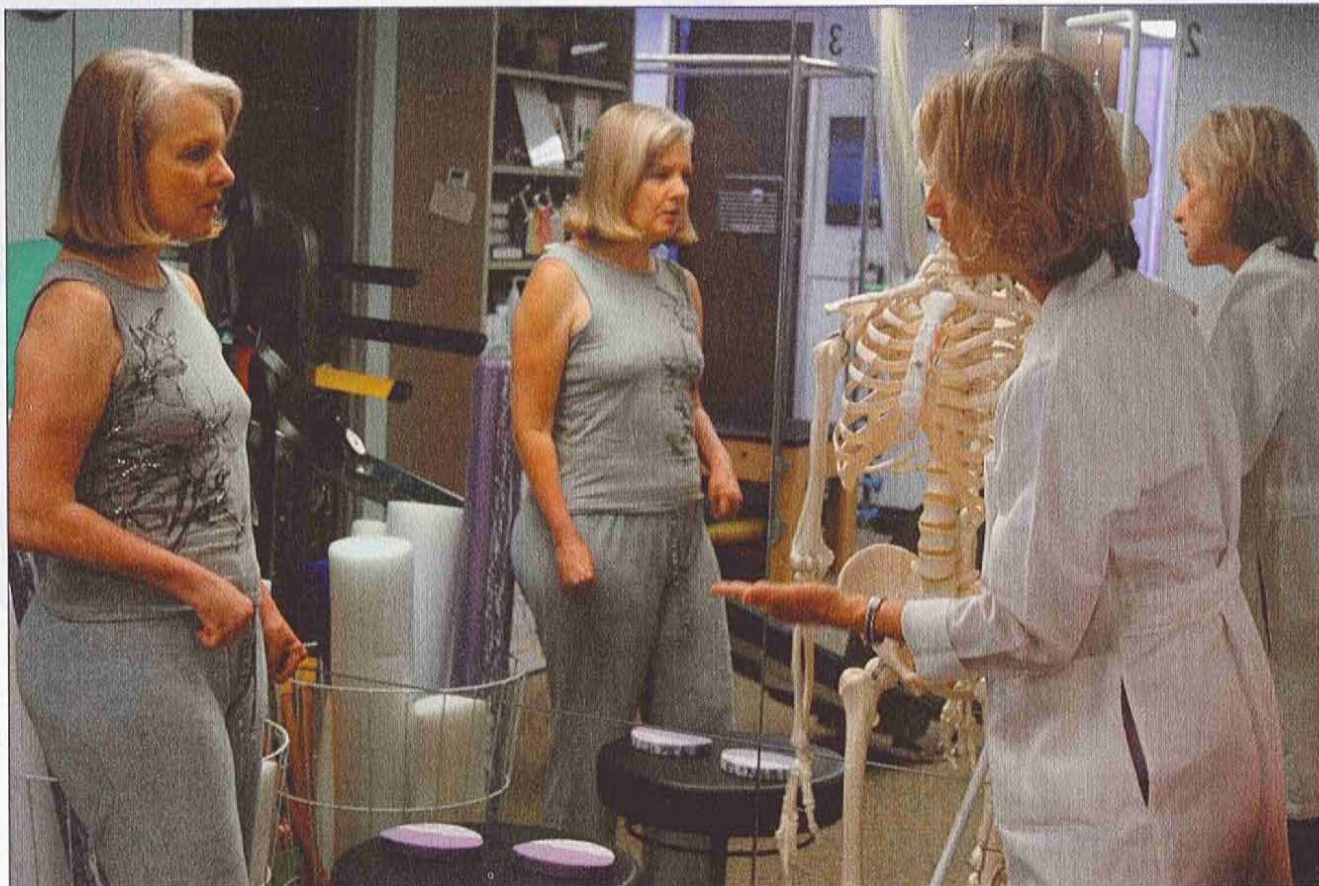


Therapy

Therapeutic Interventions



PHOTOS BY STEPHEN NOONOO AND CELIA SODURY

As part of her arsenal of kinesthetic learning tools, Stacy Barrows, PT, GCFP, CPI, uses OPTP's SMARTROLLER Sits pads to help teach patients how to balance their weight on their sits bones.

The Power of Awareness

Making patients more active participants in their treatment

By Stacy Barrows, PT, GCFP, CPI

In today's health care environment, providers are stretched to the max. Rising business costs, lower insurance reimbursements, and burgeoning documentation requirements take their toll on even the best-run practice. In addition to the challenges of running a business, PTs often have to find creative ways to provide patients with high-quality care despite fewer office visits and shorter treatment plans. They need to help patients get better sooner and faster than ever before.

While modern therapies and advanced technology can accelerate patient recovery, they alone are not a panacea. Much of the responsibility for recovery rests with the patient. As health educators, PTs can draw on the latest research about patient compliance and adherence to facilitate and maintain behavior changes that promote recovery. In other words, PTs can help their patients become better patients, and more active participants in their own treatment, through heightening their awareness via therapeutic exercise strategies, relevant informational resources, or the right products.

RECOVERY AND AWARENESS

Many PTs are kinesthetic learners who approach educating their patients as if they, too, were kinesthetic learners—explorers of their own bodies and capacities. When their patients fail to follow instructions or do home programs, PTs may think their patients are lazy, unmotivated, or disinterested in their own well-being. Often this is not the case. In fact, after an injury or illness, many patients are acutely aware of their body's own limitations and how they sense their posture or movement; they just don't know what to do with the sensory information. One way to help patients become better patients is to cultivate this newfound awareness through a kinesthetic inquiry process.

By definition, awareness is "knowledge that something exists, or understanding of a situation or subject at the present time based on information or experience." Therapists often underestimate the power of awareness. Instead, they adopt a fix-it approach, correct-

ing “faults” before patients have had a chance to absorb what they are doing. A more productive approach is to help patients draw on their own experience and perception to build their confidence in their own perception. After taking a subjective history, the PT can perform an objective evaluation while having the patient scan his movement. For example, during a gait analysis, the therapist may ask questions while observing the patient. This kinesthetic inquiry process not only helps the clinician see how the patient perceives his own movement, but can help start the patient.

PAIN AND AWARENESS

Pain is a natural deterrent both to awareness and effective motor learning. The body’s goal to avoid pain whenever possible can lead to dysfunctional postures and movement habits that eventually lead to injury. It’s no small wonder that patients who are hurting are unable to focus on motor learning to overcome injury, or simply don’t comply with their PT’s instructions.

Fortunately, many therapeutic modalities to reduce pain are at the PT’s disposal. Among them are the low-level laser, microcurrent, and interferential current—three nonpharmaceutical interventions to lessen pain symptoms and encourage awareness and compliance.

These tools not only help reduce pain and accelerate healing, but also give the PT an opportunity to educate the patient on how and why they work. Research has shown that when patients understand and have confidence in their treatment, it is much more effective. A brief instruction on the myofascial system and how electronic modalities stimulate it can instill patient confidence. Therapy practices staffed by professionals well-versed in how these modalities work will be better able to communicate with patients during treatment and get more out of each session.

THERAPEUTIC AWARENESS

In addition to these modalities, skilled manual therapy and a gentle touch create strong bonds between therapist and patient, speeding recovery. Touch stimulates nerve connections to the brain, including the release of oxytocin. A healthy nervous system is better able to handle stress than a compromised nervous system.

Many therapeutic exercise strategies today incorporate principles of neuromuscular re-education and complementary somatic disciplines. While these techniques can promote faster healing, it is best to keep in mind that these techniques are more effective when directions are clear, concise, and uncomplicated. According to Sluijs et al, “Complex regimens cause more non-compliance than simple regimen, as does the inconvenience of the regimen. In particular, it appears that compliance is less likely when the regimen is not tailored to the patient’s situation or daily routine.”¹ In other words, the simpler and more customized the routine, the better.

Another creative way to facilitate awareness and kinesthetic learning is to incorporate the use of therapeutic play. Stuart Brown, MD, author of *Play and How it Shapes the Brain*, notes that play selectively stimulates brain-derived neurotrophic factor (BDNF), which stimulates nerve growth in the amygdale (where emotions get processed) and the dorsolateral prefrontal cortex (where executive decisions are processed). Exercise also stimulates BDNF. John Ratey, MD, associate clinical professor of psychiatry at Harvard Medical School, and

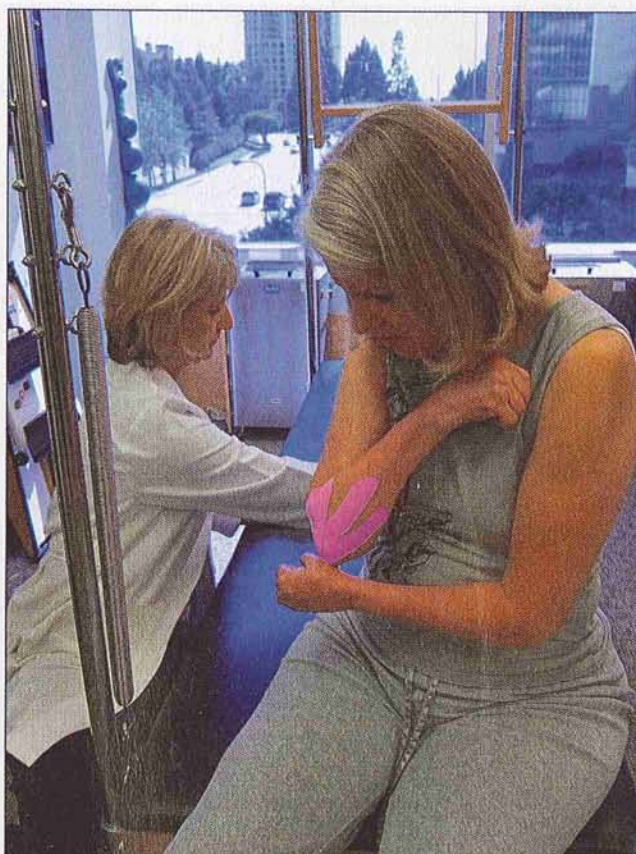
author of *Spark: The Revolutionary New Science of Exercise and the Brain*, calls BDNF “the Miracle-Gro for the brain.”² Therapeutic play and exercise continue to be positive choices to maintain function and vitality, and if patients already have a connection to a sport or fitness routine, every effort should be made to take advantage of familiar, even fun movements that promote healing.

Cross-referencing clinical learning about biomechanics with activities patients enjoy, such as golf, Pilates, dance, or walking, can provide additional opportunities for self-guided kinesthetic learning. They can improve body image awareness, promote joint protection, encourage energy conservation, and facilitate integrated movement.

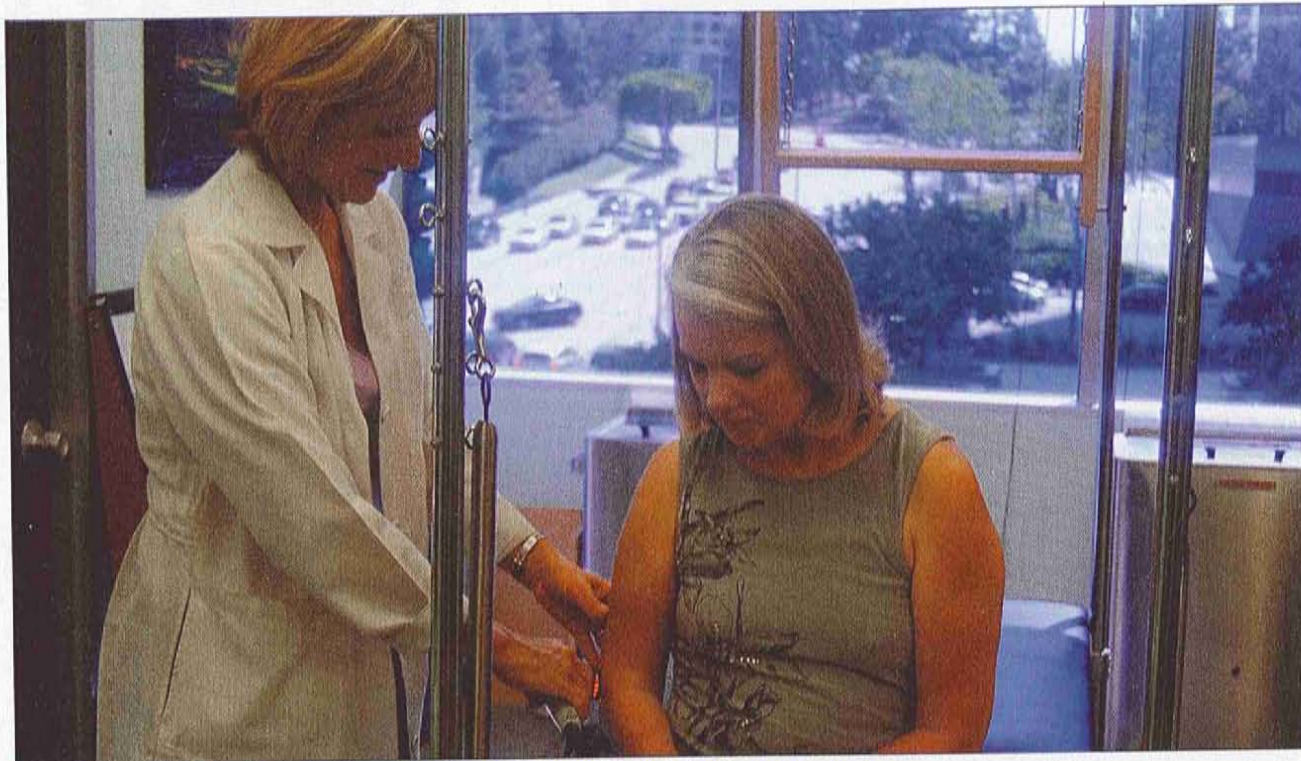
The right exercise class can also serve up support, camaraderie, and motivation. For example, dance and spin classes may improve cardiopulmonary endurance. And Feldenkrais®, t’ai chi, or yoga classes may improve biomechanics and body awareness.

PRODUCT AWARENESS

Home exercise and home rehab products are additional ways to build awareness and help support self care. Although home exercise programs have always been a core strength of physical therapy, recommending products for purchase has not always been easy for PTs or even possible in some departmental settings. But when patients can purchase reasonably priced tools that their PT believes in, and when the PT provides clear, detailed instructions in their use, it can spur better compliance and faster healing. Again, the



Explaining the science behind interventions like Kinesio Tape can help patients understand how and why they work.



Nonpharmaceutical interventions like low-level laser therapy can lessen pain and increase awareness.

simpler and more customized to the patient, the better. One device does not fit all patient needs. Here's a short list of ideas.

- Gym balls: safe therapeutic play to support treatment objectives of ROM, strength and balance.
- Foam rollers, such as the SMARTROLLER®, offered by OPTP, are an excellent way to increase patients' self awareness while improving self management skills and compliance.
- SMARTROLLER Sits durable foam pads are sensory motor learning tools to improve postural positioning on sits bones.
- Kinesio Tape®, properly applied at home, can improve healing and pain management.
- Resistance bands and oscillatory training tools can improve motor control and coordination.
- Biofreeze® and other topicals, such as Sore No More! or Flexall, are inexpensive and come as gels, sprays, or ointments for pain management.
- Home exercise programs with videos and pictures.

INFORMATION AWARENESS

Another way therapists can quickly integrate physical therapy into patients' lives and make sure their home program is real, accessible, and encourages compliance is through relevant information. Educational materials for patients and family are a vital important component of effective therapy. The materials can be either low-tech or hi-tech to suit the patient's informational style.

Low-tech materials that can be prominently displayed in the lobby or patient rooms include:

- Wellness/alternative news and integrative medicine info;
- Self care tools such as osteoporosis prevention, Nordic walking, and proper body mechanics;
- Physical therapy news on private practices, new products, and exercise protocols;

- News on health care, insurance, consumer affairs, and political issues; and
- Select classes that support therapeutic goals and reinforce self-guidance.

Hi-tech information resources may include:

- Links to physical therapy Web sites featuring the same information displayed in the facility's lobby;
- Podcasts, online home exercise programs, product recommendations, and reference and research materials on modalities, therapies, etc;
- Blogs, Facebook, Twitter, or other social media pages that provide valuable information; and
- Smartphone and tablet computer applications geared to physical health.

Providing references to complementary health services and other professionals may also support patient-centered learning. Good dieticians, acupuncturists, massage therapists, and others may reinforce health and well-being through diet, better sleep, and pain management. These professionals can be listed on the PT's Web site and linked to send referrals in both directions.

PROFESSIONAL AWARENESS

Most of these tools and ideas for turning clients into better patients are not new, yet some PTs are slow to adopt them. They are more content with conventional mechanical therapy that treats individual body parts and injuries than taking an approach that cultivates awareness and whole-body movement. While conventional therapy may work much of the time, I would argue that a more integrative approach has greater potential to make long-lasting behavior changes and is a better fit with the needs of today's patient.

PTs have many resources to help them improve their own pro-

essional awareness and skills in these areas. Continuing education is no longer the only way to shift one's perspective. Social media offers abundant mentoring, networking, and research opportunities, and PTs can take advantage of online resources like PT Talker, SomaSimple, NOI Group, LinkedIn, Brain Science Podcast, openATM.org, Physiopedia, other relevant podcasts, and more. As with all Internet content, it is advisable to cross reference for medical accuracy and appropriateness.

Opportunities to teach to the public as well as professionals also offer the necessary motivation to stay current on trends in patient management and movement science. And the benefits go far beyond good patient care. As Deepak Chopra has observed, "Everyone has a purpose in life ... a unique gift or special talent to give to others. And when we blend this unique talent with service to others, we experience the ecstasy and exultation of our own spirit, which is the ultimate goal of all goals."³

On a final note, it is always good for PTs to remind themselves and educate their patients that meeting long-term goals with a current injury takes time and patience. Part of the PT's job is to set realistic expectations for patients and their therapy. Few serious injuries can be completely resolved by the end of clinical therapy, especially when caps on visits largely determine how much better a patient might get. Much of the healing that takes place will be necessarily out of the PT's sight. For that reason, it is incumbent on patients to become the best patients they can be while in the PT's care, and to become their own best therapists once they leave the PT's office. If the PT's goals are to quickly earn the patient's confidence, and help them improve their awareness and self-advocacy, discharge planning can start on the first day of treatment. **PTP**

Stacy Barrows, PT, GCFP, CPI, is a registered physical therapist, PMA-certified Pilates teacher, and Guild-certified Feldenkrais practitioner. She co-owns a dynamic physical therapy practice in Century City, Calif, and is the author of the SMARTROLLER Guide to Optimal Movement, which was inspired by the Feldenkrais Method and her patented foam roller, the SMARTROLLER. References are available in the online version of this article.

PRODUCT RESOURCES*

- **Ari-Med Pharmaceuticals**
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- **Biofreeze/Performance Health**
(800) 246-3733; www.biofreeze.com
- **Empi**
(800) 328-2536; www.empi.com
- **Kinesio USA**
(888) 320-8273; www.kinesiotaping.com
- **Mettler Electronics**
(800) 854-9305;
www.mettlerelectronics.com
- **Multi Radiance**
(800) 373-0955; www.multiradiance.com
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