COMMENTARY

Addressing Burnout with Well-Being in Pharmacy Residency Training Programs

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Health care provider burnout has become a top priority for many health care systems. Unfortunately, a paucity of literature remains for pharmacy residents despite an increase in pharmacy burnout-related publications. This limits the ability to understand and address burnout in this at-risk population. Until further investigation into the most beneficial, evidence-based strategies is conducted, this commentary offers strategies to address and mitigate burnout in pharmacy residency training programs, based on the available, interdisciplinary literature.

Keywords: burnout, pharmacy resident, well-being, postgraduate training

INTRODUCTION

Health care provider burnout has become a major topic of interest across all disciplines recently due to the long-lasting consequences on clinicians’ careers, health care systems, and patient care. The uptick in publications related to clinician burnout has improved working knowledge on the prevalence, risk factors, and potential interventions. Historically, burnout was thought to impact only those late in their professional careers. More recent evidence suggests that burnout affects health care providers in all stages of their career, as early as their didactic education. Special consideration must be given to pharmacists in residency, as residents are likely to exhibit many factors associated with burnout, in addition to the professional and personal stressors associated with postgraduate training.

Unfortunately, a paucity of literature remains for pharmacy residents. This limits the ability to understand and address burnout in this at-risk population. The American Association of Colleges of Pharmacy (AACP) adopted the following statement on well-being: “… believes that all administrators, faculty, staff, preceptors, student pharmacists and alumni should contribute to a culture of wellness and resilience in pharmacy education.” As an organization that commits itself to advancing and transforming pharmacy education across the career continuum from student to new practitioner, it is imperative to shine light on this important issue.

The purpose of this commentary is a call to action to improve working knowledge of pharmacy resident burnout and describe evidence-based strategies to improve resident well-being. The utility of this manuscript is multifactorial. For residency programs, it may serve as a framework to establish well-being initiatives aimed at improving the practice/learning environment. Academic faculty and preceptors may garner new strategies to instill well-being and reduce burnout in their learners. Lastly, individuals considering, or currently completing residency training may gain insight into potential strategies they may implement or look for in a residency program.

Understanding Burnout

Burnout is a job-related syndrome that develops through prolonged response to chronic interpersonal stressors. Over time, the inability to recover from work-related stress manifests as the three burnout subdomains: emotional exhaustion, depersonalization, and reduced personal accomplishment. Health care provider burnout has been associated with diminished well-being, decreased job satisfaction and performance, substance abuse/dependence, depression, and suicidality. In addition to affecting the clinician, burnout has significant impact on health care systems and patient care. Medical errors, mortality, and infections are associated with provider burnout as well, demonstrating the negative impact on patient care.

The Collaborative on Clinician Well-Being and Resilience reports 45 to 60% of medical students and residents suffer from substantial symptoms related to burnout. As a profession, pharmacists may be predisposed to burnout as a result of regulatory compliance, excessive documentation, and incongruities between training and daily tasks. The prevalence of burnout in pharmacy residents has not been reported directly, however several studies suggest rates of pharmacist burnout between 46% to 62%.
It is helpful to understand factors that influence the development and/or severity of burnout, identify at-risk individuals and employ appropriate training and well-being strategies. Individual factors associated with increased risk of burnout include: younger age, female gender, having young or no children, being unmarried, perceived stress, hours worked, days on-call, and moral distress.\textsuperscript{1,4,7,9-13} Professional stressors nearly double the risk of burnout and have been reported as inadequate administrative and teaching time, uncertainty of health care reform, difficult colleagues, too many non-clinical duties, and underappreciated contributions.\textsuperscript{9} Lack of autonomy and control, heavy workload, no or minimal margin for error, interruption-driven environments, workplace disorganization, and ambiguity in the work itself are all early predictors of burnout related to the practice/learning environment.\textsuperscript{1,4,7,9-13}

These risk factors provide a glimpse into why many clinicians are predisposed to burnout. However, specific risk factors for pharmacy residents are not defined. Residency training in itself is an incredible stressor and has been associated with burnout, increased perceived stress and incidence of depression, and decreased quality of life.\textsuperscript{12-14} Moreover, residents are typically young, in their first pharmacist role, spend long hours on-site, and often participate in on-call programs. The new practitioners’ pursuit of accelerated training and progressive development requires substantial time and effort, potentially reducing dedicated time for activities known to reduce burnout.\textsuperscript{4,13} Additionally, the increase in responsibilities, expectations, and pressure to excel all place residents under greater professional, situational, and personal stress.\textsuperscript{4}

**Addressing Pharmacy Resident Burnout**

Resident well-being is the cornerstone to combatting burnout in pharmacy residency training programs. Well-being is described as the presence of positive and absence of negative emotions, satisfaction with life, fulfillment, and positive functioning.\textsuperscript{1} By definition, well-being is a psychological state subject to change from moment to moment. Well-being can be addressed by implementing new programs, improving the practice/learning environment, and supporting individual well-being efforts. The American Society of Health-System Pharmacists (ASHP) Residency Accreditation Standard Guidance documents were updated in 2019 to include burnout and well-being.\textsuperscript{15} Implementation of these standards, however, is left up to each residency program. As such, many programs may struggle to integrate well-being initiatives into their curricula, despite a strong desire to do so. Even with the availability of well-being initiatives, residents may be averse to utilizing such programming due to pressures to achieve, meet expectations, or obtain recommendations for jobs or second year training programs. Others may fear implications on their licensure and jeopardization of their career. Routine discussion may help destigmatize burnout and empower trainees to explore and adopt strategies to mitigate burnout and improve well-being.

Currently, many well-being strategies emphasize improving individual coping skills. Individual-based approaches are undeniably important, but current evidence outlines the importance of creating positive practice/learning environments, providing support, and developing interventions at the system/organizational level.\textsuperscript{16,17} Unfortunately, the implementation of organization-wide well-being initiatives has not been well-established.\textsuperscript{10} The National Academy of Medicine has developed a conceptual model to highlight the importance of clinician well-being and further illustrate the necessity of practice/learning environment adaptation.\textsuperscript{2} While the most effective strategies have not been determined, residency programs can address burnout by supporting initiatives at the program, preceptor, and individual levels. Herein, several strategies have been proposed based on the available, interdisciplinary literature. A brief, supporting-evidence summary is provided (Table 1). It is likely that no one strategy is better than another; programs should consider developing a combination of strategies tailored to the specific needs of their program and residents.

**Program-Level Strategies**

Continual program support is paramount to understanding burnout, improving resident well-being, and re-shaping the culture of post-graduate training. During the orientation period, residents should be educated on the prevalence and warning signs of burnout, as well as made aware of mitigation strategies and resources for well-being and resilience.\textsuperscript{15} Programs may also consider a well-being retreat or conference as a part of orientation and establish seminar-type lectures related to well-being.\textsuperscript{1,6,16,18,19} Regular follow-up throughout the program can remind residents of available resources.

Another strategy to consider is facilitated group discussions. These sessions offer clinicians the chance to share and process experiences that may be stressful and/or traumatic.\textsuperscript{6,16} Simultaneously, group discussions provide a safe environment and may initiate a paradigm shift in the stigma associated with burnout. Such sessions may also provide the opportunity to recognize signs and symptoms of burnout early and intervene, as appropriate.

Integration of well-being measures into the resident development plan is an opportunity to emphasize well-being and ensure regular assessment of burnout. Further, programs may consider integrating well-being and/or burnout assessment into learning experience evaluations. This encourages residents to reflect on their self-care and well-being practices and provides insight to the resident’s well-being.

Burnout is characterized by the inability to recover from the stress of work-related events. It can be inferred that removing oneself from the work environment enables recovery. Time away from work also provides residents time to
practice self-care and physical well-being. Residents should be made aware of the time-off policy during orientation and encouraged to utilize the provided time to prevent burnout and improve well-being.

Completion of post-graduate training through residency requires oversight and a coordinated program to meet ASHP standards. As a result, most programs are highly structured and offer limited flexibility and personal choice. However, autonomy, flexibility, and a sense of control have been determined to be protective factors against burnout. For pharmacy residents, autonomous decisions may take the form of topic selection for a research project or continuing education lecture, availability and number of elective rotations, and mentor/advisor selection. Potential interventions to broaden flexibility include allowing residents to alter their schedule as their career goals change and developing projects/presentations based upon the resident’s areas of interest.

Preceptor-Level Strategies

In addition to embracing autonomy and flexibility, preceptors can significantly impact resident well-being and resilience through mentorship/advising, serving as a well-being role model, giving attention to perceived workload, and offering recognition for resident success. Specifically, mentoring is a crucial component of professional development and residents can especially benefit in the transition from student to new practitioner. Potential roles include aid with relocation, navigation of the licensure process, rotation selection, and professional development. Other roles may be resident-specific and dependent upon the resident’s career goals, practice interests, identified strengths, and areas for improvement. In addition to advising, positive modeling behaviors can be impactful. These behaviors include employing personal well-being and resilience techniques, maintaining positive work-life integration, and demonstrating interests outside of work. Preceptors should be encouraged to share their own experiences with burnout and mitigation strategies, if they feel comfortable doing so.

The resident’s perception of workload has major implications on their personal and professional lives. Those involved in the training of residents should involve the resident in establishing expectations and activities to align the learning experience with the needs, career goals, and expectations of the learner. As a program, all longitudinal requirements should be frequently reviewed to ensure each is enriching, supportive of the program objectives, and meaningful for the resident and program.

Individual-Level Strategies

Current evidence outlines the importance of organizational strategies, but it would be imprudent to neglect individual well-being efforts. Effectively managing personal stress is vital to the resident’s well-being. However, not all coping strategies are healthy or advisable. Maladaptive coping strategies, despite temporarily providing perceived stress relief, can negatively impact burnout and well-being. Examples of maladaptive coping include disengagement, denial, self-blame, alcohol use, and substance abuse/dependence. Conversely, adaptive coping mechanisms such as: planning, positive reframing, active coping, acceptance, and use of support help alleviate stress and encourage well-being. Top coping strategies reported by pharmacy residents include spending time with family and friends, staying optimistic, and engaging in other activities they find meaningful.

Mindfulness has been shown to improve career satisfaction and reduce stress, burnout, and anxiety and depression. Informal activities, usually less than ten minutes, have great utility in health care, as these exercises can be conducted on-the-fly. Typically, these are rooted in taking pause and grounding oneself in the present moment.

Finally, adequate sleep and dedication to sleep hygiene are imperative for proper functioning and physiologic restoration. Pharmacy residents are expected to perform at high levels during their training, yet many pharmacy residents report not getting enough sleep. Obtaining sufficient, quality sleep should be an individual priority and supported by the residency curricula, including an enforceable duty hours policy. In addition to proper sleep, engaging in physical activity improves quality of life and decreases burnout in post-graduate training. Scheduling the activity or coordinating group activities helps maintain accountability, but the most beneficial duration or type of activity to reduce burnout has not been identified.

CONCLUSION

Addressing burnout in pharmacy resident training programs will require a paradigm shift to emphasize well-being and reshape the culture of postgraduate training. Pharmacy residents may be especially prone to the detrimental effects of burnout due to the presence of risk factors and increased stress and responsibility associated with postgraduate training. Unfortunately, an inadequacy of literature exists and further investigation is necessary to identify the most effective strategies to promote pharmacy resident well-being and reduce burnout. The development and maintenance of well-being initiatives at the program, preceptor, and individual levels is essential to support progressive advancement of new practitioners and facilitate the delivery of high-quality patient care. Future research and collaboration will be required to
develop realistic and effective strategies to eliminate burnout and foster well-being in pharmacy residency training programs.

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Table 1. Brief Evidence Summary of Several Proposed Strategies to Improve Resident Well-Being

| Strategy                                      | Evidence Summary                                                                                                                                                                                                 |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **Program-Level**                             |                                                                                                                                                                                                                   |
| Educate on burnout/well-being                 | ASHP recommends considering education to the resident during orientation on burnout syndrome, the risks and mitigation strategies.15 The lack of or unawareness of burnout and well-being/resilience programs or initiatives is associated with greater rates of burnout.10 |
| Measure burnout/well-being                    | Burnout should be measured objectively at least at baseline and periodically, thereafter.17,18 Assessment not only provides insight about individual residents but can be used as a measurable outcome to evaluate interventions.          |
| Offer facilitated group discussions           | Physicians who have participated in facilitated group discussions were found to have decreased burnout and improved engagement.6,16 Focus should be given to addressing resident concerns, rather than simply teaching non-specific approaches to reducing burnout.17 |
| Include well-being in development plans       | Consider integration of measures to assess resident well-being temporally. Assessment not only provides insight about individual residents but can be used as a measurable outcome to evaluate interventions. Burnout should be measured objectively at baseline and periodically, at least.17,18 |
| Provide time away from work                   | Too many hours worked is a major stressor with significant career impact.9,12,13 Residents who reported awareness to their time off policies exhibited greater career satisfaction, lower stress, and enhanced ability to take care of personal needs.14 |
| **Preceptor-Level**                           |                                                                                                                                                                                                                   |
| Facilitate autonomy                           | The loss of autonomy is a major contributor to burnout.4 Allowing residents to practice autonomously and demonstrate self-efficacy in their decision-making has been shown to improve well-being.4,6,7,14 |
| Offer flexibility                             | Flexibility and perceived sense of self-control in scheduling improves resident well-being.18 Spending a greater proportion of time on work activities that individuals find most fulfilling has been shown to significantly reduce rates of burnout in physicians.6,17 |
| Develop mentor programs                       | Poor mentoring is a stressor for PGY1 residents.13 A strong mentor-mentee relationship can help identify burnout, improve well-being and resilience, and reduce the stigma associated with mental health. |
| Give attention to perceived workload          | Excessive workload is associated with burnout and is a top stressor for residents.7,10,12,13,20 Careful consideration should be given to workload to provide meaningful learning experiences and limit activities perceived as ‘busy work’. |
| **Individual Level**                          |                                                                                                                                                                                                                   |
| Facilitate adaptive coping                    | An inverse relationship exists between burnout and adaptive coping skills.1,4,7 Only half of pharmacy residents reported using adaptive coping behaviors to handle stress.13 |
| Encourage mindfulness practices               | An inverse relationship exists between mindfulness and burnout.1,3,4,17-19 Mindfulness training can be effective in combating stress and burnout in healthcare.18 Integrating mindfulness into the residency curricula may alleviate barriers to implementation. |
| Encourage adequate sleep/physical activity    | Insufficient sleep, time for family/friends are stressors reported by pharmacy residents.13 Residents note that sleep loss affects their personal well-being, ability to learn, professionalism, performance, and relationships.14 A greater amount of sleep and physical activity improve well-being and reduce burnout.14 |