Organization-Level Interventions Best for Reducing Physician Burnout

Diana Phillips | December 05, 2016

Tackling the growing problem of physician burnout requires interventions that not only help individual physicians' cope with work place stressors but also target the stressors themselves, a study has shown.

In a meta-analysis of randomized clinical trials and controlled pre/post studies looking at the effectiveness of physician-directed and organization-directed burnout interventions, both types of trials led to small, significant reductions in burnout. However, the treatment effects were greater with organization-directed approaches that take into consideration the effect of work environment, Maria Panagioti, PhD, from the National Institute of Health Research School for Primary Care Research at the University of Manchester in the United Kingdom, and colleagues report in an article published online December 5 in *JAMA Internal Medicine*.

The findings add to the growing body of literature suggesting targeted interventions can reduce physician burnout and support the view that physician burnout is an organization problem requiring an organizational solution. In an earlier meta-analysis reported by *Medscape Medical News*, organizational interventions (those that address physicians' workloads, schedules, supervision, and job control, for example) showed a larger benefit with respect to overall burnout than individual-focused interventions. That said, the review showed no differences between organization- and physician-level interventions when it came to the individual components of burnout.

For the current analysis, investigators reviewed 20 independent comparisons from 19 studies comprising 1550 physicians (49% male) with a mean age of 40.3 years. Of the studies, eight were conducted in the United States, four in Europe, three in Australia, two in Canada, one in Argentina, and one in Israel. They recruited physicians in primary care (n = 7), secondary care (n = 10), and a mixed sample (n = 2).

The majority of the studies used the Maslach Burnout Inventory to assess burnout levels. The main outcome was burnout scores focused on emotional exhaustion.

Of the studies, 12 assessed physician-directed interventions, including one or a combination of techniques such as mindfulness-based stress reduction, exercise, and educational programs focusing on improving self-confidence and communication skills; five studies evaluated workload interventions, such as rescheduling hourly shifts and reducing overall workloads; and three studies considered more extensive structural/organizational interventions focusing on such things as teamwork and leadership and incorporating elements of physician interventions.

The primary analysis showed that interventions were associated with small, significant reductions in burnout (standardized mean difference [SMD], −0.29; 95% confidence interval [CI], −0.42 to −0.16), which, according to the authors, is "equal to a 3-point reduction in the emotional exhaustion domain of the [Maslach Burnout Inventory]."

In the subgroup analyses by intervention type, the reduction in burnout for physician-directed interventions (SMD, −0.18; 95% CI, −0.32 to −0.03) was significantly less than that observed for organization-directed interventions (SMD, −0.45; 95% CI, −0.62 to −0.28).

With respect to physician-directed interventions, "[w]e found no evidence that the content (eg, mindfulness, communicational, educational components) or intensity of these interventions might increase the derived benefits based on our critical review," the authors write. "This finding, in combination with the larger effects of organization-directed interventions, supports the argument that burnout is rooted in the organizational coherence of the health care system."

Although the quality of the research evidence is not strong enough "to allow firm practical recommendations," the authors offer insights for future research and clinical direction. Specifically, although they are rare and not widely evaluated, "[o]rganization-directed interventions...that combined several elements such as structural changes, fostering communication between members of the health care team, and cultivating a sense of teamwork and job control tended to be the most effective in reducing burnout."

Large-scale cluster-randomized trials of programs at the institutional or national level that emphasize organizational culture could provide important insight into the effectiveness of organization-directed interventions, the authors note.

Regarding physician-directed interventions, "unexamined factors at the process of the intervention delivery or at the participant level might account for the observed differences in the effectiveness of organization-directed and physician-directed interventions," the authors suggest, noting the need for research "to understand the best context for the delivery, evaluation, and implementation of burnout interventions."

Finally, the differences in intervention effectiveness, although nonsignificant, between experienced and less experienced physicians and between primary and secondary care physicians suggest that "[p]hysicians based in different health care settings or at different stages of their career might face unique challenges and have different needs," the authors write. "The evidence indicates that young physicians are at higher risk for burnout compared with experienced physicians, so future research should focus on prevention among less experienced physicians. Interventions focused on enhancing teamwork, mentoring, and leadership skills might be particularly suitable for young physicians and for physicians dealing with intense work and patients with complex care needs."

From a practical standpoint, according to Lara Goitein, MD, a pulmonologist at Christus St. Vincent Regional Hospital in Santa Fe, New Mexico, and coauthors of an accompanying editorial, "it is likely that health care organizations can accomplish only so much in trying to reduce physician burnout, within the context of the broader and sweeping changes in clinical practice."

The editorialists point to a fraying cohesive identity among today's physicians in the face of "the sea changes in health care" that is closely related to increasing physician burnout. "Professional dedication, unity, and generosity of purpose was perhaps more easily rallied when being a physician felt decisively like a privilege and an honor for more physicians," they write.

The connection between burnout and professional identity warrants attention, the editorialists stress. "Professional identity is perhaps the cornerstone of the quality of care we give: it determines the expectations we hold of ourselves, and the people we attract into the medical profession."

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