

Io raev qh Ukping-Btgavj Mkp fhwnpguu Vge jpkswg qp Pj yukekap Bwtpqww apf Uvtguu

DZ i [Y]gYb'6A¹z' A i bXY''?1z'9VYfgc`Y'8¹z'8fi a a cbX'8²UbX'7\Yb'8¹

F T ~|cã|Öæ/ÄP^æ|c@ÄÜ~•c^ {ÄÜ} •cãc ~c^ÄÄVæ& [{æÄÄ YCEÄWÜCE

6V@^Pæ]]~TÖÄÜ^æcc|ÄÄ YCEÄWÜCE

*7cffYgdcbX]b[Uih\cf. Bethann Mangel Pflugeisen, Multi Care Health System Institute, Mailstop 315-C2-RS, PO Box 5299, Tacoma, WA, 98415-9915, USA, Tel: +1 253-403-3629; Fax: +1 253-403-3629; E-mail: Bethann.Pflugeisen@multicare.org

FYWY]jYX'XUHy. April 27, 2016; 5WWYdhYX'XUHy. May 23, 2016; DiV]g\YX'XUHy. May 30, 2016

7cdfm][\h. © 2016 Pflugeisen BM, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

5VghfUWh

-bhfcXiWh]cb. Stress and burnout among health care providers can have serious repercussions. Mindfulness techniques, particularly when delivered by abbreviated training programs, have been studied for their success in managing smV metrics at baseline. However, at the =0.10 level, primary care providers reported a significantly lower sense of personal accomplishment (-6.0 points, 95% CI: -12.2, 0.2 points; p=0.08) at baseline.

7cbW'ig]cbg. Symptoms of stress and burnout are equally likely to be observed in providers across discipline, age, sex, and experience. A flexible, easy to use, single-breath based mindfulness program can yield significant improvements for these professionals.

?YmkcfXg. Mindfulness; Burnout; Stress; Physician

Introduction

High levels of stress and physician burnout, a “syndrome of depersonalization, emotional exhaustion, and a sense of low personal accomplishment [1],” can lead to increased medical errors [2,3],

Materials and Methods

Using a single-breath mindfulness technique taught during a live session and built upon using freely accessible video-modules, we sought to improve the well-being and decrease stress and burnout in a cohort of physicians serving a suburban hospital in the South Puget Sound region of Washington State. For full details of our program, see Pflugeisen et al. [27]. The Maslach Burnout Inventory [28] and P

erceived Stress Scale [29] were used to measure physician burnout and stress, respectively, at three time points: baseline (T1; September 2014), immediately following the 8 week intervention (T2; November

2014), and 8 weeks post-intervention (T3 January 2015). At each time point the tests were each administered in the early morning prior to the physicians starting their workday.

Here we use repeated measures ANOVA to evaluate the change in each of these four metrics across time (Table 1). To examine characteristics of providers experiencing burnout, we use multiple linear regression to evaluate the relationship between the burnout and stress metrics at baseline with select demographic variables, including practice field (primary care or specialty), provider sex (female/male), provider age, and years in practice. Significance was assessed at the

Variable	Baseline (M, SD)	Post-Intervention (M, SD)	p-value
Emotional exhaustion	8.3 (1.2, 15.5)	5.7 (2.22)	0.01
Depersonalization	2.7 (-1.2, 6.5)	2.2	0.14
Personal accomplishment	-4.7, - (-9.20.1)	6.2	0.007
Perceived stress	9.1 (3.8, 14.4)	14.7	<0.001

Table 1: Repeated measures ANOVA for physician burnout and stress scales

Physicians' sense of personal accomplishment rose during the intervention (Figure 1c) but plateaued during the follow up phase. Although personal accomplishment did not continue to rise, mean change over time was revealed to be significant for this metric ($F_{2,22}=6.2$, $p=0.007$). Depersonalization alone did not demonstrate a significant improvement ($F_{2,22}=2.2$, $p=0.14$) with a modest decrease of 2.7 points (95% CI -1.2- 6.5 points; Figure 1b) across the study period.

Our study cohort was comprised of 11 (47.8%) primary care providers (Family or Internal Medicine), three (13%) Surgeons, two (8.7%) anesthesiologists, and seven (30.4%) physicians working in specialty practice, including Pediatric Neurology, Sleep Medicine,

