

Burnout in Pediatric Residents and Physicians: A Call to Action

John D. Mahan, MD

The evidence is growing that burnout in trainees, as well as in practicing physicians, comes at a cost to the physicians, those they interact with at home and work, and their patients.¹ In their article in this issue entitled “Pediatric Resident Burnout and Attitudes Toward Patients,” Baer et al² surveyed pediatric residents at 11 programs in New England to better understand the pathogenesis of burnout in these trainees; the goal was to assist in efforts to develop effective measures to prevent and/or address these maladaptive responses.

It is unsurprising to those who work with trainees that 101 of 258 pediatric residents reported being “burned-out.”^{3–5} In fact, many studies show higher rates of burnout in pediatric trainees (40%–75%) depending on site and year of training.^{6,7} In the study by Baer et al,² there were no significant differences in burnout rates according to sex, race/ethnicity, and relationship or parental status; younger residents (<30 years of age) were slightly less likely to report burnout than older residents. Residency factors (year of training, program size and location, current rotation schedule, and hours worked in past week) were not associated with burnout. Sleep deprivation did correlate with burnout. Both perceived sleep deprivation and burnout were independent risk factors that predicted poorer self-reported quality of patient care (eg, discharging patients to make the service more manageable, making treatment or medication errors, feeling guilty about how a patient was treated).

THE CONSEQUENCES OF BURNOUT

Burnout is all too common in trainees and practitioners, as well as in all members of the health care team. Burnout in physicians is associated with the following: (1) higher levels of job dissatisfaction and shorter job tenure; (2) more reported medical errors, negative attitudes toward patients, and patient dissatisfaction; and (3) on a personal level, more failed relationships, depression, alcohol abuse, and suicidal ideation.² For the physician in training, the personal effects are sobering, including greater rates of neglect of family commitments, dysfunctional relationships, mental health disorders, and self-harm behaviors.⁸ Moreover, burnout in physicians is associated with more disruptive behaviors, as well as poorer staff relationships and performance in the workplace.

A particular issue for pediatric trainees and pediatricians is that many especially valued traits, such as compassion, altruism, and perfectionism, also predispose to burnout when clinicians are pushed to mental or physical extremes.² Burnout can also be regarded as a byproduct of the culture of medicine, exemplified by an educational system and profession that reward self-denial, persistence, and expert performance under trying conditions, driving learners to perfect clinical abilities with far less attention to the personal-social, leadership, and teamwork skills necessary to achieve success in our complex systems.⁹

Nationwide Children's Hospital, The Ohio State University College of Medicine, Columbus, Ohio

Opinions expressed in these commentaries are those of the author and not necessarily those of the American Academy of Pediatrics or its Committees.

DOI: 10.1542/peds.2016-4233

Accepted for publication Dec 19, 2016

Address correspondence to John D. Mahan, MD, Nationwide Children's Hospital, The Ohio State University College of Medicine, 700 Children's Dr; Columbus, OH 43205. E-mail: john.mahan@nationwidechildrens.org

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2017 by the American Academy of Pediatrics

FINANCIAL DISCLOSURE: The author has indicated he has no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

POTENTIAL CONFLICT OF INTEREST: The author has indicated he has no potential conflicts of interest to disclose.

COMPANION PAPER: A companion to this article can be found online at www.pediatrics.org/cgi/doi/10.1542/peds.2016-2163

To cite: Mahan JD. Burnout in Pediatric Residents and Physicians: A Call to Action. *Pediatrics*. 2017; 139(3):e20164233

THE CALL FOR BETTER SYSTEMS, PERSONAL-SOCIAL SKILLS DEVELOPMENT, AND PERSPECTIVES

These consequences of burnout are not unique to medicine and have been described in many contemporary workplaces related to the increasingly complex tasks and “production facility” mindset that characterize much of modern work. Burnout and its downstream effects must be seen as both a systems issue and an individual issue. Systems issues, such as diminished physician and trainee sense of control, electronic health record burdens, misaligned social and financial rewards, and disengagement of trainees and physicians from workplace governance, are certainly problematic. Thoughtful efforts to address organizational issues with detailed methods that focus on the mismatch between the individual and the work must be part of the solution.¹⁰

Ideally, these systems approaches are complemented by person-centered, developmental methods to prevent and/or reduce burnout by building effective self-care skills, social support, and individual resilience in trainees and physicians. We are particularly encouraged with the attention now given to educational programs designed to develop resilience, empathy, self-compassion, and mindfulness. These efforts include: mindfulness training, presented through workshops¹¹ and/or online modules¹²; CREW (Civility, Respect, and Engagement at Work) training to develop better civility and communication and to mitigate burnout in the workplace¹³; and comprehensive wellness curricula such as the University of Arizona’s Pediatric Integrative Medicine in Residency Curriculum¹⁴ and the American Academy of Pediatrics’ Resilience in the Face of Grief and Loss Resident Curriculum that focus on developing important cognitive and emotional skills of pediatric trainees to help them provide

high-quality care while fostering their personal wellness and resilience.¹⁵

The Pediatric Residency Burnout–Resilience Study Consortium (www.pedsresresilience.com) was recently formed to provide an innovative research platform to address burnout and promote resilience in a contemporary cohort of pediatric trainees in 41 programs in the United States committed to this work.

Burnout is a serious problem with significant effects on pediatric trainees, colleagues, and patients. The problem is clear; the “Call to Action” is for our community to do the hard work to address systems factors and facilitate residents to develop the personal-social skills necessary for resilience in the face of the myriad stresses and difficult outcomes they will inevitably face. Lastly, these efforts will be most effective for trainees and physicians who retain the joy, passion, and purpose of the calling that is pediatrics.¹⁶ Modeling and encouraging this appreciation of our work should remain a high priority for all of us who care for our patients and our profession.

REFERENCES

1. McClafferty H, Brown OW; Section on Integrative Medicine; Committee on Practice and Ambulatory Medicine; Section on Integrative Medicine. Physician health and wellness. *Pediatrics*. 2014;134(4):830–835
2. Baer T, Feraco A, Tuysuzoqlu S, et al. Pediatric resident burnout and attitudes toward patients. *Pediatrics*. 2017;139(2):e20162163
3. Auger KA, Landriğan CP, Gonzalez del Rey JA, Sieplinga KR, Sucharew HJ, Simmons JM. Better rested, but more stressed? Evidence of the effects of resident work hour restrictions. *Acad Pediatr*. 2012;12(4):335–343
4. Dyrbye LN, West CP, Satele D, et al. Burnout among US medical students, residents, and early career physicians relative to the general US population. *Acad Med*. 2014;89(3):443–451
5. Starmer AJ, Frintner MP, Freed GL. Work-life balance, burnout, and satisfaction of

early career pediatricians. *Pediatrics*. 2016;137(4):e20153183

6. Pantaleoni JL, Augustine EM, Sourkes BM, Bachrach LK. Burnout in pediatric residents over a 2-year period: a longitudinal study. *Acad Pediatr*. 2014;14(2):167–172
7. Olson K, Kemper KJ, Mahan JD. What factors promote resilience and protect against burnout in first-year pediatric and medicine-pediatric residents? *J Evid Based Complementary Altern Med*. 2015;20(3):192–198
8. Shanafelt TD, 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
9. Montgomery A. The inevitability of physician burnout: implications for interventions. *Burn Res*. 2014;1(1):50–56
10. Maslach C, Leiter M. *The Truth About Burnout: How Organizations Cause Personal Stress and What to Do About It*. 1st ed. San Francisco, CA: Jossey-Bass Inc; 1997
11. West CP, Dyrbye LN, Rabatin JT, et al. Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. *JAMA Intern Med*. 2014;174(4):527–533
12. Kemper KJ, Lynn J, Mahan JD. What is the impact of online training in mind-body skills? *J Evid Based Complementary Altern Med*. 2015;20(4):275–282
13. Leiter MP, Laschinger HK, Day A, Oore DG. The impact of civility interventions on employee social behavior, distress, and attitudes. *J Appl Psychol*. 2011;96(6):1258–1274
14. McClafferty H, Dodds S, Brooks AJ, et al. Pediatric integrative medicine in residency (PIMR): description of a new online educational curriculum. *Children (Basel)*. 2015;2(1):98–107
15. Serwint JR, Bostwick S, Burke AE, et al. The AAP resilience in the face of grief and loss curriculum. *Pediatrics*. 2016;138(5):e20160791
16. Gunderman R. The root of physician burnout. *The Atlantic*. Aug 27, 2012. Available at: <http://www.theatlantic.com/health/archive/2012/08/the-root-of-physician-burnout/261590>. Accessed December 14, 2016

Burnout in Pediatric Residents and Physicians: A Call to Action

John D. Mahan

Pediatrics; originally published online February 23, 2017;

DOI: 10.1542/peds.2016-4233

Updated Information & Services	including high resolution figures, can be found at: /content/early/2017/02/22/peds.2016-4233.full.html
References	This article cites 14 articles, 6 of which can be accessed free at: /content/early/2017/02/22/peds.2016-4233.full.html#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Medical Education /cgi/collection/medical_education_sub Career Development /cgi/collection/career_development_sub Workforce /cgi/collection/workforce_sub
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: /site/misc/Permissions.xhtml
Reprints	Information about ordering reprints can be found online: /site/misc/reprints.xhtml

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2017 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Burnout in Pediatric Residents and Physicians: A Call to Action

John D. Mahan

Pediatrics; originally published online February 23, 2017;

DOI: 10.1542/peds.2016-4233

The online version of this article, along with updated information and services, is located on the World Wide Web at:

</content/early/2017/02/22/peds.2016-4233.full.html>

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2017 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

