Wellness Review 2023, Part 1

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ABSTRACT

Introduction: The 2023 Part 1 summary reviews research on wellness in healthcare professionals published outside of JWellness from January 1, 2023 to June 30, 2023.

Methods: Editors conducted a Boolean search of titles and abstracts in PubMed utilizing keyword identifiers pairing healthcare personnel (providers, nurses, and other staff) with a well-being metric. Of 416 relevant articles, an intriguing and innovative 30 were selected for inclusion, with two additional articles manually curated.

Literature in Review: This sample of the recent literature into healthcare professional wellness included multiple targeted interventions and studies of resilience. Main themes that emerged include: positive systematic healthcare changes spurred by COVID-19, strategies for retention of talent, optimistic outcomes from mindfulness interventions, work-life balance implications, bolstering of well-being through compassion, kindness and empathy, team resilience and cohesion, and well-being modifications recommended to medical training programs.

Conclusion: JWellness editors highlight positive outcomes related to the strain of COVID-19. We continue to advocate for and summarize resilience building interventions and systemic workplace changes that facilitate comprehensive well-being. Healthcare professionals equipped with tools of emotional regulation can not only endure a strenuous work environment, but will emerge stronger after encountering hardship.

INTRODUCTION

Welcome to Part 1 of the Journal of Wellness 2023 literature review. This review from JWellness editors provides a selection of well-being and resilience-focused research published in the first half of 2023 (January 01 – June 30). Selected articles have direct implications for healthcare professionals (enabling readers of the Journal of Wellness a comprehensive awareness of current literature outside of our journal).

METHODS

Editors searched PubMed for clinical trials, meta-analyses, randomized control trials (RCTs), scoping reviews, and systematic reviews. For the interval of January 1 to June 30, 2023, PubMed was queried for specified keywords in titles and abstracts with the following Boolean operators: ("healthcare," OR "physician," OR "provider," OR "nurse") AND ("wellness," OR "resilience," OR "well-being," OR "wellbeing"). This search yielded 416 articles, narrowed to 81 based on topic relevance and applicability. This selection was further narrowed to a final 30 selected for inclusion, with two additional articles manually curated.

LITERATURE REVIEW

While work continues to be published describing COVID pandemic burnout, a subset of literature did reveal elements of growth and thriving in overcoming the challenges presented to healthcare professionals. Recent meta-analyses in well-being targeted interventions have largely indicated positive outcomes, with calls for wider integration into training curriculums and workplaces. Certain factors have consistently emerged as associated with resilience (e.g., individual and cultural kindness, feeling included, improved work / life balance, not complaining / venting, cohesive and effective teams, and available and ethical leadership). Additional main themes included: strategies for retention of talent to combat a 'mass exodus' of healthcare staff, optimistic outcomes from mindfulness intervention meta-analyses, bolstering of well-being through compassion and empathy, and well-being modifications for medical training programs.

COVID-19: Not All Bad

Burnout remains multifactorial and highly complex (as well as heterogenous and likely poorly understood) [1]. Robust medical literature has established the numerous negative impacts of COVID-19. While many burnout measures significantly worsened with COVID-19 related challenges, certain groups (e.g., acute care surgeons [2]) may have been more affected than others. However, not all methods to combat emotional strain and shortages (supply and evidence) were maladaptive [3]. As individuals and teams devised adaptations, national institutions must still address burnout from a regulatory standpoint [2, 3].

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As providers and researchers around the world worked together in an unprecedented cooperative and cohesive manner, rapid changes drove efforts to save lives and retain workers. These changes included: enhancement of communication practices during limited physical contact, expeditious dissemination of important and widely available research, dynamic team-based involvement of sub-specialist physicians and experts, and improved awareness of provider well-being [3].

Hermann et al. (2023) describe 10 specific elements in their summary on positive COVID-19 impacts in the critical care setting—each demonstrating landmark growth (with some acknowledged drawbacks and proposed future evolutions)[1] [3]. A cursory review of these elements is listed below.

1. *Flexibility*: mobilization of the healthcare workforce, reorganization, and recognition of the key role of critical care.
2. *Investment*: rapid political response and fiscal support, resource allocation adjustments and industry response.
3. *Critical care visibility*: increased social recognition, ICU provider involvement with public health, direct communication through social media.
4. *Research*: massive and rapid growth in COVID-19 applicable research, early patient enrolment in RCTs, fast-tracked IRB process and expeditious peer-review process.[2]
5. *Patient outcome improvement*: targeted interventions, beneficial impact of corticosteroids, enhanced supportive care.
6. *Ethics*: admission strategies and understanding the complexity of ethical discussions regarding end-of-life care and conservation of resources / distributive justice.
7. *Post intensive care syndrome*[3] : research and increased recognition—we still need post-ICU multidisciplinary follow-up and expanded rehabilitation facilities.
8. *Family communication*: expanded media communication tools, early lifting of visit restrictions, and the recognition of in-person visit value.
9. *Well-being in healthcare staff*: resilience demonstrated real-world, there was also an awareness of the value of well-being among healthcare previously under appreciated.
10. *Critical care profession visibility*: unprecedented media and social recognition, resulting in improved awareness of specialized skill-sets required, and an appeal to healthcare workers interested in complex disease processes.

Retention of Talent

Though not entirely predictable, higher resilience scores seem to engender less burnout in providers and nursing staff [4]. In a meta-analysis of 29 studies, nursing staff appeared especially prone to burnout via emotional exhaustion [4]. Conversely, those that had higher resilience scores tended to also have longer service experience. Moreover, resilience demonstrated a negative correlation with burnout (r = -0.41, n = 2750) [4].

The medical profession has seen a significant migration of the workforce world-wide—therefore sustainable employability of healthcare workers is a paramount consideration. A double blinded systematic review found a negative relationship between mental health problems and sustainable employability, latently driving absenteeism [5]. This relationship is worsened by loneliness, a significant contributor to suboptimal well-being among nurses [6].

Fortunately, local leadership can have a dramatic impact on the workplace and burnout [7]. In an assessment of 31 Midwestern hospitals, survey data from over 16,000 healthcare workers showed a clear relationship between leadership practices and burnout. Positive assessments of local leadership were strongly linked with less emotional exhaustion, improved teamwork, and lower perceptions of workload [7]. Not surprisingly, positive local leadership was associated with reduced intentions to leave practice [7].

Among the aging nursing workforce, leadership should drive interventions that place experienced nurses in mentoring roles to enhance retention [8]. Mentorship roles acknowledge and value the link of clinical experience / expertise with positive outcomes [8]. Additionally, administrators should protect provider autonomy to facilitate professional fulfillment [9].

Taken together, the results from 108 RCTs that evaluated healthcare worker well-being, indicated support for various workplace interventions [10]. In a specific 4-week RCT (n = 93), authors utilized a web-based resilience enhancement tool for nurses, and noted that nearly three-fourths of participants had improvement in self-confidence, interpersonal collegial relationships, and resilience [11]. This intervention style benefitted from smooth logistical implementation [12]. In a systematic review of 1663 articles, with 33 meeting inclusion, Cohen et al. (2023) evaluated interventions that targeted well-being in nurses, physicians and other healthcare professionals. Most were individually focused (30/33), while a minority involved organizational changes [12]. Some protocols included mindfulness, yoga, and acupuncture. Positive mindset (e.g., gratitude journaling) and coaching led to individual growth. Other efforts reduced workload and bolstered peer networks [12]. Significant improvements were noted in well-being, work engagement, and resilience; additionally, stress and depression were reduced [12]. Although studies found improved outcomes, many faced limitations of inadequate controls and follow-up.

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[1] JWellness editors highly recommend review of Table 1 from Hermann et al. (2023) [3].

[2] JWellness editors would like to add emphasis to the increased amount of freely available, and specifically open access literature—which was unprecedentedly widely disseminated to ensure provider awareness of new research. For example, even UpToDate offered freely available literature on COVID-19.

[3] I.e., relating to persistent disabilities in ICU survivors.

Environmental and cultural factors correlate with improved healthcare worker retention. In an assessment of electronic healthcare record (EHR) optimization: organizational, interpersonal, and work culture factors more closely associated with burnout than EHR frustrations [13]. Simply stated: the place you work matters.

Maladaptive coping strategies such as venting and substance use predicted poor mental health outcomes among emergency healthcare professionals — according to a review of 14 cross-sectional studies [14]. The venerated drink after shift with the team to "decompress" (with an invariable venting session) may be doubly deleterious for provider well-being.

In a scoping review of healthcare workplace design and physician satisfaction, suitable surroundings were linked with satisfaction (specifically: lighting, furniture, and art) [15]. Among assessed variables, excessive noise demonstrated the greatest detriment to well-being [15]. In comparison to other countries, authors note an ironic radio silence of US-based investigations of environmental factors (such as noise) [15].

Mindfulness Based Interventions

Burnout appears in the International Classification of Disease (11th Revision) (ICD-11), acknowledged formally as an occupational phenomenon [1]. In an anthropological and psychoanalytic review of 56 burnout articles, Gupta (2023) et al. describe important predictive factors: long work hours, administrative burdens, and individual lack of control. Additionally, authors stressed the importance of mindfulness training and limiting addictive behaviors [1].

Mindfulness-based interventions represent a subset of the larger Positive Psychology Interventions (PPIs). In the published literature of PPIs that specifically target healthcare workers, the majority involve gratitude-based psychological growth or mindfulness practices [16]. In a systematic review of interventions, courses ranged from 2 days to 8 weeks and were consistently simple and low-cost. Outcomes included reductions in stress, burnout, and depression / anxiety. Overall, PPIs increased well-being, compassion, resilience, and satisfaction (with work as well as life) [16].

Another systematic review of 15 studies of healthcare personnel demonstrated that psychological interventions with mindfulness elements conferred a positive impact on well-being (*regardless of the type, duration, or setting*[4]) [17]. Targeting nurses specifically, another meta-analysis of 14 studies (n = 1,077) revealed that mindfulness based interventions, which included both online and in-person options, were effective in reducing psychological distress [18]. A common aim of these interventions was stress reduction [18].

A feasible educational program for mental health and well-being across England deployed a smartphone application [19]. Results from 1,002 participating healthcare workers demonstrated that those randomized to the smartphone app intervention arm had improvement in psychiatric wellness and overall well-being, along with less insomnia [19]. The simplicity and scalability support the app's use in future staff support initiatives [19].

Lastly, a group of Finnish authors published an interesting systematic review of mindfulness interventions in medical students, using 13 RCTs from the US, Canada, Europe, Australia, Brazil, and Malaysia [20]. Various interventions were evaluated, ranging from DVD mindfulness courses, mobile phone applications, online platforms, to traditional face-to-face sessions. Studies demonstrated statistical significance for improvements in mindfulness (11/14)[5] , stress (9/15) and mental distress (8/8), self-compassion (5/5), and well-being (5/6) [20]. Interestingly, the shorter courses seemed as effective as the longer (4 – 7 weeks vs. 8 – 10 weeks). Beneficial effects persisted at follow-up evaluations months and even years later [20][6].

Duty Hours

While workload [9], long hours [1], work-home interference [9], and administrative burdens [1] correlate with physician burnout, duty hour considerations are complex. In understaffed facilities and systems, should healthcare professionals work longer hours for less days or shorter shifts for more days? Seohien et al. (2023) performed a systematic review and meta-analysis of nine RCTs to fill a gap in the literature on resident duty hours [21]. A shorter shift length was significantly associated with less emotional exhaustion and overall better well-being. Surprisingly, they found no significant differences in hospital length of stay or serious medical errors [21].

Compassion, Empathy & Hope

In a scoping review on a link between well-being and empathetic care in emergency physicians, authors found no clear associations with care delivery [22]. Compassion (especially self-compassion) and empathy receive much focus in studies seeking to understand well-being. Burnout usually correlates with decreased empathy [23]. In a systematic review (22 studies) and meta-analysis (five studies), empathetic concern in healthcare professionals correlated with two of three burnout elements: depersonalization and personal accomplishment [24].

Reviewing 14 studies on maladaptive coping mechanisms in emergency healthcare professionals, authors found that self-blame was significantly correlated with poor mental health outcomes [14]. Another summary of self-compassion in the healthcare worker population found that four of the six reviewed studies showed reductions in secondary traumatic stress[7] among those with higher self-compassion [25].

Compassion need not be restricted to self and patients; powerful things happen when we practice compassion for our co-workers. Presence of compassion and empathy predict resilient teams [26]. Conversely, incivility is both a consequence and a cause of stress [27]. Unkind behaviors have been linked with medical errors [27], whereas positive interpersonal connections foster growth and buffer stress. Kindness cultivates resilience [27]. Authors conclude that kindness is a critical workplace element to advance well-being in both patients and staff [27].

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[4] Setting types include those that are individually targeted as well as group interventions.

[5] I.e., 11 satudies with significance, divided by 14 that included the measure of mindfulness.
[6] Table 3 from Kaisti et al. (2023) is emphasized by JWellness editors as a quite informative summation of data and significance by intervention type (20).
[7] Secondary traumatic stress denotes compassion fatigue or emotional duress attributed to hearing first-hand accounts of traumatizing events.

Hope also buffers stress [28]. Senger (2023) defines hope as a combination of three components: goals (attainable targets), agency (motivation), and pathway thinking (the ability to think in different ways / 'pathways' to reach goals). The relationship of hope and resilience remains enigmatic, yet its importance as a wellness contributor stands firm. Specifically, hope reduces anxiety, depression, and likely loneliness [28]. Hope also bears a positive association with well-being (greater positive affect and improved life satisfaction) and predicts post-traumatic growth [28]. Interestingly, hope has also been associated with improved eating habits during the COVID-19 pandemic [28].

Loneliness vs Team Resilience

Loneliness is a significant contributor to burnout and reduced well-being [6]. In a systematic review on maladaptive coping mechanisms of emergency healthcare professionals, those that were living alone demonstrated significantly more maladaptive coping [14]. Conversely, the emergency healthcare staff that had children harbored less maladaptation [14].

The majority of interventions to bolster wellness target individuals, with a potential blind spot regarding team resilience in healthcare [26]. In a multicenter questionnaire (n = 374), team atmosphere predicted well-being [9]. Four key factors have emerged that enhance team resilience [26]:

1. Candor,
2. Humility,
3. Resourcefulness, and
4. Compassion & empathy.

While leaders should exemplify these traits, teams can promote kindness and dissuade incivility. The promotion of workplace kindness to peers and patients is essential for positive interpersonal connections and resilience [27]. Leadership styles most strongly correlating with a positive teamwork climate (and psychological safety) include appropriate conflict resolution and asking questions to clarify uncertainty [7].

Modifications Recommended to Educators & Program Directors

In a review of 23 studies evaluating a total of 5,146 residents, 42 – 79% responded that they had a below average understanding of finance and felt unprepared to handle future financial decisions [29]. Financial literacy represents an important and poorly studied consideration for medical students and residents. Between 79 and 95% believed personal finance should be taught during residency [29].

Another area for improved training involves death education and counseling. A survey of surgical providers and medical students on surgical clerkships found that only 49% received any education on coping with patient death. When symptoms surfaced, burnout was the most common reaction in providers that experienced a patient death [30]. Utilization of chaplains has shown promise in spiritual support and thus resiliency in residents [31]. It is well acknowledged that spiritual / religious considerations, resources, and accommodations are important in the healthcare environment.

Modifications to training program culture include tactics to combat loneliness and promote positive social structure.

Leaders should champion supportive relationships [6], create and sustain support groups [6], and build structured mentorship programs [23]. The latter of which demonstrates the value of the most experienced healthcare workers [8].

Mindfulness training initiatives (specifically targeting medical students) have been effective in bolstering mental health and well-being (both online and face-to-face) [20]. Future research should investigate debriefings, which have improved clinical outcomes and case-based learning. The effects of debriefings on well-being in healthcare workers remains largely unknown [32].

Work environments (e. g., culture, noise control, and aesthetics) represent an area of potential improvement in most healthcare systems [13, 15]. Teaching staff need to protect autonomy when reasonable and safe [9, 23] and limit infringement on work-home interference when possible [9]. Ideal leaders should be available, effective, and ethical, [7] while establishing a culture of kindness [27] and a sense of belonging [31].

CONCLUSION

The exacerbation of healthcare worker burnout in the post COVID-19 era is a topic well-known to the academic literature. We review a subset of literature describing growth and thriving despite hardship. Factors have consistently emerged as associated with resilience (e.g., individual kindness, civility and a culture of kindness, social inclusion, improved work / life balance, a positive and safe work culture, cohesive teams, and available leaders).

Themes in well-being research included: strategies for retention of talent to combat a 'mass exodus' of healthcare staff, bolstering of well-being through compassion and empathy, and well-being modifications for medical training programs (ranging from increased awareness of financial considerations and patient death processing, to environmental elements and positive work-place culture).

Recent reviews and meta-analyses indicate cause for optimism, with positive outcomes in a variety of wellness interventions. It is the responsibility of all clinical and academic healthcare professionals to integrate these feasible interventions into training curriculums and healthcare systems.

Conflict of Interest: The author(s) have no conflict of interest to declare for this work.

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