

PRESENTING AUTHOR'S NAME & RESEARCH TITLE

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Testing the Preliminary Efficacy of a Mindfulness-Based Smartphone App
Intervention for Nurses Traumatized from the COVID-19 Pandemic

PURPOSE/BACKGROUND

About 17-42% of nurses caring for patients with COVID-19 have developed posttraumatic stress disorder (PTSD) symptoms. A high number of nurses working in non-COVID clinical areas also have developed PTSD during the COVID-19 pandemic, and a higher prevalence of nurses developing delayed-onset PTSD is predicted months and years after the pandemic. Pre-COVID research also shows that workplace stressors are significantly associated with nurses' PTSD symptoms, and the pandemic only highlighted the already high prevalence of PTSD among nurses. Therefore, non-pharmacological approaches to self-management of PTSD symptoms need to be strategically delivered to help nurses develop resilience while they continue to be repeatedly exposed to traumatic stressors in their workplace.

The present study aimed to determine the preliminary efficacy of a six-week mindfulness-based smartphone app intervention for frontline nurses who have been emotionally and psychologically impacted by the COVID-19 pandemic.

MATERIALS & METHODS

We used a randomized controlled trial (RCT) design to determine the preliminary efficacy of the mindfulness-based smartphone app intervention. The intervention was comprised of daily audio-guided mindfulness meditations based on Acceptance and Commitment Therapy (ACT), reflective journaling on weekly ACT videos, and weekly follow-up phone calls. Participants in the intervention group used the app for six weeks, completed survey measures at multiple time points (Week 1, Week 3, Week 6, and Week 10), and attended a semi-structured interview at the end of the study. We used the following measures to evaluate the preliminary efficacy: perceived PTSD symptom severity, resilience, mindfulness, experiential avoidance, and avoidance. Two-tailed t-tests were used to compare significant differences in measures.

RESULTS

A total of 60 frontline nurses working throughout the United States participated in the study (i.e., n=30 intervention group, and n=30 wait-list controlled group). Results within the intervention group revealed significant improvement in PTSD and rumination at mid-intervention and significant improvement in all measures except resilience at post-intervention. A comparison of scores between intervention and control groups revealed significant differences in PTSD scores at mid-intervention, significant differences in all scores except resilience at post-intervention, and significant differences in PTSD, experiential avoidance, and rumination at the follow-up period (four weeks after intervention).

DISCUSSION/CONCLUSION

Our findings provide new evidence to the use of a short-term, self-help, mindfulness-based app intervention for nurses who have been emotionally and psychologically impacted by the COVID-19 pandemic. Our findings offer a comprehensive framework for developing and implementing self-help programs for COVID-related posttraumatic stress.