Addressing musculoskeletal health disparities

**Mood, mindset and coping strategies** are often identified as major determinants of musculoskeletal pain and disability, but the impact of a patient’s ability to adapt to another culture or language remains unclear.

“Imagine not being able to speak to your doctor in your native language,” said David Ring, MD, PhD, chief of the MGH Hand and Upper Extremity Service.

Ring and Mariano Menendez, MD, a research fellow in the Department of Orthopaedic Surgery, recently presented the results of three studies related to musculoskeletal disparities at the Racial and Ethnic Disparities: Keeping Current seminar series. The annual event, hosted by the Disparities Solutions Center, addresses the latest research findings, interventions and health policy issues related to reducing disparities in health care.

The first study examined whether a patient’s primary native language is an independent predictor of upper extremity disability and whether there are any differences in the contribution of psychological factors to disability between native Spanish-speaking and English-speaking patients.

“We observed that Spanish-speaking patients have greater levels of upper extremity disability, but this greater level seemed to be tied to less effective coping strategies and symptoms of depression,” said Menendez.

Added Ring, “Stress, distress and ineffective coping strategies are the strongest influences on symptoms and disability.”

The prevalence of and factors associated with low health literacy among hand surgery patients was the focus of the second study. The results showed those with low literacy were significantly more likely to be older, less educated. (Continued on page 2)
health disparities
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not privately insured, retired or unemployed, and native Spanish-speaking.

“We hope our study raises awareness of this to orthopedic surgeons, and we encourage providers to simplify their messages and improve communications strategies,” said Ring. “Keep it simple, short and health literate.”

The third study examined racial bias and income disparities in the use of autologous blood – preoperative blood donations individuals give for their own use, which are theoretically safer yet more costly than whole blood donations.

“We found disadvantaged populations received fewer autologous blood transfusions after elective surgery but could not determine if this was due to patient preference, unequal access or health literacy,” Menendez said.

He added that more research is required on implementing a simple decision aid for preoperative self donation of blood that would be clear to all educational backgrounds and different levels of health literacy.

“Part of the goal and purpose of the Disparities Solution Center is to create dialogues and foster opportunities such as this,” said Alexander Green, MD, MPH, associate director of the Disparities Solutions Center. “These studies underscore the importance of understanding social and cultural factors that impact patient care in all health fields, including highly specialized areas such as hand surgery.”
**Warren Triennial Prize to honor pioneer in cancer genetics**

**THE 2014 WARREN TRIENNIAL PRIZE AND SYMPOSIUM,** to be held on Nov. 24, will honor Bert Vogelstein, MD, the Clayton Professor of Oncology and Pathology and director of the Ludwig Center for Cancer Genetics and Therapeutics at Johns Hopkins University School of Medicine. The first scientist to determine the molecular basis of human cancer, Vogelstein will speak on Cancer Genomes and the Wars Against Cancer at 4:15 pm in the Simches Center, Room 3.110.

“Dr. Vogelstein is a legend in the field of cancer research. He has pioneered some of the fundamental concepts that underlie our understanding of how cancer arises, how it can be detected and how it should be treated with increasingly targeted therapies,” says Daniel A. Haber, MD, director of the MGH Cancer Center. “The scope of his research contributions is exceptional, as is its impact. Just as significantly, he has trained and mentored generations of young scientists who are now making their own important contributions to the field.”

Awarded every third year, the Warren Prize honors scientists who have made outstanding contributions in fields related to medicine and includes a cash award of $50,000. Created in 1871, the prize is named for John Collins Warren, MD, the co-founder of the MGH who performed the first public surgical operation using ether anesthesia on Oct. 16, 1846. Twenty-three Warren Prize recipients also have received the Nobel Prize.

Other speakers at the symposium about the Genetics of Cancer – which will begin at 2 pm and be simulcast to the Isselbacher Auditorium, 7th floor, Building 149 – are Alice Shaw, MD, PhD, and Gad Getz, PhD, of the MGH Cancer Center, Tyler Jacks, PhD, of the Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, and Kornelia Polyak, MD, PhD, of the Dana-Farber Cancer Institute. ■

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**A new and improved Proto magazine**

**TWO-THIRDS OF THE AMERICAN PUBLIC** now read the news on a computer screen. More than 90 percent carry mobile devices, and a third use those devices to do most of their online reading and interacting. Half of Twitter’s 240 million active users read news from their feeds.

To meet readers where they are, Proto magazine will now print three annual issues instead of four. At the same time, protomag.com will be updated frequently with new stories, videos, slideshows, interactive graphics and other elements. The website itself has been completely revamped, providing a dynamic experience that is easy to navigate on all devices – computer screen, smartphone and tablet.

In addition, the appearance of the print issue has changed. From a more vibrant layout to a subtle refresh of the logo, the Proto team has made tweaks to ensure that the magazine continues to be as visually dynamic as the ideas explored in its stories.

As it has done since its inception in 2005, Proto will keep exploring discovery and innovation in medicine not only at the MGH but all over the world. Topics in the current issue include 3-D printing, telemedicine and survivors of childhood cancer.

Visit protomag.com and leave feedback. Subscribers to the 275,000-member, physician-only social network Doximity, can find — and comment on — Proto there as well.
**BENCH WARMERS:** Area hospital pediatric patients, including those from MassGeneral Hospital for Children, served as bench assistants at the Oct. 28 Boston Bruins game against the Minnesota Wild. The team hosted Hockey Fights Cancer Night, an ongoing initiative founded in December 1998 by the National Hockey League and the National Hockey League Players’ Association to raise money and awareness for cancer.

**Art of healing**

**MASSGENERAL HOSPITAL FOR CHILDREN (MGH/C)** patients and their families gathered for a festive afternoon of arts and music at the 10th annual Fall for the Arts: An International Celebration. The Oct. 19 event in the Yawkey Building celebrated the healing arts programs pediatric oncology patients and their siblings participate in throughout the year. The event featured a multicultural theme and children carried passports as they travelled through the many activities — scrapbooking, origami making and creating a collective mandala (a Hindu or Buddhist graphic symbol of the universe) — and received special stamps to document their participation.

Highlights of the day included a performance by the Beelzebubs, an a cappella group from Tufts University who perform at the event nearly every year. Our Space Rocks, a community group that provides creative opportunities for children with cancer and other chronic illnesses, helped participants create a variety of craft projects. Led by child-life specialists, the children also made hero capes and paraded the halls of Yawkey 8.

“What an amazing afternoon for the patients and their families, as well as the clinical staff who care for them. The children showed us the ongoing value of the arts as a means of expression and a source of joy as they navigate the challenges of cancer treatment,” said event coordinator Elyse Levin-Russman, LICSW, clinical social worker in the Pediatric Hematology-Oncology Unit.

The afternoon continued with MGH Starz, led by Kubicek, that featured children and their families entertaining the group with their talents. The show included a Chinese dance performance, musical solos in Spanish and Portuguese, and special guitar and drum solos by Pediatric Oncology patients. The program concluded with an awards ceremony to honor the artists who have contributed to the Kaleidoscope program, which displays patient and sibling artwork within the clinic, and those participating in My Story in Beads, a program for children to create a beaded lanyard of their cancer journey.

“From the superhero parade to watching our patients and their families jam with a real steel drum band, this was an incredible day and our best year yet,” said Lorrie Kubicek, MGH music therapist.

**VOYAGERS:** MGH/C patients travel through various activities at the 2014 Fall for the Arts