

## Wellness Review 2022, Part 2

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### ABSTRACT

**Introduction:** Similar to prior reviews, the Journal of Wellness editors searched the literature from the second half of 2022 for an interesting and impactful selection of publications on wellness in healthcare professionals.

**Methods:** Editors conducted a standard keyword search in Pubmed, focusing chiefly on large journals, interventional trials, and other prospective research. We included papers published between July 1, 2022 and December 31, 2022.

**Literature in Review:** Finding several hundred publications, we excluded editorials, reviews, and some smaller, less generalizable papers. A final 25 significant studies focusing on wellness in medical professionals were sorted into the following categories: logistics, creativity / arts, exercise and nutrition, curriculum / training, burnout, and miscellaneous.

**Conclusion:** JWellness editors continue to appreciate and focus on research related to thriving and positive well-being, rather than descriptive burnout studies.

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### INTRODUCTION

Welcome to Part 2 of the Journal of Wellness 2022 wellness literature review. This review from Journal of Wellness editors provides a selection of interesting recent publications within the healthcare professional wellness domain. We summarize new science and well-being initiatives published outside of JWellness related to burnout and resilience.

### METHODS

Editors searched PubMed for empirical and observational research studies, review articles, guideline summaries, letters, and editorials. A Pubmed search of prespecified keywords was conducted: "clinical professional," "healthcare personnel," "healthcare professional," "healthcare worker," "physician," "doctor," "advanced practice provider," "wellness," "burnout," "fatigue," "resilience." Using the time period from July 1 to December 31, 2022, we curated papers with relevance to physician thriving, interventions targeting wellness and resiliency, and innovative burnout investigations. This resulted in a final 25 articles for inclusion in this review, sorted into six categories: logistics, creativity / arts, exercise and nutrition, curriculum / training, burnout, and miscellaneous.

### LITERATURE REVIEW

#### Hospital Logistics and Wellness

A remote scribe pilot program was implemented in a primary care practice to determine if it could improve physician

wellness, electronic health record (EHR) satisfaction, and EHR use. The authors found, compared with controls, that scribe users had improved wellness scores and reduced EHR use time—which has been a consistent thread emphasized in prior JWellness reviews. Organizations are encouraged to consider scribe programs for the physician workforce [1].

Patient satisfaction scores were the focus of one study in pediatric medicine. Patient satisfaction impacted not only practice patterns but also job satisfaction and burnout. The authors called for improved methods to provide feedback to pediatric physicians [2].

A Cochrane Library intervention review focused on collective leadership, which involves multiple professionals sharing viewpoints and knowledge with the potential to positively influence the quality of care and staff well-being. This summary of trials representing Canada, Iran, and the USA, comprising 955 participants, identified no direct evidence of impact to burnout and psychological symptoms. Collective leadership likely improves leadership and team performance but they are unsure if it improves clinical performance. It is possible, based on the results of one of the assessed RCTs, that collective leadership may slightly improve staff well-being by reducing work-related stress [3].

Another review focused on organizational interventions for mental health during pandemics. The systematic review included 41 studies. Potential solutions included staffing adjustments, work shift logistics, effective control and prevention, praise for workers' efforts, and psychological support [4].

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## Creativity and Arts

In an investigation into burnout, a variety of measures were utilized to assess aspects of creativity. A group identifying as burned out had the lowest scores on creativity and cognitive tasks as well as worse sleep quality and higher depression [5]. Another paper studied the effects of creative arts therapy on distress among healthcare professionals. Those randomized into the treatment group had significant improvements in anxiety, depression, posttraumatic stress, burnout, and turnover intentions [6].

Another wellness program specific to surgical residents focused on the utilization of forum theatre to address peer-to-peer mistreatment. This study design had actor volunteer residents pose scenarios with mistreatment problems while the audience engaged the actors with potential solutions to identify the best collective outcome. The design was feasible and well received. “Participants noted an improved understanding of mistreatment, felt more confident in recognizing mistreatment, reported improved confidence in their ability to intervene when witnessing mistreatment and to recognize when they themselves were involved in mistreatment.” Furthermore, this intervention seemed to affect long-term behavior change as results persisted beyond six months post intervention [7].

## Exercise and Nutrition

Motivations and barriers to exercise among physicians were studied in 64 respondents. The top motivator for adequate exercise was to reduce stress, whereas the top barriers included COVID-19 concerns and the lack of time. Consistent with prior investigations into exercise and resiliency, it is not surprising that those that identified as being “too stressed” or “too burnt out” to exercise, were in fact, burned out by objective metrics [8]. This paper suggests that though stress and burnout can contribute to poor gym-going motivation—the excuse of being burned out may lead to a self-perpetuating cycle of worse resiliency and higher workplace exhaustion. The solution, at least initially, might be forced exercise to build back bodily wellness, which could naturally engender increasing motivation to put on those shorts and tennis shoes.

Hydration and nutrition habits among physicians and medical learners was the focus of a review paper. The most common reason for poor nutrition was lack of time. The authors noted that reasons for meal-skipping and insufficient hydration were less studied [9].

## Curriculum or Training Interventions

A medical school well-being curriculum was implemented in New Zealand in 886 students. Despite the well thought out curriculum, graduating students reported increased levels of distress. The authors called for future research to examine students’ psychological traits to inform curriculum developers [10].

Kobritz et al. present research on mentoring and professionalism training. The protocol consisted of 60 minutes of reflection along with readings and discussion around humanistic mentoring skills. The authors utilized validated surveys examining burnout, resilience, and humanistic teaching practices along with interviews to determine the impact of the program on surgical resident wellness. The program reduced burnout

(64.1% to 46.1%) and improved humanistic teaching practices. Interviews revealed that the program was well received by participants [11].

Forty-eight rural family physicians participated in a survey study examining wellness and the role of training in supporting well-being. Most respondents had maintained wellness during practice and 62.6% denied experiencing burnout. Some recommendations were included for residency programs to improve training in work-life balance, self-care and wellness, and business skills [12].

## Burnout

One paper examined the concept of physician burnout and breakdown of relationships between patients and doctors. This heavily philosophical paper accepts the importance of strategies to mitigate burnout commonly cited in literature (work-life balance and resilience are important); but asserts that focusing primarily on the physician may not be enough. The authors describe how the context of physician and patient relationships must be considered, not only for the healing of the patient but also the clinician [13].

Emotional exhaustion changes from COVID-19 were examined in a study of 107,122 US healthcare workers. Over three years of study, the authors found evidence that emotional exhaustion has increased among most (varied) roles due to COVID-19 [14].

A systematic review intended to help us understand how to predict burnout among healthcare providers. The review included 141 studies and revealed workplace factors such as work-life balance, support from leadership, and job autonomy as having stronger associations with burnout than mental health and physical health factors. Moreover, mental and physical health elements overall had unclear associations with burnout [15].

Another review focused on job burnout and turnover in China among village doctors. The evidence clearly indicates high turnover in village doctors. Men, those with lower income, those with a higher educational level, and those less than 40 years of age have increased turnover rates. Additionally, the most prominent contributor to burnout was a low sense of personal accomplishment [16].

Using findings from a survey conducted by the American College of Cardiology, one study focused on the prevalence and career impact of mental health conditions among cardiologists. More than 1 in 4 cardiologists experience mental health conditions; the influence on professional life is substantial [17].

## Other Studies

A review article on environmental factors impacting trauma provider wellness found that acute care surgeons have increased sleep deprivation, musculoskeletal pain and injury, pregnancy complications, moral injury, PTSD, burnout, and feelings of isolation and personal devaluation after experiencing adverse events or complications. The authors called for more interventions to provide opportunities to augment surgeon well-being [18].

A study published in the American Journal of Medicine studied sabbaticals for medical school faculty. The survey data from deans revealed that most sabbaticals served the purpose

of enhancing research output. It appears that medical school faculty take sabbaticals far less commonly than other higher education faculty. Many factors may explain this relative utilization: clinical responsibilities, the culture of medicine, and medical school debt [19].

One interesting study focused on incomplete responses to a national survey on surgical resident well-being. Residents who discontinued the survey or had selective responses were more often junior residents and from racial or ethnic minority groups. Additionally, those who discontinued or had selective responses had higher rates of physical abuse and racial discrimination compared to completers [20].

The association of noise in intensive care units and physical / mental health of caregivers and patients was the focus of a review article. According to results, more noise increased cortisol production and oxygen consumption, negatively impacted sleep, and disrupted circadian rhythm. Further adding to complexity in treatment, noise increased the need for analgesia and sedation [21].

A fascinating randomized control trial studied a three-hour, guided Shinrin-Yoku (Forest Bathing) nature-based walk as a potential intervention for healthcare professional burnout. The Oldenburg Burnout Inventory (OLBI) and Mini-Z assessments were used to collect baseline burnout scores. Randomized participants in the intervention group completed burnout assessments again after the Shinrin-Yoku walk; the control group completed assessments after a day off from clinical duties. There were no statistically significant differences between the treatment and control arms for pre- and post-intervention test scores. However, individuals who participated in the nature walk had overwhelmingly improved (subjective) feelings of mental well-being and decreased stress [22].

One systematic review reported results from workplace wellness interventions / programs in working mothers. Pooled results from eight relevant studies showed potential to improve mental wellness in this population. Working mothers who participated in such programs will potentially gain benefits in managing limited time and energy to balance work and family tasks [23].

Woodward and Willgerodt conducted a systematic review that examined factors associated with nurse work outcomes, with a specific focus on equity and inclusion. The review revealed impact on work outcomes at the individual, unit, and organization level. The authors noted that few studies focused on equity. Specifically, under the umbrella of health, many studies only addressed burnout [24].

Our final study evaluated the potential benefit of virtual mindfulness interventions. This randomized controlled study of breathing exercises collected data on heart rate variability (HRV) metrics. They compared subjects in a virtual reality group with others using a mobile app. Virtual reality based guided mindfulness training resulted in higher HRV progress. The authors concluded that virtual reality may be more beneficial compared to standalone mobile apps, especially when routinely used [25].

## CONCLUSION

In the wake of the COVID-19 pandemic, research on wellness continues to trend toward system-wide interventions and away from descriptions of burnout. Researchers are employing creative approaches to individual wellness instruction, studying sabbaticals, virtual mindfulness, forest bathing, and tracking more insightful metrics such as heart rate variability. We look forward to a future with healthy medical professionals bringing optimal health to our patients.

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