

ORAL PRESENTATION

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OA04.04. Changes in physiological and psychological markers of stress in hospital personnel after a low-dose mindfulness-based worksite intervention

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Purpose

To determine the efficacy of a pragmatic low dose mindfulness-based worksite intervention on biological and behavioral indices of stress in healthcare professionals caring for seriously ill patients.

Methods

Participants (n=32) were recruited among the Surgical Intensive Care Unit (SICU) personnel of a large university hospital, and were randomized to intervention or wait-list control groups, stratified by gender. The low dose 8-week mindfulness-based intervention was delivered on site, one hour before shift change.

Results

Participants were representative of the SICU staff with 69% nurses, 88% females, age average of 44, and 11.8 (± 10.1 , SD) average years working in the SICU. Participant biological indices of stress, measured by the level of salivary α -amylase, was significantly reduced in the intervention group ($t=2.562$, $p=0.026$) only. Behaviorally, they rated their experience of stress using the Depression, Anxiety and Stress Scale (DASS-21), and rated sleep over the past month using the Pittsburg Sleep Quality Index (PSQI). There was a significant decrease of the scores on the DASS-21 stress subscale ($t=2.245$, $p=0.040$) and a significant improvement in the overall quality of sleep ($t=2.482$, $p=0.027$) between pre and post assessments in the intervention group with no changes for the wait list group. Work satisfaction also increased

significantly ($t=-3.2020$, $p=0.006$) for the intervention group only.

Conclusion

These data indicate the effectiveness of a mindfulness-based intervention delivered at the worksite towards stress reduction for staff in a high stress, hospital environment. The SICU personnel care for trauma 1 and 2 level patients and patients with severe pathology recovering from major surgery, and are confronted with catastrophic events on a regular basis. Given the nature of the job, work-related stressful events in the SICU will not change, but the resiliency tools offered via the intervention may help maintain wellness and prevent the deleterious effects of stress.

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