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Stratification of burnout in health-system pharmacists during the COVID-19 pandemic: A focus on the ambulatory care pharmacist

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Abstract

Introduction: Burnout is defined as high emotional exhaustion and depersonalization, and low personal accomplishment from work. Prevalence of burnout among health-system and ambulatory care pharmacists is unknown during the COVID-19 pandemic.

Objectives: The purpose of this research is to analyze burnout prevalence among health-system pharmacists (HSPs) and ambulatory care pharmacists (ACPs) using the Oldenburg Burnout Inventory and Maslach Burnout Inventory.

Methods: An electronic survey was sent to HSPs at two academic health systems in Chicago, IL. Demographics, risk of burnout based on two validated assessments (the Oldenburg Burnout Inventory [OLBI] and the Maslach Burnout Inventory [MBI]), burnout contributors, burnout mitigation strategies, and change in burnout due to COVID-19 were collected. Burnout was defined as meeting any one criterion for high burnout on the following dimensions: exhaustion score and disengagement on the OLBI, and emotional exhaustion and depersonalization on the MBI. The co-primary outcomes were the prevalence of burnout among HSPs, and the comparison of ACP burnout to that of non-ambulatory HSPs. Secondary outcomes were comparison of burnout between the OLBI and MBI assessments, conceptualization of the causes and contributors of burnout and mitigation strategies among HSPs, and the self-perceived effect of COVID-19 on burnout severity.

Results: Of the 113 pharmacists included in the study, HSP burnout prevalence as defined above was 87.6%, ACP burnout was 88.4%, and non-ambulatory HSP burnout was 87.1%. There was no statistical difference between ACP and non-ambulatory HSP burnout prevalence, either overall or in any specific burnout dimension. The OLBI and MBI captured similar rates of burnout. The commonly reported burnout causes were staffing and scheduling issues, precepting requirements, and patient needs. Participants' most reported coping strategies were spending time with family/

friends, sleep, exercise, and recreational/relaxation activities. A majority of HSPs (78.2%) reported higher levels of burnout due to COVID-19.

Conclusion: HSP burnout during COVID-19 pandemic is higher than cited in the pre-COVID literature. Individual coping strategies are poor buffers for work-related burnout.

KEYWORDS
ambulatory care, burnout, COVID-19, pharmacists, professional

1 | INTRODUCTION

Burnout is a syndrome defined as a high degree of emotional exhaustion and depersonalization, and a low sense of personal accomplishment from work.[1] Prior to 2020, burnout prevalence among health professionals was high, cited at approximately 50% for physicians and pharmacists and 40% for nurses.[2,3] Contributing factors to health professional burnout include working in a high-stakes environment, inefficient work processes (such as cumbersome documentation requirements), high work load, poor work-life balance, and staffing inadequacy. Younger practitioners and female gender are also associated with higher burnout risk.[2-4] While health professional burnout understandably increases the risk of depression, alcohol dependence, suicidal ideation, and loss of productivity, it is also correlated with medical errors, patient harm, frayed interpersonal teamwork, reduced patient satisfaction, and reduced healthcare access.[2]

Although burnout among pharmacists has been an increasing research interest in the past decade, little is still known about the full scope of pharmacist burnout. In 2020, a systematic review highlighted the prevalence of pharmacist burnout ranging from 19% to ~33%, which is lower than previously cited. However, many of the included studies only included health-system pharmacists (HSPs). The authors summarized the following remaining gaps in knowledge: lack of evidence on the impact of mitigation strategies for pharmacist burnout, lack of clarity of validated burnout assessments, and the inability to stratify burnout based on pharmacist practice area.[3]

Pharmacists working in an ambulatory care setting may have burnout rates that differ from other practice settings. Ambulatory care pharmacists (ACPs) provide comprehensive medication management to patients through the institution and community-based clinics. ACPs often work under collaborative practice agreements, evaluating patients independently, starting or adjusting medications, and ordering and interpreting labs. In supporting patients and providers, ambulatory care practice mirrors that of physicians and advanced practitioners.[5] Burnout of ambulatory care pharmacists may mimic that of physicians.

Given the gaps in knowledge on pharmacist burnout, we sought to evaluate the level of burnout of all HSPs, with a specific comparison between ACPs and non-ambulatory HSPs. We also sought to compare the rates of burnout as captured by two validated burnout assessments: Oldenburg Burnout Inventory (OLBI) and Maslach Burnout Inventory (MBI). This work was funded by the American College of Clinical Pharmacy (ACCP) Ambulatory Care Practice and Research Network (PRN) Innovations Grant prior to Coronavirus Disease 2019 (COVID-19) pandemic. Once the COVID-19 pandemic reached the United States, the research was re-conceptualized to capture COVID-19-related burnout. The purpose of this research was to assess the prevalence of burnout among all HSPs, compare non-ambulatory HSP burnout to ACP burnout, and utilize and compare two validated burnout assessments.

2 | METHODS

The co-primary outcomes were the prevalence of burnout among HSPs, and the comparison of ACP burnout to that of non-ambulatory HSPs. Secondary outcomes were the comparison of burnout results between the OLBI and MBI assessments, conceptualization of the causes and contributors of burnout and mitigation strategies among HSPs, and the self-perceived effect of COVID-19 on burnout severity. This is an Institutional Review Board (IRB)-approved, cross-sectional cohort study conducted among two academic health systems (University of Illinois Hospital and Health Sciences System [UI Health] and Rush University Medical Center) in Chicago, IL. Target participants were self-identified HSPs working in direct patient care locations: centralized/decentralized drug verification and dispensing, decentralized clinical care such as internal medicine or critical care, outpatient ambulatory care, or drug information. Pharmacists were recruited via health-system inpatient and outpatient pharmacist email listservs in June 2021 through coordination with the Department of Pharmacy's clinical coordinator and/or director for both sites. Pharmacists who stated they primarily worked in specialty pharmacy, managed care, or community settings were excluded. Participants completed an electronic survey developed in Qualtrics (Provo, Utah) software. Email survey reminders were sent to non-responders weekly for a total of 4 weeks. To improve the response rate, participants were entered into a raffle to win one of ten $25 Amazon gift cards upon completion of survey.

2.1 | Data collection and scoring

The electronic survey collected demographic information before routing participants to validated burnout assessments: the OLBI followed

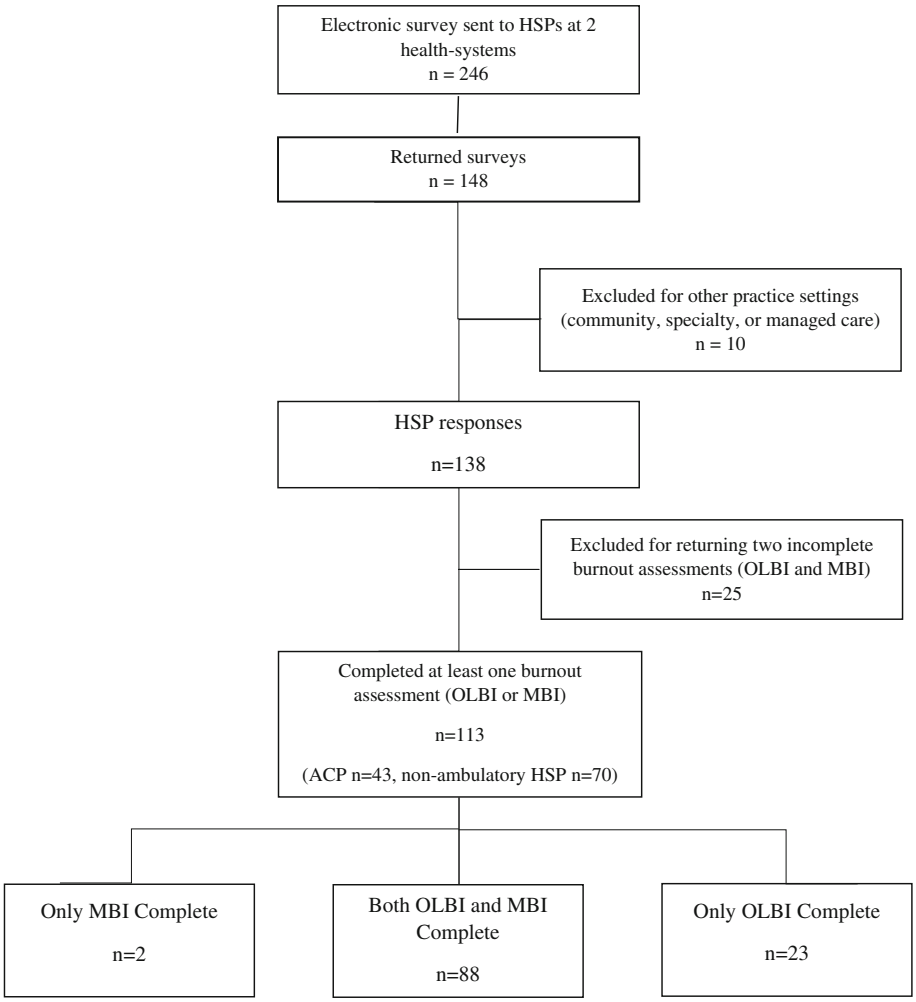

FIGURE 1 HSP survey response and completion rate

by the MBI Human Services Survey (HSS). An HSP participant needed to complete one burnout assessment (either OLBI or MBI) to be included in the full analysis. Upon completion of the assessments, participants were asked about causes of burnout, methods for coping with burnout, and the self-perceived effect of the COVID-19 pandemic on their level of burnout. The self-perceived effect of COVID-19 burnout was asked using a Likert-type scale (−3 less burned out, 0 neither more nor less burned out, 3 more burned out), with all responses >0 defined as an increase in burnout. The OLBI is in the public domain and available in Appendix S1[6]; the MBI is a proprietary instrument and was purchased from Mind Garden, Inc. for use in this research.[7]

The OLBI is a 16-item burnout assessment that measures two dimensions: disengagement and exhaustion. It uses positively and negatively phrased items with a 4-item Likert-type scale (ie, strongly agree, agree, disagree, strongly disagree). It is scored by assigning each item a numerical value between 1 and 4 (negatively phrased responses are reverse scored), and averaging each item in the disengagement and exhaustion dimensions.[6,8] The MBI-HSS is a 22-item burnout assessment that measures three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. Participants respond to phrases on a 7-item Likert-type scale describing the frequency of feelings (0 = never, 6 = everyday). Scoring is completed by summing each dimension and is commonly presented in healthcare literature as sums. As an example, the emotional exhaustion dimension consists of nine items; participants' score could range 0 to 54.[7]

Great variability in the literature exists when describing numerical thresholds for those meeting burnout criteria. Our definitions of burnout align with thresholds most commonly cited in the healthcare literature. For the OLBI, our criteria for meeting burnout are defined as an average exhaustion score ≥ 2.25 and/or disengagement ≥2.1.[9] For the MBI, our criteria for burnout are defined by an emotional exhaustion score of ≥27 and/or depersonalization ≥10.[7,10] Historically, the personal achievement score is not taken into account when assessing the risk of burnout; therefore, we did not include it in our definition.[4,6,10-12]

2.2 | Outcomes and statistical analysis

The primary outcomes of this research are the prevalence of burnout among HSPs and the comparison between the ACPs and non-ambulatory HSP groups. Secondary outcomes included a comparison between OLBI and MBI rates of burnout, perceived causes of burnout

TABLE 1 Participant demographics

Demographic characteristics	Entire cohort	HSP/non-ACPs	ACPs	Any burnout (All HSPs)
Gender	n = 112[a]	n = 70[a]	n = 42[a]	n = 98
Female	84 (75.0)	49 (70.0)	35 (83.3)	76 (77.6)
Male	28 (25.0)	21 (30.0)	7 (16.7)	22 (22.4)
Ethnicity	n = 108[a]	n = 70[a]	n = 38[a]	n = 96
Black/African American	5 (4.6)	1 (1.4)	4 (10.5)	5 (5.2)
Hispanic/Latino	3 (2.8)	0	3 (7.9)	2 (2.1)
Asian	38 (35.2)	27 (38.6)	11 (28.9)	33 (34.4)
White/Caucasian	62 (57.4)	42 (60.0)	20 (52.6)	56 (58.3)
Marital status	n = 109[a]	n = 69[a]	n = 40[a]	n = 97
Single, never married	35 (32.1)	27 (39.1)	8 (20.0)	34 (35.1)
Married/domestic partnership	71 (65.1)	40 (58.0)	31 (77.5)	60 (61.9)
Divorced	3 (2.8)	2 (2.9))	1 (2.5)	3 (3.1)
Household income	n = 109[a]	n = 68[a]	n = 41[a]	n = 96
20 000-49 000	3 (2.8)	3 (4.4)	0	2 (2.1)
50 000-79 000	1 (0.9)	1 (1.5)	0	1 (1.0)
100 000-119 000	21 (19.3)	14 (20.6)	7 (17.1)	19 (19.8)
120 000-149 000	25 (22.9)	15 (22.1)	10 (24.4)	23 (24.0)
150 000-199 000	16 (14.7)	7 (10.3)	9 (22.0)	14 (14.6)
200 000 or greater	43 (39.4)	28 (41.2)	15 (36.6)	37 (38.5)
Practice environment	n = 113[a]			n = 99
Health system	70 (61.9)	70 (61.9)	---	61 (61.6)
Ambulatory care	43 (38.1)	---	43 (38.1)	38 (38.4)
Degrees	n = 113[a]	n = 70[a]	n = 43[a]	n = 99
Bachelors, n = 109	35 (32.1)	24 (34.3)	11 (25.6)	30 (30.3)
Masters, n = 110	2 (1.8)	1 (1.4)	1 (2.3)	2 (2.0)
PharmD, n = 113	110 (97.3)	68 (97.1)	42 (97.7)	97 (98.0)
Other doctorate, n = 113	3 (2.7)	3 (4.3)	0	3 (3.0)
Additional training	n = 113[a]	n = 70[a]	n = 43[a]	n = 99
PGY1	39 (34.5)	22 (31.4)	17 (39.5)	37 (37.4)
PGY2	19 (17.7)	12 (17.1)	7 (16.3)	18 (18.2)
Area of specialization	N = 18[b]	n = 11[b]	n = 7[b]	n = 17
Internal medicine	1 (5.6)	0	1 (14.3)	1 (5.9)
Cardiology	2 (11.1)	2 (18.2)	0	2 (11.8)
Hematology/oncology	4 (22.2)	2 (18.2)	2 (28.6)	4 (23.5)
Transplant	2 (11.1)	2 (18.2)	0	2 (11.8)
Critical care	2 (11.1)	2 (18.2)	0	2 (11.8)
Emergency medicine	2 (11.1)	2 (18.2)	0	2 (11.8)
Ambulatory care	4 (22.2)	0	4 (57.1)	3 (17.6)
Infectious disease	1 (5.6)	1 (9.1)	0	1 (5.9)

Abbreviations: ACP, ambulatory care pharmacists; HSP, health-system pharmacists.
[a]Not all respondents answered all questions.
[b]PGY2 trained respondents.

symptoms, reported mitigation strategies, and the self-perceived impact of the COVID-19 pandemic on burnout. Pharmacists were considered meeting the criteria for burnout if they met or exceeded the threshold burnout score in at least one dimension of either the MBI or OLBI assessment.

Demographic information and the prevalence of burnout among HSPs were summarized with descriptive statistics. A comparison of burnout prevalence between ACPs and non-ambulatory HSPs was analyzed using the chi-square test. Burnout scores within each dimension were compared between ACPs and non-ambulatory HSPs using

TABLE 2 Burnout prevalence and scores based on OLBI and MBI dimensions

		Total n = 113	Non-ambulatory HSPs n = 70	ACPs n = 43	*P*-value*
OLBI	Disengagement (threshold ≥2.25)				
	Prevalence, n (%)	78 (69%)	51 (72.9%)	27 (62.8%)	
	Mean score (±SD)	2.3 ± 0.6	2.4 ± 0.6	2.3 ± 0.5	0.26
	Exhaustion (threshold ≥2.1)				
	Prevalence, n (%)	87 (77%)	51 (72.9%)	36 (83.1%)	
	Mean score (±SD)	2.6 ± 0.5	2.6 ± 0.6	2.7 ± 0.5	0.15
MBI	Emotional Exhaustion (Threshold ≥27)				
	Prevalence, n (%)	72 (63.7%)	42 (60.0%)	30 (69.8%)	
	Mean score (±SD)	37.6 ± 12.7	37.2 ± 13.7	38.3 ± 11.1	0.29
	Depersonalization (Threshold ≥10)				
	Prevalence, n (%)	60 (53.1%)	40 (57.1%)	20 (46.5%)	
	Mean score (±SD)	14.1 ± 7.1	15 ± 7.2	12.7 ± 6.8	0.12
Any burnout					
	Prevalence, n (%)	99 (87.6%)	61 (87.1%)	38 (88.4%)	0.85

Abbreviations: ACP, ambulatory care pharmacists; HSP, health-system pharmacists; MBI, Maslach Burnout Inventory; OLBI, Oldenburg Burnout Inventory.
*Student *t*-test.

Student *t*-tests for parametric data and Mann-Whitney *U* tests for non-parametric data. The McNemar's test was used to compare burnout prevalence between the two assessments, with the MBI as the reference assessment. All statistical analyses were conducted using SPSS v.27.0 (IBM Corp., Armonk, New York).

3 | RESULTS

Survey response and completion rates are shown in Figure 1. Of the 246 HSPs who received the survey, 148 (60%) surveys were submitted. Of the submitted surveys, 113 (46% of those who received the survey) met inclusion criteria (either the OLBI or MBI completed). Participant demographics are shown in Table 1. Most participants were female, White, and held a Doctor of Pharmacy degree. Slightly more than half (52.2%) reported completing residency training.

Table 2 shows burnout results based on the OLBI and MBI. For the primary outcome, total HSP burnout was 87.6%. ACP burnout prevalence was 88.4% with non-ambulatory HSP burnout prevalence at 87.1% ($P = .55$). There were no significant differences in either overall burnout rates or burnout in specific dimensions between ACPs and non-ambulatory HSPs. With regards to specific dimensions, for the OLBI, 78 (69%) and 87 (77%) participants were at risk of burnout in the disengagement and exhaustion dimensions, respectively. For the MBI, 72 (63.7%) and 60 (53.7%) of participants were at risk in the emotional exhaustion and depersonalization dimensions, respectively. Of the 88 participants who completed both the OLBI and MBI, comparison of the two assessment scales did not meet significance, indicating that the OLBI results were not statistically different from the MBI (Table 3, $P = .73$).

Perceived causes and contributors of burnout are shown in Table 4. The most commonly reported causes were staffing and scheduling issues, precepting requirements, and patient needs. There were no statistical differences between burned-out pharmacists and those who did not meet the burnout criteria. Table 5 lists burnout coping strategies. Participants' most reported strategies were spending time with family/friends (63.7%), sleep (49.6%), exercise (47.8%), and recreational/relaxation activities (45.1%). Coping strategies were similar between those who met burnout criteria vs those who did not.

Regardless of the current burnout level, 78.2% of HSPs reported their burnout levels have increased due to the COVID-19 pandemic (Figure 2). Of those who met burnout criteria based on the OLBI or MBI, 80.1% reported increases due to the pandemic.

4 | DISCUSSION

To our knowledge, this is the first study exploring burnout among HSPs during the COVID-19 pandemic using two validated burnout assessments, and the first to analyze ACPs as its own cohort. Our results indicate a staggering majority of HSPs meet the criteria for high burnout (87.6%). While we hypothesized that burnout prevalence among ACPs would differ from that of other HSPs, potentially reflecting that of physician burnout, there was no difference between prevalence of ACP and non-ambulatory HSP burnout. Due to the low numbers of pharmacists who did not meet the burnout criteria, no further statistical analyses could be made to explore burnout differences between ACPs and non-ambulatory HSPs.

In March 2020, burnout among health professionals intensified due to the COVID-19 pandemic. Abrupt changes to system workflow,

TABLE 3 Comparison between burnout results on the OLBI and MBI assessments (n = 88)

		OLBI Assessment		
		Yes, met burnout criteria	No, did not meet burnout criteria	*P*-value*
MBI Assessment	Yes, met burnout criteria	70	5	0.73
	No, did not meet burnout criteria	3	10	

*McNemar's test.

TABLE 4 Pharmacist reported causes and contributors to burnout*

	Entire cohort (n = 113), n (%)	Any burnout (n = 99), n(%)
Lack of staff	59 (52.2)	57 (57.6)
Precepting	44 (38.9)	41 (41.4)
Patient demands	43 (38.1)	40 (40.4)
No schedule flexibility	42 (37.2)	41 (41.4)
Physician demands	31 (27.4)	30 (30.3)
Hostile work environment	25 (22.1)	25 (25.3)
Insurance demands	24 (21.2)	22 (22.2)
High prescription volume	22 (19.5)	21 (21.2)
Corporate demands	20 (17.7)	20 (20.2)
Personal safety concerns	9 (8.0)	8 (8.1)

**P*-values > .05 for all comparisons.

TABLE 5 Pharmacist strategies for coping with burnout stratified by burnout level*

	Any burnout n = 99 n (%)	No burnout n = 14 n (%)
Spending time with family/friends	62 (62.6)	10 (71.4)
Sleep	49 (49.5)	7 (50.0)
Exercise	46 (46.5)	8 (57.1)
Recreational/relaxation activities	45 (45.5)	6 (42.9)
Talking about it/formal debriefing	38 (38.4)	6 (42.9)
Alcohol	19 (19.2)	1 (7.1)
Spiritual methods (prayer, house of worship)	16 (16.2)	2 (14.3)
Meditation/mindfulness techniques	14 (14.1)	2 (14.3)
Discussing concerns with a mentor	12 (12.1)	3 (21.4)
Change of employment	9 (9.1)	2 (14.3)
Formal counseling/therapy	8 (8.1)	0
Other	7 (7.1)	0
Prescription drugs (anxiolytics, antidepressants)	4 (4.0)	0

**P*-values > .05 for comparisons.

isolation, fear of disease, and the impact of illness and death combined with loss of support systems (social distancing requirements, travel restrictions, lack of childcare) resulted in an extremely strained health professional workforce. For pharmacists, including HSPs, COVID-19 testing and vaccine preparation and administration have become full-time requirements, in addition to high hospital censuses and prescription volume.[13,14] By the end of 2020, a survey of 1119 healthcare workers demonstrated a staggering amount (76%) reporting burnout and exhaustion.[15] The survey notably lacked a pharmacist-specific breakdown.

Studies among US pharmacists early in the pandemic indicate potentially higher burnout rates among HSPs than prior to COVID-19. For instance, in 2018 a study published by Durham and colleagues reported that 53.2% of 329 HSPs met burnout criteria on at least one of the MBI dimensions, driven by 36.5% with high MBI emotional exhaustion scores and 20.1% with high depersonalization scores.[12] Comparatively, Jones and colleagues surveyed 484 HSPs in April/May 2020 and assessed burnout using the Professional Quality of Life Scale (ProQOL). The results showed that 65.3% of pharmacists had a moderate or high likelihood of burnout.[14] Similarly, Smith and colleagues evaluated critical care pharmacist burnout using the MBI-HSS (Medical Personnel) in May 2020 and found that 60% (128 of 211 respondents) met burnout criteria based on high emotional exhaustion and depersonalization scores.[16] Our burnout results are higher than other pharmacist literature reports to date. The reasons for this could be 2fold. First, our criteria for burnout were meeting the threshold of any dimension of two separate burnout assessments, the OLBI and the MBI. The OLBI has a broader definition of burnout risk and may capture more pharmacists. Second, the timing of our survey was different. The pandemic had been ongoing for more than 1 year, and the longevity of pandemic stress may have manifested in higher burnout levels. Our results mimic reports of burnout among other health professionals months into the COVID-19 pandemic.[15] This study highlights that the pharmacist workforce, like other health professions, is strained to an alarming level.

This is also, to our knowledge, the first research utilizing and comparing two validated burnout risk assessments for HSPs. While the MBI is considered the gold standard for assessing professional burnout risk, it was developed as a research tool and thus has limitations.[17] The MBI measures emotional exhaustion, depersonalization, and personal accomplishment with the former two being measured using negatively worded items. On the other hand, the OLBI uses both negatively and positively phrased statements to assess two facets of burnout risk - exhaustion and disengagement.[6,17] In doing so, the OLBI may be more effective in measuring the opposite end of the spectrum of burnout—vigor and engagement.[17] The OLBI is an open-access tool available for use at no cost, while the MBI is a licensed

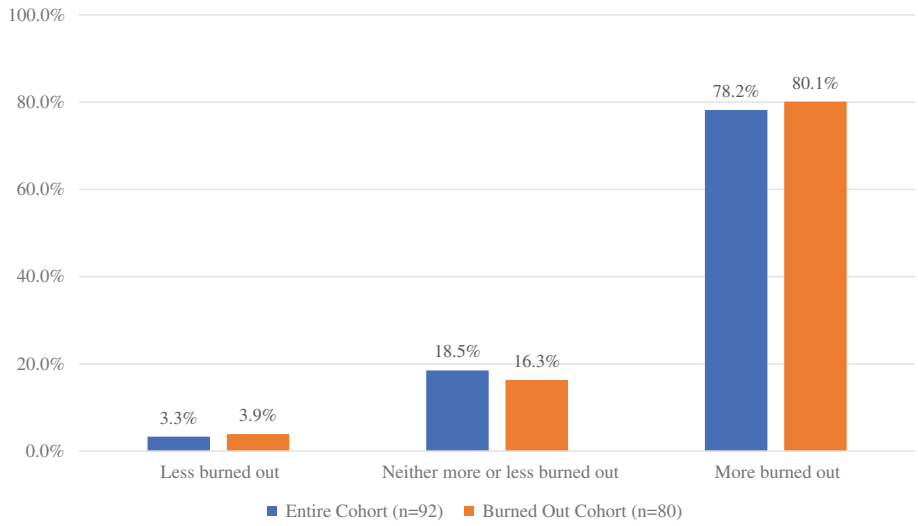

FIGURE 2 Self-reported change in burnout due to COVID-19 pandemic among health system pharmacists

tool. Our results show the OLBI exhaustion and MBI emotional exhaustion dimension results differ numerically (77% and 63.7% of respondents meeting criteria for burnout based on these dimensions, respectively). This may be expected given each dimension's definition (OLBI exhaustion: "consequence of intense physical, affective, and cognitive strain"; MBI emotional exhaustion: "being emotionally overextended or exhausted by one's work").[7,17] The OLBI captures both physical and mental exhaustion, whereas the MBI only focuses on mental exhaustion. Similarly, the OLBI disengagement and MBI depersonalization rates were different, with 69% and 53.1% meeting criteria for burnout, respectively. The OLBI defines disengagement as "distancing oneself from one's work in general, work object and work content," and the MBI defines depersonalization as "unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction."[7,17] In the context of burnout, depersonalization is considered to be one part of disengagement.[17] Interestingly, when comparing the two assessments on a dichotomous level—met burnout criteria vs did not meet burnout criteria—as opposed to on each dimension individually, they both captured similar frequencies of those meeting burnout criteria ($P < .73$). Based on our results, although the OLBI dimension definitions may indicate a wider picture of burnout, there was no difference in meeting burnout criteria compared to the MBI. The OLBI could be used as comparable and affordable assessment of burnout among pharmacists.

These results should serve as a call to action for pharmacy leadership to address and mitigate burnout and burnout risk among HSPs. Individual stress-reduction strategies, such as yoga, mindfulness, diet, and exercise are important for individual mental and physical health. However, they have a limited role in reducing burnout because they do not address burnout causes and contributors.[1,18] Our results also enforce this as participants with incongruent burnout prevalence reported similar individual mitigation strategies. Efforts to reduce burnout must come from an organizational level. Shanafelt and Noseworthy published organizational strategies to promote engagement and reduce burnout: (a) acknowledge and assess the problem; (b) harness the power of leadership; (c) develop and implement targeted interventions; (d) cultivate community at work; (e) use rewards and incentives wisely; (f) align values and strengthen culture; (g) promote flexibility and work-life integration; (h) provide resources to promote resilience and self-care; and (i) facilitate and fund organizational science.[1] While these strategies seem straightforward, implementation can be costly and time-consuming. However, the risk of unmitigated burnout amongst most pharmacists should encourage pharmacy leadership to invest in burnout reduction strategies. As an example, King et al. published their process for an organizational intervention to reduce burnout among their leadership team. They developed a taskforce to reduce work overload based on their experiences. Implementing ground rules for checking and responding to emails outside of work hours improved team members' efficiency and reduced perceived stress.[19] Using a similar stepwise approach, institutions can develop an understanding of contributors to burnout and facilitate mitigation strategies within the organization to support pharmacists in an especially difficult period.

There are limitations to our research. Participants were recruited from two institutions in the same city, limiting generalizability to the rest of the United States. As with most survey research, there is likely selection bias on who completed the entire survey and met inclusion criteria. Despite these limitations, the results of this research add to the literature regarding HSP burnout in the time of COVID-19, common stressors, and individual mitigation strategies, and set the foundation for future research in organizational support and prevention.

5 | CONCLUSION

When measuring burnout using the OLBI and MBI, it is estimated that nearly nine out of 10 HSPs are at high risk for burnout. There is no difference between ACP and non-ambulatory HSP burnout results. The majority of HSPs responded that the COVID-19 pandemic negatively impacted burnout levels. It is important that future research in organizational science explores burnout prevention and mitigation strategies.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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