

“Compassion Cultivation in Chronic Pain May Reduce Anger, Pain, and Increase Acceptance: Study Review and Brief Commentary”

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Chronic pain exerts an enormous impact on the quality of life of the more than 1 billion people around the globe who are living with this condition [1,2] (IOM, IASP). The economic burden of chronic pain is astounding, and in the United States alone costs over half a trillion dollars annually [1]. Given the costs to humanity there exists a critical need to develop and disseminate interventions that may reduce the impact of chronic pain including associated suffering. In 2014 my colleagues and I published “Pilot study of a compassion meditation intervention in chronic pain” in *Journal of Compassionate Health Care* [3] <http://www.jcompassionatehc.com/content/1/1/4>

Compassion had previously been shown to influence emotional processing and reduce negative bias, thereby suggesting it could treat pain and anger in tandem. However, prior work on compassion cultivation training including pain didactics in the intervention. In our 2014 study, we aimed to study the unique effects of compassion cultivation training in people with chronic pain, with a specific focus on pain severity, anger, and acceptance.

Indeed, anger has emerged as an increasingly important aspect of the chronic pain experience [4-23]. In people with chronic pain, anger is associated with greater acute and chronic pain intensity [12,16,18,21], disability [24], poorer function [23], reduced pain treatment response [9,10] and impaired relationships with spouses [25]. Anger can be directed towards others as well as towards oneself [26-28] including disappointment and frustration with pain [29], self-blame [30], self-criticism [31] and poor acceptance of one's physical limitations [32]. Eastern traditions prescribe compassion cultivation to treat persistent anger.

Similarly, acceptance has also proven to be a strong correlate of outcomes in chronic pain, with interventions that target and increase acceptance showing promise for reducing pain and its associated emotional and functional burdens.[33-37]

We conducted a pilot study of a 9-week group compassion cultivation intervention in chronic pain. The compassion cultivation training course we used is a standardized curriculum developed by the Stanford Center for Compassion and Altruism Research and Education (CCARE) that is delivered in weekly, 2-hour group classes delivered by a certified instructor (<http://ccare.stanford.edu/education/about-compassion-cultivation-training-ccf/>). Importantly, the program was in no way modified for chronic pain (i.e., did not include any pain education). We used a repeated measures design that included a within-subjects wait-list control period. Twelve chronic pain patients completed the intervention (F=10). Data were collected from patients at enrollment, treatment baseline and post-treatment. Post-treatment results revealed significantly reduced pain severity and anger, and increased pain acceptance, compared to treatment baseline.

The findings from this study suggested that compassion cultivated may be broadly relevant as chronic pain treatment. The study participants were not selected for having high anger; thereby suggesting that anger is chronic pain may be underappreciated and overlooked clinically as a therapeutic target. The compassion intervention was found to reduce anger, and anger reductions correlated strongly with reduction in pain

severity and increased acceptance. While Acceptance and Commitment Therapy was developed to specifically target and increase acceptance, our results suggest that acceptance may be cultivated indirectly and successfully with compassion. More research is needed on larger samples, and future studies may examine the mechanisms by which compassion interventions reduce pain and negative correlates. Future studies may also examine other pathways – including physical interventions that may indirectly enhance compassion for self and others.

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