, barges into the group, and grabs the giraffe. Kayla protests and grabs it back, causing Dylan to scream “Mine! Mine!” and to hit Kayla. Conflict ensues. Because of his ID, Dylan does not have the cognitive ability to understand the pretend activity, and does not enter the group appropriately. He is not able to perceive the conflict from Kayla’s perspective, anticipate her probable reaction to his grabbing the giraffe, or regulate his behavior to delay gratification (playing later with the giraffe or playing with another toy). Dylan does not have the language skills to use internalized self-talk to regulate his behavior (“I’m gonna ask if I could play” “I’m gonna play with another toy”), or to negotiate a solution with Kayla (“Can I have the giraffe later?”). Due to the noisy conflict, the teacher is apt to become involved. She instructs Dylan to apologize to Kayla, then asks the children to include Dylan in their game. Due to his ID, he may not understand the children’s pretend actions, role assignments, or dialogue. The play situation keeps changing, and there is too much social information to process and integrate. Dylan wanders away from the group.

**INTERVENTION**

Intervention for young children with dual diagnosis should optimize the child’s development and the family’s ability to support the child’s development. The first step of intervention is accurate identification of the child’s developmental status. Although a child’s behavior problems may cause greatest stress for parents and professionals, formal identification of the child’s intellectual disabilities (ID) is equally important. Identification of ID leads to better understanding of behavior problems, results in realistic expectations for progress and behavior, and can reduce the risk of maltreatment.

Intervention plans may include developmental services for children (occupational, physical, and/or speech language therapy), with the goal of optimizing development, rather than “curing” the ID. Children with mild ID are apt to derive greatest benefit from these services. Whether a young child with dual diagnosis attends a specialized, integrated, or regular preschool or childcare program, instructional goals and classroom activities should be consistent with the child’s developmental level. Being able to manage classroom tasks and expectations will reduce behavior problems for many children with ID.

As well as implementing services for children, intervention should offer supports for interested families. Some families may want access to information and advocacy or support groups related to the child’s condition. Other families may prefer more extensive supports. Based on an infant mental health model, therapeutic approaches for parent-child dyads may be useful. Formal parent training programs, such as Webster-Stratton’s “Incredible Years,” following a specific curriculum, may be helpful. McIntyre (2008) describes an adaptation of this program for young children with ID.

Developmental follow-up, offered by a health care provider or other professional, helps families monitor a child’s progress over time. During periodic follow-up sessions, the provider assesses the child’s developmental status, determines the child’s current service needs (including discontinuation of services no longer needed), and serves as a resource for families.

**CONCLUSION**

Early identification of children’s developmental status, including both ID and behavior problems, and providing intervention that targets all components of children’s developmental status, will optimize outcomes for young children and their families.

**References** (Expanded reference list available from the author)


