

Wellness Review 2019, Part 2

Brian Ferguson DO^{1,2*} and Martin Huecker MD¹, Editors-in-Chief

DOI: 10.18297/jwellness/vol2/iss1/5

Website: <https://ir.library.louisville.edu/jwellness/>

Affiliations: ¹University of Louisville, Department of Emergency Medicine, ²Keesler Air Force Base, Emergency Department

Recommended Citation: Ferguson, Brian A. and Huecker, Martin (2019) "Wellness Review 2019, Part 2," Journal of Wellness:

Vol. 2 : Iss. 1 , Article 5.

Publication Date: February 28, 2020



INTRODUCTION

Welcome to Part 2 of the Journal of Wellness review of 2019 wellness literature (July-December). In this review, we continue the goal of bringing a cohesive awareness of recent publications within the wellness domain, encompassing wellness leaders from all disciplines in healthcare. We provide insight into unique perspectives and new science published outside of JWellness, dealing with burnout prevention and wellness initiative implementation.

For this review we searched Pubmed from July through December (2019) for keywords “burnout,” “wellness,” “well-being,” in “physicians” and “healthcare professionals.” We selected forty-one articles for in-depth review, and have chosen to include twenty-two in the summary below. To meet inclusion, a paper must specifically address a concept relating to the well-being of healthcare professionals, or offer a new perspective to the current body of research in burnout, resilience or wellness.

LITERATURE REVIEW

Common themes in current wellness publications include various surveys to decipher trends in burnout, personal characteristics of those that meet Maslach Burnout Inventory (MBI) criteria for burnout, expert opinion on legal implications, interventions targeting burnout prevention, and workplace bolstering by pilot wellness and resilience programs. JWellness continues to believe efforts directed towards thriving, rather than surviving, offer the greatest potential to overcome the burnout epidemic. Therefore, this review will begin with those publications that endeavor to enhance the wellness of healthcare professionals.

Wellness Interventions for Resilience and Burnout Prevention

In the first summit focusing on the science of happiness in healthcare, experts from the fields of lifestyle medicine, medical education, healthcare administration and psychology convened to identify the best practices for implementation of positive psychology science into healthcare [1]. Positive psychology—aligned with the goals of the JWellness community and team—focuses on thriving in difficult environments and researches the strengths that enable people to thrive. Some of these include character strengths (e.g., sustained gratitude), positive relationships, mindfulness practices and establishing a life purpose [1].

Research in this field has established significant benefits from the implementation of positive psychology in clinical practice, to include improved emotional well-being, quality of life, decreased health care use, and less provider burnout [1]. Benefits of optimization of emotion / happiness extend to measurable pathophysiological consequences: improved wound healing, increased telomere length (aging mitigation) and decreased inflammation [1]. The summit concluded with health provider recommendations to maximize these characteristics and thus optimize resilience and burnout mitigation. Some of these recommendations were on-site meditation / retreat programs, well-being action plans and well-being breaks, reminders on well-being elements (e.g., gratitude practice), team building events, on-boarding resiliency training, nature / greenery incorporated into facilities, and an administration requirement to support worker well-being [1].

Regular physical activity has also been hypothesized as a buffer against burnout—working-age adults, across all occupations, spend an average of 9.5 hours a day sedentary [2]. Burnout interventions therefore often include an element of exercise. Examples of widespread workplace wellness intervention strategies include subsidized gym memberships, yoga and mindfulness courses, weekly massages, mental health awareness training, treadmill or stand-up desks, and locker and shower facilities to encourage physical activity (e.g., biking to work) [2]. Such wellness interventions have previously proven to increase employee satisfaction and team building [2].

Counsel from the Legal System

Not all of the onerous responsibility for implementing a resilience program rests on the shoulders of individuals and healthcare administrators—it can also arise from the legal system. In an article advocating for the improved use of the legal system to help clinicians—currently with rates of conglomerate burnout cited at 44%, carrying also one of the highest suicide risks—Hoffman argues we can use existing legal structure to optimize physician tasks and responsibilities [3].

For every hour spent with a patient, clinicians spend two hours on documentation, and as many as 4,000 clicks per clinical ER shift. Unanticipated by many physicians upon entering the work force, this is often cited as a key component leading to burnout [3, 4]. Hoffman argues

*Correspondence To: Brian Ferguson
Email: batmanferguson@gmail.com

that electronic medical record (EMR) systems should undergo rigorous and standardized testing prior to implementation, to ensure optimization for nurses and physicians. Likewise, a system of reporting failed EMRs could protect against implementation of particularly troublesome systems [3]. The whole effort would progress toward a minimum allowable standard for usability far exceeding what is currently in place at many institutions [3].

Hoffman also recommends a health care administration mandate for the reporting of random provider MBI assessments—with Medicare bonus points awarded to administrations that target problems (e.g., financing scribes for clinician, with costs partially offset by extra Medicare points) [3].

A recent meta-analysis of twenty-one studies, inclusive of both nursing and physician staff from the US and European countries, provides further rationale for this type of intervention [5]. The meta-analysis highlights a concerning 60% association between burnout and patient safety [5]. Thus, patient safety concerns can help drive a Medicare incentive program for creation and implementation of burnout prevention / resilience programs—much the same as is the driving force behind other recent Medicare mandates.

Culture, Introversion and Self-Valuation

In a clinical review addressing medical culture, authors Robertson and Long argue for optimization of a well workplace, describing medicine as currently shrouded in a blanket of shame. They advocate an approach to teaching and dialog that embodies kindness and respect, offering constructive feedback while providing support after medical errors [6]. Such an approach would foster a mutually beneficial learning environment while mitigating against a culture of negative and destructive stress—likely a major contributor to physician mental health issues [6].

The importance of workplace culture is also addressed in a cross-sectional study of burnout and its associations with the learning environment of 93 psychiatry residents—55% of whom met Oldenburg Burnout Inventory burnout criteria [7]. Residents with burnout had greater stress levels and worse perception of the learning environment ($p < 0.001$) [7]. Consistent with anticipated personal effects of shame, the burnout group was less willing to disclose or seek help, employing greater active-avoidance coping mechanisms [7]. This avoidance of help and introversion in the setting of burnout could be more troublesome than previously described—a positive culture and learning environment can mitigate these concerns.

Contrary to trends seen in introverted individuals, extroverted medical and surgical residents from a Dutch study appeared protected from burnout, (even after controlling for autonomy at work, quality of life, gender, and hours spent working overtime) [8]. Mentorship and reading outside of medicine also carry potential for greater resident resiliency [8].

In a cross-sectional survey from five academic centers in the US, comprising a total of 3,899 faculty and staff physicians, lower self-value was associated with burnout and impaired sleep [9]. The specialties representing the lowest mean self-value scores were pediatrics, anesthesia and OB-Gyn, respectively (least first) [9].

If the relationship between self-value and burnout is causal, authors suggest ameliorating burnout through optimization of self-valuation [9]. Potential interventions would target unhealthy habits of deferment of self-care and harsh reactions to personal errors—thus also targeting a culture of shame. Interestingly, women of

the study population had both lower self-valuation and higher burnout—most of the difference in burnout was attributable to the negative self-valuation [9]. Could gender-based differences presented in other investigations of burnout relate to variation in self-value?

Wellness as a Four-Letter Word

Could the solution to the problems of institutionally influenced shame and low self-value be a four-letter word? Elizabeth Cerceo makes an interesting case for love [10]. Many physicians choose their careers out of love. Thus, if the medical profession focuses instead on bolstering our love of others in our work, this will not only invigorate our clinical experience—it will make us happier people in the process [10].

Before their final exit, the master clinicians must maintain expertise in a system of demanding electronic record keeping and billing nuances that change frequently. John Holmes argues that in order to retain the valuable experience, master clinicians should receive love in the form of certain allowances to their practice, e.g. decreased night shift allocation [11]. This is already a well-recognized problem in Europe, as the European Working Time Directive specifies shorter shifts and working hours for older doctors [11].

Resiliency, Compassion and Bank Accounts

To keep healthcare professionals of all ages thriving, the answer could be a resilience bank account. In an informative review on resilience in medicine, Maddaus, in *Annals of Thoracic Surgery*, suggests the metaphor of a resilience bank account to conceptualize the cumulative positive impact of reserve-building habits [12]. He summarizes recent science from six areas of resilience optimization that allow a healthcare provider to thrive: sleep, exercise, meditation / mindfulness, gratitude, self-compassion, and connection to others [12].

Maddaus also discusses the difference between empathy and compassion in the context of the neural network. Compassion and empathy affect distinctively different portions of the brain. Compassion networks span the medial orbitofrontal cortex and striatum—where its activation can derail trends toward empathetic distress, thus minimizing threat response and allowing rapid recovery [12].

In a structured literature review of interventions that target resilience in physicians, even brief interventions have the potential to impact resilience. Though these findings were not consistent among all studies evaluated [13], self-compassion appeared to predict resilience [13]. Therefore, future strategies targeting growth in resilience should pursue growth in self-compassion [13].

In an urban cancer center, compassion satisfaction among 93 assessed nurses was found to predict turnover intention—with lower scores also associated with less burnout [14]. In an example of a specific intervention undertaken with the goals of improving patient experiences and decreasing physician burnout, thirty clinicians from a range of specialties (cardiology, internal medicine, OB-Gyn, and surgery) completed a twenty-four week intervention consisting of individual learning, conference calls, discussions, and social gatherings [15]. Their learn-do-share approach employed modules, integration of newly learned techniques into clinical encounters, and sharing success and lessons learned during biweekly conference calls and in-person sessions. Relative to controls, the intervention group had statistically significant improvement in patient experience and MBI measures of depersonalization and personal achievement [15].

In the end, are the best physicians destined for Hell?

This is famously taught in the Torah, and alluded to by Abramson in a clever article describing a major obstacle on the road to recognition and recovery from burnout—the courage to seek help and overcome our pride [16]. Likewise, it is important to lookout for prideful physicians that show warning signs of being burned out—we need to reach out and help our colleagues just as we help our patients [16].

Burnout Description and Definition

In May of 2019, the World Health Organization officially recognized burnout as an occupational phenomenon in the International Classification of Diseases [2]. Praising workers as the most important assets of any organization, Adlakha states that recognition and reversal of burnout is the shared responsibility of occupational safety, public health, clinicians, the workers, and policy makers [2]. This begins in the recognition phase. The definition of burnout continues to evolve and includes components of moral injury and system-induced distress [17], and also what is merely socially contagious [18].

Lipsitt illustrates the similarities between our conception of burnout and the diagnosis of neurasthenia. The author recognizes the possible fashionable component of burnout, whose semantic definition varies little from neurasthenia of the 19th century. Both essentially describe a state of stress and overwork leading to somatization, exhaustion and discontent [18]. Alternatively, moral injury has been cited in the literature as a uniquely medical source for burnout [17]. Morally injured physicians, unable to practice medicine in alignment with their ethics, limited by either administrative or system constraints, feel frustration and demoralization ultimately leading to physician distress. Other studies have established that many doctors feel overwhelmed by their daily quantity of work—rather than being morally injured by it [4, 17].

A synthesis of these concepts can be reached via a new name coined by Winner and Knight: system-induced distress responsive to multilevel strategies [17]. This includes conceptualization of both paths that lead to physician distress: an overwhelming workload and moral injury. This designation also hints at the many possible avenues to combat either moral injury or the burden of tasks leading to distressed providers.

Burnout as a Spectrum

In another review, compassion fatigue received focus [19]. Physicians affected by compassion fatigue (feelings of emptiness / depletion, fatigue, questioning one's purpose) can still find engagement in patient care, whereas burned out physicians become unable to care for patients or connect with others [19].

The mechanism and appellation aside, brain chemistry differences appear in MBI-determined burned out individuals. In a correlation analysis of EEG spectral characteristics and burnout symptoms, reduced alpha power was observed in the burnout group [20]. The findings suggest cortical hyperactivity, which authors conclude could indicate greater mental effort and possible development of compensatory mechanisms [20].

Burnout's Reach

Estimates on the pervasiveness of burnout vary, with some studies suggesting a possible improvement in recent years [21]. In a survey of 30,456 physicians, and 5,197 participants, 44% had at least one symptom of MBI burnout in 2017, as compared with 54% in 2014 [21]. Despite this improvement, physicians remain at increased risk for burnout relative to other fields even after adjusting for

age, sex, relationship status and hours worked [21].

Recent estimations in obstetrics [22] and urology [8] are not as optimistic. Of 5,376 US OB-Gyn residents, 4,999 completed a multi-institutional cross-sectional survey regarding burnout and home well-being practices [22]. More than half (61%) claimed to have experienced burnout, with 32% reporting depression [22]. Only exercise was associated with a reduction in self-reported problems ($p < 0.001$); whereas alcohol (reportedly used by 46% to support their well-being) correlated with an increased likelihood of other problems [22].

Burnout among US urology residents is as high as 64%, with the most frequently cited cause for burnout being excessive work hours [8]. In another review, time allocation was more important; time spent specifically on non-clinical tasks led to burnout [4].

CONCLUSION

Despite recent improvement, burnout is still considered an epidemic by many. The path to burnout includes moral injury, compassion fatigue and excessive burden of tasks. This affects not only our patient care, but also influences individual brain chemistry. Thriving represents a new, albeit rare, target of wellness intervention strategies. Tools for thriving can be found in the currently underutilized legal system, as well as administration directed self-learning and sharing initiatives. Perspectives in positive psychology, optimization of self-valuation, self-compassion, exercise encouragement and meditation programs all harbor potential for enhancing physician thriving and overcoming burnout.

REFERENCES

1. Lianov LS, Fredrickson BL, Barron C, Krishnaswami J, Wallace A. Positive Psychology in Lifestyle Medicine and Health Care: strategies for Implementation. *Am J Lifestyle Med.* 2019 Apr;13(5):480–6.
2. Adlakha D. Burned Out: Workplace Policies and Practices Can Tackle Occupational Burnout. *Workplace Health Saf.* 2019 Oct;67(10):531–2.
3. Hoffman S. Physician Burnout Calls for Legal Intervention. *Hastings Cent Rep.* 2019 Nov;49(6):8–9.
4. Yates SW. Physician Stress and Burnout. *Am J Med.* 2020 Feb;133(2):160–4.
5. Garcia CL, Abreu LC, Ramos JL, Castro CF, Smidlerle FR, Santos JA, et al. Influence of Burnout on Patient Safety: Systematic Review and Meta-Analysis. *Medicina (Kaunas).* 2019 Aug;55(9):553.
6. Robertson JJ, Long B. Medicine's Shame Problem. *J Emerg Med.* 2019 Sep;57(3):329–38.
7. Chew QH, Ang LP, Tan LL, Chan HN, Ong SH, Cheng A, et al. A cross-sectional study of burnout and its associations with learning environment and learner factors among psychiatry residents within a National Psychiatry Residency Programme. *BMJ Open.* 2019 Aug;9(8):e030619.
8. Fainberg J, Lee RK. What Is Underlying Resident Burnout in Urology and What Can Be Done to Address this? *Curr Urol Rep.* 2019 Sep;20(10):62.
9. Trockel MT, Hamidi MS, Menon NK, Rowe SG, Dudley JC, Stewart MT, et al. Self-valuation: Attending to the Most Important Instrument in the Practice of Medicine. *Mayo Clin Proc.* 2019 Oct;94(10):2022–31.
10. Cerceo E. A Four-Letter Word in Medicine. *J Gen Intern Med.* 2019 Nov;34(11):2648.
11. Holmes JL. Sustaining a long career in emergency medicine: issues for emergency physicians of all ages.

- Emerg Med Australas. 2019 Dec;31(6):1112-4.
12. Maddaus M. The Resilience Bank Account: Skills for Optimal Performance. *Ann Thorac Surg*. 2020 Jan;109(1):18-25.
 13. Moorfield C, Cope V. Interventions to increase resilience in physicians: A structured literature review. *Explore (NY)*. 2019 Aug;S1550-8307(19)30448-3.
 14. Wells-English D, Giese J, Price J. Compassion Fatigue and Satisfaction: Influence on Turnover Among Oncology Nurses at an Urban Cancer Center. *Clin J Oncol Nurs*. 2019 Oct;23(5):487-93.
 15. Congiusta S, Ascher EM, Ahn S, Nash IS. The Use of Online Physician Training Can Improve Patient Experience and Physician Burnout. *Am J Med Qual*. 2019 Aug [Epub ahead of print].
 16. Abramson S. The Best Physicians Are Destined to Hell. *Perm J*. 2019;23(18):315.
 17. Winner J, Knight C. Beyond Burnout: Addressing System-Induced Distress [Internet]. *Fam Pract Manag*. 2019 Sep/Oct;26(5):4-7.
 18. Lipsitt DR. Is Today's 21st Century Burnout 19th Century's Neurasthenia? *J Nerv Ment Dis*. 2019 Sep;207(9):773-7.
 19. Siegel TR, Nagengast AK. Mitigating Burnout. *Surg Clin North Am*. 2019 Oct;99(5):1029-35.
 20. Golonka K, Gawlowska M, Mojsa-Kaja J, Marek T. Psychophysiological Characteristics of Burnout Syndrome: Resting-State EEG Analysis. *BioMed Res Int*. 2019 Jul;2019:3764354.
 21. Shanafelt TD, West CP, Sinsky C, Trockel M, Tutty M, Satele DV, et al. Changes in Burnout and Satisfaction With Work-Life Integration in Physicians and the General US Working Population Between 2011 and 2017. *Mayo Clin Proc*. 2019 Sep;94(9):1681-94.
 22. Winkel AF, Woodland MB, Nguyen AT, Morgan HK. Associations Between Residents' Personal Behaviors and Wellness: A National Survey of Obstetrics and Gynecology Residents. *J Surg Educ*. 2020 Jan - Feb;77(1):40-4.