

In an academic medical practice, physician burnout, engagement, and career satisfaction

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Abstract

Background:

Physician burnout is a widespread issue in healthcare, characterized by emotional exhaustion, depersonalization, and reduced professional efficacy, all of which compromise patient care. Research has shown that burnout negatively impacts the quality and safety of care. Conversely, engagement, defined as a positive emotional connection to work, can help reduce burnout's harmful effects. This study explores the relationship between burnout and engagement in a large academic medical practice and how engagement may mitigate the adverse effects of burnout on career satisfaction and retention.

Methods:

Data were obtained from a biennial survey conducted among physicians in an academic faculty practice. The survey assessed burnout, engagement, career satisfaction, and intention to remain in the role. Burnout was measured using the Maslach Burnout Inventory, and engagement was assessed through the Utrecht Work Engagement Scale. Demographic and workplace factors were adjusted for in multivariate models, and statistical analyses were conducted using SAS version 9.4.

Results:

Of the 2,031 physicians invited, 92.66% (1,882) completed the survey. The results indicated that 43.8% of respondents reported low burnout and high engagement, while 30.0% reported high burnout and low engagement. Early-career physicians and primary care physicians were more likely to experience burnout. Greater satisfaction with Continuing Medical Education, manageable workloads, and access to peer support were associated with lower burnout and higher engagement. Additionally, engagement positively influenced career satisfaction and retention, with engaged physicians reporting higher satisfaction and greater intent to remain in their roles, even when experiencing burnout.

Conclusion:

This study highlights the critical role of engagement in combating burnout and enhancing career satisfaction and retention among physicians. Healthcare organizations should focus on promoting engagement by offering opportunities for continuous learning, career fulfillment, and support to help mitigate the negative impacts of burnout.

Introduction

Physician burnout has been extensively discussed in academic literature (1). Maslach and colleagues (2) defined burnout as a condition marked by depersonalization, emotional fatigue, and a diminished sense of personal achievement, leading to reduced professional effectiveness. This combination of symptoms can severely impact individual patient care and has broader consequences for communities reliant on consistent access to high-quality healthcare. Research has shown that burnout adversely affects the quality and safety of care provided (3–8).

Elevated burnout levels among physicians have also been linked to decreased commitment and engagement in their professional roles (9–13). Engagement, often considered the opposite of burnout, reflects a positive connection to work, characterized by enthusiasm, energy, and deep involvement (14). Some researchers advocate for evaluating well-being through the lens of engagement rather than focusing solely on burnout, aiming to identify workplace

factors that can help mitigate the inherent stressors driving burnout (15). Evidence suggests that fostering engagement can protect against burnout, and organizations that invest in engagement-focused initiatives may reduce burnout levels among healthcare providers (14–19).

Traditionally, most studies assessing physician well-being have relied on the Maslach Burnout Inventory (2), while fewer have employed the Utrecht Work Engagement Scale (UWES), a validated tool for assessing workplace engagement, specifically in the physician population (20–22). In a recent institutional survey conducted every two years, burnout rates increased from 41% in 2014 to 45% in 2017. Motivated by this trend, this study utilized a less commonly applied tool to evaluate engagement, aiming to better understand its relationship with burnout and its potential to alleviate burnout's effects in a diverse academic faculty practice. Although the link between burnout and career engagement has been explored in previous research, these studies often involved smaller sample sizes, less diverse academic practices, or less robust engagement measurement tools, along with lower response rates. The current study was designed to address these limitations by employing a validated engagement measurement instrument and achieving a historically high response rate, encompassing multiple clinical specialties. It also aimed to inform leadership priorities based on survey outcomes as part of a broader quality improvement initiative.

Methods

Data were sourced from a biennial survey conducted among physicians within an academic faculty practice. Participation in the survey was incentivized through a financial reward as part of the organization's Quality Incentive Program (23, 24). The survey aimed to assess the performance of the clinical enterprise across departments, evaluate organizational progress on key priorities, and gather feedback on leadership (23, 24). The 2017 iteration focused on four domains: (1) satisfaction with career and compensation, (2) well-being, (3) administrative workload, and (4) leadership and diversity (24).

Outcome Measures

To examine the link between burnout and engagement, the study defined four binary outcomes:

1. **Burnout:** Determined using the Maslach Burnout Inventory-General Service (MBI-GS). Physicians were classified as experiencing burnout if they scored extreme in two out of three subscales: high exhaustion or cynicism and low professional efficacy (2).
2. **Work Engagement:** Measured using the Utrecht Work Engagement Scale. Physicians were categorized as engaged if they scored high on at least two of three subscales: vigor, dedication, and absorption (20).
3. **Career Satisfaction:** Assessed through the question, "How satisfied are you with your career as a physician?" Physicians selecting "very satisfied" or "satisfied" on a five-point Likert scale were considered satisfied (24).
4. **Intention to Remain in Role:** Evaluated through a question on career plans for the next three years. Physicians indicating their intent to stay in their current role were categorized as planning to remain.

An interaction variable was developed based on burnout and engagement outcomes, resulting in four distinct groups: (1) burned out and engaged, (2) burned out and not engaged, (3) not burned out and engaged, and (4) not burned out and not engaged. The reference group included physicians with low burnout and high engagement. This variable was used to explore the overlap between burnout and engagement and to determine how engagement moderates burnout's effect on career satisfaction and intention to remain in the role.

Models were adjusted for demographics (gender, race/ethnicity, career stage), specialty, alignment between career and meaningful activities (<20% of time spent on personally fulfilling activities), and selected work characteristics, including satisfaction with Continuing Medical Education (CME) opportunities, workload, access to trusted advisors, and opportunities to consult peers (25). For career satisfaction and intention to stay models, the burnout-engagement interaction variable and demographic characteristics were also included as covariates.

Univariate comparisons were performed using the Chi-square test, and multivariate logistic regression was employed to identify predictors of the outcome variables. A significance threshold of 0.05 was applied. Statistical analyses were conducted using SAS version 9.4 (SAS Institute Inc., Cary, North Carolina).

Results

Out of 2,031 physicians invited to participate in the survey, 92.66% (n=1,882) completed it. Among the respondents, 40.3% (n=759) were women, 51.1% (n=962) were men, and 8.6% (n=161) chose not to disclose their gender. A majority of respondents (59.4%, n=1,117) were medical specialists, and 43.5% (n=819) had been practicing for 10 years or less (Table 1).

Low burnout combined with high engagement was reported by 43.8% (n=825) of participants. Conversely, high burnout and low engagement were observed in 30.0% (n=565). A subset of 15.6% (n=294) reported experiencing both high burnout and high engagement, while 10.5% (n=198) reported low burnout alongside low engagement.

Univariate analyses revealed significant differences in burnout and engagement levels based on gender, race/ethnicity, and specialty. While career stage was not a predictor of engagement, early-career physicians (≤ 10 years) were more likely to report high burnout levels ($P=0.009$; Table 1).

In multivariate models accounting for demographic and workplace factors, neither gender nor race/ethnicity predicted burnout or engagement. However, early-career physicians had a higher likelihood of reporting burnout ($OR=1.87$, 95% $CI=1.42-2.47$) and lower odds of engagement ($OR=0.70$, 95% $CI=0.53-0.92$). Compared to specialists, primary care physicians (PCPs) were more likely to experience burnout ($OR=1.42$, 95% $CI=1.02-1.97$). Career misfit did not predict burnout but was associated with lower engagement levels ($OR=0.67$, 95% $CI=0.47-0.96$). Greater satisfaction with CME opportunities, the ability to seek peer advice, manageable workloads, and access to a trusted advisor were linked to reduced burnout and higher engagement.

Multivariate regression results examining the combined effect of burnout and engagement on career satisfaction and retention. After adjusting for burnout, engagement was found to enhance both career satisfaction and retention. Physicians with low burnout who were not engaged had significantly lower odds of career satisfaction ($OR=0.20$, 95% $CI=0.11-0.35$) and were less likely to remain in their current role ($OR=0.52$, 95% $CI=0.37-0.73$) compared to their engaged peers.

Similarly, among physicians with high burnout, those who were engaged reported greater career satisfaction ($OR=0.21$, 95% $CI=0.12-0.36$ vs $OR=0.08$, 95% $CI=0.05-0.12$ for non-engaged) and a higher likelihood of staying in their roles ($OR=0.34$, 95% $CI=0.25-0.45$ vs $OR=0.27$, 95% $CI=0.21-0.34$ for non-engaged). This suggests that engagement can mitigate some of the negative effects of burnout on professional fulfillment and retention.

Table 1. Distribution of Respondents by Demographics and Burnout/Engagement Status

Variable	N (%)	Engagement ^a		Burnout ^b	
		Engaged N (%)	P value	Burned-out N (%)	P value
Gender			<0.0001		0.0003
Male	962 (51.1)	612 (63.6)		404 (42.0)	
Female	759 (40.3)	435 (57.3)		362 (47.7)	
Prefer not to say	161 (8.6)	72 (44.7)		93 (57.8)	
Race			0.0013		0.003
Asian	266 (14.1)	163 (61.3)		117 (44.0)	
White	1334 (70.9)	816 (61.2)		587 (44.0)	
Others ^c	282 (15.0)	140 (49.7)		155 (55.0)	
Career Stage			0.229		0.0094
Early (≤ 10 y)	819 (43.5)	546 (57.3)		399 (48.7)	
Middle (11–20 y)	518 (27.5)	315 (60.8)		240 (46.3)	
Late (>20 y)	545 (29.0)	335 (61.5)		220 (40.4)	
Specialty			0.046		<0.001
ERAPS ^d	336 (17.9)	194 (57.7)		138 (41.1)	
Medicine	1117 (59.4)	673 (60.3)		499 (44.7)	
Primary Care	251 (13.3)	134 (53.4)		153 (61.0)	
Surgical	178 (9.5)	118 (66.3)		69 (38.8)	

^a Engaged is defined as scoring high on two of the three engagement scales;

^b Burned-out is defined as score high on two of the three burnout scales;

^c Other race includes: black/African American, American Indian/Native Alaskan, Native Hawaiian/Pacific Islander, and Others. The number of respondents for these groups were small and we combined them into one group for the analysis;

^d ERAPs= emergency medicine, radiology, anesthesia, and pathology

Discussion

While the relationship between burnout and engagement has been widely acknowledged, this study provides valuable new insights into the connection between these factors. Unlike other research that often uses quality of life scales or the mini-Z survey (26–28), this study utilized the Utrecht Work Engagement Scale, which is specifically validated for measuring physician engagement in the workplace. The mini-Z typically focuses on emotional exhaustion as part of burnout, whereas the Utrecht Work Engagement Scale evaluates vigor, dedication, and absorption, providing a more comprehensive measure of career engagement (20–22). This approach allows for a

better understanding of how engagement relates to burnout in the context of medical careers. Additionally, this study is distinct in that it encompasses a diverse academic medical setting, spanning 16 clinical departments, which broadens the scope of experiences captured compared to previous research limited to a single medical specialty.

The survey response rate in this study was exceptionally high at 92%, which is much greater than what is typically seen in this type of research. The large sample size, with 1,882 responses, also sets this study apart. In contrast, the meta-analysis by Panagioti et al. (29), which analyzed 47 studies and 42,473 physicians, reported a median sample size of 243, much smaller than the sample in our study.

Our findings suggest that workplace engagement, an aspect recognized as vital in other professions, is equally important for physicians. We observed that engaged physicians, regardless of their burnout levels, experienced greater career satisfaction and were more likely to remain in their roles. Therefore, fostering engagement may be just as crucial as addressing burnout. Although physicians with low burnout and low engagement fared better than those experiencing high burnout, those with high engagement, even when experiencing burnout, were twice as satisfied with their careers as those with both low burnout and low engagement.

Similar findings have been reported in other studies. Panagioti et al. (29) noted that burnout is linked to diminished professionalism, particularly among residents and early-career physicians. In this study, early-career physicians (≤ 10 years) also reported higher levels of burnout ($P=0.009$). This insight presents a significant opportunity for healthcare organizations to better support physicians during the transition from training to full professional practice, a period identified as key for burnout prevention (29–35). As Slavin (30) suggests, healthcare leadership should focus on increasing physician engagement through meaningful professional activities, fostering a sense of purpose and belonging. Physicians should also strive to find meaning in their work to better cope with burnout (30).

The implications of burnout and engagement extend beyond personal job satisfaction. Low professionalism is linked to poorer quality of care (OR, 2.31; 95% CI, 1.87–2.85) and reduced patient satisfaction (OR, 2.28; 95% CI, 1.42–3.68) (29). Our study aligns with this, showing the potential broader effects of burnout and engagement on the quality of care and patient outcomes.

Interestingly, our results show that burnout and engagement do not always function as opposites. If they were, we would expect all respondents to fall into either high-burnout, low-engagement or low-burnout, high-engagement categories. However, we found that a significant portion of respondents (about 25%) did not fit into these anticipated categories. For these individuals, not experiencing burnout did not automatically mean high engagement, and being highly engaged did not necessarily shield them from burnout.

Both burnout and engagement appeared to be influenced by factors such as connectedness, mentorship, and opportunities for ongoing learning. These findings are consistent with other studies on physician burnout and non-physician research on engagement (28–30). While the impact of electronic health records (EHR) and administrative tasks on physician wellbeing has been widely discussed, our results suggest that significant improvements could be achieved by fostering environments where physicians have the time and resources to connect with colleagues and engage in continuous professional development. Programs aimed at reducing burnout and boosting engagement should focus particularly on early-career physicians, who may struggle to find mentorship and learning opportunities, as well as those working across multiple sites, where connectivity with peers may be limited.

Career fit, a concept defined by Shanafelt et al. (25) as having 20% of one's time dedicated to preferred professional activities, has been shown to reduce burnout. In our study, we found that career fit was associated with higher engagement but not with reduced burnout. Career fit is a challenging aspect of a physician's professional life, requiring mentorship, access to opportunities, and resources to allow physicians to explore their specific interests. Allocating 20% of time for these activities might seem like a small investment but could have a substantial impact on physician satisfaction and retention.

The study's main limitation is that it focuses on a single academic center, which may limit the generalizability of the results to other physician groups or practice settings.

Conclusion

This study underscores the importance of addressing both burnout and engagement to maximize career satisfaction and retention. The key lies in fostering connectedness and opportunities for continuous learning. Engagement is driven by having the time to engage in the most fulfilling aspects of one's career, and healthcare organizations must develop initiatives that promote and protect these opportunities for physicians.

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