



Editorial

Understanding the role and significance of gender differences in pain and depression in Chinese elders with osteoarthritis

1. Introduction

The paper by Tsai et al. demonstrated how gender could influence the pain–depression relationship in a sample of elderly Chinese patients with knee osteoarthritis. Women reported greater pain intensity and interference from OA, a finding that converges with data obtained from OA patients in US clinics (e.g., Keefe et al., 2000). In addition, their regression analysis revealed that the effects of gender on pain were mediated by depression. Depression, in essence, explained the differences between males and females in pain dysfunction, and was conceptualized in this cross-sectional study as the predictor of pain. The paper illustrates some important theoretical and methodological issues in examining pain and mood disturbance in the most prevalent arthritic disease.

2. Importance of gender and culture

The findings on gender highlight the importance of taking into account disparities between males and females in their experience of OA pain. Although the prevalence of OA is roughly equally distributed across gender, females may experience a more difficult adaptation to OA than males. It is indeed important to understand the basis for this finding, and this paper offered a potential explanation, pointing to the importance of mood disturbance. Depression is more prevalent in women than men, and it is possible that mood disturbance may augment their pain dysfunction. However, other factors could be responsible for this result. For example, differences in disease activity could have accounted for problems in pain and functional adaptations. Obesity and radiographic evidence of joint damage impair mental and physical dimensions of quality of life in OA patients (e.g., Salaffi et al., 2005). Since assessments of Body Mass Index (BMI) and joint damage were not included in the study, a cautious interpretation of the find-

ings of their model is warranted. Depression may not be the key variable driving their results.

A related question is whether cultural factors contributed to the differences in gender found on pain and depression measures. The authors pointed out that confucianism may accentuate gender differences by promoting stoicism in males and by allowing greater emotional expression and reports of physical distress in women. The implication of this view is that reporting biases may have been responsible for the gender differences. Accordingly, women may be more inclined to report depression and pain symptoms while males may feel cultural pressures to minimize their distress. Moreover, the disparity in self-reported expression between males and females may be more pronounced in elderly patients who have adopted more traditional cultural norms, and less evident in younger Chinese patients who have had greater exposure to Western norms. However, because gender differences in depression and pain expression also have been found in Western samples of OA patients, the plausibility of culture alone explaining the gender findings is debatable. Nevertheless, cross-cultural research that compares Chinese and western OA patients will shed light on this issue and have important clinical implications for managing patients from diverse backgrounds.

3. Subjective vs. objective measures

In a broader sense, the question of whether self-report biases are confounding interpretations of data is an ongoing problem for pain researchers and clinicians. The self-report of depressive symptoms and pain sensations is crucial to understanding the subjective experiences of patients with OA. In addition, self-reports are critical to evaluating patient reported outcomes in chronic illness and for diagnostic and treatment planning considerations. On the other hand, objective measures may be needed to complement the significance

and interpretation of self-report data that may reflect biases in self-expression or a response to the demand characteristics of a clinical interaction. Interview-based measures of depression such as the Hamilton Depression Rating Scale and reports from significant others or from health care providers on functional adaptations may be highly useful for such purposes. The Tsai et al. paper illustrated the importance of distinguishing between a veridical difference between gender on depression and pain, and a potentially misleading difference reflective of the method of assessment.

4. The relationship between pain and depression

The prevalence of mood disturbance in conditions such as OA and rheumatoid arthritis (RA) is roughly two to three times higher than in the general population, highlighting the importance of addressing the contribution of depression to the adjustment process. Depression presents a unique set of functional problems and comorbidities that interfere with quality of life and present formidable clinical challenges for arthritis patients. Furthermore, because mental health services are not routinely integrated into rheumatology care, depression may neither be recognized nor managed effectively.

Considerable debate has taken place over the past 20 years in the arthritis literature on the causal relationship between pain and depression. The authors point out that depression has been found to both precede and follow the development of pain in arthritic conditions. Although the Tsai et al. findings suggested that depression accounted for differences between males and females in pain, the cross-sectional nature of their design precluded an understanding of the temporal relationship that is crucial to understanding the dynamic association between depression and pain. Prospective methodologies and assessment strategies that measure daily or weekly fluctuations in mood disturbance and pain dysfunction are recommended for analyzing the functional relationships between these constructs. These approaches capture the ebb and flow of symptoms that are characteristic of the experiences of patients coping with chronic disease (Keefe et al., 2004). Moreover, glo-

bal reports may not correspond with daily reports of pain and depressed mood (Todd et al., 2004). Highly practical information may be derived from dynamic assessment approaches. The finding, for example, that a week of depressed mood poses risk for heightened OA pain the following week is clinically significant and suggests the need for strategies to manage depression. The preventive and educational value of data gleaned from prospective, dynamic analyses is advantageous to both patients and clinicians.

To a significant degree, the issue of whether depression leads to pain or vice versa should be viewed as part of a broader question that addresses the cyclical, recursive patterns of dysfunction that afflict many patients with arthritis. Alternatively, more research is needed on the variables that promote resilience in the face of chronic pain and situational challenges and prevent functional declines. Both emphases will highlight innovations in behavioral management and treatment.

References

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