Burnout and Resilience in the Community-Based Pharmacist Practitioner

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ABSTRACT

Objective: The primary objective was to assess presence of community-based pharmacist practitioner burnout and workplace stress through administration of validated tools. **Methods:** Pharmacists licensed in Ohio received an invitation to participate in the anonymous online assessment via Qualtrics™ using emails available via the State Board of Pharmacy listserv. The survey assessed emotional exhaustion, depersonalization, and personal accomplishment using a validated tool, the Maslach Burnout Inventory (MBI). The Areas of Worklife Survey (AWS) was used to assess stressors as they relate to burnout and job stress. This study was approved by The Ohio State University Institutional Review Board. **Results:** There were 1,425 complete responses. Based on the study sample, 67.2% of community-based pharmacists are experiencing burnout. When asked to self-identify workplace stressors, respondents primarily described the Workload, Control, and Reward dimensions of the AWS. The most commonly reported coping mechanisms were self-care strategies (28.4%), mindfulness (17.6%), and personal time/time off (15.3%). Respondents suggested that organizations address staffing (50.2%) and development of a culture of well-being (17.2%) to promote well-being. **Conclusion:** This study allowed insight into workplace stressors for community-based pharmacists and strategies organizations can employ to improve their well-being. Future studies are needed to assess the efficacy of these interventions.

Keywords: burnout, community-based pharmacy, workforce issues

Background

As the United States healthcare system continues to evolve, more workplace pressure and stress is placed on healthcare providers.[1] In addition to personal and societal stressors, increasing organizational and practice stressors may lead to Burnout Syndrome.[1] Burnout is characterized by high levels of emotional exhaustion and depersonalization, and low levels of sense of personal accomplishment.[1] Current literature surrounding provider burnout has been conducted largely with physicians and medical residents. In medical residents, burnout rates have been shown to range from 27-75% depending on specialty.[2]

Provider burnout is associated with reduced patient satisfaction, reduced patient outcomes, and increased costs.[5] Patient satisfaction has been shown to decrease when patients are cared for by a provider experiencing burnout, and reported adverse events have been shown to increase.[6,3] When looking at the financial implications of burnout there are many impacts. Studies have shown that providers experiencing burnout see an increase in medical errors.[3] Burnout has been associated with increased turnover, and costs related to turnover of a physician are estimated to be 2 to 3 times their annual salary.[7] If a provider experiencing burnout stays with the organization, the reduced productivity of that individual will also affect the organization financially.[7] The Institute for Healthcare

Improvement (IHI) developed the Triple Aim framework in 2007 to enhance the patient experience, improve population health, and reduce healthcare cost.[4] Due to the impact burnout can have on each of the facets of the Triple Aim , it was proposed that a fourth aim be added to include provider/care team wellbeing. As healthcare becomes more quality-based it is important to ensure that our providers are able to provide high-quality care to their patients, and to do so they must first ensure their own wellbeing. [4]

There is a robust amount of literature focused on burnout with physician providers and other ancillary medical personnel.[8,1] One study that has assessed stress in pharmacy residents found their stress levels were higher than that of the general public and more comparable to those of cardiology medical residents.[8] When assessing pharmacists practicing in a health-system setting, it was found that approximately half of pharmacists experience burnout.[9,10] Emerging literature in pharmacy is focused on residency programs, or practice in a health-system setting.[11,12] The impact of burnout on physicians and medical residents, and the many similar stressors from medicine to pharmacy, reinforces the need for further research into the depth and impact of burnout on pharmacists in a variety of practice settings, specifically in community-based settings.

Community-based pharmacists are frontline practitioners, who provide direct patient care daily. Over 60% of pharmacists in the United States practice in a community-based setting.[13] Many community-based pharmacists are challenged with job stressors such as balancing high dispensing volume and providing clinical services such as Medication Therapy Management (MTM), and immunizations, while working long

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shifts with limited support staff. It is not uncommon for frontline practitioners, such as community-based pharmacists, to prioritize patient care over their own needs.[10] Some available research demonstrates that pharmacists practicing in a chain setting report higher levels of role overload and demand, and lower levels of job satisfaction than pharmacists in other practice settings.[14] Due to the demands of the profession of pharmacy, and of community-based pharmacy, it is vital that we assess the wellbeing of providers through tools such as burnout assessments.

While there is literature assessing burnout in some subsets of pharmacy practice, community-based pharmacy practice continues to lack transparency surrounding burnout data due to the proprietary nature of community-based practice, and fear of retribution for employer-based surveys.[15] Overall, there is a paucity of information within this subset of pharmacy practice. Therefore, this study aims to evaluate pharmacist burnout in community-based pharmacy settings.

Objective
The objective of this study was to evaluate presence of community-based pharmacist burnout and workplace stress.

Methods
All pharmacists with active licenses with the Ohio State Board of Pharmacy received an email invitation to participate in the anonymous online assessment administered via an online survey tool, Qualtrics™, using email addresses available via the State Board of Pharmacy public listserv. This listserv included those licensed in Ohio with a different primary practice state, and those retired/non-practicing pharmacists with active licenses. Participants were included or excluded based on self-identification of a community-based or non-community-based practice site. Community-based pharmacist practitioners were defined as the following self-identified practice settings: Ambulatory Care Clinic, Community Pharmacy (Chain, Grocery Store, and Independent), Government Agency – Outpatient, Nursing Home/Long-Term-Care, Primary Care Clinic, Physician's Office, Residency – Community/Ambulatory Care, and Other Community-Based Practice. The survey was sent from February-March 2019, and remained open for three weeks with three reminder emails being sent at the end of week one, end of week two, and middle of week three.

The administered online assessment included two validated survey tools, the Maslach Burnout Inventory© (MBI) for Medical Personnel and the Areas of Worklife Survey© (AWS) that came packaged together as part of a toolkit "to measure both the extent and likely cause of burnout".[16,17] These tools were selected as they are commonly used tools in the literature to assess burnout and workplace stress. The MBI is a gold-standard burnout assessment with strong validity and ability to benchmark with its robust use in literature.[18] The AWS was used in this project as a supplemental tool to describe workplace stress and help identify the potential cause of

burnout in respondents. Both survey tools were developed using decades of data on burnout, organizational risk factors, and work-related outcomes.[16,17] Included with the survey for both the MBI and AWS are proprietary scoring guides to categorize the results of the survey.

The survey was administered via Qualtrics™. The MBI is a 22-item assessment, and the AWS is a 28-item assessment. There were five optional demographic questions, three open-ended questions, and one question to screen for study eligibility. The survey was a 59-item assessment in total.

The MBI accompanying scoring guide breaks down scoring subscales for each of the dimensions assessed (i.e. emotional exhaustion [EE], depersonalization [DP], and lack of personal accomplishment [PA]).[16] Emotional exhaustion is defined as "feelings of being emotionally overextended and exhausted by one's work", depersonalization is defined as "unfeeling and impersonal response towards recipients of one's service, care, treatment, or instructions", and personal accomplishment is defined as "feelings of competence and successful achievement in one's work with people".[16]

Methodology used in the literature to associate MBI scores with manifested burnout vary widely. Some studies represent burnout by an outlying score in any of the assessed domains (DP, EE, or PA).[19] Other studies have shown that abnormal scoring within just the depersonalization and emotional exhaustion domains are associated with physical manifestations of burnout, as such those were the two domains used to indicate burnout in our survey data.[20] Respondents that scored high on either the DP (score ≥13 on a scale from 0-30) and/or EE (score ≥27 on a scale of 0-54) subscale(s) are consider to have manifestations of professional burnout.[20] While this study did not use PA as a marker for burnout it is of note that the PA score is scored in reverse with a score of ≤31 on a scale of 0-48 being notable.

Each dimension of the AWS (workload, control, reward, community, fairness, and values) is scored on a 1-5 scale with 1 (lowest score) representing an extreme mismatch, and 5 (highest score) representing an extreme match. The lower the score the less congruence, which could lead to workplace stress. The AWS was used to assess workplace stress. Unlike the MBI, there was no set score to indicate stress in each dimension. Instead, this data was used descriptively to validate qualitative responses. There are 6 dimensions in the AWS defined below:[17]

- Workload - "the amount of work to be done in a given time"
- Control - "the opportunity to make choices and decisions, to solve problems, and to contribute to the fulfillment of responsibilities"
- Reward - "recognition – financial and social – for contributions on the job"

- Community - "the quality of an organization's social environment"
- Fairness - "the extent to which the organization has consistent and equitable rules for everyone"
- Values - "what is important to the organization and to its members"

To further describe self-reported workplace stressors and suggested organizational strategies thematic analysis was completed by the research team for responses to open-ended questions related to stressors, coping mechanisms, and desired organizational approaches to burnout prevention. Results were reviewed for inter-reviewer agreement. The themes used for thematic analysis of self-identified coping mechanisms were modeled after a study on health-system pharmacists in Ohio.[21]

This study was approved by The Ohio State University Institutional Review Board. A license was obtained for the use of the MBI and AWS.

Licenses were obtained for the 4th edition of the MBI - Human Services Survey for Medical Personnel - MBI-HSS:

- I feel emotionally drained from my work.
- I have accomplished many worthwhile things in this job.
- I don't really care what happens to some patients.

Licenses were obtained for the 5th edition of the Areas of Worklife Survey (AWS):

- I do not have time to do the work that must be done.
- I have control over how I do my work.
- I receive recognition from others for my work.
- Members of my work group communicate openly.
- Resources are allocated fairly here.
- My values and the Organization's values are alike.

Data Analysis. Demographic information was summarized using descriptive statistics. Briefly, discrete data was presented using counts and percentages; continuous data was presented using mean and standard deviation for data normally distributed, or median and inter-quartile range (IQR) for data not normally distributed.

A sample size of 1014 was required for a power of 80% with a 95% confidence to 3%, and a sample of 1428 to 2.5%, thus power was met. All statistical tests were two-sided, and the significance level was set at 0.05. SAS9.3 (The SAS Institute, Cary, NC) was used for all statistical analyses.

Qualitative data underwent thematic analysis by members of the research team, and results were reviewed for inter-reviewer agreement. Each team member independently reviewed qualitative survey responses and placed into themes, then the research team compared themes and reviewed all responses/categorization together until consensus was determined for each comment.

Results
The survey was sent to 20,311 pharmacists with a response rate of 8.5%. There were 1,717 total responses to the survey, of which 1,425 were complete responses that met inclusion criteria. With 1,425 responses, power was met at 80% with a 95% confidence to 3%. Of note, key demographic results include that of the 1,425 completed responses, the majority of respondents were female (62.1%), practicing in a non-independent community pharmacy practice (68%) on-site as a staff pharmacist or site manager (85.7%). All demographic questions were optional, with number of final responses variable for each as a result. Complete demographic results are in **Table 1**.

Table 1. - Demographics

Current practice setting (n=1,425)	
Ambulatory care clinic	78 (5.5 %)
Community pharmacy, chain	653 (45.8%)
Community pharmacy, grocery/supermarket	317 (22.2%)
Community pharmacy, independent	203 (14.2%)
Government agency, outpatient	31 (2.2%)
Nursing home/long-term care pharmacy	44 (3.1%)
Other community-based practice	81 (5.7%)
Residency, community/ambulatory care	18 (1.3%)
Title (n=1,304)	
Administration *(e.g. Clinical Coordinator, Director, District/Regional Manager)*	47 (3.6%)
Owner	39 (3%)
Resident/Fellow	17 (1.3%)
Site/Pharmacy Manager	449 (34.4%)
Staff Pharmacist	669 (51.3%)
Clinical Pharmacist	62 (4.8%)
Other*	21 (1.6%)
Average Work Hours per Week (n=1,305)	
0-24 hours	119 (9.1%)
24-40 hours	556 (42.6%)
41-50 hours	530 (40.6%)
51-60 hours	70 (5.4%)
61+ hours	30 (2.3%)
Years in Practice (n=1,305)	
0-11 months	55 (4.2%)
1-5 years	244 (18.7%)
6-10 years	217 (16.6%)
11-15 years	195 (15%)
16-20 years	150 (11.5%)
21+ years	444 (34%)
Gender (n=1,307)	
Male	477 (36.5%)
Female	812 (62.1%)
Prefer not to answer	18 (1.4%)
Remaining Student Loan Debt (n=1,260)	
Less than $50,000	802 (63.7%)
$50,000-$99,999	108 (8.6%)
$100,000-$149,999	92 (7.3%)
$150,000-$199,999	72 (5.7%)
$200,000-$249,999	40 (3.2%)
$250,000 or more	29 (2.3%)
Prefer not to answer	117 (9.3%)
*Examples of other titles include specialty pharmacist, telephonic pharmacists, and MTM pharmacist	

Of the dimensions in the MBI, respondents were at highest risk as relating to EE. When assessing only the EE and DP dimensions from the MBI, 968 pharmacists (67.93%) had professional burnout. Whereas, when assessing burnout using any dimension of the MBI (EE, DP, or PA), 977 pharmacists (68.56%) had professional burnout. Additional results found in **Table 2**.

Table 2. MBI Results by Dimension

MBI Dimension	Number and percent of responses (n=1718)		
	High	**Med**	**Low**
Emotional Exhaustion	921 (53.6%)	247 (14.4%)	550 (32%)
Depersonalization	613 (35.7%)	378 (22%)	727 (42.3%)
Personal Accomplishment (scored in reverse)	641 (37.3%)	431 (35.1%)	646 (37.6%)

Based on the AWS, the dimensions of workload (2.2) and control (2) had the lowest scores, which could contribute or lead to workplace stress. The other dimensions also were associated with workplace stress; reward (3), community (3.6), fairness (2.8), and values (3.5).

When asked to self-identify their top 3 workplace stressors, respondents primarily described stressors that aligned with the

Workload, Control, and Reward dimensions of the AWS. Common responses within these domains related to pharmacy staffing, productivity and performance metrics, Pharmacy Benefit Manager (PBM) reform and reimbursement, and lack of perceived appreciation from coworkers/supervisors. Respondents answered with open-ended text, and examples of each dimension of stress (**Table 3**).

Table 3. – Self-Identified Stressors by AWS Dimension

Dimension	Number and percent of responses	Examples
Workload	873 (36%)	"short staffed"; "meetings"; "busy work"
Control	798 (32.9%)	"change"; "goals"; "metrics"; "reimbursement"
Reward	522 (21.6%)	"recognition"; "appreciation"
Community	150 (6.2%)	"communication"; "colleagues"
Fairness	51 (2.1%)	"distribution of workload"; "accountability"
Values	28 (1.6%)	"lack of congruence/alignment with organization values"
N=2422 (response to this question was optional, and respondents were not limited to one item/stressor)		

Respondents were asked what strategies they have used to cope with stress within the past 30 days. The most common coping mechanism was self-care (i.e. physical activity, healthy sleep, and time for hobbies), followed by integrative medicine

techniques (i.e. meditation and deep breathing). While less common, there were negative coping strategies reported such as alcohol and substance use (6%). A wide variety of strategies were reported in the open-ended responses (**Table 4**).

Table 4. – Self-Identified Coping Mechanisms

Theme	Number and percent of responses	Examples
Self-Care	372 (28.4%)	physical activity, sleep, healthy diet, hobbies
Integrative Medicine	231 (17.6%)	meditation, deep breathing, prayer, spirituality
Personal Time	200 (15.3%)	time off, lunch breaks, separation from work
Support	161 (12.3%)	family, friends, counselor
Time Management	85 (6.5%)	delegation
Substance Use	78 (6%)	alcohol, binge eating, tobacco use
Working off the clock	27 (2.1%)	coming in early, staying late, working on days off
Medications	15 (1.1%)	pharmacotherapy
None	141 (10.8%)	N/A
N=1310 (response to this question was optional, and respondents were not limited to one item/stressor)		

Then respondents were asked what strategies or initiatives from their employer would be beneficial. The majority of responses were related to staffing and workload. As such, the most common strategies recommended by respondents in open-ended text responses were also related to staffing and

workload. Some examples included increase amount of technician time, more pharmacist overlap in shifts, and decreased emphasis on productivity metrics such as number of MTMs provided (**Table 5**).

Table 5. – Self-Identified Desired Response from Organization/Employer

Theme	Number and percent of responses	Examples
Staffing	659 (50.2%)	adequate staffing, less meetings, less/no metrics, technology support
Culture of Well-Being	226 (17.2%)	time off/breaks, employee assistance program, feeling valued, calming space/environment
Coaching	206 (15.7%)	teamwork, attitudes, training, resources
Finance	86 (6.5%)	paid time off, wage increases, work from home, HR benefits
Communication	34 (2.6%)	clear communications, "check-ins" from supervisors
Accountability	29 (2.2%)	keeping other accountable, consequences for actions
Security	3 (0.2%)	alarm, security guard
N=1314 (response to this question was optional, and respondents were not limited to one item/stressor)		

Discussion

Before discussing the results of this study, it is important to note that these results were collected prior to the COVID-19 pandemic. It would be anticipated that the burnout and workplace stress is further exacerbated now that there has been increasing workload, provision of clinical services, and staffing shortages in community-based practice.[22] In addition to burnout prevalence data, this study explores existing coping strategies used and opportunities for organizations to promote CBPP well-being. In our current practice climate, it is essential that not only individuals, but organizations, systematically approach well-being for the health and safety of not only their pharmacists but for patients as well.

The results of this study describe the significant prevalence of burnout and workplace stress in community-based pharmacist practitioners. The majority of respondents are experiencing burnout and significant workplace stress. Using the AWS terminology, these stressors are primarily reported as the workload (e.g. lack of adequate staffing), control (e.g. performance metrics and reimbursement), and reward (e.g. appreciation) dimensions of workplace stress.

In line with the methodology of other studies assessing burnout, our study data utilized high-risk results in either the EE or DP dimensions to represent burnout. In a study that assessed clinical validity of the MBI, they demonstrated that those experiencing symptoms of burnout and seeking treatment had notable scores in the EE and DP dimensions, whereas those in both the burned out and non-burned out groups could have notable scores in the PA dimension.[23] Because of this, we only used EE and DP in the evaluation of participants experiencing burnout. Based on the results of this survey, 67% of Ohio community-based pharmacist practitioners are experiencing burnout. When compared to colleagues in medicine, this rate is comparable if not slightly higher.[24] Rates in physicians and physician trainees are estimated at 50%.[24] When considering comparator rates in a health-system setting, over two-thirds of pharmacists and pharmacy residents (69.7%) reported

experiencing emotional exhaustion.[24] The results of this survey were pre-COVID-19 pandemic. Healthcare workers, including pharmacists, have endured additional workplace stress and burnout during the pandemic that this study did not assess.[25, 26, 27]

According to the Areas of Worklife Survey, respondents in this survey experienced stress/incongruence in all six dimensions of stress. The most incongruent were workload and control, which align with the responses included in the thematic analysis. Both the validated survey tool (AWS) and self-reported stressors (open-ended responses) are congruent that the primary contributors to workplace stress in community-based pharmacy practice as workload (e.g. staffing), control (e.g. performance metrics and reimbursement), and reward (e.g. appreciation). In this survey, respondents were asked to self-identify stressors. Many respondents included topics such as staffing, volume of work, and meeting goals or metrics. This study was completed pre-pandemic, and we would expect to see higher rates of stress and burnout if this survey were repeated in the current environment.[28]

Community-based pharmacist practitioners utilize a variety of coping strategies, most notably self-care. This is not surprising as self-care is a common, non-pharmacologic counseling recommendation pharmacists may provide to patients. Some of the described strategies included healthy diet, physical activity, sufficient sleep, and engaging with existing or new hobbies. While many reported various coping mechanisms, it is concerning to note that 10.8% of respondents reported no individual coping strategies. With burnout prevalent in CBPPs, it is important for not only individuals to have established coping strategies, but for organizations to promote the development and inclusion of well-being promotion activities and policies to prevent chronic stress and burnout.[25,29] Studies in medical students have shown that engagement with self-care activities decrease perceived stress.[23] While self-care is the most commonly reported coping strategy, there are also many community-based pharmacists that report having no coping

strategies. As such, it is reasonable to consider the promotion of regular self-care could enhance pharmacist well-being, while both decreasing and preventing stress.

One of the unique outcomes of this survey was the ability to address organizational responses to address burnout and workplace stress in community-based pharmacy practice. Most of the previous literature is focused on the symptoms and strategies of the individual. The results of this survey, as well as other studies[31], propose that an organizational approach is needed to address the root-cause workplace stressors.

Considering the survey responses of what organizations/employers could do to promote resilience, it is evident that community-based pharmacists would like organizations to address staffing. Some of these recommendations included increased technician staffing hours, improved technician training/efficacy, and shorter shifts with pharmacist overlap. Recognizing that each pharmacy is a business that does not have infinite personnel or financial resources, leaders need to be creative in addressing these concerns. For example, it may not be possible to hire an additional pharmacist to provide overlap coverage, but is it possible to adjust schedules so that the pharmacist has sufficient support staff during high volume times. While there may be limitations on length of shift, or hours worked per pay period, is it possible to provide technology support and resources for pharmacists and support personnel to decrease technical workload burden. Aside from addressing staffing, other suggested strategies were related to culture and coaching such as, promotion of time off/breaks, appreciation by colleagues/supervisors, and training and resources for ongoing development. These strategies, and many others, can be used to address staffing concerns and promote resilience. These solutions must be customized to the individual needs of the practice site, and leaders should consider implementation of both short- and long-term solutions.

While this study was completed pre-COVID-19 pandemic, these recommendations may be even more relevant in today's practice environment. Working conditions have been highlighted by pharmacists across the country in the "#pizzaisnotworking" social media campaign.[32] Through social media campaigns such as this, pharmacists have begun to become more vocal surrounding concerns of not only the well-being of pharmacy staff but also of patients. The recommendations from this study may support organizations looking to address organizational change in working conditions for community-based pharmacists.

Limitations
This survey was shared with all pharmacists licensed in the State of Ohio. Only those whom self-identified as current community-based practitioners in Ohio were likely to open the link based on the request for participation, this is likely a primary contributor to the lower response rate. Due to the anonymous nature of responses, it is not possible to account for the demographics of non-respondents. As the survey respondents self-selected to participate, it could be considered that only those experiencing workplace stress or burnout completed the survey.

In addition, this data was collected prior to the COVID-19 pandemic. As such, this data may not be representative of current workplace stress or applicable to other practice settings, or states with different pressures in community-based practice.

The survey was lengthy, at 59 questions in length. The length of this survey may have limited some participants from completing in its entirety.

Conclusion
Burnout and workplace stress are multifactorial issues, and it is anticipated that this has been exacerbated since the findings of this survey by the COVID-19 pandemic. This study allowed insight into workplace stressors in community-based pharmacy practice and potential opportunities organizations can employ to improve pharmacist well-being. Organizations may find this data useful in the development of programs and policies to promote pharmacist well-being. Future studies are needed to assess the efficacy of these interventions.

The opinions expressed in this paper are those of the authors.

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