

Traumatic Brain Injury and Teens: Information for School Administrators

Students who are recovering from brain injuries may need several kinds of support to continue to function in school.

By Joan Bohmann

Shelly was in middle school when she was in a very serious car accident. In addition to a broken leg, she suffered a traumatic brain injury (TBI) and was hospitalized for several weeks. The principal called on the school psychologist to prepare staff members to support Shelly's recovery and transition back to school.

Traumatic Brain Injury

Brain injuries range from mild to severe. A mild brain injury is often associated with the word *concussion*. The effects are brief: the person experiences only a few minutes, days, or weeks of confusion. A mild brain injury is often defined by a brief loss of consciousness; loss of memory of events immediately preceding or following the injury; alteration in mental state at the time of the injury; and a loss of sensation, such as sense of smell or fine motor coordination, that may or may not be restored (Brain Injury Association of America, n.d.). Most people who suffer a mild brain injury recover spontaneously. Repeated mild injuries, however, such as those sustained in sports, can result in more significant and more permanent damage.

A person who has sustained a moderate brain injury requires treatment to make a full recovery or to learn how to compensate for the damages done. Severe brain injuries result in prolonged loss of consciousness or coma. The recovery from a severe brain injury occurs most rapidly in the first year, although it can continue at a much slower pace for several years. Most individuals who suffer a severe brain injury will be left with permanent physical, cognitive, or behavioral deficits (NIH, 2007).

At one time, professionals believed that brain injuries in young children were less likely to have long-lasting effects because of the

"plasticity" of the brain during early development. Those beliefs have been challenged by recent research. A brain injury that occurred in early childhood may be relevant to current behavioral or academic concerns. The demands of school and society increase as children mature and progress through the school system. More recent research indicates that the consequences of a brain injury can have renewed impact with each new developmental stage.

Educational Implications

A TBI can result in impairments in memory, word retrieval, expressive language, physical strength and agility, and regulation of emotions. If a student with a TBI can't find the right words, teachers and peers are unable to understand what the student is trying to communicate. This interferes not only with the learning process but also with assessing what the student has learned. The mental energy required to meet daily demands can be exhausting. Balance problems or other physical symptoms can also contribute to fatigue or difficulty navigating stairs or crowded walkways. Unaccustomed challenges to learning or physical skills can result in frustration, anger, and discouragement. Educators may observe a very different student than the one they remember from before the accident. Given these factors, a student may need academic, emotional, or other support at school.

Is Special Education Required?

Shelly was disorganized; she sometimes lost her homework assignments or couldn't remember how to do the assignment at the end of the day. She was also easily frustrated and often angry. Shelly needed help remembering what her class schedule was and where to find her classes. She had trouble comprehending

Joan Bohmann is a nationally certified school psychologist and the director of professional standards and continuing professional development for the National Association of School Psychologists.

Student Services is produced in collaboration with the National Association of School Psychologists (NASP). Articles and related handouts can be downloaded from www.naspcenter.org/principals.

textbooks at her grade level. Her grades fell. She qualified for special education services for part of her day and also needed help navigating her day and courses.

Students who have experienced a TBI may be eligible for special education or Section 504 services. Two key points in the federal definition of TBI are that the injury must have occurred as a result of external force *and* that the results of the injury must adversely affect the student's educational performance. Events that cause brain damage but do not fall under the federal definition of TBI include brain tumors, lack of oxygen, and stroke. Also, a student who experiences a complete recovery from a brain injury or who has only mild residual effects, such as occasional headaches, may be able to navigate the school and pass his or her classes. Such a student would not meet the requirement for impairment in educational functioning.

Eligibility for a 504 plan requires that the TBI causes a substantial limitation in the student's ability to learn or perform another major life activity, such as walking, seeing, talking, or hearing. A 504 plan might be necessary for students who do not require special education but who nevertheless have substantial academic needs, such as a student who understands the concepts being taught but cannot keep up with the note-taking demands of a classroom, which results in poor performance on tests and assignments. The accommodation plan might allow the student to tape lectures, have a scribe in the classroom, or copy the teacher's lecture notes. For a student who fatigues easily, the accommodation plan might allow the student to complete a lengthy exam in two sessions, rather than one.

Before school personnel decide whether a student requires special education or a 504

Basic Facts About TBI

- In the U.S., males ages 0–35 are twice as likely to have a TBI as females.
- Each year, more than 30,000 children in the U.S. suffer permanent disabilities as a result of a brain injury
- TBI is the number one cause of both death and disability in children and young adults in the U.S.
- Motor vehicle crashes are the leading cause of brain injuries and death among U.S. teens ages 15–20 years
- Drinking or drug use increases the risk of brain injuries when paired with other risky behaviors, such as inexperienced and impaired driving
- Brain injuries in teens are commonly associated with sports, such as skiing, sledding, ice skating, ice hockey, and football

Symptoms of TBI

- Physical: headache, dizziness, nausea, sleep disruption, fatigue, poor coordination, and paralysis
- Cognitive: decreased attention span and concentration, slower mental speed and impaired short-term memory, impaired communication, impaired judgment, impaired problem solving, impaired planning skills, and difficulty reading and writing
- Behavioral: irritability, depression, anxiety, impulsiveness, mood swings, poor self-monitoring, anger, and inappropriate social responses

The prevalence and severity of symptoms will vary with the severity of the injury.

Sources: Centers for Disease Control and Prevention, Nation Center for Injury Prevention and Control. Facts about traumatic brain injury. Retrieved September 25, 2007 from www.cdc.gov/ncipc/tbi/FactSheets/Facts_About_TBI.pdf.

■ Centers for Disease Control and Prevention, Nation Center for Injury Prevention and Control. Signs and symptoms. Retrieved September 25, 2007 from www.cdc.gov/ncipc/tbi/Signs_and_Symptoms.htm

■ ThinkFirst National Injury Prevention Foundation. Injury prevention. Retrieved July 16, 2007 from www.thinkfirst.org/teens/injuryprevention.asp.

Conversation Starters

Use the following questions to talk to your school health providers and school psychologist about how to support students who have a traumatic brain injury (TBI) or other health issues:

- Does the form used to obtain a student's developmental history include questions about serious head injuries or hospitalizations?
- Is information about the supports used to aid a student with TBI communicated to all pertinent staff members—including bus drivers and lunch room monitors—and passed along when a student transfers?
- What opportunities exist to educate staff and students about the consequences and prevention of TBIs? Is it included in the health curriculum?
- Would an in-service about TBI benefit staff?

plan, the student's level of functioning and needs must be evaluated by a team that is knowledgeable about the student, the assessment, and the eligibility criteria.

How School Personnel Can Help

Education. All appropriate staff members, including teachers, cocurricular personnel, bus drivers, lunchroom attendants, and others, should understand what supports the student requires to get through the day. Students with a brain injury may appear willful or lazy, or they may be misdiagnosed with an emotional disorder when in fact they are struggling to cope with the demands of life.

Collaboration. School administrators can help develop partnerships with the student and family. Parents will be able to tell the school team about their child's needs, the warning signs of frustration or confusion, and how best to prevent emotional outbursts. Parents are in a good position to invite the hospital rehabilitation team or a representative to a transition meeting as their child prepares to return to school. Speech pathologists and occupational therapists often provide a great deal of cognitive intervention to people who have experienced brain injuries and will have good insights into the supports the student will require for school success.

Family support. The principal should ensure that the appropriate school specialists meet the student and family and that the lines of communication between educators and the family are open to meet needs and celebrate successes. The student and his or her family and friends remember the injured student's level of functioning before the accident. This awareness can lead to grief, anger, and guilt about the injury and the loss of previous skills.

Appropriate supports. Because of Shelly's disorganization and disorientation, part of her rehab involved learning how to develop and

use a notebook that contained the information she needed to get through the day. The school psychologist helped her create a school notebook that included her class schedule, the names and pictures of her teachers, and room numbers along with a simplified map of the school that showed her how to find her classes, her locker, and the lunchroom. Keeping this notebook current was essential. With the help of her teachers and parents, Shelly used her notebook to keep track of her assignments.

Whether or not the student requires special education or an accommodation plan, there are many steps a school can take to support a student with a TBI. Some students (and not just those who are recovering from a TBI) need a homework sheet that has a sample problem or the steps of a task clearly demonstrated to help them recall how to do the assignment. Students who become fatigued easily will require abbreviated assignments or extra time. Students may require flexible programming with an abbreviated day at first or with some,

but not all, classes in a special education classroom (Havey, 2002). Audio- or videotaped demonstrations may help some students master lessons. Supports should be monitored for effectiveness and adjusted as a student's abilities change.

Demonstration along with verbal instruction is helpful for students with a TBI. Consistent routines are also helpful. Administrators should try to place a student with a TBI with teachers who have consistent expectations and strong organizational skills.

Transition planning. Planning for transitions to the next grade is also important. The student may need more intensive support at the start of each school year. For a student who has difficulties with memory or spatial orientation, these transitions can present significant challenges. Communication between teachers and between schools when students move from a middle level school to

Whether or not the student requires special education or an accommodation plan, there are many steps a school can take to support a student with a TBI.

a high school will help staff members set appropriate expectations and carry over effective accommodations. Administrators can take the lead by encouraging school visits, planning conferences, and ensuring the transfer of all appropriate information about the student's health status and school needs. If the student receives his or her schedule early, he or she will have time to become familiar with teachers and class locations and to discuss expectations and support requirements.

Summary

Schools can play a vital role in helping students who are recovering from a TBI succeed in school and move through rehabilitation. Educators should be aware not only of the current needs of the student but also of the emotions surrounding the loss of previous skills. The student may also lose friends because of changes in his or her skills and personality. School

personnel can help by seeking out the family's knowledge when planning for the student's educational needs, informing all members of the student's educational team, and being flexible in terms of educational programming and expectations. **PL**

REFERENCES

- Brain Injury Association of America. *Brain injury: The teenage years understanding and preventing teenage brain injury*. Retrieved July 16, 2007, from www.biausa.org/publications/Teenage.Years%20_Edited_.pdf
- Havey, M. (2002). Best practices in working with students with traumatic brain injury. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV* (pp.1433-1445). Bethesda, MD: National Association of School Psychologists.
- National Institutes of Health. *NINDS Traumatic Brain Injury Information Page* Retrieved July 16, 2007 from www.ninds.nih.gov/disorders/tbi/tbi.htm

Resources

Brain Injury Society
www.bisociety.org

ThinkFirst National Injury Prevention Foundation
www.thinkfirst.org

Brain Injury Association of America
www.biausa.org

National Resource Center for Traumatic Brain Injury
www.neuro.pmr.vcu.edu

Advertisement