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Editorial

Two Is Better Than One: Dyadic Coping in the Context of Chronic Pain

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Most experts in pain treatment and research concur that a biopsychosocial view of pain provides the most benefit when attempting to understand this complex clinical issue. However, it is increasingly being recognized that pain research has a far greater focus on the *bio-* and the *psycho-* than on the *-social* aspects of the biopsychosocial model. A quick scan of the tables of contents of most journals related to pain will reveal a preponderance of papers examining biological constructs, relatively few exploring intrapersonal (ie, psychological) factors, and finally, a small minority seeking to understand interpersonal factors related to the experience of pain.

In this issue of *The Journal of Rheumatology*, Mittinty and colleagues are helping to reset the balance with their examination of dyadic coping in the rheumatoid arthritis (RA) population.[1] Dyadic coping is an inherently interpersonal concept.[2] Based on the systemic transactional model, the dyadic coping model proposes that when a stressful event occurs to an individual who is in a committed relationship, both members of that relationship are affected. Moreover, in such an occurrence, the model suggests that coping responses to that stressor occur at the level of the couple, not just at that of the individual directly affected.[2] Given that approximately 75% of the population in the United States is either married or cohabiting,[3] and more than 50% of adults in Western societies live with chronic disease,[4] it is surprising that a dyadic perspective is not more commonly adopted when investigating adjustment to long-term illnesses.

According to the model, dyadic coping can be either positive (for example, the provision of instrumental support, empathy, and encouragement) or negative (such as expressions of frustration, hostility, or withdrawal from the ill partner). Importantly, this form of coping applies only to stressors originating outside the couple, such as dealing with illness, and not stressors from within the relationship, such as infidelity. The ways in which the dyad responds are said to affect the appraisal of stress, the emotional and physiological reactions to stress, and the adaptation outcomes of both partners. Moreover, dyadic coping can mediate or moderate the effects of stress on the relationship quality and the individual psychological distress of the partners.

There is substantial literature demonstrating a strong, bidirectional interplay between psychological stress and the experience of chronic pain in general,[5] not to mention the reciprocity between stress and RA in particular.[6] Hence, investigating factors that can significantly influence these pain-stress interactions is of critical importance in the pursuit of improving health outcomes for the RA population.

Mittinty and colleagues surveyed 163 couples from a nationally held RA registry in Australia in which one of the partners had a diagnosis of RA.[1] Alongside a number of measures of pain, mood and relationship satisfaction, each member of the couple also completed the Dyadic Coping Inventory, which contains items such as "I talk to my partner about their pain and help them change their perspective" (positive dyadic coping) and "I often ignore my partner when he/she is in pain" (negative dyadic coping).

The results broadly supported the study hypotheses. The study showed that for individuals with RA who reported supportive dyadic coping in their relationship, they also reported better mood, better relationship quality, and better quality of life overall. Similarly, participants with RA who reported negative dyadic coping also reported lower mood, higher anxiety, and higher stress, as well as worse relationship quality. Spouses who reported supportive dyadic coping also reported better relationship quality, and those reporting negative dyadic coping also reported worse mood across all domains. Interestingly, "partner effects" were not found in this study, meaning that in none of the statistical comparisons did the results of one member of the couple influence the results of the other.

There are several methodological strengths to this study. First, a sample of 163 couples is very large, especially when it has been previously identified that recruiting both members of a couple

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in clinical research is notoriously difficult.[7] Second, the authors employed a powerful statistical method, the actor-partner interdependence model, which is a form of structural equation modeling in which the separate influence of each member of a couple can be assessed, both on themselves and on each other. The authors also made sure that couples had been cohabiting for at least 12 months to be eligible to take part in the study, ensuring that these were genuine intimate relationships under investigation.[1]

Mittinty et al[1] also acknowledged that the study has some limitations. For example, from all eligible RA registry members, only 22% elected to take part in the study, and those who did opt in to the study tended to be White and middle-aged, with long and established relationship histories. The extent to which the findings are generalizable to more diverse couples, or to those with shorter relationship histories, remains to be seen. As a cross-sectional study, it is not possible to determine whether it is the dyadic coping style that lifts the mood and raises satisfaction with the relationship, or whether it is feeling positive in oneself and content in one's relationship that helps to facilitate the expression of supportive dyadic coping responses. Very likely, it is a bidirectional relationship, but longitudinal research is needed here.

And finally, large survey studies such as this give us important information about a study population at a high level, but they will always suffer from an inability to capture the nuances of a complex interpersonal system like adult intimate relationships. As an example, couples can have quite different behavioral expressions of a common emotional experience. For one couple, there may have been an agreement that in times of pain flares, the preferred response of the partner is to withdraw and allow the person with pain to engage in their self-management strategies without fussing or scrutiny by the partner. Although this behavioral expression would be a supportive act in this particular couple's situation, it would be (incorrectly in this case) labeled as negative dyadic coping when assessed using a standardized dyadic coping questionnaire measure.

Why is this study important? If we continue to concentrate our clinical and research efforts on the biological, and to a lesser extent the psychological, aspects of chronic diseases such as RA, the study of Mittinty and colleagues[1] reminds us that we are overlooking key elements of the pain experience. Their findings underscore the importance of considering the interpersonal dimension of coping with chronic illness and the potential benefits of enhancing dyadic coping—communication, support, problem solving, and relationship adjustment—in assisting patients with RA and their partners.

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