Can You Teach Resilience?

To the Editor: Cross-national data indicate high levels of anxiety, depression, and insomnia among frontline health care workers (FHCWs) attending to coronavirus disease 2019 (COVID-19) patients.[1,2] Shechter et al[1] found that 57% of FHCWs experienced acute stress, 48% reported depressive symptoms, and another 33% expressed symptoms of anxiety. The study concluded that midlevel providers, as well as nurses, experienced the highest level of COVID-19–related psychological distress and theorized that this may be due to a more direct involvement in patient care.[1] Another study, by Chew et al,[3] found that FHCWs also experienced loss, grief, and guilt as a result of losing both colleagues and patients.

While the attention of researchers has focused primarily on the adverse psychological effects experienced by FHCWs, little is known about fostering resilience in this population. Recent efforts to address this gap include a study by Pietrzak et al,[4] who explored the factors related to resilience in a survey of 6,026 FHCWs during the peak of the pandemic in New York. The study showed that resilience correlates strongly with self-efficacy, positive emotions, purpose in life, social support, and refraining from substance use as a coping mechanism.[4] Regardless, merely identifying these personal and environmental factors is not enough to assist FHCWs in managing their stressors in a "resilient fashion."

Although resilience remains difficult to conceptualize, most constructs imply that it involves positive adaptations to adversity.[5] Early descriptions depict resilience solely as an innate personality trait. Recent theories, however, view resilience as a multifactorial, dynamic process that is amenable to change.[5] In this context, it is important to not only identify social, cognitive, and coping factors, but also design measurable and achievable interventions to strengthen resilience. Toward this end, Winwood et al[6] developed the resilience at work (RAW) scale, which consists of items such as mindfulness, belonging, positivity, balance, physical fitness, and social support that can be harnessed to foster resilience at work. While efforts to validate this scale are ongoing, research also needs to focus on resources that can cultivate resilience among FHCWs.[7] "Battle Buddies," a program originally developed by the US Army, illustrates how health care systems can encourage social connectedness among FHCWs during the COVID-19 pandemic.[7] Preliminary data suggest its effectiveness in reducing COVID-19–related psychological symptoms among FHCWs.

Unfortunately, there remains no evidence-based set of recommendations designed to improve resilience among FHCWs. Nevertheless, coping style, organizational support, and sense of self-efficacy all seem to influence whether FHCWs exhibit psychological harm or instead demonstrate resilience. Furthermore, adding a research piece to existing programs can improve understanding of how to harness resilience in FHCWs during recurrent waves of COVID-19.

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Understanding Resilience: No Place to Rest on Our Laurels—Reply to Modesto-Lowe et al

To the Editor: In their Letter to the Editor, Modesto-Lowe et al[1] in commenting on our recent article,[2] raised the issue of lack of evidence-based recommendations to improve resilience among frontline health care workers (HCWs). They have appropriately highlighted a cogent need to consider the broader issue of further in-depth research and understanding about several interrelated areas pertaining to resilience among HCWs, including frontline HCWs, such as the meaning of resilience, factors influencing resilience and possible constructs, better ways to assess resilience, models to enhance resilience, and review of group or individual interventions over time.

In the midst of possible definitions of resilience that encompass the central notion of a dynamic process of positive adaptation to significant adversity,[3] other facets that are also relevant for further examination include whether resilience is a trait versus a state, resilience as a coping mechanism, its malleability,[4] and its personal meaning to each individual.[5] In this regard, qualitative studies of HCWs of varying seniority from different disciplines in different contexts including frontline health care settings can potentially shed light on this topic.[5] Pertaining to factors influencing resilience, studies have looked into individual (such as self-determination and positivity), interpersonal (such as social support), and organizational (such as workload and workplace culture) factors that can be interrelated and interactional in nature.[6] There is scope to consider Engel's biopsychosocial approach[7] to the formulation of these factors affecting resilience, including consideration of biological vulnerability (such as arousal states, brain regions involved, and physical illnesses), personality, and psychosocial factors (such as intercurrent life events as well as workplace dynamics) and the complex interactions of these domains. Such a formulation of the germane vulnerability and protective factors should be personalized when planning ways to help an individual subsequently.

Measurement of resilience thus entails taking a holistic perspective of the relevant interactive factors and would necessitate an appreciation beyond the use of resilience rating scales with associated scores. In terms of care models that seek to enhance resilience, the issue raised by Modesto-Lowe and colleagues[1] underscores the importance of relating the care model to underlying factors influencing resilience within a specific group of HCWs in their unique setting. Recent care models to optimize resilience have sought to address broad areas either cross-sectionally or longitudinally. Learning from the Ebola outbreak in 2014–2015, Schreiber et al[8] described an APD (Anticipate, Plan, Deter) model to anticipate stressors, plan coping response, and deter adverse impact by engaging self-monitoring and activating a resilience plan. Cordova et al[9] adopted a longitudinal approach to building resilience among medical professionals by attending to intrapersonal, interpersonal, and systemic and sustainability areas across the career lifespan ranging from attentional practices and intrapersonal skills early on to managing teams and groups, fulfillment, and organizations in the latter part of one's career. Of note, there is a need for more prospective studies to evaluate the effectiveness and impact of these different models of resilience training in different HCW groups. Any attempt to improve resilience among HCWs needs to start from a better understanding of what resilience means to the individual and the complex network of factors influencing it so that the approach can be multifaceted yet integrated, developmentally appropriate, and contextually and culturally relevant.[10] In the context of the evolving pandemic, there is much room for further research and understanding and no place to rest on our laurels yet.

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Building Resilience and Well-Being in Health Care Workers in the COVID-19 Era: Lessons Learned and Next Steps—Reply to Modesto-Lowe et al

To the Editor: We would like to thank Modesto-Lowe and colleagues[1] for their thoughtful commentary about our study of factors associated with psychological resilience in health care workers (HCWs) on the frontlines of the COVID-19 pandemic.[2] While we cannot definitively conclude from our initial results that bolstering these factors will help improve resilience, results of this study have been instrumental to informing our development of targeted interventions aimed at enhancing resilience and mitigating adverse mental health effects in frontline HCWs at Mount Sinai Hospital.

Toward this end, our team has implemented several strategies aimed at enhancing the resilience and well-being of our HCWs. Some of these strategies focus on enhancing institutional culture, while others focus on the individual. A growing body of research suggests that high-quality, clear, and regular communication from leadership, team-building efforts, and respect for autonomy may help enhance the resilience of HCWs.[3] Similarly, results of our study[2] revealed that greater perceived leadership support was one of the strongest correlates of resilience during the first COVID-19 pandemic surge in New York City. Further, a study of more than 2,800 physicians conducted prior to the pandemic[4] observed a strong relationship between ratings of leader effectiveness and burnout and professional satisfaction. Specifically, every 1-point increase in composite ratings of leader effectiveness was associated with a 9.0% increased likelihood of professional satisfaction and 3.3% reduced risk of burnout.

On the basis of these and internal data, we developed a leadership curriculum for health care leaders that focuses on enhancing coaching and appreciation skills, with the ultimate goal of enhancing resilience, well-being, and professional satisfaction in the workforce. These sessions include a review of communication tools such as Humble Inquiry (ie, asking instead of telling to develop better communication and collaboration)[5] and the GROW model of coaching (ie, Goal, Reality, Options, Will),[6] as well as the opportunity to practice these skills in small groups. This curriculum was delivered virtually over 2 hours at 2 time points during the pandemic to nearly 150 clinical and research leaders at Mount Sinai, with the goal of bolstering leadership support for our HCWs. Preliminary results revealed that the course was well-received and improved self-reported knowledge and skills in leadership competencies. Initial post-workshop survey results demonstrated that the workshop increased participants' knowledge or skills in coaching (92%) and appreciation of employees (96%), and 88% felt that their peers would benefit from attending. We are currently analyzing pre- and post-course data and planning a 6-month follow-up assessment.

In addition to institution-focused interventions, there is some meta-analytic evidence[7] suggesting that individual-focused resilience interventions may help bolster resilience and mitigate stress in HCWs (standardized mean difference [SMD] for measures of resilience = 0.45; 95% CI, 0.25 to 0.65; SMD for measures of stress = −0.61; 95% CI, −1.07 to −0.15; SMD for measures of depressive symptoms = −0.29; 95% CI, −0.50 to −0.09). These findings parallel those reported in a meta-analysis of controlled trials of resilience interventions[8] conducted in a broad range of trauma survivors, which found a small-to-moderate improvement on measures of resilience (pooled SMD = 0.44; 95% CI, 0.23 to 0.64). However, concerns remain about the quality of study designs used to evaluate such interventions,[7] as well as a lack of an evidence base to inform the selection and implementation of such interventions in frontline HCWs during and after disease epidemics,[9] warranting continued research in this area.

At Mount Sinai, we are also engaged in system-wide efforts to implement and evaluate individual and group-level interventions to promote resilience in HCWs. Early in the pandemic, the Mount Sinai Health System founded the Center for Stress, Resilience and Personal Growth (CSRPG) to support the resilience and mental well-being of its entire workforce.[10] A cornerstone of CSRPG offerings consists of resilience workshops, which focus on 5 domains: (1) self-care; (2) facing fears; (3) realistic optimism; (4) social support; and (5) meaning, faith, and spirituality. These domains are based on the work of Steven Southwick, MD, and Dennis Charney, MD, who have comprehensively reviewed evidence-based factors associated with resilience in individuals affected by stress and trauma[11] and how they apply to COVID-19 HCWs.[12] Through a combination of in-person and virtual offerings, 100 workshops have been completed between June 2020 and April 2021. Workshop content is now being made available in a mobile app that employees can utilize at their own pace, particularly if they are not able to attend workshops.[13] Several research studies are ongoing to evaluate the effectiveness of these group and self-guided resilience trainings in mitigating distress and bolstering resilience.

While the health care community has made some advances in resilience training, there is much work to do in developing sustainable resilience-building programs and identifying novel and creative ways to measure the impact of such interventions in HCWs. Digital platforms may provide opportunities to extend the reach of interventions and, together with wireless physiologic monitoring, have shown promise in providing real-time data capture in this population.[14]

When evaluating resilience interventions for HCWs, it is also important to consider preexisting mental health difficulties. For example, our research group observed a strong association between pre-pandemic burnout and higher rates of depressive, anxiety, and pandemic-related posttraumatic stress disorder symptoms in COVID-19 frontline HCWs.[15] This finding suggests that organizational efforts to address burnout and related mental health issues on an ongoing basis may help prevent adverse mental health consequences during times of crisis and create a more resilient health care workforce and organization. Further, resilience training that is delivered prior to crisis situations may help prepare HCWs for the emotional challenges that these situations present.[16] Finally, in addition to adverse outcomes, it is possible that the COVID-19 pandemic experience will give rise to posttraumatic growth, which may in turn help to promote individual and organizational resilience to subsequent crises.[17] Given the countless sacrifices that health care personnel make every day, particularly during the COVID-19 pandemic, continued efforts to develop, evaluate, and disseminate resilience-building interventions are critical to bolstering and maintaining the emotional well-being of this dedicated population.

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