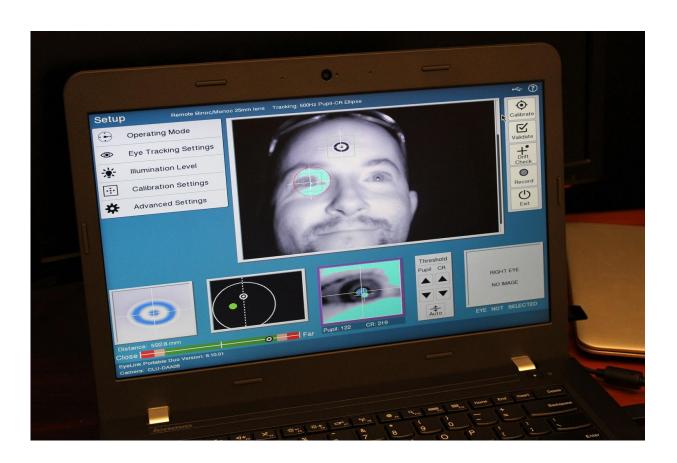# Mind-body therapies immediately reduce unmanageable pain in hospital patients

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Eye tracker in use. Credit: University of Utah

Mindfulness training and hypnotic suggestion significantly reduced acute pain experienced by hospital patients, according to a new study published in the *Journal of General Internal Medicine*.

After participating in a single, 15-minute session of one of these mind-body therapies, patients reported an immediate decrease in pain levels similar to what one might expect from an opioid painkiller. This study is the first to compare the effects of mindfulness and hypnosis on acute pain in the hospital setting.

The yearlong study's 244 participants were patients at the University of Utah Hospital in Salt Lake City who reported experiencing unmanageable pain as the result of illness, disease or surgical procedures. Willing patients were randomly assigned to receive a brief, scripted session in one of three interventions: mindfulness, hypnotic suggestion or pain coping education. Hospital social workers who completed basic training in each scripted method provided the interventions to patients.

While all three types of intervention reduced patients' anxiety and increased their feelings of relaxation, patients who participated in the hypnotic suggestion intervention experienced a 29 percent reduction in pain, and patients who participated in the mindfulness intervention experienced a 23 percent reduction in pain. By comparison, those who participated in the pain coping intervention experienced a 9 percent reduction. Patients receiving the two mind-body therapies also reported a significant decrease in their perceived need for opioid medication.

"About a third of the study participants receiving one of the two mind-body therapies achieved close to a 30 percent reduction in pain intensity," said Eric Garland, lead author of the study and director of the U's Center on Mindfulness and Integrative Health Intervention Development. "This clinically significant level of pain relief is roughly equivalent to the pain relief produced by 5 milligrams of oxycodone."

Garland's previous research has indicated that multi-week mindfulness training programs can be an effective way to reduce chronic pain symptoms and decrease prescription opioid misuse. This new study

added a novel dimension to Garland's work by revealing the promise of brief mind-body therapies for people suffering from [acute pain](#).

Eric Garland is the associate dean for research in the College of Social Work at the University of Utah and director of the Center on Mindfulness and Integrative Health Intervention Development. Credit: University of Utah

"It was really exciting and quite amazing to see such dramatic results from a single mind-body session," said Garland. "Given our nation's current opioid epidemic, the implications of this study are potentially huge. These brief mind-body therapies could be cost-effectively and feasibly integrated into standard medical care as useful adjuncts to pain management."

Garland and his interdisciplinary research team aim to continue studying mind-body therapies as non-opioid means of alleviating pain by conducting a national replication study in a sample of thousands of patients in multiple hospitals around the country.

More information: Eric L. Garland et al, Randomized Controlled Trial of Brief Mindfulness Training and Hypnotic Suggestion for Acute Pain Relief in the Hospital Setting, *Journal of General Internal Medicine* (2017). DOI: 10.1007/s11606-017-4116-9

Provided by University of Utah