GUEST EDITORIAL

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Clinician Burnout: How Will We Come Through the Fire?

By current estimates, 35% to 54% of nurses and physicians in the United States report symptoms of burnout. There is an indirect relationship between nurse burnout, turnover, costly labor disputes, quality of patient care, and patient satisfaction. Among physicians, clinician burnout has been associated with increased incidence of major errors, reduced work effort, and malpractice suits. Therefore, the rising

prevalence of clinician burnout poses a clear threat to patient safety. The purpose of this editorial is to share definitions and causes of burnout identified by experts that may guide future research and solutions.

Keywords: Anesthesia provider, burnout, clinician burnout, error, quality of care, turnover.

In recent years, an increasing number of professional healthcare organizations have recognized the importance of clinician well-being to the nation's healthcare system. However, today there is growing concern over the alarming surge in the prevalence of clinician burnout and its potential negative consequences for patient care and stability of the healthcare provider workforce. The burgeoning prevalence of burnout has been linked to recent changes in the United States healthcare system that have given rise to increased workloads, time pressures, lack of resources, difficulties with technology, work-life imbalance, and conflicts of values between clinicians and organizations. 1 By current estimates, 35% to 54% of nurses and physicians in the United States report symptoms of burnout. There is an indirect relationship between nurse burnout, turnover, costly labor disputes, quality of patient care, and patient

satisfaction.² Among physicians, clinician burnout has been associated with increased incidence of major errors, reduced work effort, and malpractice suits. 3-5 Therefore. the rising prevalence of clinician burnout poses a clear threat to patient safety. Clinicians suffering from burnout are at increased risk for chronic systemic illnesses, depression, substance use disorders, and suicide. Unmitigated burnout increases absenteeism and staff turnover, driving up costs for healthcare institutions. 7,8 Finally, burnout may impel clinicians to leave their chosen profession, worsening the shortage of healthcare providers.¹ Thus, burnout is a phenomenon that has serious consequences for the US healthcare system.

As the prevalence of burnout continues to rise in healthcare, the American Association of Nurse Anesthetists (AANA) Health and Wellness Committee launched an effort to educate Certified Registered Nurse Anesthetists (CRNAs) and student registered nurse anesthetists (SRNAs) about burnout, share efforts to address this growing problem, and expand resources for AANA members to utilize. As of now, there is a paucity of research about burnout specific to CRNAs and SRNAs.9 Therefore, the frequency and sources of burnout in the nurse anesthesia professionals are unknown. It is also possible that the concept, causes, ramifications, and potential solutions for burnout are not widely understood in the nurse anesthesia profession. The purpose of this editorial is to share definitions and causes of burnout identified by experts that may guide future research and solutions.

Historical Evolution of Burnout

In 1974, clinical psychologist Dr Herbert Freudenberg first applied the term *burnout* to an observed set of behavioral signs, including exhaustion, labile emotions, and

withdrawal, among mental health professionals in a free clinic. 10 Shortly thereafter, Dr Christina Maslach, social psychologist and researcher, defined burnout as a state of emotional exhaustion. depersonalization, and reduced personal accomplishment resulting from environmental factors in the workplace. 11 Similar definitions were proposed by fellow burnout researchers, who described the syndrome as states of fatigue or frustration in the workplace, related to thwarted expectations, or physical, emotional, and mental exhaustion from long-term involvement in emotional situations. 12

A phenomenon similar to burnout, known as neurasthenia, was identified in 1869 by neurologist George Miller Beard. 13 According to Beard, the fast pace of life in modernized, postindustrial revolution society placed undue strain on the human brain, leading to "exhaustion, anxiety, despair, insomnia, indigestion, palpitations, and migraines." Beard's concept of neurasthenia was widely accepted across Europe and Asia. Following the concept's wide acceptance, the term was loosely applied, became ambiguous, and, therefore, fell into disuse.

Similarly, burnout escalated after major changes in US society. 12 Following World War II, human services professions fell under increased federal and state regulations, creating conflicts between providers and organizations. Cultural revolution and shifts in public attitudes weakened authority of those in traditionally esteemed occupations such as physicians, nurses, educators, and law officers, as clients became increasingly individualistic, empowered, and demanding. In parallel, working professionals expected to gain personal fulfillment from their occupations. Hence, the stage was set for an upsurge in workplace burnout.

Like neurasthenia, burnout can become ambiguous if misunderstood and confused with other concepts, particularly stress and depression. While stress can lead to burnout and burnout can lead to depression, these states can exist independently. 12 Stress has been defined as physical and/or psychological reactions to demands on the body or psyche. 14 Depression is a mental illness characterized by "a negative affective state, ranging from unhappiness and discontent to an extreme feeling of sadness, pessimism, and despondency, that interferes with daily life," and not just work. 12,15 Despite stress, some individuals thrive in their occupations and do not develop burnout provided they derive meaning from their work. 14 Likewise, individuals living with depression do not necessarily experience burnout at work.

Risk Factors, Signs, and Causes of Burnout

Professions involving extensive interaction with people carry a high risk for burnout. Therefore, nurses, physicians, teachers, lawyers, mental health workers, and law enforcement officials are susceptible. More recently, burnout among dentists, veterinarians, and pharmacists has been recognized.

According to Drs Christine Maslach and Michael Leitner, burnout arises from a mismatch between the nature of the job and persons performing the job. The authors classified six sources of burnout in the workplace and offered descriptions of each.¹¹

- Work Overload. Imbalances arise from the organizational drive to produce and limits to what workers can accomplish. The overall nature of work is more complex: work days are becoming longer and people are caught up in the epidemic of busyness, such that there is no relief from demands of work and home life. As a result, workers become physically and emotionally exhausted.
- *Insufficient Reward*. Decreasing benefits and opportunities for advancement, increased workloads,

job insecurity, stagnant wages, and decreased purchasing power have a negative impact on job satisfaction. Intrinsic rewards of work diminish when support needed to do a job well is lost, turnover is high, and financial gain becomes an organization's primary focus.

- Lack of Control. Autonomy and decision-making are inherent to work of professionals. Without control over one's job, workers may feel ineffective and lose interest in their work. Lack of control over important aspects of one's job may produce ineffectual, embittered employees.
- Conflict of Values. In the era of cost containment and drive for profits, economics often trump professional values. Employees often perceive a disconnect between stated organizational values and actions taken.
- Breakdown in Community. The social environment of the workplace influences emotional well-being of employees and effective teamwork. Interpersonal conflict decreases efficiency, depletes energy, and undermines collaboration.
- Absence of Fairness. Trust, openness, and respect lay the foundation for a sense of fairness in the workplace. Market competition and drive for financial gain relegate employees to components of a corporate plan. Secrecy and lack of communication drive mistrust between administrators and workers.

Individuals with burnout experience an erosion of engagement with work that manifests as frustration, anger, fear, and apathy. These responses develop as a result of the six aforementioned conditions.¹³

• Personal Factors in Burnout. Certain personal characteristics may predispose some individuals to burnout. Founger workers may experience disillusionment when the realities of the workplace overshadow high expectations and idealism. In contrast, older workers may have achieved a sense of balance and maturity that may shield them from workplace stressors that lead to burnout. Other personal risk factors include low self-esteem, and difficulty controlling or appropriately expressing emotions such as anger, fear, patience, and empathy. Strong needs for achievement, meaning, and identity with work can be significant factors, as well.⁶

Resilience, defined as one's capacity to rebound from or cope with adversity, is a protective personality trait against burnout. Resilience among nurses shows a positive correlation to other personal traits such as optimism, well-defined morals or personal beliefs, ability to conquer fear, resilient mentors, and a sense of humor. Also, a positive world view, supportive social networks, cognitive flexibility, self-care, and sense of balance were associated with resilience.

The Current State

Research on burnout in nurse anesthesia practice found positive relationships between burnout and workplace factors such as incivility, excessive hours worked, job dissatisfaction, and intention to quit.^{8,18} Recent research on burnout among anesthesia professionals used mixed samples of anesthesiologists, anesthesia residents, and nurse anesthetists both in the United States or abroad. 19-21 In some cases, nurse anesthetists were pooled with registered nurses and licensed practical nurses. 19 While more research on burnout among CRNAs is clearly needed, a team of nurse anesthesia researchers expressed concerns about varied definitions of burnout and selection of appropriate, validated measurement tools.9 However, Maslach's definition of burnout and the Maslach Burnout Inventory assessment remain the gold standard for guiding research, particularly in the health professions. 5,12,22,23 so nurse anesthesia researchers might look to their work when designing studies.

Misconceptions and denial within organizations enable employee burnout. The prevailing belief is that burnout is an individual problem and sign of personal failure.^{5,11} Instead of acknowledging environmental workplace stressors as a source of burnout, organizations tend to direct efforts towards "fixing" individuals instead of the work environment.11 Well-known. traditional individual-level interventions such as meditation, yoga, retreats, and self-affirmations are useful first-line strategies for stress management. However, they do not address or change dysfunctional elements of the work environment that perpetuate burnout. 1,5 If viewed as only a matter of personal well-being, organizational leaders are unlikely to extend sympathy toward clinicians who are perceived as part of a privileged subset of healthcare providers, such as physicians and CRNAs.²⁴

Large Scale Efforts Underway

National, international, and professional organizations have drawn attention to clinician burnout to raise awareness, explore the scope of the problem, identify sources, and propose solutions.

The National Academy of Medicine (NAM)

In follow up to its report, *To Err* is Human: Building a Safer Health *System, and, Crossing the Quality* Chasm: A New Health System for the 21st Century, NAM launched the Action Collaborative on Clinician Well-Being and Resilience in 2017 to address high rates of stress, burnout, and suicide among healthcare providers in the United States. The following year, a study began to examine scientific evidence on clinician burnout and well-being and draft recommendations for systemslevel interventions to reduce burnout and improve clinician well-being. In 2019, NAM published its consensus report, Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being, issuing six goals with recommendations. 1

- Create a Positive Work
 Environment. Healthcare organizations should create, employ, and appraise workplace interventions to mitigate burnout and support clinician well-being with the goal of improving patient care. Leaders should consider the impact of business decisions on clinical operations and be held accountable for health measures of the work environment.
- Create Positive Learning Environments. Efforts to provide positive learning experiences should target drivers of burnout, including evaluation and grading systems, preparation, learning experiences, behaviors of supervisors and peer, and autonomy.
- Reduce Administrative Burden. Eliminate regulations, laws, policies, and standards that interfere with clinician productivity and do not improve patient care. Simplify processes for billing, quality improvement reporting, professional certifications, and credentialing.
- Enable Technology Solutions.
 Developers of healthcare technology should invite input from clinical end users to improve usability and decrease workflow disruptions.
 Enhancements in electronic infrastructures and interfaces would improve provider and patient access to healthcare information.
- Provide Support to Clinicians and Learners. Remove stigma related to clinician use of mental health services and prior diagnoses of mental health conditions. Provide access to emotional support programs for clinicians and learners.
- Invest in Research. Research is needed in the United States to examine workplace factors related to burnout in nurses, physicians, allied health professionals, and students. Studies to determine effective systems-level interventions to reduce burnout are also needed.

The World Health Organization (WHO)²⁵ listed burnout as an occu-

pational phenomenon, not a medical condition, in its 11th revision of the *International Classification of Diseases* (*ICD-11*). WHO defined *burnout* as "a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed" characterized by:

- feelings of energy depletion or exhaustion;
- increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and
 - reduced professional efficacy.

The WHO plans to develop evidence-based workplace guidelines for mental well-being.

The American Hospital Association (AHA), in its 2020 Environmental Scan, shared study results on prevalence of burnout among US nurses and physicians. ²⁶ In a Kronos study, 63% of nurses reported experiencing burnout, with 41% intending to change jobs as a result. In a Medscape report, 44% of physicians reported burnout. Nationally, physician turnover and work hour reduction cost the nation \$4.6 billion. Annual average costs of nurse burnout to hospitals ranged from \$5.2-\$8.1 million.

The Anesthesia Patient Safety Foundation (APSF) listed burnout among its top 12 patient safety priorities for 2018. ²⁷ In its February 2019 newsletter, APSF shared study reports of high prevalence of burnout in among anesthesiologists and anesthesia residents. Burnout was linked to deviations from best practices, high weekly alcohol consumption, and tobacco use among anesthesia residents. ²⁸

The AANA supports and promotes CRNA and SRNA well-being through continually proving resources on wellness-related topics, including burnout. To learn about who is affected, why it is happening, and how this problem can be remediated visit www.aana.com/burnout. Listen to podcasts, see the latest statistics from national studies, and read articles from the AANA and other organizations. The AANA

Health and Wellness Committee, fiscal year 2020, has provided these resources on its webpage and through this editorial.

Where Do We Go From Here?

Rigorous research on prevalence and root causes of burnout among CRNAs and SRNAs in the United States is urgently needed to assess the scope of this problem and guide change. Meanwhile, CRNAs and SRNAs can educate themselves about burnout and its signs, symptoms, and likely causes. Practicing nurse anesthetists and students can employ individual-level burnout countermeasures. These include optimizing sleep, exercising, mindfulness-based stress reduction, resilience training, spending time with family and friends, hobbies, recreation, and protecting time away from work or school. Nurse anesthesia educators should support individual-level wellness interventions for SRNAs into their programs. Because early career professionals are at higher risk of burnout, nurse anesthesia educators should create realistic expectations for practice and effective coping mechanisms for associated challenges, that align with the realities in the working world. 13

Barriers to overcoming clinician burnout include economic pressures, burdensome regulations, lack of understanding, failure or unwillingness to recognize clinician burnout as a problem, and lack of sympathy for well-compensated healthcare professionals such as physicians and CRNAs. 1,22 Because causes of burnout are rooted in the work environment, individual interventions alone are not sufficient to reduce burnout. Therefore, organizational-level initiatives are essential to target avoidable stressors that lead to burnout. The NAM Collaborative developed a consensus report on burnout, and though it found no conclusive evidence for interventions, did suggest that interventions would vary by institution and are context dependent.1

However, NAM recommendations and the work of experts, such as Dr Christine Maslach, may serve as guides for organizational level burnout interventions.

Finally, a current workplace reality that has no doubt contributed to burnout includes the coronavirus outbreak, which began in a seafood and poultry market in Wuhan, China late in 2019, and spread swiftly across the world.²⁹ In the United States, the healthcare system was overwhelmed in many areas and CRNAs were faced with multiple concerns that have added to the burden of burnout: cancellation of elective surgery to devote resources to COVID-19 patients and loss of positions; CRNAs sent to provide non-anesthesia critical care management for ER and ICU settings; and infection control practices turned into a number one priority due to the extremely infectious and deadly nature of the virus, with inadequate personal protective equipment.³⁰ Future continuing research of this phenomenon will add more useful information to on-going efforts to combat burnout.

Conclusion

Burnout has been acknowledged as a problem among health services professionals since the 1970s. However, the current prevalence of burnout among physicians and nurses has reached alarming levels, placing the well-being of patients and clinicians in jeopardy. International and national healthcare associations have drawn attention to this problem and made recommendations for changes in healthcare institutions. The nurse anesthesia profession must turn its attention to this problem and perform its own assessment of prevalence and causes of burnout among CRNAs and SRNAs to assist its membership. While there is no conclusive evidence on effective interventions, solutions may be guided by the work of experts and recommendations of the NAM collaborative. It is incumbent upon organizational leaders

and regulatory bodies to recognize and act upon this threat to patients and clinician well-being, despite pressures for cost containment and quality improvement, as together we "come through the fire."

REFERENCES

- National Academies of Sciences, Engineering, and Medicine. Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being. National Academies Press: 2019. doi:10.17226/25521
- McHugh MD, Kutney-Lee A, Cimiotti JP, Sloane DM, Aiken LH. Nurses' widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care. *Health Aff.* 2011;30(2):202-210. doi:10.1377/ hlthaff.2010.0100
- Shanafelt TD, Balch CM, Bechamps G, et al. Burnout and medical errors among American surgeons. *Ann Surg.* 2010;251(6):995-1000. doi:10.1097/ SLA.0b013e3181bfdab3
- Balch CM, Oreskovich, MR, Dyrbye, LN, et al. Personal consequences of malpractice lawsuits on American surgeons. J Am Coll Surg. 2011;213(5):657-667. doi:10.1016/j.jamcollsurg.2011.08.005
- Shanafelt TD, Noseworthy JH. Executive leadership and physician well-being: nine organizational strategies to promote engagement and reduce burnout.
 Mayo Clin Proc. 2017;92(1):129-146. doi:10.1016/j.mayocp.2016.10.004
- 6. Maslach C. Burnout: The Cost of Caring. ISHK/Malor Books; 2015.
- 7. Poghosyan L. Clinician burnout: new times, old issue. *Nurs Econ.* 2018;36(3):109,155.
- 8. Mahoney CB, Lea J, Schumann PL, Jillson IA. Turnover, burnout, and job satisfaction of Certified Registered Nurse Anesthetists in the United States: role of job characteristics and personality. *AANA J.* 2020;88(1):39-48.
- 9. Del Grosso B, Boyd AS. Burnout and the nurse anesthetist: an integrative review. *AANA J.* 2019;87(3):205-213.
- Freudenberger HJ. Staff burn-out.
 J Soc Issues. 1974;30(1):159-165.
 doi:10.1111/j.1540-4560.1974.tb00706.x
- 11. Maslach C, Leiter MP. The Truth About Burnout: How Organizations Cause Personal Stress and What to Do About It. Jossey-Bass Publishers; 1997.
- 12. Schaufeli WB, Maslach C, Marek T, eds. *Professional Burnout: Recent Developments in Theory and Research.* Routledge; 2017.
- 13. Schaufeli WB. Burnout: A short sociocultural history. In: Neckel AK, Schaffner AK, Wagner G, eds. Burnout, Fatigue and Exhaustion: An Interdisciplinary Perspective on a Modern Affliction. Springer Interna-

- tional Publishing/Palgrave Macmillan; 2017:105-127.
- 14. Selye H. The Stress of Life. McGraw-Hill; 1956.
- Depression. APA Dictionary of Psychology. American Psychological Association. Accessed March 8, 2020. https://dictionary.apa.org/ depression
- 16. Hart PL, Brannan JD, De Chesnay M. Resilience in nurses: an integrative review. J Nurs Manag. 2014;22(6):720-734. doi:10.1111/j.1365-2834.2012.01485.x
- 17. Mealer M, Jones J, Moss M. A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses.

 Intensive Care Med. 2012;38(9):1445-1451. doi:10.1007/s00134-012-2600-6
- Elmblad R, Kodjebacheva G, Lebeck L. Workplace incivility affecting CRNAs: a study of prevalence, severity, and consequences with proposed intervention. AANA J. 2014;82(6):437-445.
- 19. Hyman SA, Michaels DR, Berry JM, Schildcrout JS, Mercaldo MD, Weinger MB. Risk of burnout in perioperative clinicians: a survey study and literature review. Anesthesiology. 2011;114(1):194-204. doi:10.1097/ALN.0b013e318201ce9a
- 20. Misiolek A, Gil-Monte P, Misiolek H. Prevalence of burnout in Polish anesthesiologists and anesthetist nursing professionals: a comparative nonrandomized cross-sectional study. *J Health Psychol.* 2017;22(4):465-474. doi:10.1177/1359105315604377
- 21. Shah A, Wyatt M, Gourneau B, Shih G, De Ruyter M. Emotional exhaustion among anesthesia providers at a tertiary care center assessed using the MBI burnout survey. *Psychol Health Med.* 2019;24(5):620-624. doi:10.1080/13548506.2018.1546019
- 22. Dyrbye LN, Shanafelt TD, Sinsky CA, et al. Burnout among healthcare professionals: a call to explore and address this underrecognized threat to safe, high-quality care. July 5, 2017. Accessed March 6, 2020. https://nam.edu/burnout-among-health-care-professionals-a-call-to-explore-and-address-this-underrecognized-threat-to-safe-high-quality-care/
- 23. Hyman SA, Shotwell MS, Michaels DR, et al. A survey evaluating burnout, health status, depression, reported alcohol and substance use, and social support of anesthesiologists. *Anesth Analg.* 2017;125(6):2009-2018. doi:10.1213/ANE.00000000000002298
- Epstein RM, Privitera MR. Doing something about physician burnout. *Lancet*. 2016;388(10057):2216-2217. doi:10.1016/S0140-6736(16)31332-0.
- World Health Organization. Burn-out an 'occupational phenomenon': International Classification of Diseases. May 28, 2019. Accessed March 6, 2020. https://www.who. int/mental_health/evidence/burn-out/en/

- American Hospital Association. 2020 Environmental Scan. American Hospital Association;
 Accessed March 6, 2020. https://www.aha.org/system/files/media/file/2019/11/2020-Environmental-Scan-Final_0.pdf
- Lane-Fall M. APSF highlights 12 perioperative patient safety priorities for 2018.
 APSF Newslett. 2018;33(2). Accessed June 22, 2020. https://www.apsf.org/article/apsf-highlights-12-perioperative-patient-safety-priorities-for-2018/
- Huang J, Brenner A. Our own safety. APSF Newslett. 2019;33(3):83-84. Accessed June 22, 2020. https://www.apsf.org/article/ our-own-safety/
- Taylor DB. How the coronavirus pandemic unfolded: a timeline. The New York Times. Accessed June 3, 2020. https:// www.nytimes.com/article/coronavirustimeline.html
- 30. Quraishi J, Jordan L, Hoyem RL. The impact of COVID-19: findings from a survey of CRNAs. Letter. *AANA J*. Posted online June 2020. Accessed June 3, 2020. https://www.aana.com/docs/default-source/aana-journal-web-documents-1/letters-2.pdf?sfvrsn=49917e0_6

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