

# THE USE OF REMOTE MINDFULNESS APPLICATIONS FOR MANAGING CHRONIC PAIN DURING THE COVID-19 PANDEMIC

CHRISTIAN ROEHMER, M.D., DAN MCKEE, B.S., DOUGLAS BRYANT, M.D., AND KAIVALYA DESHPANDE, M.D.

## BACKGROUND

- Mental health issues and exposure to stress are widely known as contributors to chronic pain
- Due to COVID-19, access to mindfulness resources have decreased significantly, thereby limiting the availability of in-person resources for patients living with chronic pain

## OBJECTIVES

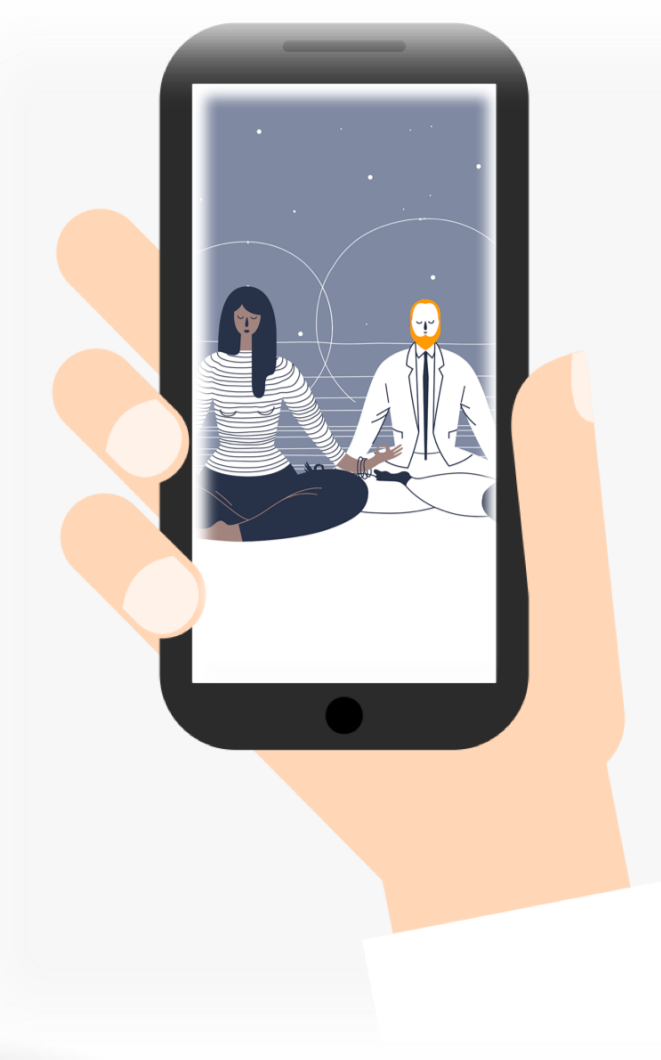
- The objective of this study was to determine if remote mindfulness programs could be of benefit for chronic pain management and to assess the level of research available on the topic.

## DESIGN

- An electronic search was performed using PubMed, Medline, Cochrane databases, and the U.S. National Library of Medicine.
- Works cited lists were then searched and cross-referenced.
- Studies were selected using key terms, including remote mindfulness, mobile applications, and chronic pain management.
- Articles were excluded if they did not address remote application-based mindfulness, chronic pain, or if the study was a meta-analysis, systematic review, or non-human trial.

## RESULTS

- Literature search resulted in 11 eligible matches (5 subsequently excluded based on criteria)
- 5 out of 6 studies addressed mindfulness practices in the setting of internet-based modalities
  - 1 study specifically addressed the use of mobile phone applications
- Pertinent studies reported positive effects from remote-based mindfulness therapies in each of the following ways:
  - Improvements in pain catastrophizing
  - Pain acceptance
  - Pain interference
  - Pain severity
  - Psychological inflexibility
  - Functional impairment
- Applications, with only 1 study specifically addressing mobile phone applications.



## CONCLUSIONS

- Due to limitations in in-person therapy during the COVID-19 pandemic, remote therapies have become increasingly important.
- Evidence suggests that remote mindfulness can be an effective modality for treating chronic pain by improving pain-associated coping behaviors, limiting functional impairment, and improving pain severity.
- The limited research that is available on the role of mindfulness techniques has focused on internet-based mindfulness applications, which are limited in number and are not easily accessible.
- Future studies should be done to assess the prevalence of mobile phone application use during COVID-19 and to determine if mobile mindfulness applications could be as efficacious as internet-based applications for individuals with chronic pain.

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