original contributions

To Address Burnout in Oncology, We Must Look to Teams: Reflections on an Organizational Science Approach

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QUESTION ASKED: How do we effectively implement organizational science strategies to address oncologist burnout?

SUMMARY ANSWER: To effectively address burnout, it is not enough to look at oncologists; instead, we must include all those involved in the delivery of cancer care. When organizations develop team factors such as communication and psychological safety, employees experience a better sense of teamwork in their units, which reduces burnout in oncology.

WHAT WE DID: Using a team-based organizational science approach within a large health care organization, data from 409 oncology employees (90% female) in 30 units were analyzed to examine oncology team perceptions and employee burnout.

WHAT WE FOUND: Teamwork perceptions mediated the relationship between oncology units' perceptions of the team-based development program and individual oncology employee levels of burnout.

BIAS, CONFOUNDING FACTORS, DRAWBACKS: Although multiple oncology units across departments and locations were included in the sample, this study was conducted using data from a single health care organization.

REAL-LIFE IMPLICATIONS: Past attempts to mitigate burnout within a single profession were not enough to fully address this complex and pressing issue; treating physician burnout alone will treat only 1 symptom of the overall issue of burnout in oncology. Because burnout affects all oncology professionals, methods for reducing burnout for oncologists must also include all the members of the oncology team. Organizational science best practices can improve team factors that will help reduce burnout.

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abstract

PURPOSE Despite decades of effort, burnout among physicians remains elevated compared with that of other working populations, and it yields catastrophic consequences, including medical errors and physician suicide. Burnout leaves oncologists feeling like they are alone, but this is not the case—it affects everyone. To effectively address burnout, it is not enough to look only at oncologists; instead, we must include all those involved in the delivery of cancer care. With this aim, we present an overview of the organizational science strategies and initial evidence for the value of a comprehensive, team-focused approach to addressing oncology provider burnout.

METHODS We describe the development of a team-focused burnout intervention approach, implemented for oncology providers, which focuses on the importance of encouraging communication and psychological safety to reduce feelings of isolation and fragmentation. We discuss the initial findings from 1 such team-based initiative currently underway within an academic medical center, presenting data from 409 cancer care providers embedded in 30 oncology units participating in this intervention approach.

RESULTS Preliminary results demonstrate that units that integrated a team-focused intervention for burnout reported significantly higher levels of teamwork and lower levels of burnout. We also describe lessons learned and recommendations for implementing this type of intervention on the basis of best practices from organizational science.

CONCLUSION This approach can positively affect the delivery of cancer care, interprofessional relationships among oncology staff, and the well-being of both patients and providers. Treating physician burnout alone will treat 1 symptom of the overall issue of burnout in oncology. As burnout pulls oncology clinicians apart, our solution must be to bring them together.

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INTRODUCTION

Despite decades of effort, burnout among physicians remains elevated compared with other working populations,[1] and it can yield devastating consequences, including (but not limited to), provider depression, anxiety, substance abuse, fractured relationships, medical errors, and suicide.[2] Burnout is defined as an occupational stress condition characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment.[3] The complexities of cancer care and the increasing prevalence of cancer diagnoses force oncologists to face mounting workplace stressors such as patient deaths, administrative burdens, high patient expectations, surging volumes, emotional communication with patients and families, and interprofessional conflict, leading to high rates of oncologist burnout.[4-8] Although oncology departments demonstrate some of the highest rates of burnout in health care, a comprehensive mitigation approach for reducing provider burnout remains elusive in cancer care.[5,9]

This is not to say that effective interventions are currently unavailable; indeed, efforts are underway in many health care organizations to address the widespread challenge of provider burnout.[10] However, most of these efforts have been aimed at the individual after burnout has taken its toll. Treating individual physician burnout alone will treat 1 symptom of the overall issue of burnout in oncology. Current and future efforts need to move upstream and proximal, to understand how the medical system creates such high rates of burnout and to develop interventions to

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prevent it in the first place. What is needed is a more integrative, systemic approach that leverages the science of organizations to tackle the multitudinous contributors of burnout in oncology.[11] Specifically, by leveraging evidence from the field of organizational science[12] and because of recent calls for addressing cancer care through a team-based approach,[13] we suggest that a team-focused effort may be an effective and efficient way to tackle the challenge of burnout for not only oncologists, but all providers involved in the complex coordination of cancer care.

With this aim, this article presents an overview of and initial evidence for this type of team-focused approach. We first build on existing literature to depict the value add of focusing on the team as a point of intervention when addressing provider burnout. We next describe an example of an evidence-based approach currently being implemented to address oncology provider burnout, including initial data and results from 30 oncology units in a large health care system. We conclude with key lessons learned and recommendations for implementing team-focused approaches, aimed at providing useful guidance for holistically reducing burnout and improving the quality of work in oncology.

Isolation and Fragmentation as Drivers of Provider Burnout in Oncology

Recent studies indicate that approximately 45% of medical oncologists in the United States report emotional exhaustion and feelings of depersonalization related to burnout.[14] Sources of burnout in the practice of oncology include job stressors related to providing care to patients with complex diagnoses. This includes relaying a cancer diagnosis, weighing treatment options or deciding to discontinue treatment, managing expectations and feelings of disappointment, and patient suffering and death, as well as job stressors commonly associated with changes in the landscape of health care (ie, longer hours, more time spent on electronic medical records and other administrative burdens, having to see more patients with fewer staff and in less time, interprofessional conflict, and teamwork or leadership challenges).[14-16a] Overall, when providers feel that they do not have the resources to adequately manage job demands, even those demands that fill them with a sense of purpose and meaning, they are more likely to experience burnout. Although interventions have been initiated for many of these sources of burnout, 2 major barriers, isolation and fragmentation, are still in need of attention and mitigation strategies . Despite calls for team-based care and teamwork, many oncology providers conduct their work largely in isolation from others.[17] Because of the stigma associated with seeking help for burnout,[18] providers often become burdened by loneliness, further intensifying their feelings of burnout.[17,19] Even the design of burnout interventions can further a sense of isolation, because mindfulness or well-being–focused interventions are individually driven and can often put the onus on clinicians to be better at not becoming burned out.

Equally as troubling, feelings of burnout are exacerbated under conditions of fragmentation. Overall, cancer care has become increasingly complex, and the rapidly increasing patient population, depth of new knowledge, and specialization required to deliver care contribute to this complexity.[20] In turn, this can often lead to an "increased…danger of care fragmentation, in which each provider picks a corner of a patient's needs to work on in isolation."[21(p3634)] This may be reinforced by differences in interprofessional cultures that prevent meaningful interactions among team members when they do work together.[11,22] Unfortunately, interventions meant to reduce burnout may only increase this fragmentation if they are targeted at 1 group of professionals at a time.[23] However, by only addressing that which providers themselves can improve, burnout interventions fail to confront the systemic workplace causes of stress and burnout.

Addressing Burnout via Team-Focused Approaches Informed by Organizational Science

To combat issues of fragmentation and isolation and to reduce burnout systemically in health care, a focus on teams and teamwork has been suggested as an important solution.[11,23] The complexity of cancer care necessitates a team effort, with all oncology clinicians working together and listening to one another.[3] Despite the recognized importance of bringing together different providers to deliver cancer care, evidence suggests that the quality of teamwork in oncology is poor. However, rather than signaling that teamwork will not succeed in oncology practice, these findings reinforce the importance of doing teamwork the right way.

Accordingly, it is not enough to consider and address only oncologist burnout; effective approaches must include all clinicians involved in the delivery of cancer care. Treating physician burnout alone will treat 1 symptom of the overall issue of burnout in oncology. Instead, the burnout among all oncology clinicians must be addressed. When it is effective, teamwork can serve as a source of social support that helps health care professionals better manage the demands of their work.[24]

Furthermore, recent work has called for a better integration of the study of clinician well-being, teamwork, and patient safety.[23] We agree with this charge and extend it: we propose that the solution is to focus on the full team experience. What is missing is a comprehensive approach that combines teamwork, cancer care delivery, and well-being. We extend the understanding of burnout in the practice of oncology by integrating past approaches and breaking down silos to propose an integrated, team-focused intervention approach.

This includes 2 main aims: (1) the incorporation of teamwork and organizational science into the examination

of patient and staff experience, and (2) the integration of all members of oncology care teams into the lens of oncology clinicians whose burnout must be addressed. Indeed, the successful mitigation of oncology burnout will not reside solely within the scope of oncology physicians. This is because many situational and organizational stressors are also experienced by other providers involved in cancer care. Indeed, research indicates that leader and staff burnout are intertwined,[27,28] and that physicians are affected by staff member burnout and vice versa.[29] Accordingly, it is not possible to address oncologist burnout without addressing the burnout of all clinicians, staff, and other team members responsible for providing cancer care.

Structuring a Team-Focused Approach to Alleviating and Preventing Provider Burnout

Given this potential role of a team-focused approach to burnout reduction in providers, we next offer how we have specifically implemented and evaluated our team-focused approach to burnout in oncology. To design our intervention, we relied on the rich literature and evidence base found in organizational science.[17a] Organizational science–driven initiatives have been identified as important strategies for addressing physician burnout as well as enhancing teamwork.[3] We have adopted this approach and have extended its importance to all health care employees involved in cancer care, incorporating communication and psychological safety as key features.

In this pursuit, our organization first formed a system-wide committee charged with enhancing the practice of medicine to address clinician burnout.[30] Of note, the committee defined clinicians as all staff members contributing to the mission of the health system. This committee included those who directly practice medicine (physicians, nurses, technicians, etc) and those who do not (administrators, organizational development consultants, researchers). The committee's objective was to identify, implement, and evaluate organizational science initiatives that would reduce burnout and enhance the well-being of all employees, leaders, and teams.

By integrating organizational science theories related to the importance of leadership and teamwork for occupational well-being, an initiative to enhance teamwork within health care units across the system was developed. As described next, this focus on teamwork and supportive interpersonal interactions was informed by current organizational research demonstrating the important connections among cancer care delivery, teamwork, and burnout.[18] Accordingly, we hypothesized that the implementation of a team-focused intervention would reduce oncology employee burnout through the mediating mechanism of enhanced perceptions of teamwork.

Description of Intervention

The development and implementation of our team-focused intervention was driven by several best practices in implementing organizational science and teamwork in health care. Communication and psychological safety have been identified as important factors for team-based delivery of effective cancer care, and these were identified as critical.[13] Psychological safety refers to a shared sense of trust and confidence that members of the group can openly express themselves without fear of adverse consequences.[19] When a team has a high level of psychological safety, its members are more likely to openly share ideas, engage in innovation, and perform better.[31] There are reciprocal relationships between communication in teams and psychological safety. The ways in which leaders and team members communicate with one another influence the development of psychological safety; in turn, when psychological safety is high, team members are more likely to engage in open and supportive communication.

Finally, emerging research supports the idea that, in addition to enhancing team processes, psychological safety is positively related to engagement and negatively related to burnout.[22,32,33] Overall, communication and psychological safety have both been identified as important workplace resources that facilitate effective teamwork and well-being. This is likely because of the effect that teamwork has on individual well-being; research has established that a supportive work environment, characterized by the quality of social relationships and the climate of one's work team, predicts engagement and burnout.[33] Accordingly, integrating these 2 concepts should help facilitate the right climate needed for health care providers to feel comfortable discussing sensitive topics such as feelings of burnout, as well as to actually rely on one another for the task-related and interpersonal support needed to prevent or alleviate burnout.

The initiative involved 2 phases. First, leaders from each oncology unit were invited to participate in a developmental program that introduced this team-focused approach. The program, delivered by organizational development consultants and organized by a director of leadership development, involved attendance at monthly information sessions, participation in quarterly conferences internal to the organization, and the use of a toolkit of additional resources. It focused on building self-awareness, other-awareness, emotion regulation, and interpersonal skills to develop meaningful interpersonal interactions among staff members. In program sessions, facilitators stressed the importance of openness within a team and candid expression of thoughts and emotions. Leaders were also instructed in the overlap between communication and psychological safety, because the skills of active listening and the ways in which individuals openly express themselves are important in creating a team climate of psychological safety; they were also provided with opportunities to practice and assess their skills with feedback, following organizational science best practices for training and development.[34,35]

Second, leaders were asked to bring the training to their teams. Leaders were provided with tools and resources (ie, handouts, videos, reading material, coaching sessions) to incorporate what they learned into their units. This occurred during team huddles and supervisor-employee rounding, and importantly, through the leader modeling communication and interpersonal skills. Employees were subsequently given access to additional materials related to building effective communication and psychological safety practices.

METHODS

To assess the spread and efficacy of this intervention, we analyzed responses to 2 years of an annual engagement survey completed by health care providers in the system. The investigators received approval from the institutional review board to access anonymized data from the survey for the purpose of evaluating organizational science initiatives implemented by the health system. More than 90% of the full employee population completed the survey (10,450 employees in 650 units), with oncology units yielding similar response rates.

To conduct oncology-specific analyses, the research team partnered with the system's human resources department to identify the units involved in treating, coordinating with, or otherwise interacting with patients with cancer. The Cancer Institute at the health system includes a multidisciplinary center of specialists, a Center for Integrative Oncology and Survivorship, and a focus on Cancer Care Delivery Research and is sponsored by the National Cancer Institute's Community Oncology Program. The oncology sample included 409 oncology employees (90% female) in 30 units, with an average of 12 employees per unit.

To assess the degree to which the leaders successfully transferred what they learned in the training program to their units, we included a measure of the average unit perception of whether their leader implemented the team-based development program, with items such as, "My leader shares these ideas with our team." This was calculated using the previous year's employee survey responses aggregated to the unit level to allow for a separation of the independent and dependent variables and the ability to examine the impact of this program over time. From the subsequent annual employee survey, we included 2 measures: employee perceptions of teamwork and employee burnout. Teamwork measures included items such as, "My work unit works well together," "Communication between shifts is effective in my work unit," "There is a climate of trust within my work unit," and "Employees in my work unit help others to accomplish their work." Burnout was measured using a 2-item scale previously validated in a health care setting.[36]

RESULTS

Because employees were nested within different oncology units, data were analyzed with hierarchic linear modeling. Intraclass correlation coefficients were calculated for the teamwork and burnout variables, representing the proportion of the variance within groups versus between groups. For teamwork, 18% of the variance exists between units, and for burnout, 7% exists between units; because a significant proportion of the variance exists within units for both variables, multilevel modeling is appropriate for these data.

The mediation hypothesis was tested using multilevel mediation analysis with the 2-1-1 model in the MLMED package of SPSS.[37] The 2-1-1 mediation model uses a unit-level variable to predict an employee-level mediator and employee-level outcome.[38] Results supported the hypothesis: the indirect effect of the team-based training on employee burnout through teamwork perceptions was significant (−0.28; SE = .13; $P < .05$; 95% CI, −0.57 to −0.05; see Fig 1). When oncology units report higher team-focused intervention dissemination, oncology employees report higher perceptions of teamwork and lower burnout a year later.

DISCUSSION

Most efforts to address this issue have focused on the individual (ie, resiliency, mindfulness) but are unable to achieve a meaningful reduction in burnout that is sorely needed. Moving forward, we recommend more attention be paid to the value of implementing a team-focused approach, specifically in reducing provider burnout in oncology. It has been established that effective teamwork enhances patient safety and the quality of cancer care coordination. However, our preliminary findings with this team-focused approach to intervention may provide important implications for continuing research to explore the role of the team as a meaningful unit for addressing provider well-being and reducing burnout.[22] Although this is only the beginning of the longitudinal study being

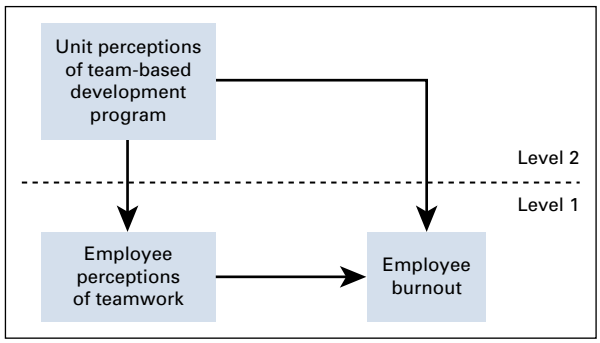

FIG 1. Results of multilevel mediation analysis evaluating team-based program.

conducted on this team-focused approach to reducing burnout in health care, the results seem promising.

Furthermore, several lessons were learned along the way that may help inform others as they work toward similar systemic attempts to reduce burnout. First, organizational science offers a rich evidence base for identifying, implementing, and evaluating systemic burnout interventions. As an interdisciplinary domain, organizational science, or the study of workplace behavior at individual, group, and organization levels of analysis, has been applied to health care to promote the evidence-based development of leaders and teams.[12,39] This science has been informed by a wide range of industries, with many models, studies, and frameworks that can make implementing interventions in health care much more streamlined and effective.[17] Accordingly, instead of reinventing the wheel, health care can more quickly advance in reducing burnout by relying and building on the existing body of literature.

Second, a team-focused approach may work best to reduce burnout in oncology settings that are already structured around teaming. Moving toward a multidisciplinary, patient-centered care approach, with jointly conducted clinics, integrated planning, and team care, has improved the experiences and care of patients.[40,41] The same approach is now needed for the care team, especially because oncology is one of the most complex and stressful branches of medicine. Efforts can be made to train and care for the care team themselves, acknowledging the potential for burnout and providing training and resources for high-level teaming and on-going support.[42]

Engaging oncology providers in the process of designing burnout interventions is critical. Person-directed interventions reduced burnout in the short term ($\leq$ 6 months), whereas a combination of both person- and organization-directed interventions had longer-lasting positive effects ($\geq$ 12 months).[15] The support of organizations in helping develop and implement systematic prevention and treatment efforts for burnout is an invaluable investment. Accordingly, engaging providers in the process of selecting and implementing the right interventions at the right time is especially key to ensuring long-term success.

Burnout can leave oncologists feeling isolated in their suffering, but this does not have to be the case; burnout is a challenge regularly faced by all types of oncology providers. Common charges in studies related to oncology burnout state that we must reduce the administrative burden, or we must change the system so we do not continue losing talented clinicians. In response, we ask: Who is we? Whose system? Who is left out or forgotten when we do not fully engage all members of the greater cancer care team? Through taking a team-focused approach to intervening, especially one informed by organizational science, a more comprehensive approach can be implemented so that no provider is left to combat burnout alone.

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