

ADHD

ENHANCING FOCUS THROUGH ACTION

By Heather World



Michelle Cappello, MSPT, remembers the cheerleader distracted from therapy by hip-hop music, the high school sophomore who couldn't count out her exercises, and the many children who were unable to focus when others were in the clinic.

Only about 5% of patients at Children's Hospital & Research Center Oakland, in Oakland, Calif., have been diagnosed with some type of attention deficit hyperactivity disorder (ADHD), but Cappello knows to adjust her pediatric therapy bag of tricks when children are easily distracted. "You're really monitoring what's going into the sensory input system," says Cappello, the management coordinator of sports medicine, adding that even seemingly innocuous background music and shelved toys can obstruct therapy.

Keeping children engaged in exercise is hard, but when those patients suffer from ADHD — which can manifest itself as predominantly hyperactivity-impulsivity, inattentiveness-distractibility, or both — their physical therapists must walk a moving line between enticement and over-stimulation.

The majority of pediatric physical therapists work with children who have a variety of impairments, says Robin Dole, PT, EdD, PCS, associate dean and program director for the Institute for Physical Therapy Education at Widener University in Chester, Penn.

As a result, strategies for helping the children focus are wide-ranging and gar-

nered from physical and occupational therapists, teachers, parents, and the children themselves. Ideally, parents, teachers, and assorted therapists communicate and borrow from each other. "What we're looking for is a change in behavior they're going to be able to carry over at home, at school," Dole says.

In the case of Cappello's sophomore, the girl devised a solution to her problem: she would repeat her exercises for the duration of one song rather than for any particular count.

In other cases, parents have helped Cappello by suggesting therapy sessions during slow hours if their children are easily distracted by others in the room. "It's worked very well," she says. "I'll pick certain times of day when I know it's quieter."

COMMUNICATING CALM

Because children with ADHD may have other therapeutic needs, communication among providers can be tricky. When he worked in a school setting, Mark Malczynski, PT, MPT, shared information with teachers, parents, and other therapists using a "communication book" filled with therapy notes and detailed techniques that helped that particular child to focus.

Now Malczynski works at the Children's Hospital of Philadelphia. He takes a couple of minutes from each session to talk to the child's caregiver about the session and what kinds of strategies can be tried at home and in school. "You've got to get them all on the same page," he says.

Up to a quarter of his caseload has involved children somewhere on the spectrum between easily distracted and

autistic, Malczynski says. Sometimes children have a specific diagnosis of ADHD, and sometimes they don't.

Malczynski sometimes forgoes structured therapy during his first session with a patient. Instead, he plays with the child to find out favorite toys and activities while determining how long the child can stay focused.

"Kids really attend activities they like," he says, recalling one preschool-aged child who loved a specific toy in the clinic. "I knew I'd have to incorporate that toy into what he was doing."

FOCUS ON FUN

Keeping therapy fun is important with all children, says Cindy Kays, PT, who works specifically with children with ADHD or autism in the Norfolk Public School District in Norfolk, Va. "These kids don't get a chance to move and run," she says. "The attention-deficient kids thrive on having movement."

Often she advises teachers to let squirrely children do jumping jacks or run in place before sitting down for schoolwork that requires concentration. She's suggested that teachers provide gum for a child to chew during a test. Sometimes she gives the children cushions filled with beans or liquid so they can wiggle while they sit.

Kays also works with children out of class, running a weekly sensory group with changing themes. Prior to Super Bowl Sunday, the children eased into elastic body socks and imagined they were wearing football uniforms. The bundled children then ran an obstacle course that incorporated training exer-

cises for football, by carrying weights and dumping them into buckets.

Although traditionally used with autistic children, the body sock provides gentle resistance for children who need strengthening, she says. Furthermore, the compression helps distractible children orient themselves in much the same way autistic children do. "ADHD can involve your entire sensory system," she says.

Similarly, Kelly Bossola, PT, literally weighs down some of her patients with ADHD at an outpatient satellite of the Children's Hospital of Pittsburgh. "Some ADHD kids might have sensory issues," she says. "They might need to be helped to center and focus."

Bossola presses them with a beanbag or rolls balls over them. She asks them to push or carry things. She puts weights on their ankles or loads a backpack with small weights.

INDIVIDUALIZED THERAPY

Up to 30% of the patients who visit the clinic for everything from spina bifida to sports injuries have some aspect of ADHD, though not all are diagnosed, Bossola estimates. Each child has different needs and abilities, she says, and only trial and error will uncover the individual therapy and application that will work.

Some children like lists. For them, she creates a list of exercises they can choose from and cross off when they've finished. Some like games. For them, she creates bingo cards that mix individualized therapy activities the child likes and dislikes to maintain focus without overwhelming her patients. "It's one separate activity versus doing an obstacle course of activities where you might lose control of the session," she says.

Others respond well to rewards. Parents can be especially helpful devising rewards for finished homework, she says.

Much of her work involves building a child's stamina. The list grows



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longer over time, while the breaks between exercises shrink. Children who needed to start therapy in a quiet hallway are eventually brought back into the gym or into a busy hallway.

Good physical therapy prepares children with ADHD for the world outside of the clinic, Dole of Widener University says. That can mean gradually re-introducing other children, toys, and games to the therapy environment. It can mean lengthening exercise intervals while reducing breaks. It means working with other therapists, teachers, and parents to provide the child with consistency between therapeutic, classroom, and home settings.

As a therapist, Dole swung toward research when she began to wonder if treatment sessions with some of her children would improve if their attention deficits were addressed directly. She joined two research projects that used nonverbal feedback to engage children with delayed skills — many of whom had various problems with motor coordination.

In one of the projects, conducted as dissertation research by a colleague at Widener, children performed exercises

like clapping their hands to the beat of the Interactive Metronome (IM), a tool developed in the early 1990s for children with learning and developmental disorders.

The patented IM program teaches patients to synchronize hand and foot motions to the rhythmic beat of a computer-generated tone they hear through headphones. The children had real-time auditory feedback on their performance that didn't distract them and helped them improve. Again, as the duration of therapy periods increased, endurance built up.

By the time they'd finished the project, the children had clapped their hands thousands of times.

Practice, as any athlete knows, is the backbone of learning. "You're not going to get very good at a sporting activity if you don't have guided practice," Dole says. The

same held true for the children.

The metronome also improved patients' timing, an important skill for everything from balancing on one leg to flowing through social situations.

In the end, the techniques for working with all children are actually similar, Malczynski says, but when he treats children with ADHD, he knows that some days may yield less therapy than others.

"Unfortunately, some days you're not going to get to where you want to," he says. "If it's a bad day, you have to take a couple of steps backwards to advance the session."

Children with ADHD do well when therapists remain flexible with their treatment approaches. Instead of asking his patient to stand on one foot to improve balance, for example, Malczynski will have a child kick a ball or make a game out of who can stand on one foot the longest.

"You make it less structured and give them more opportunity to be a kid and have fun," he says. ●

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