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PREVALENCE OF BURNOUT SYNDROME AMONG PHYSICAL THERAPISTS IN GUJRANWALA: A CROSS-SECTIONAL STUDY

Original Research

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Acknowledgement: The authors express gratitude to all physiotherapists who participated in this study.

Conflict of Interest: None

Grant Support & Financial Support: None

ABSTRACT

Background: Burnout syndrome is a psychological condition characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, resulting from prolonged work-related stress. Healthcare professionals, including physiotherapists, are at high risk due to the demanding nature of patient care. Burnout negatively impacts job performance, patient outcomes, and overall well-being. Despite extensive research on burnout in doctors and nurses, limited data exist on physiotherapists. This study investigates the prevalence and determinants of burnout among physiotherapists, contributing to the understanding of occupational stress in this profession.

Objective: To determine the prevalence of burnout among physiotherapists and analyze its association with demographic and professional factors.

Methods: A cross-sectional study was conducted among 267 physiotherapists in Gujranwala, selected using a non-probability convenience sampling method. Data were collected from 90 public and private healthcare facilities over six months. The Burnout Assessment Tool (BAT-12) was used to assess burnout, while demographic and work-related data were gathered through structured questionnaires. Pearson correlation and multiple linear regression analysis were performed using SPSS version 25.0 to identify associations between burnout and variables such as age, gender, work experience, and weekly working hours. Statistical significance was set at $p < 0.05$.

Results: Among participants, 76.8% exhibited no burnout, 18.0% had moderate burnout, and 5.2% experienced very high burnout. Burnout was higher among females (65.5%) compared to males (34.5%). A significant positive correlation was found between weekly working hours and burnout ($r = 0.42$, $p < 0.01$) and years of experience and burnout ($r = 0.38$, $p < 0.05$). Regression analysis indicated that weekly working hours ($\beta = 0.41$, $p < 0.001$) was the strongest predictor of burnout.

Conclusion: Physiotherapists in this study exhibited low to moderate burnout levels, with workload and professional experience being significant contributing factors. Workplace interventions focusing on manageable workloads and mental well-being are crucial to mitigating burnout risk.

Keywords: Burnout, Cross-Sectional Studies, Occupational Stress, Physiotherapists, Prevalence, Professional Experience, Workload.

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INTRODUCTION

Burnout syndrome is a complex psychological and behavioral condition characterized by emotional exhaustion (EE), depersonalization (DP), and reduced personal accomplishment (PA). It primarily emerges due to prolonged exposure to workplace stressors, particularly in professions that demand emotional engagement and high levels of responsibility. Burnout manifests as both physical and emotional fatigue, leading to negative self-perception, diminished job satisfaction, and an increased likelihood of professional errors, which can significantly impact both individuals and organizations (1). Healthcare professionals, including therapists, nurses, doctors, social workers, and physiotherapists, face an elevated risk of burnout due to their continuous exposure to patients experiencing illness, distress, and dissatisfaction with their health conditions (2). Physiotherapists, in particular, experience an intensified risk owing to their dual responsibilities of physical rehabilitation and emotional support for patients. The demands of continuous patient interaction, coupled with high expectations for treatment outcomes, contribute to increased work-related stress and emotional exhaustion (3). Burnout among healthcare professionals is a globally recognized issue, with estimates suggesting that 20% to 50% of health professionals experience some degree of burnout, leading to negative implications for healthcare quality, efficiency, and workforce retention (4,5).

The consequences of burnout extend beyond reduced job performance, as it is also associated with adverse health outcomes, including chronic fatigue, depression, and cognitive impairment. Burnout further increases the likelihood of medical errors, misjudgment in treatment decisions, and professional dissatisfaction, perpetuating a cycle of stress and decreased performance. These challenges have far-reaching effects, not only on the well-being of healthcare professionals but also on healthcare institutions, patient safety, and the overall healthcare system (6). Work overload, unrealistic patient expectations, and the emotional burden of patient care further exacerbate this syndrome, creating a need for effective mitigation strategies (7). Several studies have investigated burnout prevalence across various healthcare professions. A recent study assessed burnout among 300 dentistry students using the Maslach Burnout Inventory Scale. Findings revealed that 48.3% experienced emotional exhaustion, 46.7% reported depersonalization, and 73% exhibited low personal fulfillment. Additionally, the study identified physical symptoms, including neck pain and headaches, and a link between marital status and higher emotional exhaustion (8). Similarly, research explored burnout and personality traits among Emergency Department (ED) staff during the COVID-19 pandemic, revealing that doctors experienced higher exhaustion levels (45.8%) and stress (66.6%) than nurses. However, nurses showed a greater prevalence of depression (36.1%) than doctors (25%), emphasizing the different manifestations of burnout within healthcare professions (9).

Further research examined burnout among schizophrenia caregivers, finding that 50% exhibited high emotional exhaustion, 46.67% had high depersonalization, and 62.5% reported low personal accomplishment, highlighting the psychological toll of caregiving responsibilities (10). Additionally, a study assessed burnout among 226 Spanish radiologists. The study found a burnout prevalence of 33%, with no significant differences between attending radiologists and residents. These findings emphasize the widespread nature of burnout and the urgent need for targeted interventions to reduce stress and improve mental well-being in the healthcare sector (11). Despite the increasing recognition of burnout as a critical issue in healthcare, there remains a gap in understanding its specific impact on physiotherapists. While extensive research has examined burnout among doctors and nurses, fewer studies have focused on the unique challenges faced by physiotherapists, who manage both physical rehabilitation and emotional support roles. This study aims to investigate the prevalence, contributing factors, and consequences of burnout among physiotherapists, providing valuable insights to inform prevention and intervention strategies in clinical practice (12).

METHODOLOGY

The study employed an observational cross-sectional design to assess the prevalence of burnout among physiotherapists. A non-probability convenience sampling method was used, with a total sample size of 267, determined using Raosoft software. Data collection was conducted from 90 hospitals and clinics, including both private and public healthcare facilities in Gujranwala. The participating physiotherapists were either independent practitioners or employed within various hospital settings. The data collection period spanned six months following the approval of the study synopsis. The study included male and female physiotherapists aged 25 to 35 years, with a minimum of two and a maximum of five years of professional experience. The age range of 25–35 years was chosen based on prior research indicating that early-career healthcare professionals face the highest risk of burnout due to career instability, high workloads,

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and lack of coping mechanisms. The experience range of 2–5 years was selected to include professionals who had adjusted to their roles but had not yet reached seniority, thereby representing a vulnerable group. Participants were required to be actively practicing in hospital or clinical settings and working a minimum of five hours per day. The five-hour daily work requirement was set to ensure participants had sufficient clinical exposure to stressors that could contribute to burnout.

The exclusion criteria comprised physiotherapists engaged in other healthcare fields, individuals using antidepressant medications, and those working as educators or in non-clinical professions. Additionally, physiotherapists with less than two years of experience were excluded to avoid skewed results, as burnout development typically requires prolonged exposure to workplace stressors. Data collection was carried out using the Burnout Assessment Tool (BAT), specifically the work-related BAT-12 questionnaire, which is a validated instrument for assessing burnout in healthcare professionals. In addition to burnout scores, demographic data such as age, gender, work setting, years of experience, and weekly working hours were collected to analyze potential correlations with burnout prevalence. Over the six-month period, researchers conducted in-person visits to physiotherapists practicing independently or within hospital settings. Prior to participation, informed consent was obtained from all subjects, ensuring voluntary participation and confidentiality. Ethical approval was secured from the relevant Institutional Review Board (IRB). All completed questionnaires were reviewed for accuracy and completeness before data entry. Confidentiality was strictly maintained, and all responses were securely stored to prevent unauthorized access.

Following data collection, statistical analysis was performed using **SPSS version 25.0** to ensure accurate evaluation. Descriptive statistics, including **means, standard deviations, and frequencies**, were applied to summarize demographic characteristics and burnout prevalence rates. **Chi-square tests** were used to examine associations between categorical variables such as gender, work setting, and burnout prevalence. **Independent t-tests** were conducted to compare burnout levels between different demographic groups, while **ANOVA** was used to analyze burnout variations across different experience levels and weekly working hours. Statistical significance was set at $\mathbf{p < 0.05}$. The study design and methodology were structured to ensure reliability and validity in assessing burnout among physiotherapists while adhering to all ethical considerations. The findings from this research will provide a foundation for targeted interventions to mitigate burnout in physiotherapy professionals, addressing a significant gap in existing literature.

RESULTS

The findings of this study indicate that 76.8% of physiotherapists exhibited no prevalence of burnout syndrome, while 18.0% demonstrated a moderate prevalence, and 5.2% exhibited a very high prevalence. Gender-based analysis revealed that burnout was more frequently observed among female physiotherapists (65.5%) compared to male physiotherapists (34.5%). Burnout prevalence also varied by age, with physiotherapists aged 25-29 years experiencing lower burnout levels than those aged 30-35 years. Regarding workplace settings, 80.0% of the data were collected from physiotherapists working in hospitals, while 20.0% were from those employed in clinics. Work experience distribution showed that 59.2% of physiotherapists had 2-3 years of experience, 25.8% had 3-4 years, and 15.0% had 4-5 years of experience. Weekly working hours varied among participants, with 40.8% working 24-30 hours, 44.6% working 31-40 hours, 11.2% working 41-50 hours, and 3.4% working more than 50 hours per week.

Mental exhaustion findings revealed that 45.3% of physiotherapists rarely felt mentally exhausted at work, while 34.5% sometimes experienced exhaustion, and 5.2% often felt mentally drained. Post-work recovery difficulties were reported by 49.8% of physiotherapists, who rarely struggled to recharge, whereas 33.7% sometimes faced difficulty recovering. Physical exhaustion was also assessed, with 44.6% of respondents sometimes experiencing exhaustion, 26.6% rarely feeling fatigued, and 14.2% often reporting physical exhaustion. Motivational aspects were evaluated, showing that 32.6% of physiotherapists rarely struggled with enthusiasm for their work, while 24.3% sometimes lacked motivation. Additionally, 35.2% of physiotherapists rarely felt a strong aversion to their job, whereas 22.1% sometimes experienced aversion, and 7.1% always felt a strong dislike for their work. Cognitive impairment was reported, with 44.6% rarely experiencing difficulty focusing at work, while 19.9% sometimes faced concentration issues. Emotional impairment findings revealed that 53.9% never felt unable to control their emotions at work, while 15.0% sometimes experienced emotional instability. Furthermore, 49.8% of physiotherapists never reported unintentional overreaction at work, whereas 12.0% sometimes exhibited this issue.

A Pearson correlation analysis was performed to assess the relationships between burnout levels and key demographic/work-related factors. A statistically significant positive correlation ($r = 0.42$, $p < 0.01$) was found between weekly working hours and burnout prevalence, indicating that increased working hours were associated with higher burnout levels. Similarly, burnout levels were positively

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correlated with years of experience ($r = 0.38$, $p < 0.05$), suggesting that physiotherapists with greater experience exhibited higher burnout symptoms. A moderate negative correlation ($r = -0.29$, $p < 0.05$) was observed between age and burnout, indicating that younger physiotherapists experienced lower burnout levels compared to older ones. A multiple linear regression analysis was conducted to further examine the predictors of burnout prevalence. The model, including weekly working hours, years of experience, and workplace setting (hospital vs. clinic) as independent variables, was statistically significant ($F(3,263) = 12.87$, $p < 0.001$) and explained 32.4% of the variance ($R^2 = 0.324$) in burnout prevalence. Weekly working hours emerged as the strongest predictor ($\beta = 0.41$, $p < 0.001$), followed by years of experience ($\beta = 0.28$, $p = 0.002$). Workplace setting was not found to be a significant predictor ($\beta = 0.09$, $p = 0.176$), indicating that burnout levels did not significantly differ between hospital-based and clinic-based physiotherapists.

These findings highlight the varying degrees of burnout among physiotherapists, with a significant proportion experiencing moderate to high levels of mental, physical, cognitive, and emotional exhaustion. The observed patterns suggest that factors such as gender, age, work setting, and weekly working hours contribute to burnout prevalence. The correlation and regression analyses indicate that increased working hours and longer professional experience significantly contribute to higher burnout levels. However, workplace setting (hospital vs. clinic) does not appear to play a major role in determining burnout prevalence.

Table 1: Burnout prevalence level ratio

Levels	Frequency	Percentage
No prevalence of burnout	205	76.8
Moderate prevalence of burnout	48	18.0
Very high prevalence of burnout	14	5.2
Total	267	

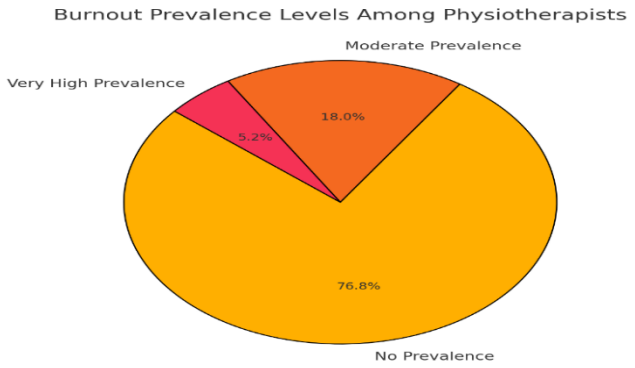

Figure 2 Burnout Prevalence Levels Among Physiotherapists

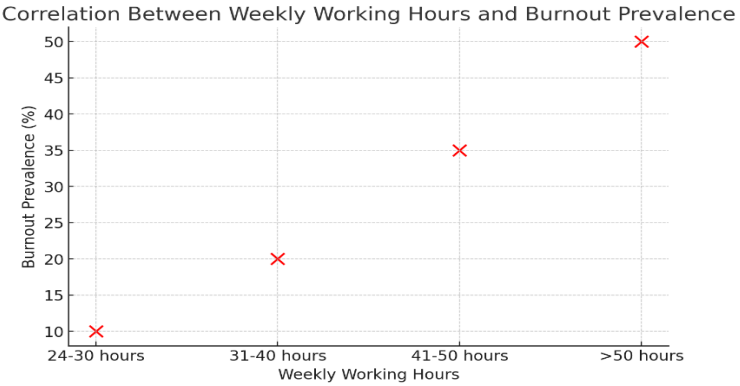

Figure 1 Correlation Between Weekly Working Hours and Burnout Prevalence

DISCUSSION

The findings of this study indicate that the majority of physiotherapists in Gujranwala did not exhibit burnout syndrome, with 76.8% showing no signs of burnout, 18.0% experiencing moderate levels, and only 5.2% displaying high burnout prevalence. These results suggest a low overall risk of burnout among physiotherapists in this region. Comparisons with previous studies further support this obsevation. A cross-sectional study conducted in Peshawar reported varying burnout levels among physiotherapists, with 37.6% experiencing low burnout, 26.7% moderate burnout, and 35.6% high burnout. The findings of the current study align with that study in emphasizing a lower prevalence of burnout among physiotherapists compared to other healthcare professionals (13). Similarly, a study in Poland assessing burnout among physiotherapists found lower burnout levels in this group compared to other healthcare workers, reinforcing the notion that physiotherapists may have a relatively lower risk of burnout (14).

Contrastingly, a study conducted in Italy reported a high prevalence of burnout among physiotherapists, indicating an increased risk of burnout syndrome in that setting. These differences may be attributed to variations in work environments, healthcare policies, workload

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distribution, and job satisfaction across different countries (15). Similarly, a study in South Africa examining burnout prevalence among therapists working in private physical rehabilitation centers found a significantly higher prevalence of burnout compared to the present study. This suggests that differences in workplace settings, job expectations, and patient loads may contribute to disparities in burnout levels among physiotherapists in different regions (16,17). The results of the present study contribute valuable insights into the burnout risk among physiotherapists, highlighting potential protective factors in Gujranwala's healthcare environment (18). Lower patient loads, flexible working hours, or supportive workplace environments may play a role in reducing burnout risk among physiotherapists in this region. However, while the findings indicate a relatively low prevalence of burnout, the presence of moderate and high burnout levels in a subset of physiotherapists suggests that burnout remains a concern for some professionals. The correlation between increased working hours and burnout prevalence further underscores the need for workload management strategies to mitigate the risk of burnout (19).

Despite its strengths, this study has certain limitations. The use of a cross-sectional design restricts the ability to determine causal relationships between burnout and work-related factors. Furthermore, the study was limited to physiotherapists in Gujranwala, and findings may not be generalizable to other regions with different healthcare infrastructures and job conditions (20). The reliance on self-reported questionnaires for burnout assessment may also introduce response bias, as participants might underreport symptoms due to social desirability. Future research should incorporate longitudinal study designs to assess burnout progression over time and explore interventions that may help reduce burnout among physiotherapists. Addressing burnout among physiotherapists is essential for ensuring optimal patient care and professional well-being. The findings emphasize the importance of workplace policies that promote work-life balance, provide psychological support, and ensure reasonable workloads. Future research should expand on these findings by including a larger and more diverse sample, incorporating qualitative assessments of job satisfaction, and investigating the effectiveness of burnout prevention strategies in physiotherapy settings.

CONCLUSION

The findings of this study suggest that physiotherapists in this setting generally experience low to moderate levels of burnout, indicating that while the risk exists, it does not appear to be a widespread issue. However, the presence of moderate burnout in a subset of physiotherapists highlights the importance of maintaining a supportive and balanced work environment. Ensuring manageable workloads, fostering professional well-being, and promoting workplace interventions can help mitigate the risk of burnout and enhance job satisfaction. These insights contribute to a broader understanding of burnout in physiotherapy and emphasize the need for continued efforts in safeguarding the mental and emotional health of healthcare professionals.

AUTHOR CONTRIBUTIONS

Author	Contribution
Maryam Zahra*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Maria Afzal	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Muqaddas Shafique	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Mehwish Ramzan	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Muhammad Husnain	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Azka Tariq	Substantial Contribution to study design and Data Analysis Has given Final Approval of the version to be published

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