EDITORIAL

Gender Differences in the Affective Processing of Pain: Brain Neuroscience and Training in “Biopsychosocial” Pain Medicine

Wasan and colleagues [1], in their article in this issue “Differences in Pain, Psychological Symptoms, and Gender Distribution Among Patients with Left vs Right-Sided Chronic Spinal Pain”, present data suggesting that left-sided spinal pain may increase the risk of affective distress and interference in male patients complaining of chronic spinal pain. They posit that the differences between men and women in this respect are consistent with experimental neuroscience research demonstrating that: 1) painful stimuli activate men’s, more than women’s, right hemisphere; 2) that the right hemisphere is more involved in the attentional aspects of pain; and 3) that negative emotions in men are preferentially processed in the right hemisphere. In the language of pain medicine and neuroscience, their article carefully addresses the existing evidence for and against alternative hypotheses that might explain their data.

Their work and others herald the promise of the future of pain medicine, in which pain medicine specialists trained in pain evaluation and phenomenology and in clinical neuroscience and psychopathology train their measurement skills to fully realize the promise of a true biopsychosocial pain medicine. This trend will render common terms such as “holistic” and “whole person” medicine, which capture a concept but are unable to be measured scientifically, as “holistic” and “whole person” medicine, which capture a concept but are unable to be measured scientifically, as “black box” (shades of Skinnerian behaviorism) instead of as “holistic” and “whole person” medicine, which capture a concept but are unable to be measured scientifically, as “black box” (shades of Skinnerian behaviorism) instead of...
other issues related to gender that may influence clinical practice and ultimately how we train providers. Their study of clinical decision-making in seriously ill patients, using clinical vignettes, reveals that women providers are more likely to use opioids and antidepressants, to refer to mental health specialists, and to consider the “existential” effects of pain when treating patients with chronic pain. Primary care providers, rather than specialists, are also more attuned to these factors as providers and have more confidence in their pain management skills. Their findings are strengthened by a study design that includes two advantages. First, they derived a clinical vignette of a clearly elderly, frail, and suffering patient with a terminal illness, rather than a nonspecific chronic pain complaint in an otherwise well person; hence, ambiguity about diagnosis and whether pain was “real” was removed. Second, they employed a large sample of 280 clinicians working in 19 hospital- and community-based primary care, oncology, and cardiology clinics at eight geographically dispersed sites in two large VA hospital systems, although geographically isolated from Southern California; hence, they reduced the likelihood of a “local effect” of a specific hospital culture.

Their findings are consistent with other literature suggesting that women providers as a group are more empathic to the suffering of pain and more likely to consider a more integrated approach to treatment that considers emotional well-being as well as physical factors (e.g., biopsychosocial). It is also not surprising that specialists would be less attuned to suffering and well-being, as most specialists are trained to focus on organ system pathology and management, and not on the person with the disease—Osler’s complaint. Their article provides more evidence that, to a degree, training in pain management to create confidence in clinicians is essential, and that losing sight of the forest (patient) for the trees (organ) persists as a problem in training in clinical medicine. Should training programs consider gender in tailoring their training programs based on gender-related cognitive or empathic skills? Will such findings subtly engage a gender bias in decisions about medical training? Will the next generation of providers, raised in a more androgenous culture, continue to demonstrate such gender-based differences in attitudes and skills?

References