

Emotional Exhaustion Among Health Care Workers on the Rise as Pandemic Wears On

The bad news first (though it's not surprising) – healthcare workers have become more burned out as the pandemic has worn on. A [study published in *JAMA Network Open*](#) showed emotional exhaustion among U.S. healthcare workers, already problematic prior to the COVID-19 pandemic, significantly increased in 2021-2022 across all roles, both clinical and non-clinical.

The study surveyed participants at three distinct time points – before the pandemic (September 2019), after the start of the pandemic (September 2020), and following the introduction of vaccines and the rise of variants (September 2021 through January 2022). Respondents were asked to rate their own emotional exhaustion (%EE) as well as the climate of emotional exhaustion (%EEClim) in their workplace using the Safety, Communication, Organizational Reliability, Physician, and Employee Burnout and Engagement (SCORE) survey.

Emotional exhaustion increases for all roles in 2021-2022

In total, 107,122 surveys were collected, and overall %EE increased from 31.8% in 2019 to 40.4% in 2021-2022. Nurses, the most frequently reported role, had the highest levels of emotional exhaustion, increasing from 40.6% in 2019, to 46.5% in 2020. By the second year of the pandemic, nearly half of all nurses sampled, 49.2%, reported burnout. Other roles reported similar cumulative increases in %EE, though at lower levels.

Physicians were a notable exception. During 2020, survey results show a decrease in %EE among physicians, from 31.8% in 2019 to 28.3% in 2020. Study authors attribute this dip to the rise in telehealth, and, in some areas, lower patient volumes at the start of the pandemic when shelter in place ordinances were common and elective procedures were canceled. During 2021-2022, however, physicians also reported a sharp increase in %EE, jumping to 37.8%.

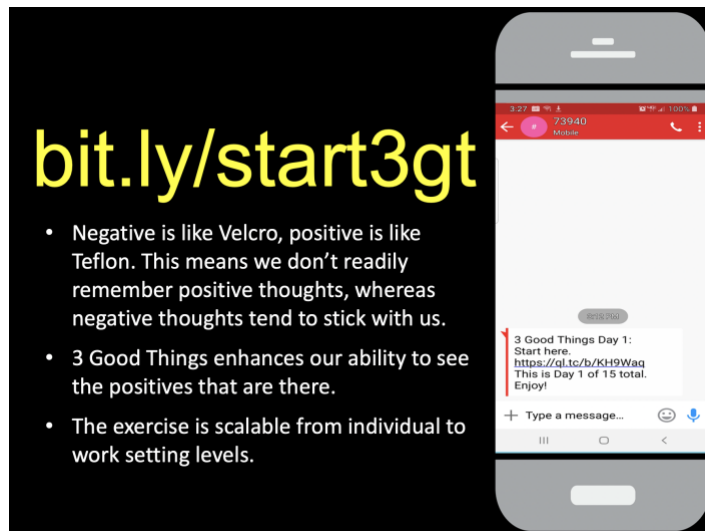
Overall, the trends in %EEClim match %EE, with respondents indicating that they perceived emotional exhaustion among their colleagues worsened from 2019 to 2012-2022. Notably, respondents reported higher %EEClim as compared to %EE.

The study's large sample, representing 76 community hospitals within 2 U.S. healthcare systems, and the diversity of healthcare worker roles surveyed contribute to the strength of its findings. Since its publication in September 2022, the paper has been mentioned by nearly 50 news outlets. Its Altmetric score is 520 (as of 12/15/2022), putting it in the top 5% of all research outputs scored by the data science company. Co-authors include [Jochen Profit, MD, MPH](#), Chief Quality Officer for the California Perinatal Quality Care Collaborative (CPQCC), and [Xin Cui, PhD, MPH](#), CPQCC Biostatistician.

While the study’s sample did not represent neonatal intensive care units (NICUs) specifically, likely, NICUs face similar increases in %EE and %EE_{Clim} among healthcare workers. Now, nearly three years after the World Health Organization declared the 2019 Novel Coronavirus a public health emergency, there have been over 99 million COVID-19 cases recorded in the United States. Healthcare workers are currently dealing with what’s being called the ‘triple-demic’, as respiratory syncytial virus (RSV), flu, and COVID-19 are surging all at once during the 2022 holiday season.

Bite-sized, web-based antidote to burnout

But for individuals facing burnout, there are resources that are backed by science. A [study published in *Frontiers in Public Health*](#) on December 8 shares good news – exercises that take just a few minutes to complete, performed every day for a week, can reduce emotional exhaustion for months thereafter. “The effect size is essentially similar to pharmacotherapy,” says Dr. Profit, the study’s senior author.



This randomized clinical trial (RCT) represents the latest effort to measure the impact of the Web-based Implementation for the Science of Enhancing Resilience (WISER) intervention on healthcare workers’ wellbeing. Based on previous feedback from users in earlier trials, WISER was refined to be bite-sized, the intervention lasting just 10 days and titled ‘WISER in 10 texts’. (By comparison, WISER 1.0 lasted 6 months.)

Even with its shorter duration, healthcare workers reported better mental health after engaging in WISER. Compared to waitlist controls, WISER participants showed improvements in depressive symptoms, work-life integration, happiness, emotional thriving, and emotional recovery. Positive outcomes persisted at 1, 6, and 12 months post-intervention.

Relative to controls, WISER participants showed an average decrease in depressive symptoms (-7.5, $p < 0.001$) that is roughly equal to the overall cumulative increase in %EE reported by healthcare workers during the pandemic. Though, because the WISER RCT represented a smaller sample (<500 participants initially enrolled) and data was collected in 2018 and 2019, it’s difficult to predict whether the same effect size would be observed among healthcare workers today.

Tools help healthcare workers tap into gratitude, joy, hope, humor

Notably, healthcare workers can still access all [WISER tools](#) on the Duke Center for Healthcare Safety and Quality website. Tools can be used by both clinicians and non-clinicians, and individuals can enroll on their own or NICU healthcare workers can participate as a group. Each tool targets a different area of wellbeing. Some of the more popular ones guide users to [cultivate gratitude](#) (10 minutes/day for 2 days), [cultivate awe](#) (10 minutes/day for 2 days), and name [3 good things](#) in their day (2 minutes/day for 15 days). Push notifications are sent with daily reminders to complete activities.

“We think there are some tools that can help people in the moment, that are fast acting, that can give people a boost to be a better version of themselves,” Dr. Profit says. “But it doesn’t mean we shouldn’t work on other organizational things.”

What might be a systems solution to burnout among NICU healthcare workers? Dr. Profit believes the most powerful antidote to burnout will involve rebuilding relationships among NICU staff.

“Everybody has been sort of siloed into isolation to not infect each other, to see each other as a threat than as a coworker or colleague,” Dr. Profit explains. “I would try to start getting people back together, celebrating things safely, fostering that human-human connection. We know that engagement is a great antidote to burnout. If you get people motivated and engaged in meaningful work and quality improvement or research activities, that protects people from burnout.”

In March 2023, CPQCC will host its 4th annual Improvement Palooza (IP2023) centering on the themes of restoration and teamwork. Held in conjunction with the 2023 Cool Topics in Neonatology Meeting, IP2023 will focus on helping NICU caregivers and parents to build an environment that reduces stress and burnout and promotes patient safety and staff wellbeing. [Conference registration](#) will open in early 2023.

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