Special this Month - Orientation & Mobility Corner

Therapy with Blind and Low Vision Patients - by Joanne Laurent, M.A., COMS
Highest Expectations Travel & Adaptive Skills Instruction for the Blind

The varying degrees of blindness can be confusing to anyone who rarely encounters blind people. We are accustomed to speaking in visual terms. I chuckle when I observe people answer a blind man's request for directions by pointing and saying "it's over there." Or drivers who wildly wave through their windshields that it is safe for blind people to cross the street using the silent motion that means, "It's okay, I'll wait for you to cross." We live in a visual world and we cannot help but think in visual terms.

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Therapy with Blind and Low Vision Patients - April 2009

Therapy with Blind and Low Vision Patients

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the silent motion that means, “It’s okay, I’ll wait for you to cross.” We live in a visual world and we cannot help but think in visual terms.

When a therapist working on a skipping exercise asks a child to skip down the hall and stop at a specific visual landmark the child will invariably begin skipping down the hall. But miscommunication can occur when a visually-impaired child fails to stop at the target location because she did not understand the visual reference and was unable to recognize and articulate that lack of understanding. Her repeated failure to stop at the visual landmark may result in needless frustration on the part of both the child and the therapist. Visually-impaired children who try to please, but are visually unable, may appear to be disrespectful or learning disabled when they fail to follow instructions. Some visually-impaired children may perform a task satisfactorily while carrying an unspoken burden of fear and anxiety.

More often than not, children (and adults) will try to please their therapists by attempting to comply with requests even when they don’t fully comprehend the instructions. It is not unusual for a newly blind person to attempt whatever task is requested if at all possible because they might not yet know how to describe (or even be completely aware of) the extent of their visual limitation. Children almost always unquestioningly obey even when they do not fully understand the request which can lead to errors that annoy the person who made the request. Consultation with an orientation & mobility (O&M) specialist is a quick and easy way to clear up any communication or visual uncertainties to ensure that therapy goes smoothly.

Therapists may wish to team with O&M Specialists when working with a blind or visually impaired child for anything from crawling and play skills to eating to teeth-brushing. It is never too soon to begin engaging an infant in interaction. In a study of parent-child interaction, parents and their visually-impaired children demonstrated a reduced sensitivity and responsiveness to each other (Celeste, 2009) which can easily be ameliorated by providing education and counseling about blindness to the parent and OT. Self-stimulating behaviors such as rocking and eye poking begin when lack of visual information cause a child to withdraw into his own world. O&M training from the earliest of infancy can provide parents with a toolbox full of strategies that will eliminate self-stimulating mannerisms and encourage large and fine motor development.

Knowledge of blindness-related differences may be useful to the physical therapist when assessing and treating proprioceptive deficits. A study comparing 8 to 13 year-old sighted children to those with low vision found that balance and gross motor skills were weaker in the low vision group (Bouchard, Tetreault, 2000). Numerous studies have attributed poor posture and balance to visual impairment. In a contrary stability study, visually impaired individuals were found to stabilize and support themselves equally well but differently than did the sighted participants. When facing challenges to their balance the visually impaired group compensated by bending at the hips while the sighted group responded by using their ankles to rebalance. (Horvat, et al., 2003). The physical therapist and the orientation & mobility specialist can help each other by sharing information when a child with vision loss has balance and large motor disabilities.

Delays in meaningful language have been well documented in babies who lack the ability to observe the actions that accompany word usage. Echolalia has been observed in blind toddlers for the simple reason that the toddlers lack sufficient visual information to put the new vocabulary they are learning into context. (Ryles, 2004). Blind rehabilitation professionals, who are well-versed in strategies that will overcome blindness-related speech deficiencies, are happy to collaborate with the SLP upon request. The SLP might be able to achieve results more quickly using a coordinated approach with a pediatric blind rehabilitation therapist or teacher of the visually impaired (VI Teacher).

In all forms of therapy involving blind people, cognitive and emotional components have a strong impact on the outcome. Parents who are coping with the news that their child or new baby will grow up blind deserve to receive immediate support from well-connected blind rehabilitation specialists so they have easy access to information about blindness programs, technology, training, resources and peer mentoring through consumer group interaction and online listserv connections. A qualified O&M Specialist, VI Teacher or Blind Rehabilitation Therapist will recognize the extent of a problem that may easily elude teachers, parents and hospital staff. In addition, the blindness specialist can provide training, resources and peer connections which encompass the important cognitive and emotional components that are crucial parts of any blind rehabilitation training program.

A Reference Guide to Different Types of Blindness

When we hear the term “blindness” we tend to presume the blind person has no vision at all and lives in complete darkness. In reality, 90% of all “blind” people have some form of remaining vision. A large percentage of legally blind individuals pass us by unnoticed because they don’t look blind. They may have enough useful vision to enable them to walk without using a mobility aid, such as a long white cane or a dog guide. They might even be able to read the fine print of a telephone book. Nevertheless, you can be sure they are struggling to keep up with their peers in a sighted world and, without proper training and resources, will live severely restricted lives.

Below is a snapshot of different forms of blindness:

Visual field loss (i.e. tunnel vision): This person might be able to read small print better than you or see a dime across the street while being unable to see a stapler sitting on his desk. There are various degrees of severity within the range of legal blindness but all levels of this condition severely impede movement. A person with a 5-degree tunnel is likely to “look” blind and refuse to take a step without holding someone’s arm or using a mobility aid while a person with a 20-degree tunnel can easily appear to have normal vision under limited circumstances. As with all visual field blindness, people who have 20 degrees of remaining visual field (enough to fake being sighted) cannot see anything that is close to them. It’s hard to believe they’re blind because they might tell you about a small object they see in the distance. Suddenly, you become confused as you observe them pivot and walk right into a wall or stumble into an object that is right in front of them. Most people, however, have learned to adapt to vision loss (or are

faking good vision) and are more careful and deliberate in their steps. They will rarely make the mistake of walking into a wall. Nevertheless, their safety is at stake. Without use of a mobility aid (long white cane or dog guide) steps, curbs and crowds of people can be mortal enemies to the person with tunnel vision. These people cannot see anything in the dark and, without proper training, will withdraw from all evening activities and do whatever is necessary to ensure they are home before dusk. Children with tunnel vision are able to read the eye chart and simple words so their poor reading skill is often mislabeled as a learning disability. Parents and teachers do not understand the difficulty of learning to read and sound out new words when the child may only be able to see a piece of a word at a time and never sees entire sentences and paragraphs that we all take for granted. The need for children with tunnel vision to learn Braille is overlooked. Some of the eye conditions that cause tunnel vision are: Retinitis Pigmentation (RP), Glaucoma, Hemianopia/stroke and Pseudotumor.

Central vision loss (poor acuity): Some blind people with central vision loss are able to read print using varying strengths of magnification. Some may read clocks and recognize faces while others cannot see a thing even with the most powerful magnifiers or telescopes. Many people in this group can see colors. Depending upon the type and severity of vision loss, this person may be able to walk without a mobility aid considerably easier than a person who has a visual field loss. Use of high-powered magnification reduces the viewing area to a small tunnel which interferes with the ability to see the whole picture. Thus, even with good corrected acuity using magnification, many children learning to read will struggle with seeing only small pieces at one time which results in their being incorrectly labeled with a learning disorder. A few of the common eye conditions that cause central vision loss are: Stargardt’s, Macular Degeneration and cataracts.

Blind spots (Scatomas) refer to random areas of vision loss. The scatomas can be large or small, many or few. People with blind spots may have some or all of their central vision, peripheral vision, or both disrupted. Diabetes is a common cause of blind spots as the leaky blood vessels block some or all areas of the eye.

Other eye conditions: Nystagmus (uncontrollable eye movement), photophobia (light sensitivity), floaters, inability to see without heavy contrast and eye fatigue usually cause wide fluctuations in visual acuity from day to day or moment to moment.

It is not uncommon for a blind person to have two or more eye conditions simultaneously. A combination of glaucoma and cataracts would cause restricted field vision as well as reduced acuity. Most blind people who have remaining vision experience fluctuations in their vision from day to day. It is imperative that any professional service provider understand that a person with visual disorders may be able to perform a task one day yet be unable to perform the same task the next day. If a student, client or patient states they are unable to see what you previously observed them see, please believe them and honor their statement.

The medical community acting as a team with blind rehabilitation professionals can ensure that the best options are available to patients and provide them with essential resources that will be

useful in multiple life experiences.

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This Month's Featured Organization:
Highest Expectations Travel and Adaptive Skills for the Blind.

Special Thanks to Joanne Laurent, M.A., COMS for providing this article.

Joanne’s teaching philosophy is: “If you can’t learn it, I’m not teaching it right!” Joanne maintains strong affiliations with blind consumer groups believing that the most important opinions are those of blind people themselves.

She holds a Master’s degree in teaching orientation & mobility from Western Michigan University and a Bachelor of Science in speech communication from Portland State University. She taught O&M to blind and multi-handicapped/blind children at South Carolina School for the Deaf and the Blind and provided vocational rehabilitation (O&M, Braille and daily living skills training) to teenagers and adults at Washington State Services for the Blind. She continues teaching in private practice providing assessments, consulting, and training for schools and state agencies for the blind.

Joanne is certified by The Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP).

Please support our contributing authors and visit Joanne's website: Highest Expectations Travel and Adaptive Skills for the Blind at http://www.blindcoach.com

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