



Using a smartphone app to enhance the wellness of emergency department staff – a randomised controlled trial

Contact author: Hui (Grace) Xu
grace.xu@health.qld.gov.au

Ms Hui (Grace) Xu^{1,2}, Dr Robert Eley^{3,4}, Dr Kathryn Kynoch⁵, Dr Anthony Tuckett^{1,6}
 1 Emergency Department, Queen Elizabeth II Jubilee Hospital, Brisbane, Australia; 2 School of Nursing, Midwifery and Social Work, The University of Queensland, Brisbane, Australia; 3 Southside Clinical Unit, Faculty of Medicine, The University of Queensland, Brisbane, Australia; 4 Emergency Department, Princess Alexandra Hospital, Brisbane, Australia; 5 Evidence in Practice Unit and Queensland Centre for Evidence Based Nursing and Midwifery; A Joanna Briggs Institute Centre of Excellence, Mater Misericordiae Ltd, Brisbane, Australia; 6 Curtin School of Nursing, Curtin University

Introduction

Digital mindfulness can effectively promote better mental health. However, it is unknown if smartphone app delivered mindfulness training is useful for ED staff.

Research aims

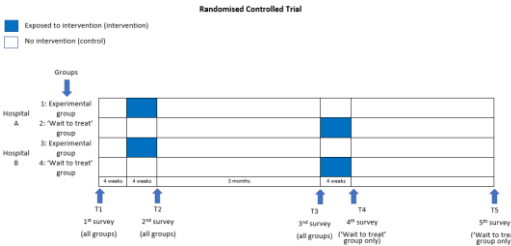
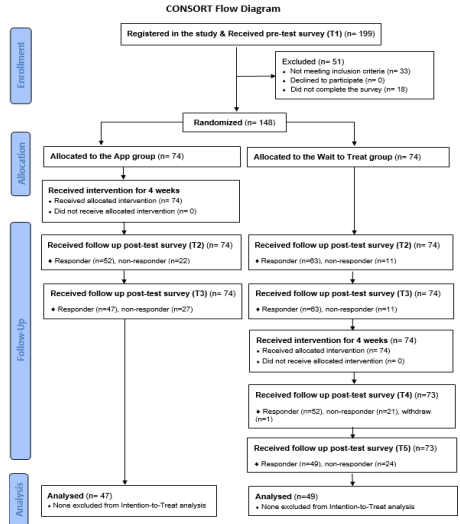
To test if daily mindfulness practice by using a smartphone app could reduce stress levels and promote staff wellbeing.

Methods

A two-arms, randomised controlled trial was conducted in two Metro South EDs. Participants who met the inclusion criteria were randomised into either the App group or the Wait group.

Participants were instructed to practice 10 minutes daily meditation using an app (Headspace meditation app®).

Pre and post intervention surveys (immediate post and 3 months posts) via the survey platform were conducted to assess staff stress and wellness levels by using the Perceived Stress Scale and Warwick-Edinburgh Mental Wellbeing Scale, respectively.



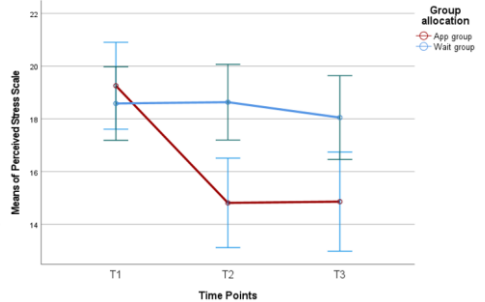
Results

97/148 participants completed all surveys.

No significant difference was among the two groups and study sites.

71 (48%) participants reported continuous app use.

Stress: **Statistically improved stress** (F=15.70, p<0.001)



Wellbeing: **Statistically improved wellbeing** (F=10.71, p<0.001)

Conclusion

Mindfulness practice delivered via a smartphone app can enhance ED staff wellbeing. Mobile mindfulness can be added to the wellness toolkit to assist individual staff to increase wellness.

Reference:

Xu, H., Tuckett, A., Kynoch, K., & Eley, R. (2021). Effects of mobile mindfulness on emergency department work stress: a randomised controlled trial. *Emergency Medicine Australasia*, accepted for publication on July 2021.

