My Moments Protocol

Title: My Mindful Moments: A Mindfulness Meditation and Digital Art Activity

Background

Stress and anxiety are pervasive in the current healthcare environment. During the COVID-19 pandemic, staff have been required to cope with multiple changes in the work environment. According to Phillips (2019) systematic review, expressive arts interventions show effectiveness at reducing acute anxiety in healthcare workers. Mindfulness meditation is a well-established technique to promote relaxation in various adult populations and has demonstrated effectiveness in reducing consequences of anxiety in healthcare workers as well (Regeher, et al., 2018; Burton, et al., 2017). This project provides an opportunity for patient care staff in an ambulatory oncology setting to participate in and evaluate an activity that includes a mindfulness meditation technique and an expressive digital arts activity. Feasibility of conducting the activity in the workplace and differences in anxiety level pre- and post-intervention will be evaluated. The project will be conducted with strict adherence to COVID-19 related safe environment policies.

Purpose & Objectives

The purpose of this evidence-based practice project is to evaluate the feasibility of providing a relaxation mindfulness meditation and an expressive digital arts activity among clinical staff on the Yawkey 9 ambulatory oncology care clinic at Dana Farber Cancer Institute (DFCI) (Longwood Campus).

Specific objectives are: 1.) To evaluate the feasibility of conducting a guided activity that combines a relaxation mindfulness meditation and an expressive, digital arts activity by calculating a.) the frequency of staff participation, b.) the frequency of staff completion of the activity, c. the time needed to complete the activity; 2.) To evaluate change scores in participants' stress using the Global Anxiety - Visual Analog Scale (GA-VAS) a validated measure of anxiety in adult populations (Williams, Morlock, & Feltner; 2010) pre- and post- participation in the activity; and 3.) To evaluate staff perceptions of the activity using additional survey items developed by the research team; and 4.) to identify common themes that emerge from digital art images created by participants.

Methods

Currently, approximately 60 patient care staff work on Yawkey 9 ambulatory infusion clinic at Dana Farber Cancer Institute. The meditation/digital arts activity will be conducted in a designated, private meeting space. Participation is strictly voluntary, and all Yawkey 9 staff will be invited to participate. An email will be sent to all staff and a flyer will be posted on the unit to include a sign-up sheet with the dates and times for the activity (see Appendix A). 5-12 sessions will be provided at times convenient for staff to attend during scheduled break times. Staff will be invited to sign up by selecting a session on the sign-up sheet. The nurse director will manage the daily staffing schedule to allow break times for staff while providing adequate staffing on the unit. Sessions will be added to accommodate staffing needs.

At each session, study team members will wear masks, handle all study materials with gloved hands after hand washing, and wipe down study materials between uses. Consecutively numbered survey packets to include a cover letter and pre- and post- activity surveys will be provided at each Dana Farber participant space (see Appendix B) with an iPad for each participant to use. Groups of 4-8 participants

will be guided by a project team member to select seats 6 feet apart from each other. Participants will be required to wear masks for the entirety of the activity. As noted above, I-pads will be provided to each participant and wiped down between uses per COVID-19-related current policies. The guide with script for study team members conducting the activity is detailed in Appendix C.

We are requesting a waiver of registration of participants in OnCore.

The mindfulness intervention consists of a mindfulness meditation led by a trained APRN. Participants listen to the meditation provided in person or via Zoom, depending on the status of COVID policies at DFCI at the time of the study. A video demonstration is provided in Appendix D.

The My Moments® application (app) is a tool used to facilitate expressive art creation in a digital photography media. The tool will be used with the permission of the author (see Appendix E) on iPads during the activity. Use of the application is described in Appendix F.

The My Moments app will be loaded on DFCI iPads provided to participants. Participants do not enter individual identifiers into the app. The only information that the app collects is the IP address of the device, which in this case will not be that of the individual but will be identified as owned by DFCI, i.e. DFCI Blum iPad 1, DFCI Blum iPad 2, etc...

The individual participant interacts with the app by creating a digital image. A description of the activity is found in Appendix F: My Moments Digital Imagery Activity. If the participant chooses to do so, they can share the image by clicking the "share" button within the app. They are immediately notified that the image has been sent to a workshop folder which is private and managed by the research team facilitator. When an image is shared, only the "name" of the device (ie.DFCI Blum iPad 1) t is attached to the image and viewable in the private workshop folder. No other info is collected about the image creator and sharing is optional. The app does not automatically save any images. The participant can save the image to the individual device if they choose to do so. The research team will delete any saved content between iPad uses and at the end of the study.

A collection box will be available in the meeting space for participants to deposit completed surveys. Participants will be identified only by number on the surveys. Each survey packet will contain a cover letter, a pre- and a post- survey. Each pre- and post- survey within a packet will be numbered, i.e. pre-survey 1 and post-survey 1. Participants will receive the entire packet at the beginning of the activity. Packets will be numbered consecutively. If COVID policies require remote collection of data, Surveys packets will be completed via REDCap, which will be available to participants on the iPads used in the activity. Survey packets created in REDCap will be numbered consecutively and participants will be guided remotely via Zoom to complete the surveys pre- and post- activity, identified only by number.

Hard copy data will be kept in a locked file in the Cantor Center. Survey data will be recorded, maintained and analyzed securely on a password protected computer in the Cantor Center. Aggregated data will be shared with staff and administration. If COVID-related policies at the time of approval do not permit the research team to conduct the protocol in person, all procedures will be done remotely. The intervention activity may be conducted with participants via Zoom and surveys may be administered via RedCap.

Eligibility Criteria:

Inclusion Criteria

1. Adults > 18 years of age 2. Currently employed at DFCI 3. Providing patient care on Yawkey 9

Exclusion Criteria

1. None

Evaluation & Outcome

Feasibility will be evaluated by index scores of the percentage of Y9 clinical staff who choose to participate, the percentage who complete the activity, and the mean time required for groups to complete the activity. Participant feedback from open ended survey items will be analyzed for common themes. In previous unit-based mindfulness meditation activities provided at DFCI, a range of 20-60% of staff have chosen to attend, depending on the total number and times of day sessions were provided. We will consider the intervention feasible if > 50% of staff choose to participate, if > 80% of those who participate complete the activity, and if the activity is completed by the group in 40 minutes or less. Changes in participant anxiety will be evaluated by comparing GA-VAS scores pre- and post- intervention by calculating a paired t-test comparison of means. Shared digital images will be analyzed using a qualitative methodology (Lincoln, 2005), in which common themes among all images as a group are identified with regard to color, light, and artistic effect. Aggregate results will be shared with staff and administration.

References

Burton, A., Burgess, C., Dean, S et al. (2017). How effective are mindfulness-based interventions for reducing stress among healthcare professionals? A systematic review and meta-analysis. Stress and Health, 33 (1). pp. 3-13.

Lincoln, N. K. D. Y. S. (2005). The Sage handbook of qualitative research: Sage.

Phillips, C. & Becker, H. (2019). Systematic Review: Expressive arts interventions to address psychosocial stress in healthcare workers. Journal of Advanced Nursing; 75: 2282298.

Regeher, C. Glancy, D., Pitts, A. & LeBalnc, V.R. (2018). Interventions to reduce the consequences of stress in physicians: a review and meta-analysis. Journal of Nervous Mental Disorders; 202(5): 353-359.

Williams, V.S., Morlock, R.J., & Feltner, D. (2010). Psychometric evaluation of a visual analog scale for the assessment of anxiety. Health and quality of life outcomes; 8:57.