Expanding the Conversation on Burnout Through Conceptions of Role Strain and Role Conflict

Lara Varpio, PhD
Rashawn Ray, PhD
Ting Dong, PhD
Jeff Hutchinson, MD
Steven J. Durning, MD, PhD, FACP

The program director (PD) for internal medicine at a large tertiary care hospital has been following the research on resident burnout and wants to proactively identify and address this problem in her program. Through informal conversations, the PD has confirmed that burnout is affecting the residents in this program. The discussion also reveals that burnout has many sources and contributing factors—both personal (eg, marital strain and ailing children) and professional (eg, academic performance anxiety and interprofessional conflicts). Many residents struggled to articulate how these stressors combine to lay the foundation for burnout, explaining: "It's not that I can't manage each problem. I can be a supportive spouse. I'm pretty good with my patients. But, everything, all together, it's too much. I just can't be everything for everyone all the time." The PD knows that addressing the burnout problem will require creating a more supportive learning environment and helping individuals develop more resilience. But how can the PD do this when learners struggle to identify the primary cause of their burnout, and suggest that everything (the combination of many causes) is the problem?

The program director's conundrum in this fictional scenario is common. Research has established that residents are affected by fatigue, frustration, and burnout (ie, depersonalization and emotional exhaustion)[1,2] and suggests that patient care is negatively affected by physician burnout.[3,4] While these studies offer valuable insights, many PDs struggle to support residents because the causes of burnout cut across multiple aspects of their lives. When *everything* is contributing to burnout, how can a PD identify starting points for change?

Educators and scholars in other domains have investigated this conundrum by applying the concept of *role identities*. A *role identity* is "the character and the role that individuals devise for themselves when occupying specific social positions."[5] To illustrate, many residents have different identities—as physicians, spouses, and/or as parents. Each of these roles informs a resident's identity at all times—a resident's identity as a physician is not confined to time spent in the clinical work environment, nor is a resident's identity as a spouse and a parent confined to time spent at home. We live our multiple roles across all experiences. The concept of role identities has informed research on burnout in nurses,[6] emergency responders,[7] and university-employed academics,[8] helping to identify (1) which roles (both personal and professional) inform the individual's identity, and (2) how incongruities across these (eg, *role strain* and *role conflict*) contribute to an individual's stress. Since tensions within and across roles affect job performance and well-being,[9] medical educators might also use the concept of role identities to help residents identify some of the root causes of their burnout. In other words, PDs can use role identities as a lens through which to identify competing demands from different roles (eg, being the resident on-call *and* a parent) and/or within an individual role (eg, managing a particularly difficult colleague *and* modeling professionalism to junior learners). These can then become the starting points for interventions. Since burnout is not a one-size-fits-all problem, these concepts can help PDs tailor efforts to address each resident's unique burnout experience.

In this Perspective, drawing on theories from sociology, we describe the relationship between burnout and role identities. It is not our goal to review the literature on resident burnout: existing reviews are available.[1,2,10,11] Nor is it our goal to make recommendations for policies to address resident burnout: such recommendations have already been articulated.[12,13] Instead, we offer 2 concepts related to role identities—*role strain and role conflict*—as tools for PDs to help residents identify some root causes of their burnout. We also outline ways that the concepts of role strain and role conflict

DOI: http://dx.doi.org/10.4300/JGME-D-18-00117.1

might offer new approaches for studying the resident burnout problem.

Burnout, Role Strain, and Role Conflict

Burnout has been defined as "a pathological syndrome in which emotional depletion and maladaptive detachment develop in response to prolonged occupational stress."[2] Symptoms of burnout include emotional exhaustion, depersonalization, and a decreased sense of personal accomplishment and professional effectiveness.[4] Burnout is more common in physicians than in other professions in the United States.[14]

Research in the field of sociology suggests that burnout can, and often does, result from experiences of role strain and/or role conflict.[15] A *role* is the set of expectations and behaviors associated with a social position.[16] In health care, recognized roles include *physician*, *resident*, and *nurse*. In a familial context, roles include *spouse*, *parent*, *son/daughter*, and *sibling*.

Role strain is the tension experienced when a scarcity of resources (eg, time, skills, finances, and/or energy) impedes an individual's ability to meet role expectations and responsibilities.[17] For example, a resident may have difficulty fulfilling the demands of his or her role as an *interprofessional collaborator* when the clinical environment adopts a new electronic health record that buries nursing notes beneath many links and tabs.

An individual experiences *role conflict* when one role clashes with the demands of other roles.[12] For example, the *resident* role can obstruct an individual's ability to fulfill the expectations of his or her *parent* role. Being on call and working long hours at the hospital may lead to a resident's inability to be available for important events with children (eg, birthday celebrations or school events).

Using Role Strain and Role Conflict to Examine Burnout

Exploring resident burnout through the concepts of role strain and role conflict can help to identify some root causes. Research has suggested resident burnout stems from both occupational and personal stressors.[10] Investigations into occupation-related contributors grow largely out of the work of Maslach and Leiter.[18] Research of workplace stressors largely aligns the categories they identified: workload, control, balance between effort and reward, community, fairness, and values.[18] Personal stressors that affect burnout—interpersonal relationships,[1] social support systems,[19] sleep,[20] and financial debt load[21]—have also been identified. The concepts of role strain and role conflict can help PDs work with residents to identify how occupational and personal roles contribute to burnout. Since role strain and role conflict bridge the professional and the personal, these concepts enable educators to work with the entirety of a resident's burnout experience, and not relegate the problem (and solution) to a single aspect of a resident's life. By addressing both the personal and professional, we believe that interventions geared toward role strain and role conflict may help PDs contend with the widespread problem of burnout.

Consider a new resident who secures a particularly sought-after residency position, and joins the clinical team. While gaining the prestige of the competitive residency can bolster the individual's confidence and sense of accomplishment, this experience can negatively impact the resident. The demands of clinical work can find residents confronting the limits of their clinical expertise and ability to navigate difficult situations with peers and/or patients, and test their endurance to offer high-quality patient-centered care over long, fast-paced shifts. Being faced with these limitations can cause role strain—the resident can easily become discouraged based on a perception of lacking the expertise, skills, or energy needed to succeed. Frustrations resulting from this role strain can contribute to burnout.

Furthermore, being the junior resident in a busy clinical space generally entails an increased workload, which can prevent the resident from actively participating in familial relationships and responsibilities. Missed family celebrations, exhaustion-induced interpersonal conflict with a spouse, and/or extended absences from home life may cause the resident's private life to suffer because he or she secured the prestigious residency. This role conflict can be a source of considerable tension for residents, and may be a contributor to burnout.

The PD who supervises a resident with these role conflicts, and who understands resident burnout from the perspectives of role strain and role conflict, can construct solutions with the resident that seek to address both professional and personal burnout contributors. For instance, the PD might work to foster "a culture of mutual appreciation and teamwork, in which residents and faculty regularly recognize each other's contributions and hard work."[22] Bolstering the resident's workplace community in this way can help minimize conflict and enable exchange of feedback that supports professional growth and interpersonal support. This can reduce the resident's role strain.

Further, the PD can offer insights into navigating familial relationships during residency, either through

personal experience or through resources provided by professional organizations (the American Medical Association has multiple online open-access resources available[23]). Sharing ideas about effective communication in marital relationships, and how to share the family care burden, even when on call, can help the resident not only gain skills to navigate these personal challenges, but also normalize these struggles. This can help further alleviate role conflict.

When working with residents to identify the causes of their burnout, we suggest that role conflict and role strain can provide a useful lens through which PDs can recognize the professional and personal contributors to burnout. These concepts can help PDs and their residents identify if a particular problem requires institutional transformations, or personal changes, or (more likely) a combination of both.

Implications

Research aimed at understanding how residents experience role strain and role conflict, and how these experiences affect resident burnout should be a first line of inquiry. We suggest a research methodology that explores these experiences in depth. Listening for social positions voiced by the residents (eg, The Listening Guide[24]) will be needed to effectively delve into residents' role narratives. Exploratory qualitative research is needed to comprehend these experiences before the community constructs measures for quantifying levels of role strain and role conflict in individual residents, and develops interventions for addressing these challenges.

Understanding when burnout is, at least in part, rooted in role strain and role conflict will offer new intervention starting points. Existing research suggests that work-life balance, social and family support, adequate rest, and regular physical activity correlate with career satisfaction, improved sense of well-being, increased empathy, and decreased burnout.[25,26] But improving work-life balance, for example, is notoriously difficult. If part of the root cause of a lack of work-life balance is role conflict, we could aim interventions toward helping residents identify role expectations, prioritize, and then renegotiate those expectations to minimize conflict, and by extension, burnout. What if part of the residency curriculum explicitly discussed how to manage role strain and role conflict, arming residents with strategies to better understand and ameliorate their experience of burnout? What if PDs had residents periodically complete brief personal inventories on role strain and role conflict in hopes that, by naming and monitoring these stressors, we might curb burnout?

Conclusion

We suggest role strain and role conflict are tensions that can lead to burnout. Researching sources of role strain and role conflict in residents' lives may lead to the development of interventions that might reduce burnout rates. We hope that expanding the conversation on residents' experiences of burnout to include role strain and role conflict might provide the community with a new approach to addressing the experiences of burnout that plague residents.

References

1. IsHak W, Lederer S, Mandili C, et al. Burnout during residency training: a literature review. *J Grad Med Educ*. 2009;1(2):236–242.
2. Thomas N. Resident burnout. *JAMA*. 2004;292(23):2880.
3. Loerbroks A, Glaser J, Vu-Eickmann P, et al. Physician burnout, work engagement and the quality of patient care. *Occup Med*. 2017;67(5):356–362.
4. Shanafelt T, Bradley K, Wipf J, et al. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med*. 2002;136(5):358–367.
5. McCall G, Simmons J. *Identities and Interactions*. New York, NY: Free Press; 1978.
6. Tzeng YL, Chen JZ, Tu HC, et al. Role strain of different gender nursing students in obstetrics practice: a comparative study. *J Nursing Res*. 2009;17(1):1–9.
7. Trainor JE, Barsky LE. *Reporting for Duty? A Synthesis of Research on Role Conflict, Strain and Abandonment among Emergency Responders during Disasters and Catastrophes*. Newark, DE: University of Delaware Disaster Research Center; 2011.
8. Elliott M. Gender difference in the causes of work and family strain among academic faculty. *J Human Behav Social Environment*. 2008;17(1–2):157–173.
9. Shanafelt T, Boone S, Tan L, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med*. 2012;172(18):1377–1385.
10. Prins JT, Gazendam-Donofrio SM, Tubben BJ, et al. Burnout in medical residents: a review. *Med Educ*. 2007;41(8):788–800.
11. Raj KS. Well-being in residency: a systematic review. *J Grad Med Educ*. 2016;8(5):674–684.
12. Jennings ML, Stuart J. Resident wellness matters: optimizing resident education and wellness through the learning environment. *Acad Med*. 2015;90(9):1246–1250.
13. Accreditation Council for Graduate Medical Education. Summary of Changes to ACGME Common Program Requirements Section VI. https://www.acgme.org/What-We-Do/Accreditation/Common-Program-Requirements/Summary-of-Proposed-Changes-to-

ACGME-Common-Program-Requirements-Section-VI. Accessed October 29, 2018.
14. Tayfur O, Arslan M. The role of lack of reciprocity, supervisory support, workload and work–family conflict on exhaustion: evidence from physicians. *Psychol Health Med*. 2013;18(5):564–575.
15. Simon RW. Gender, multiple roles, role meaning, and mental health. *J Health Soc Behav.* 1995;36(2):182–194.
16. Adám S, Györffy Z, Susánszky E. Physician burnout in Hungary. *J Health Psychol*. 2008;13(7):847–856.
17. Goode W. A theory of role strain. *American Sociological Review.* 1960;25(4):483.
18. Maslach C, Leiter MP. *The Truth About Burnout: How Organizations Cause Personal Stress and What to Do About It*. San Francisco, CA: Jossey-Bass; 1997.
19. Lemkau JP, Purdy RR, Rafferty JP, et al. Correlates of burnout among family practice residents. *J Med Educ*. 1988;63(9):682–691.
20. Kassam A, Horton J, Shoimer I, et al. Predictors of well-being in resident physicians: a descriptive and psychometric study. *J Grad Med Educ*. 2015;7(1):70–74.
21. Collier VU, McCue JD, Markus A, et al. Stress in medical residency: status quo after a decade of reform? *Ann Intern Med*. 2002;136(5):384–390.
22. Jennings ML, Slavin SJ. Resident wellness matters: optimizing resident education and wellness through the learning environment. *Acad Med*. 2015;90(9):1246–1250.
23. Parks T. Family matters: how to juggle residency training, parenthood. December 15, 2016. https://wire.ama-assn.org/life-career/family-matters-how-juggle-residency-training-parenthood. Accessed October 29, 2018.
24. Gilligan C, Spencer R, Weinberg K, et al. On the listening guide: a voice centered relational method. In: Camic PM, Rhodes JE, Yardley L, eds. *Qualitative Research in Psychology: Expanding Perspectives in Methodology and Design*. Washington, DC: American Psychological Association; 2013:157–172.
25. Cydulka R, Korte R. Career satisfaction in emergency medicine: the ABEM Longitudinal Study of Emergency Physicians. *Ann Emerg Med*. 2008;51(6):714–722.e1.
26. Bazargan M, Makar M, Bazargan-Hejazi S, et al. Preventive, lifestyle, and personal health behaviors among physicians. *Acad Psychiatr.* 2009;33(4):289–295.

Lara Varpio, PhD, is Professor of Medicine, Uniformed Services University of the Health Sciences; **Rashawn Ray, PhD,** is Associate Professor, Department of Sociology, University of Maryland; **Ting Dong, PhD,** is Research Associate Professor of Medicine, Uniformed Services University of the Health Sciences; **Jeff Hutchinson, MD,** is Associate Professor of Pediatrics, Uniformed Services University of the Health Sciences; and **Steven J. Durning, MD, PhD, FACP,** is Professor of Medicine and Pathology, Uniformed Services University of the Health Sciences.

The views expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the Uniformed Services University of the Health Sciences, the Department of Defense, or the US government.

Corresponding author: Ting Dong, PhD, Uniformed Services University of the Health Sciences, 53-37 Jones Bridge Road, Bethesda, MD 20814, 571.303.8109, ting.dong.ctr@usuhs.edu