BODY IMAGE AND SELF-ESTEEM are often significantly affected after spinal cord injury (SCI), brain trauma or stroke and in many neurological disorders. In turn, these changes can have a substantial impact on sexuality. In the rehabilitation hospital setting, a multidisciplinary approach and nonjudgmental, proactive communication can help address the typical psychological and emotional issues surrounding intimate relations after a neurological event has occurred.

**A Universal Need**

Sexuality is a major component of most adult romantic relationships. It is both physically pleasurable and a symbolic expression of passion, love, attachment and commitment. This remains true among persons with neurological disorders. In one study, individuals with tetraplegia rated sex their second-highest priority after hand and arm functioning. In another survey, paraplegic persons ranked sex the most important function, surpassing even walking and bladder and bowel function.

Physical effects of disability obviously can affect performance (see sidebar, page 7). Options for positioning may be limited, bodily control may be compromised, and reduced or absent erectile function, arousal, lubrication, sensation or orgasm can create anxiety about self- and partner satisfaction.

For particular injuries or disorders, psychological and emotional issues can impede recovery more so than the physical. These might include changes in self-perception, cognitive difficulties, reversal of typical sexual roles, and new interpersonal stressors. Alterations in desire can range from apathy and decreased libido to sexual inappropriateness or outright aggression. On the emotional side, depression, anxiety or grief over the loss of previous capacity can have significant ramifications for both the patient and partner.

**Impact on Relationships**

Neurological disorders, and their effects on intimacy, vary according to age and sex. Strokes tend to occur in older persons, who are more likely to be in... (continued on page 7)
A CALL FOR SOLUTIONS

Service members and others suffering from mild TBI and PTSD are at increased risk of suicide

I recently had the privilege of speaking to more than 500 attendees at the Defense Forum Washington, which was sponsored by the U.S. Naval Institute and the Military Officers Association of America and held in Washington, D.C. This fourth annual conference was focused on the current and future health care and rehabilitation needs of our wounded warriors and those who care for them. The two sponsoring military advocacy organizations represent active and retired military personnel in Washington and promote the access of our troops to benefits, including health and rehabilitation care. Attendees included combat veterans, their families, government and private health care workers, and other interested parties.

The major clinical conditions that were front and center were traumatic brain injury (TBI) and amputations. One of the clear messages sent was the desire of injured personnel to have high-quality military and veterans’ health care but also to have full access to exceptional care in the private sector. The speakers addressed issues such as ensuring that services are available close to home for veterans and recognizing the need for both convenient and timely access.

A particular concern raised at the conference is something that is not routinely considered by many in the world of hospital-based rehabilitation, namely the risk of suicide among patients with mild TBI and post-traumatic stress disorder (PTSD). While this issue has been discussed in the media, military and VA settings, our inpatient rehabilitation programs tend to not recognize these problems.

The alarming rate at which military personnel with mild TBI and PTSD are taking their own lives is clear. The question for the rehabilitation community is whether there is a role for us to step up and help identify and offer solutions. Many inpatient rehabilitation hospitals and units (IRH/Us) that operate TBI inpatient programs also have outpatient services. Some are also focused on mild TBI. How many do a good job of screening for the risk factors for suicide in this population? Is there something about the combination of mild TBI associated with PTSD that leads to poor impulse control and disinhibited suicidal ideations? Do the personal traits of individuals attracted to military careers predispose them to this action? Do the training and acculturation of military service have a role in promoting or influencing the vulnerability of individuals to commit this act? Does self-treatment of the symptoms of PTSD and TBI with substance abuse aggravate the risk of suicide in this particular population?

I don’t know the answers to these questions, but I suggest that our private-sector IRH/Us should be developing and offering programs for patients with mild TBI and PTSD that are specially focused on the risk of suicide, and should offer these services to our wounded veterans. By providing high-quality programs that are accessible and convenient for these individuals, we may be able to further help the heroic men and women who have given so much for our nation.

Bruce M. Gans, M.D.
Chief Medical Officer
DEVELOPING AND implementing a quality improvement program is critical to the success of an inpatient rehabilitation hospital, and helps to ensure both the best patient care possible and compliance with the reporting requirement of the Affordable Care Act (ACA). As is the case with hospitals across the country, Kessler Institute for Rehabilitation is committed to improving quality of care as well as the quality of the environment for patients, and has implemented a robust program to achieve these goals.

**Defining the Details**

While there are many contributors to quality care, the concept of quality is best analyzed using six discrete domains: adverse events, outcomes, the care delivery system, efficiency, efficacy and patient satisfaction. Using these categories to identify and develop quality measurements allows Kessler to focus on making improvements in a systematic manner through well-defined and insightful care delivery systems.

- **Recording adverse events** is designed to ensure patient safety. Examples of such events include falls or pressure ulcers, incidents that are often relatively straightforward to quantify and track.
- **Analysis of patient outcomes** is at the heart of what physical medicine and rehabilitation professionals strive to do: provide care that has a significantly positive impact on the lives of patients. At Kessler, outcomes are evaluated on different levels, first and foremost in relation to patients, but also in terms of providers, programs and hospitals. Distinctive types of learning and opportunities for creating “best practices” stem from examining outcomes at these various strata.

  At the patient level, an individual’s overall improvement in health is assessed, as are specific functional improvements such as progress in mobility, activities of daily living and communication. The data at the provider level might be used to help identify those who are achieving better outcomes, possibly leading to innovations that will enhance best practices. At the program level, specific outcomes are observed. For example, there is a review of the percentage of patients from each clinical program who are able to return home to live. Lastly, at the hospital level Kessler’s outcomes are compared with those of other institutions or other appropriate benchmarks.

- **When measuring the quality of care delivery systems**, it is necessary to consider specific steps of patient care, for example, in wound care and wound prevention. Indicators in this area include: a thorough evaluation of an individual’s skin, avoiding risk factors for decubitus ulcers, checking for nutritional deficits or anemia that impact skin healing, and training the patient and family to do weight shifting.

- **Monitoring efficiency and efficacy** also is critical to a quality improvement program. In delivering any particular aspect of patient care, a rehabilitation hospital faces limits of available time, financial and material resources, and staffing. Yet to measure and strengthen quality, evaluators must determine not only if time and resources are being used productively but also whether the provided care is truly beneficial in the first place. Part of quality management is asking questions about how to make the best use of available resources, how to choose which resources to invest in, and how to make those decisions in a way that optimally enhances care. Kessler’s quality program helps identify procedures and items that should be prioritized and others that could be eliminated to improve both overall efficacy and efficiency.

- **Specific attention to patient satisfaction** is necessary to ensure that individual goals are being met. For example, consider the case of a woman who had multiple severe strokes and was admitted to Kessler for rehabilitation. She had been unable to live at home with her family for almost a year due to...
Q&A WITH STEVEN KIRSHBLUM, M.D.

EACH SUMMER, medical residency programs across the country guide new physicians into their next important phase of professional development. The Accreditation Council for Graduate Medical Education (ACGME) currently lists more than 70 such programs in the U.S. that specialize in physical medicine and rehabilitation (PM&R). While these residency programs are valuable in preparing practitioners for careers in physiatry, including spinal cord injury, traumatic brain injury, pediatric rehabilitation, sports medicine or other specialized areas, the role of mentoring is often overlooked.

To gain insight into the unique opportunities and challenges of working with residents and fellows, Focus on Rehabilitation recently spoke with Steven Kirshblum, M.D., the director of the Spinal Cord Injury Medicine Fellowship at Kessler Institute for Rehabilitation, and the associate director of the Residency Program for Physical Medicine and Rehabilitation for the department of PM&R at the University of Medicine and Dentistry of New Jersey-New Jersey Medical School. Kirshblum knows first-hand the impact of quality training on the field, and he gave his perspective on mentorship and how training at Kessler is preparing physicians for what lies ahead.

Focus on Rehabilitation: What are some of the formal parameters of Kessler’s involvement in the residency program in PM&R?

Steven Kirshblum, M.D.: As part of the overall Physical Medicine and Rehabilitation Residency Program at UMDNJ-New Jersey Medical School, Kessler is one of several area hospitals where residents undergo training. We currently fund 12 positions, which are divided between the West Orange and Saddle Brook campuses. While the majority of the positions are inpatient, we emphasize the importance of giving the residents a wide breadth of training experiences. Therefore, residents are offered opportunities in outpatient care and electrodiagnosis (such as nerve conduction and electromyography), as well as participation in joint and epidural injections and spasticity management. Each of the rotations is two months in duration, and each resident spends his or her rotation working one-on-one with an attending physician on specialty services such as spinal cord injury, traumatic brain injury, stroke and amputee populations. In addition, Kessler also offers fellowship programs, which provide additional subspecialty training in areas of spinal cord and traumatic brain injury (TBI).

Focus: How can a physician successfully make time for mentoring while keeping pace with the demands of day-to-day patient, research, academic and administrative duties?

“My education has helped me achieve both of my goals for pursuing PM&R: I have learned more musculoskeletal and rehabilitation medicine than I could have imagined, while my clinical experience has illustrated the significant contributions we can make to our patients’ lives.”
—Miguel A. Coba, M.D., Spinal Cord Injury Fellow

“The residency program at Kessler Institute for Rehabilitation has provided me a rigorous, comprehensive education. The experience I have gained through exposure to spinal cord injury, traumatic brain injury and neuromuscular disease has prepared me to treat even the most complex patients.”
—Benjamin D. Levy, M.D., Chief Resident
Mentoring through residency and fellowship programs offers a rewarding opportunity to teach new physicians—and to learn from them.

**Kirshblum:** Never take for granted the numerous opportunities to mentor and provide training throughout the day. Hands-on teaching can be performed at the bedside during a patient’s history and physical examination, as well as throughout morning and evening rounds. I believe a vital component to effective mentoring is setting an example in how you care for patients, interact with their families and manage complicated situations. This is often a standard part of one’s everyday clinical care that does not need to impose any extra time burden to your daily routine. Even when physicians are busy, they are still treating patients with compassion and giving much-needed information to them and their families, while at the same time providing the resident with a learning experience. There is no doubt, however, that time is the greatest commodity we have, and given added responsibilities and pressures, the most important way to teach effectively is to enjoy it. If teaching is made a priority in one’s day, then working with residents will not be viewed as a burden.

**Focus:** How do you establish and maintain these programs, especially in light of budget constraints and possible staff cuts?

**Kirshblum:** In regard to fellowship training, funding sources have diminished and the hospital has taken on a greater role in direct funding as grant opportunities are decreasing. For non-ACGME approved programs, such as the TBI fellowship, there is no reimbursement and the fellowship is completely absorbed by the hospital.

**Focus:** Inpatient rehabilitation in particular, has a reputation for being difficult, emotional work that requires much dedication and long hours. How does mentorship help prepare individuals for their future as PM&R physicians and what can hospitals do to encourage doctors to specialize in this area?

**Kirshblum:** There is a perception that the new generation of training residents view caring for inpatients as less exciting than outpatient work. This stereotype I do not believe is new, and has been present for many years. In order for the field to thrive and to ensure that we continue to produce well-trained health care providers, residents need to understand the realities of inpatient care—namely, that it is challenging, requires an emotional commitment, and involves an intimate knowledge of rehabilitation as well as other aspects of medicine and other specialties. This is an added responsibility but also a challenge to offer good care to patients who are in need. Mentors can help instill an appreciation that the opportunity to make a tremendous difference in people’s lives outweighs some of the perceived burdens.

The field of PM&R is constantly expanding, which means that trainees are faced with the unique difficulty of learning core competencies while simultaneously keeping pace with the latest advances in research and clinical care. This in part is why Kessler offers residents a wide variety of training experiences. Given the long hours and demanding schedule, it is important that programs consider alternative models of inpatient care. This may include offering physicians more flexible schedules and the use of physician extenders, such as physician assistants or nurse practitioners, as means to maintain the quality of patient care.

**Focus:** From your personal experience, what do you find rewarding about working with residents and fellows?

**Kirshblum:** The most enjoyable aspect of mentoring is seeing a trainee come into his or her own as a physician. Nothing makes me prouder than knowing that so many former residents and fellows are currently working in our system as attending physicians. I feel fortunate to have the chance to witness every day what wonderful health care providers they have become. And the same is true for those who have left Kessler and found success not only in the area of publishing research but also in earning the respect of their colleagues and of their patients for the quality and compassionate care they provide. This, to me, is truly the most rewarding feature and makes mentoring a unique and special experience.

**Steven Kirshblum, M.D.,** is the medical director of Kessler Institute for Rehabilitation’s West Orange campus and director of Kessler’s Spinal Cord Injury Program. He is board-certified in physical medicine and rehabilitation and was one of the first physicians in the country to receive special certification in spinal cord injury medicine. He can be reached at skirshblum@kessler-rehab.com.
THE ACCOUNTABLE CARE ACT, the recent health care legislative package, is introducing many new challenges and opportunities to the field of rehabilitation medicine, including the launch of Accountable Care Organizations (ACOs). The ACO initiative is a unique addition to the health care landscape. This is no longer a demonstration project or a pilot program; this is a definitive piece of the new health policy.

An ACO is a mechanism for providing and managing the continuum of patient care across providers and institutions. The goals are increased quality and decreased costs. An ACO may include ambulatory and inpatient care, and, possibly, post-acute care. Many acute care hospitals and health systems are currently exploring or developing ACOs. There have been several demonstration projects; the enabling regulations covering ACOs, however, were not due to be published until the end of 2010, and the details of how they will operate were not yet known. “ACO Fever” has hit the acute care hospital industry.

Unraveling the Effects

The impact this will have on inpatient rehabilitation hospitals and units (IRH/Us) is unclear at this time, and all of the current planning for implementation of ACOs is based on broad assumptions:

- Patients will be assigned by Medicare to ACOs, probably without their knowledge or permission.
- Patients will retain their freedom to choose their providers, despite the existence of the ACO.
- Post-acute care does not necessarily need to be incorporated into the ACO plan.

The demonstration projects to date have focused primarily on acute hospital and physician care and preventive care. Cost savings from coordinating physician and hospital activities have been the principal agenda, and they have largely ignored rehabilitation. The ACOs will share in the imputed financial gains (cost savings) realized through this system of care.

Despite this uncertainty, we can speculate on the risks and opportunities that the rehabilitation field may face. For example, in developing an ACO, the acute care hospital may decide that it wants to avoid rehospitalization as a key cost-saving measure. Rehospitalization rates for skilled nursing facilities have been reported to be twice as high as that for IRH/Us. This could be a powerful factor for an ACO to consider as it develops plans for post-hospitalization treatment.

The acute care hospital may go through a “make or buy” analysis to decide whether it will either provide its own rehabilitation services or partner with an IRH/U. This could be a threat or opportunity.

Possible Price Wars

Unless the ACO recognizes the importance of taking the long view on the patient’s total episode of care (both quality and costs), the acute care hospital could decide to channel patients to the least expensive setting, ignoring what would be the most clinically appropriate choice. This could put an IRH/U in jeopardy of losing needed referral volume, or create price wars.

If ACOs acquire specialty physician practices, free-standing rehabilitation hospitals may find it more difficult to attract these physicians to serve as consultants, resulting in constrained access to needed care by patients in the IRH/U.

Opportunities for IRH/Us include the chance to build new and stronger relationships with the acute care hospitals, which will have to rethink their discharge planning processes. An IRH/U could help with this by providing physiatrists or liaison nurses to the acute care hospital and embedding them upstream into the ER, ICU or other departments. These rehabilitation-savvy professionals could promote earlier identification of patients who will need post-acute care and help anticipate the proper setting and timing for this care.

Rehabilitation hospitals will need to pay close attention to the development and regulation of ACOs and determine the best way to participate in this new opportunity.
SEXUAL HEALING (continued from page 1)

established relationships. Although sexuality remains important to these patients, it is often overlooked by medical professionals. Conversely, SCI and brain trauma typically affect younger people, who are more often concerned about dating, marriage and reproduction.

A new disability poses the greatest challenge to existing relationships. For example, the divorce rate among married people who sustain SCI is twice that among able-bodied persons. Role changes and the need for care can significantly increase stress for couples and interfere with sexuality. Significant others should not be placed in a nurse or caregiver role, to the extent possible. If a person cannot catheterize or dress him- or herself, the couple should consider alternatives such as placement of an indwelling catheter or hiring an aide to help with activities of daily living. Of interest, the divorce rate remains identical to that of uninjured individuals if marriage occurs after the SCI, since both partners realize the implications of their decision to wed.

A 1996 survey also showed that 84 percent of partners of persons with SCI rated their overall relationship satisfying, and 45 percent considered their current sex life to be at least as good as it had been before the injury. Factors associated with a positive physical relationship included a variety of rewarding sexual activities and concern about the partner’s pleasure and satisfaction. Although addressing issues related to sex is important, partners should also be encouraged to find additional ways to be romantic and have fun together.

The Rehabilitation Process

Many people are socialized to keep sexuality private. Patients may have difficulty asking questions about this topic and can be left feeling confused and scared when little is discussed about it in acute rehabilitation settings. Health care providers must appreciate such concerns and incorporate them into initial and continuing recovery programs. Because the focus immediately after injury or physical disability is on recovery and adjustment, some persons may not be prepared to discuss intimacy worries at first. Related questions might appear only after discharge from the acute care hospital or when the individual enters a more stable situation at home or elsewhere.

All Kessler Institute for Rehabilitation care team members participate in this aspect of recovery. The physician assesses and manages any physical concerns to optimize functioning, with referral to specialists as needed. For example, a urologist might be helpful in evaluating and treating erectile, ejaculatory or fertility problems. An obstetrician-gynecologist can offer consultation for women considering pregnancy, and social workers can discuss the financial implications of having children. A psychologist or counselor can aid the patient and partner in developing new strategies for pleasing each other, accommodating changes in physical and cognitive capacities and establishing new roles in their day-to-day and romantic activities.

It can be very effective for rehabilitation hospitals to offer peer support groups to discuss issues related to interpersonal relationships. These groups can provide important insights that able-bodied caregivers might overlook.

Finally, persons with disability sometimes do not want any specific treatment, but they are often reassured to know that options are available to them if needed.

Resuming a fulfilling sex life requires cognitive flexibility. Definitions of sexuality and satisfaction will likely require changing to encompass more than intercourse and orgasm alone. Pleasure, intimacy and affection might begin to play more prominent roles, and opportunities for behavioral creativity and experimentation may emerge. As always, open and ongoing communication remains the key to developing satisfying intimate relationships, regardless of physical or mental ability.

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PHYSICAL CONSIDERATIONS

The nature of the injury determines the impact of sexual function. Persons with SCI may have loss of sensation in the genitalia, spasticity, difficulty with positioning, urine or stool incontinence, erectile and ejaculatory dysfunction, or autonomic dysreflexia (T6 and above). They are more likely to have tetraplegia (80 percent of cases) than paraplegia (20 percent). Those with head injury also can have spasticity and positioning problems, but emotional liability and altered sex drive are more common in this group. Stroke can be associated with reduced mobility, loss of bladder control, aphasia, spasticity, depression and loss of libido.
the severity of her disability and associated medical status. She had dysphagia, which prevented any oral intake, and her cognitive-communication deficits prevented comprehensible communication with her family. At the conclusion of her rehabilitation program, she was able to live at home with family, communicate better and eat by mouth, her personal goals. Although she was not able to walk independently, she and her family were pleased with her progress and the outcome. (Part of Kessler’s quality assessment is measuring the satisfaction achieved by both patient and family.)

Providing Training
Identifying the individual measurements that can be made in each of the above-described domains is just the first step in implementing a quality program. It is also important to involve staff in assessment in such a way that each person develops a sense of ownership and responsibility for making enhancements. Sometimes health care providers, despite excellent clinical skills, lack formalized training in the quality improvement processes. Education gives staff the tools to evaluate quality measures, collect meaningful data, analyze results in a sophisticated manner and present them in a useful way. Including all staff impacts the culture of the hospital and builds a sense of teamwork, as well as enthusiasm and awareness of the importance of quality in all services provided.

Furthermore, if the overall approach to data collection and utilization is not well-planned and strategic, then a quality program may not produce practicable results despite all of the effort that goes into it. The data collected should measure items and outcomes that are relevant, and the collection process must be manageable for staff. It is essential that this information is then actually used to make appropriate adjustments. A crucial component of the quality process is measuring the impact of any changes to verify that a real difference is being achieved in improving patient care.

At Kessler, data are reviewed internally and provided to an electronic database so that the hospital can be compared with other rehabilitation facilities in the nation. Some of this data is also available to the public to help patients make informed decisions when selecting rehabilitation care.

In summary, a comprehensive quality program requires a rehabilitation hospital to precisely define quality indicators, energize and empower staff through dedicated training, and competently collect, assess and utilize data to improve patient care.

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