# Comparative Effectiveness of a Burnout Reduction Intervention for Behavioral Health Providers

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**Objectives:** Prior research found preliminary effectiveness for Burnout Reduction: Enhanced Awareness, Tools, Handouts, and Education (BREATHE), a daylong workshop for reducing burnout among behavioral health providers. Using a longer follow-up compared with prior research, this study compared the effectiveness of BREATHE and a control condition.

**Methods:** Behavioral health providers (N=145) from three U.S. Department of Veterans Affairs facilities and two social service agencies were randomly assigned to BREATHE or person-centered treatment planning. Burnout and other outcomes were compared across groups over time.

Burnout is characterized by emotional exhaustion, cynicism, and a diminished sense of personal accomplishment (1) and is common among mental health providers and administrators. Burnout results from navigating a work life with high job demands and low resources to meet those demands (2). Depending on the sample and methods used, studies have found that 21% to 67% of mental health workers report high levels of burnout (3). Burned out workers often experience health problems, such as fatigue, insomnia, headaches, and poor overall health; social and family relationship problems; diminished job satisfaction; and increased mental health symptoms and substance abuse (4,5).

Research also indicates that employee burnout may negatively affect organizations in a number of ways, including absenteeism, tardiness, frequent breaks, reduced job commitment, and, in some studies, poor job performance and increased turnover (5). In addition, burnout and staff turnover are believed to disrupt the continuity of mental health care and undermine the quality of services provided (6,7). Not surprisingly, the cynical attitudes that often accompany burnout have been shown to undermine therapists' positive feelings about mental health clients (8).

In view of the negative impact of burnout, the lack of rigorous research on interventions to improve burnout among

**Results:** Analyses yielded no significant differences between groups. However, BREATHE participants showed small but statistically significant improvements in cynicism (six weeks) and in emotional exhaustion and positive expectations for clients (six months). Participants in the control condition showed no significant changes over time.

**Conclusions:** Although it did not demonstrate comparative effectiveness versus a control condition, BREATHE could be strengthened and targeted toward both distressed providers and their organizations.

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behavioral health providers is especially striking. A review of the literature on interventions for burnout revealed eight studies focusing specifically on reducing burnout among behavioral health workers (3). Most of the studies targeted inpatient providers or nurses in European health care systems. Only two involved a randomized controlled trial, but neither had a total sample size of greater than 53 participants.

In a quasi-experimental design, Salyers and colleagues (9) found preliminary support for the effectiveness of Burnout Reduction: Enhanced Awareness, Tools, Handouts, and Education (BREATHE), a daylong workshop for reducing burnout among community behavioral health providers. The study found that the providers experienced less burnout and improved attitudes toward clients six weeks after completing the BREATHE workshop. The goal of this study was to rigorously test the approach used by Salyers and colleagues (9) by comparing BREATHE with an active control condition and using a longer follow-up period. It was hypothesized that the intervention would reduce emotional exhaustion and improve provider attitudes compared with the control condition. The effect of the intervention on other aspects of burnout (cynicism and reduced sense of personal accomplishment) and other job-related outcomes was also explored.

### METHODS

Participants (N=145) were employees of one of five organizations providing behavioral health care services in three Midwestern cities, including 109 employees of three U.S. Department of Veterans Affairs (VA) medical centers providing both inpatient and outpatient services and 36 employees of two community social service agencies providing a range of behavioral health services. Employees who received more than three hours of burnout training in the past two years were excluded (N=0). Recruitment occurred by circulating brochures about the study at routine meetings, placing the brochures in staff mailboxes, and sending an electronic version of the brochure by e-mail.

Participants provided written informed consent and completed online surveys prior to the intervention and at six weeks and at six months postintervention. Randomization was stratified by organization to control for organizational characteristics, such as management style, that might have an impact on burnout. Participants were randomly assigned to attend either the intervention or the control condition, a daylong workshop on person-centered treatment planning. Recruitment for and scheduling of the workshops occurred in two waves over ten months to diffuse the burden of staff absences. Study data were collected from January 2013 to September 2014. All study procedures were approved by the Indiana University Institutional Review Board and the VA Research and Development Committee.

BREATHE addresses burnout by enhancing providers' personal resources for reducing emotional exhaustion and cynicism and increasing their sense of personal accomplishment and work engagement (9). It is consistent with the differentiated job demands and resources model (2,3). Delivered by two psychologists experienced in mindfulness and cognitive-behavioral approaches, BREATHE uses a relapse-prevention framework to help participants identify antecedents of burnout and introduces wellness strategies, including cognitive-behavioral techniques for stress reduction (for example, deep breathing and cognitive restructuring), contemplative practices (for example, mindfulness meditation, imagery, and yoga), approaches for building social support (for example, building positive relationships and communication and managing conflict), information about physical wellness (for example, sleep hygiene and the importance of exercise), and time management (for example, setting boundaries). Participants received a workbook, intended for use both during and after the workshop, to develop a personalized plan of self-care that would help them avoid or reduce burnout.

The control group received a daylong workshop on personcentered treatment planning facilitated by a trained psychologist. The workshop provided an overview of assessment, staging, and treatment planning principles that focus on clientdirected goals and client strengths. Person-centered treatment planning was selected as the topic for the control workshop because it aligns with VA and community initiatives to provide person-centered care but has minimal overlap with the content covered in BREATHE. Organizational leaders approved administrative leave for workshop participation.

Participants reported age, gender, race-ethnicity, education level, job tenure, and tenure in mental health field. Demographic data for the sample are presented in Table 1; there were no significant demographic differences between participants in the experimental and control conditions.

Burnout, the primary outcome of interest, was assessed with the Maslach Burnout Inventory (1), a widely used measure of three components of burnout: emotional exhaustion, cynicism, and personal accomplishment. For personal accomplishment, lower scores indicate higher burnout. The subscales have shown good internal consistency, stability over time (for example, as indicated by test-retest reliability for the emotional exhaustion scale at four-week follow-up [r=.82]), and convergent validity (1).

Staff attitudes were measured with the ten-item Provider Expectations Scale, adapted from an earlier seven-item version. Staff were asked to think about clients with whom they currently worked and to report how many clients that they expected to achieve specific outcomes (for example, related to housing and employment) on a 5-point scale, ranging from 1 (almost all) to 5 (none), with higher scores indicating more optimistic expectations. This scale has good internal consistency and correlates with related constructs (10).

Job satisfaction was assessed with five items from the Job Diagnostic Survey, which has good internal consistency and evidence of convergent and divergent validity (11).

Employee turnover was assessed in two ways. Two selfreport items assessed turnover intentions. For the first item ("How often have you seriously considered leaving your job in the past six months?"), responses were 1, never, to 6, several times a week. For the second item ("How likely are you to leave your job in the next six months?"), responses were 1, not likely at all, to 4, very likely. Actual turnover was also obtained via confirmation with organizational leaders. However, because actual turnover in our sample was very low at both six weeks (N=1, .7%) and six months (N=3, 2.1%), it was omitted from the final analyses.

Absences for sickness and vacations were assessed through self-reported items: "In the past six months, how many sick hours have you taken, whether paid or unpaid?" and "In the past six months, how many vacation or other paid time-off hours have you taken?" To avoid overlap of response periods, data on absences were collected at baseline and six months.

Work-life balance was assessed by using two three-item scales measuring dimensions of work-family conflict (time, strain, and behavior), with one scale measuring the interference of work role on family life and the other measuring interference of family role on work life (12).

Analyses were run by using SAS, version 9.3. Because study groups did not differ on demographic characteristics, we did not control for these characteristics in the analyses. However, 26 participants in the control condition did not participate in all three assessments compared with 13

TABLE 1.	Characteristics	at baseline of	participants	in a	comparative-eff	ectiveness	study of	ŕ
BREATHE	and a control	condition <sup>a</sup>						

	Total (N=145)		BREATHE (N=76)		Control (N=69)	
Characteristic	N	%	Ν	%	Ν	%
White <sup>b</sup>	111	77	59	78	52	75
Female	103	71	55	72	48	70
Education <sup>c</sup>						
Associate degree, some college, or high school	15	10	6	8	9	13
Bachelor's degree	24	17	13	17	11	16
Master's degree	79	55	42	55	37	54
Doctorate degree	26	18	15	20	11	16
Age (M±SD)	45.7±11.5		44.9±11.0		46.5±12.1	
Job tenure (M±SD years)	4.5±5.4		4.4±5.2		4.7±5.7	
Tenure in mental health field ( $M\pm$ SD years)	14.1±10.5		13.2±10.1		15.1±10.8	
Time in direct care (M±SD %)	75.9±26.4		76.7±25.0		75.0±28.0	

<sup>a</sup> BREATHE, Burnout Reduction: Enhanced Awareness, Tools, Handouts, and Education. There were no significant differences between the intervention and control groups for any characteristic.

<sup>b</sup> Results reflect comparison of white versus non-white participants. Non-whites included 24 black participants (N=9, BREATHE, N=15, control), 3 Asian/Pacific Islanders (N=2, BREATHE, N=1, control), and 3 American Indian/Alaska Natives (N=2, BREATHE, N=1, control). Two (both BREATHE) participants were Hispanic or Latino, and data were missing for 4 participants.

<sup>c</sup> Education data missing for one participant in the control condition

participants in the intervention group ( $\chi^2$ =8.04, df=1, p=.005). Because of the missing data, we selected a pattern mixture model to estimate the effect of study condition on outcomes (13). Longitudinal changes within groups were tested by using multilevel models to account for the nested structure of the data: baseline, six-week, and six-month data were nested within participants. Models were tested separately for the control and BREATHE groups. For all analyses, significance levels were set at p≤.05.

## RESULTS

Pattern mixture modeling analyses comparing the effectiveness of the BREATHE intervention and the control condition did not yield significant findings for any outcomes. However, BREATHE participants scored .26±.12 points lower on emotional exhaustion (t=-2.21, df=128, p=.03, d=-.39) and  $.13\pm.06$  points higher on positive views of clients (t=2.01, df=124, p=.05, d=-.36) at the six-month follow-up compared with baseline. Also, they scored .20±.10 points lower on cynicism at the six-week follow-up (t=-2.06, df=128, p=.04, d=-.36) compared with baseline. Significant differences over time were not found for reduced personal accomplishment, job satisfaction, turnover intentions, work absences, and work-life balance. No significant differences over time were found for the control condition. [A table with complete descriptive data and statistical test results for each study variable is available as an online supplement to this report.]

## DISCUSSION

In a rigorous test of effectiveness, BREATHE was not more effective in reducing burnout than a routine workshop relevant to behavioral health providers. However, BREATHE participants showed small, but statistically significant improvements across multiple domains over time, consistent with pilot work using the same approach (9). In addition, follow-up data indicate that some pre-post effects for BREATHE (decreasing emotional exhaustion and improving provider expectations of client recovery) have the potential to be sustained for at least six months. This is important given that the intervention addresses the individual provider's coping resources, presumably harder to maintain than changes to the larger organizational context.

Considered together, the lack of comparative effec-

tiveness and pre-post findings of effectiveness for only BREATHE participants suggest limited power in this study, perhaps due to the strength of BREATHE or in sampling. To strengthen BREATHE, separating content into smaller modules delivered over time may encourage continued use of burnout prevention strategies despite daily work demands; however, multiple sessions may create obstacles for participating in the full curriculum. Other options to reinforce the wellness strategies may include using additional electronic resources and reminders outside the workshop setting. Second, revising the content of the BREATHE materials to more specifically address how to cope with key job demands that promote burnout may also increase potency. For example, despite workload challenges, providers frequently feel rewarded by seeing clients experience positive changes (14). Although BREATHE addresses time management and emphasizes prioritizing work tasks that align with personal values, it may be helpful to enhance training materials, exercises, and follow-up activities in this area.

Finally, the BREATHE intervention was designed to address personal resources for mitigating work strain but does not address organizational issues that contribute to burnout, for example, lack of autonomy and workload. Although noteworthy that the intervention demonstrated sustainable changes over time, additional measures that address systemic factors may be necessary to increase the effectiveness of burnout interventions. Examples of organizational approaches for addressing burnout in behavioral health include improving role clarity, decentralizing decision making to increase autonomy (3), and creating shared values, mission, and goals within the work culture (15). Managers at the work unit level could learn to recognize burnout, reinforce coping strategies for individual staff, or make modifications to work policies that reduce burnout. Although BREATHE and similar approaches may be helpful for the individual, bolstering personal resources alone may be palliative—more akin to treating symptoms rather than the underlying disease.

Our ability to detect differences may also have been affected by limitations in sampling. It is possible that the most distressed clinicians declined study participation. To explore this possibility further, we compared scores for participants in the BREATHE pilot (9) program at baseline and six weeks with baseline scores in this study. Although scores of the pilot participants improved significantly six weeks after the intervention (9), the pilot sample demonstrated much higher mean scores for emotional exhaustion at both baseline  $(3.7\pm.8)$ and six weeks after intervention  $(3.2\pm.8)$  compared with baseline scores for the current sample  $(2.8\pm1.3)$ . The smaller effect size observed in this study may be due to a floor effect demonstrating relatively little need for burnout reduction among the participants. This theory is further bolstered by the very low rate of actual turnover observed in this study sample, much lower than rates documented in other mental health settings (6). Future interventions for staff burnout may be most effective if targeted to those who are experiencing higher levels of burnout.

Sample attrition also was a study limitation; 39 (27%) participants did not complete all surveys, with greater dropout in the control group. Staff who volunteer for a study aiming to reduce burnout may be less engaged if they are assigned to a control condition. In addition, federal policy limits the incentives that can be provided for completion of surveys. More attention is needed on how to best recruit and retain busy providers for future research addressing burnout interventions.

## CONCLUSIONS

The one-day BREATHE workshop did not demonstrate comparative effectiveness in reducing burnout versus an active control but showed some promising, if small, pre-post improvements. Several opportunities exist to strengthen the intervention, including offering booster sessions and targeting the intervention to the most distressed workers. Incorporating burnout reduction principles at the organizational level, such as working with managers to introduce BREATHE strategies or identifying methods to increase autonomy or other burnout-reducing factors within the organization, is also warranted.

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#### REFERENCES

- 1. Maslach C, Jackson SE, Leiter MP: Maslach Burnout Inventory Manual. Palo Alto, Calif, Consulting Psychologists Press, 1996
- Crawford ER, Lepine JA, Rich BL: Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. Journal of Applied Psychology 95:834–848, 2010
- 3. Morse G, Salyers M, Rollins A, et al: Burnout in mental health services: a review of the problem and its remediation. Administration and Policy in Mental Health and Mental Health Services Research 39:341–352, 2012
- Rohland BM: A survey of burnout among mental health center directors in a rural state. Administration and Policy in Mental Health and Mental Health Services Research 27:221–237, 2000
- Stalker C, Harvey C: Professional Burnout: A Review of Theory, Research, and Prevention. Waterloo, Ontario, Canada, Wilfrid Laurier University, Partnerships for Children and Families Project, 2002. Available at legacy.wlu.ca/documents/7177/Professional\_burnout.pdf
- Paris M Jr, Hoge MA: Burnout in the mental health workforce: a review. Journal of Behavioral Health Services and Research 37: 519–528, 2010
- Salyers MP, Flanagan ME, Firmin RL, et al: Clinicians' perceptions of how burnout affects their work. Psychiatric Services 66: 204–207, 2015
- Holmqvist R, Jeanneau M: Burnout and psychiatric staff's feelings towards patients. Psychiatry Research 145:207–213, 2006
- Salyers MP, Hudson C, Morse G, et al: BREATHE: a pilot study of a one-day retreat to reduce burnout among mental health professionals. Psychiatric Services 62:214–217, 2011
- Tsai J, Salyers M, Lobb A: Recovery-oriented training and staff attitudes over time in two state hospitals. Psychiatric Quarterly 81: 335–347, 2010
- Hackman JR, Oldham GR: The Job Diagnostic Survey: An Instrument for the Diagnosis of Jobs and the Evaluation of Job Redesign Projects, 1974
- Carlson DS, Kacmar KM, Williams LJ: Construction and initial validation of a multidimensional measure of work-family conflict. Journal of Vocational Behavior 56:249–276, 2000
- Enders CK: Applied Missing Data Analysis. New York, Guilford, 2010
- 14. Salyers MP, Rollins AL, Kelly Y-F, et al: Job satisfaction and burnout among VA and community mental health workers. Administration and Policy in Mental Health and Mental Health Services Research 40:69–75, 2013
- 15. Glisson C, Schoenwald SK, Kelleher K, et al: Therapist turnover and new program sustainability in mental health clinics as a function of organizational culture, climate, and service structure. Administration and Policy in Mental Health and Mental Health Services Research 35:124–133, 2008