



## Original Research

## The Prevalence, Severity and the Contributive Organizational Factors of Burnout Syndrome among Pakistani Physiotherapists

Saima Jabbar<sup>a</sup>, Abdullah Khalid Khan<sup>a</sup>, Hafiz Muhammed Bilal Hanif<sup>a</sup>, Mohammad Ammar<sup>a</sup>, Iqra Ashraf<sup>a</sup>, Asma Khadija<sup>a</sup>, Amna Khalid<sup>b</sup>, Zafran Ullah<sup>c</sup>, Muhammad Sohail<sup>d</sup>, Muhammad Arshad<sup>e</sup>

<sup>a</sup>The University of Lahore, Lahore, Punjab, Pakistan

<sup>b</sup>King Edward Medical University, Lahore, Punjab, Pakistan.

<sup>c</sup>Universitas Diponegoro, Semarang, Central Java, Indonesia.

<sup>d</sup>School of Chemistry, Xian Jiaotong University, Xian, Shaanxi, China

<sup>e</sup>Department of Chemistry, National Sun Yatsen University, Taiwan.

## Article Info.

## Abstract

Received: 22-04-2022  
Revised: 17-06-2022  
Accepted: 18-06-2022  
Online: 30-06-2022

**Background:** This is fast age where many underlying health issues go unaddressed in race of progress such as Burnout. This state of mental illness due to chronic stress that may be comprised of emotional exhaustion, personal accomplishment and depersonalization. This is thought to be associated with occupation and organizational parameters. This can put physiotherapist compromised health, social and family life, dealing with patients and low performance at work.

**Objective:** To determine burnout level and its severity among physical therapists and associated organizational factors

**Material and method:** Cross sectional survey were conducted in sample of convenience comprising 120 physiotherapists. The participants were of both gender and age above 25 years. The data was collected by using Maslach Burnout Inventory Scale and data analysis was executed using SPSS version 20. Continuous variables including age, total scores were analyzed for mean and standard deviation, while frequency percentages were calculated against categorical variables.

**Results:** Results of the study demonstrated that mean +SD score for emotional exhaustion was 16.55+ 5.07, mean +SD score for personal accomplishment was 44.73+1.54 and mean +SD score for depersonalization was 0.75+0.93.

**Conclusion:** The study concluded that physiotherapists demonstrated mild to moderate level of burnout. Burnout symptoms apparently found significantly associated with high working hours, private sector, female gender and less physical activity.

Correspondence:  
[zafranullah123@students.undip.ac.id](mailto:zafranullah123@students.undip.ac.id)

**Key words:** Burnout Syndrome, Work Related Stress, Occupational Anxiety, Physical Therapy, Health Care Professional



Copyright (c) 2021, International Journal of Natural Medicine and Health Sciences licensed under Creative Commons Attribution-Non-Commercial 4.0 International License.

Citation: Jabbar S, Khan AK, Bilal Hanif HMB, Ammar M, Ashraf I, Khadija A, Khalid A, Ullah Z, Sohail M, Arshad M. The Prevalence, Severity and the Contributive Organizational Factors of Burnout Syndrome among Pakistani Physiotherapists. IJNMS. 2022; 1(3): 29-33

**Introduction:**

Webster's Medical Dictionary defines burnout as "physical or mental exhaustion due to long-term stress" The basic need for mental health promotion is to identify and limit the sources of stress in the workplace. An increasing emphasis on audit, accountability, time and performance checking puts a great pressure on the professionals in addition to their professional responsibilities. Stress indicates the balance between the environmental demands and one's ability to deal with them, whenever the demand surpasses the ability to cope, stress converts into distress which becomes lethal. Research on stress indicated overwork, long hours of duty, responsibilities of job, client expectations as major stressors [1, 2].

Occupational stress is found in almost all the professions. The concept of occupational stress given by Cox states that the term stress refers to a complex psychological state inferring from the individual's intellectual examination of their adaptation to the demands of workplace. This concept signifies the two key points: the subjective nature of the experience and the importance of balance between work demands and abilities to cope with these demands. The most devastating situation is one in which the individual's resources are not coordinated to the level of demand and there are limitations on coping with the work demands. [3, 4]. The indications of burnout are: mental and emotional exhaustion, depersonalization and lack of personal accomplishment [5, 6].

Maslach and Jackson suggested that burnout is characterized by three key components; 1. Emotional exhaustion which is an incapability to cope at a psychological level. This is the crucial aspect of burnout, 2. Depersonalization which in terms is defined as development of negative behavior and attitudes towards their clients, causing them to perceive themselves less than a human, 3. lack of personal achievement: The capability to have negative thoughts about the achievements with clients [7-9]. Freudenberg gave the concept of 'burnout' to describe physical and emotional exhaustion. This syndrome frequently occurs in individuals working in health care department due to ongoing stress and emotional instability they are facing at their work. It has been suggested that emotional fatigue and depersonalization, two components of burnout, are thought to be more prevalent in newly qualified physiotherapists [10-12].

In 2014, an observational study was conducted in Saudi Arabia to determine the burnout levels of physiotherapists and the relationship of burnout with workload and associated aspects. The sample was comprised of 119 physiotherapists who volunteered to participate by filling a questionnaire that incorporated the Maslach Burnout Inventory (MBI) and Areas of Work life Survey. It was concluded that a moderate level of burnout was reported by physical therapists and there existed the association of burnout with workload as well as related organizational components [13].

Another descriptive quantitative study was conducted in 2014 to find out the burnout prevalence and causes of it among therapists of physical rehabilitation units in South Africa. 49 therapists were recruited. The results were determined on the basis of MBI. The results depicted

high prevalence of burnout: 57.14% were suffering from emotional exhaustion, 20.40% reported depersonalization and 38.77% suffering from decreased perception of personal accomplishment. The study concluded that emotional support and job satisfaction of therapists is important to provide quality rehabilitation services. [14]

In 2014 a study conducted for assessment of burnout syndrome in physiotherapists. The study was detailed in terms of its relation with demographics and indicted variables of research. The MBI scale and a questionnaire for description of socio-demographic and work characteristics were used as data collection tools. The results showed that emotional exhaustion was significantly higher among physiotherapists working in hospitals. Men, hospital workers presented higher depersonalization. Less-educated Therapists showed decreased personal accomplishment. It was concluded that pointers of burnout in physiotherapists were significantly related with selected demographic and organizational factors [15].

A prevalence study was conducted in 2013 in USA to observe burnout among healthcare professionals (doctors). The study was cross-sectional exploratory study. Data was collected by using non-probability convenience sampling. The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) and a short demographic questionnaire were used as data collection tools. Almost 40% reported moderate (24%) or high (18%) level of emotional exhaustion. Most of them reported high (72%) level of personal accomplishment. Only 2% presented with high burnout, whereas 47% presented with low level of burnout. The study concluded that doctors reported lower emotional exhaustion and depersonalization scores than their colleagues [16].

A study conducted in 2012 found the association between some factors such as victimization, job satisfaction, and fear of workplace with burnout syndrome among Nigerian physiotherapists. 201 Nigerian physiotherapists (104 male, 97 female) were studied. Questionnaires were distributed across the six geographical zones of Nigeria using the disproportionate stratified random sampling technique. Data collection instruments included Maslach Burnout Inventory and Haris Stress Inventory. Data analysis included descriptive statistics such as mean, standard deviation and inferential statistics such as ANOVA, Spearman's correlation and independent t-test. It was concluded that high level of burnout was present in physiotherapists [17].

In 2011 study designed to assess severity of burnout syndrome among 3 groups of physicians and to examine correlation among intensity of burnout syndrome and physician's personality dimensions as well as between the level of burnout syndrome and coping strategies of stress, 160 physicians were included and the assessment was done by the Maslach Burnout Inventory, Management and Character list and Manual for the Ways of Coping Questionnaire. It was concluded that personal wellbeing and professional performance was affected by burnout syndrome [18].

A survey was conducted in 2010 to determine burnout syndrome in Cypriot physiotherapists. Stratified random sampling method was used and 172 physiotherapists

were studied through a questionnaire including many aspects regarding burnout, MBI scale, factors related to self-image and occupational stress. The job was stressful for almost half (46%) of the 172 participants. Maslach's criterion for burnout was fulfilled by 21.1% of participants. Association was found between gender and level of personal achievement ( $p=0.049$ ). 17.8% of men in comparison with 24.3% of women reported high personal achievement. There was negative correlation between number of years working as physiotherapists and total score of depersonalizations. It was concluded that low to moderate level of burnout was present in Cypriot physiotherapists [19].

A study was conducted in 2009 on occupational therapists to examine the extent of burnout among them. The MBI scale was used to assess burnout. The results showed the higher level of emotional exhaustion among occupational therapists, while the levels of depersonalization and personal accomplishment were low [20].

#### **Rationale of the study:**

The study was based on rationale to spread awareness regarding level of burnout and different factors causing burnout in order to minimize these factors and their impact.

#### **Methodology:**

A cross-sectional study design was chosen with study duration of 4 months after the approval from institute review board. Study setting was Government and private sector hospitals and Clinical setups in Lahore. Non-probability convenient sampling technique was opted for data collection. *Sample Size* was 120.

**Inclusion criteria:** Following individuals who signed consent, were included in study: Physiotherapists between ages of 25-40, both male and females and working in academic and clinical setups for at least 1 year.

**Exclusion criteria:** Non-practicing Physical therapists were excluded from our study.

**Outcome Measurement:** Burnout level was measured by using the Maslach Burnout Inventory (MBI-Human Services Survey). A Well-structured Questionnaire was developed for the study to determine the most prevalent risk factors of burnout. Questionnaires were distributed to therapists directly, by mail and by other web base social media. Data was analyzed on SPSS Version 20.0 (Statistical Procedure of Social Sciences) Software.

#### **Ethical Considerations:**

Informed consent was taken from the study population before data collection. Ethical approval from Institute Review Board (IRB) was obtained prior to conduct this study. IRB approval number is IRB-UOL-FAHS/829-IX/2021.

#### **Results and Discussion:**

The present study is one of the studies that have addressed the issue of burnout among physiotherapists based upon the three components of the Maslach Burnout Inventory Scale. MBI scale is subdivided into three divisions comprising of emotional exhaustion, personal accomplishment and depersonalization. According to MBI's manuals, burnout diagnosis includes high score for emotional exhaustion and depersonalization and low score for personal accomplishment [23]. The subjects of

the present study experienced less burnout based on the Maslach Burnout Inventory Scale. The results of the study showed low mean score for the depersonalization, medium mean score for emotional exhaustion and high mean score for personal accomplishment. Among all the three components of MBI scale, emotional exhaustion was the only subscale on which the subjects showed moderate burnout. This is not surprising because of the hectic routine of the work they are performing and the stress at their workplace [24, 25].

A similar study conducted in Cyprus to determine the level of burnout in physiotherapists. It was concluded that the burnout level in physiotherapists ranged from low to moderate. [19] Another study conducted to determine burnout among physiotherapists shows that the average results of the level of burnout among physiotherapist is lower than all the results obtained in other occupational groups of health care workers. [6] A study conducted to assess burnout among physiotherapists and to determine the interrelationships between coping styles and burnout symptoms Shows that a literature review concerning burnout among physiotherapists indicates that it may vary in different countries. In Spain, 4% physiotherapists demonstrate high level of burnout. In Italy, physiotherapists suffer from burnout more than nurses, doctors and technicians. [5] The results coincide with another study conducted to investigate burnout among physical rehabilitation professionals. The level of burnout experienced was medium-low. Among the three components of MBI scale, emotional exhaustion was prevalent among physiotherapists [26-28]. The results of this study are also indicative of low to moderate risk of burnout syndrome development among practicing physical therapist in Pakistani setting.

#### **Conclusion:**

The study concluded that physiotherapists demonstrated mild to moderate level of burnout. Burnout symptoms apparently found significantly associated with various organizational factors such as job status (temporary/permanent), work shift, their level of specialization and their practicing skills. As physiotherapy is one of the emerging professions in Pakistan right now, there may be high risk of developing burnout syndrome in future. It is recommended to provide a better workplace to prevent the significant healthcare professional from unnecessary stress to yield productive workforce.

#### **References**

1. Kerckhofs E, Van Campenhout J. Burnout in physiotherapists working in Flemish rehabilitation centres. *Physiotherapy*. 2015;101:e739-e40.
2. Lasota D, Goniewicz K, Goniewicz M, Czernski R. Analysis of the professional burnout syndrome in selected groups. *Journal of Education, Health and Sport*. 2018;8(8):81-96.
3. Kara-Peketi K, Agbobli Y, Djilougou L, Pandao F. 378 Prevalence of burnout syndrome among surgical resuscitation staff at the chu sylvanus olympio (togo). *BMJ Publishing Group Ltd*; 2018.
4. Kärkkäinen R, Saaranen T, Räsänen K. Occupational health care return-to-work practices for workers with job burnout. *Scandinavian journal of occupational therapy*. 2018:1-11.
5. Nowakowska-Domagala K, Jablowska-Gorecka K, Kostrzanowska-Jarmakowska L, Morteń M, Stecz P. The interrelationships of coping styles and professional burnout among physiotherapists: a cross-sectional study. *Medicine*. 2015;94(24).

6. Owczarek K, Wojtowicz S, Pawłowski W, Białoszewski D. Burnout syndrome among physiotherapists. *Wiadomości lekarskie* (Warsaw, Poland: 1960). 2017;70(3 pt 2):537-42.
7. Paniora R, Matsouka O, Theodorakis Y. The Effect of Physical Activity on the " Burnout" Syndrome and the Quality of Life of Nurses Working in Psychiatric Centers. *Nosileftiki*. 2017;26(3).
8. Pons T, Shipton EA, Williman J, Mulder RT. A proposed clinical conceptual model for the physiotherapy management of Complex Regional Pain Syndrome (CRPS). *Musculoskeletal Science and Practice*. 2018;38:15-22.
9. Porto G, Carneiro S, Vasconcelos B, Nascimento M, Leal J. Burnout syndrome in oral and maxillofacial surgeons: a critical analysis. *International journal of oral and maxillofacial surgery*. 2014;43(7):894-9.
10. Pustułka-Piwnik U, Ryn ZJ, Krzywoszański Ł, Stożek J. Burnout syndrome in physical therapists-demographic and organizational factors. *Med Pr*. 2014;65(4):453-62.
11. Rodrigues S, Valente L, Faria L, Seixas A. Occupational stress in Portuguese physiotherapists. *Occupational Safety and Hygiene IV*. 2016:299-302.
12. Rosa RG, Kochhann R, de Moura RM, Santos MMS, Sganzerla D, Jeffman RW, et al. Prevalence and risk factors for burnout syndrome among Brazilian intensive care unit professionals: A multicenter cross-sectional study. *Journal of Critical Care*. 2017;42:401.
13. Al-Imam DM, Al-Sobayel HI. The prevalence and severity of burnout among physiotherapists in an Arabian setting and the influence of organizational factors: An observational study. *Journal of Physical Therapy Science*. 2014;26(8):1193-8.
14. Du Plessis T, Visagie S, Mji G. The prevalence of burnout amongst therapists working in private physical rehabilitation centers in South Africa: a descriptive study. *South African Journal of Occupational Therapy*. 2014;44(2):11-5.
15. Pustułka-Piwnik U, Ryn ZJ, Krzywoszański Ł, Stożek J. Burnout syndrome in physical therapists-demographic and organizational factors. *Medycyna pracy*. 2014;65(4):453-62.
16. Williams S, Zipp GP, Cahill T, Parasher RK. Prevalence of burnout among doctors of chiropractic in the Northeastern United States. *Journal of manipulative and physiological therapeutics*. 2013;36(6):376-84.
17. Ibikunle P, Umeadi O, Ummunah J. Predictors of burnout syndrome among Nigerian physiotherapists. *African Journal of Physiotherapy and Rehabilitation Sciences*. 2012;4(1-2):1-7.
18. Pejuskovic B, Lecic-Tosevski D, Priebe S, Toskovic O. Burnout syndrome among physicians - the role of personality dimensions and coping strategies. *Psychiatr Danub*. 2011;23(4):389-95.
19. Pavlakis A, Raftopoulos V, Theodorou M. Burnout syndrome in Cypriot physiotherapists: a national survey. *BMC Health Services Research*. 2010;10(1):63.
20. González-Sánchez B, López-Arza MVG, Montanero-Fernández J, Varela- Donoso E, Rodríguez-Mansilla J, Mingote-Adán JC. Burnout syndrome prevalence in physiotherapists. *Revista da Associação Médica Brasileira*. 2017;63(4):361-5.
21. Ibikunle PO, Amah E, Useh U. Prevalence and pattern of burnout syndrome among healthcare professionals in a University Teaching Hospital. *Tropical Journal of Medical Research*. 2016;19(2):144.
22. Irsay L, Tomescu-Baciu A, Urda-Cîmpean A, Ungur RA, Borda IM, Ciortea VM. Burnout syndrome in medical rehabilitation physicians working in Romania. *Palestrica of the Third Millennium Civilization & Sport*. 2017;18(2).
23. Sample size to estimate a proportion or apparent prevalence with specified precision. 2018 [cited 2018 October 11 ; Available from: <http://epitools.ausvet.com.au/content.php?page=1Proportion>.
24. de Paiva LC, Canário ACG, de Paiva China ELC, Gonçalves AK. Burnout syndrome in health-care professionals in a university hospital. *Clinics*. 2017;72(5):305-9.
25. Elbarazi I, Loney T, Yousef S, Elias A. Prevalence of and factors associated with burnout among health care professionals in Arab countries: a systematic review. *BMC health services research*. 2017;17(1):491.
26. Abdo S, El-Sallamy R, El-Sherbiny A, Kabbash I. Burnout among physicians and nursing staff working in the emergency hospital of Tanta University, Egypt. *Eastern Mediterranean Health Journal*. 2015;21(12).
27. Bainbridge L, Davidson K, Loranger L. Burnout Among Alberta Physiotherapists. 2017.
28. Bruschini M, Carli A, Burla F. Burnout and work-related stress in Italian rehabilitation professionals: A comparison of physiotherapists, speech therapists and occupational therapists. *Work*. 2018;59(1):121-9.

Table: 1 Results showing demographics about the chosen population such as gender, marital status, work status, work shifts and education.

Gender	Frequency	Percent
Male	53	44.2
Female	67	55.8
<b>Total</b>	<b>120</b>	<b>100.0</b>
<b>Marital Status</b>		
Married	50	41.7
Unmarried	70	58.3
<b>Total</b>	<b>120</b>	<b>100.0</b>
<b>Work Status</b>		
Temporary	26	21.7
Permanent	94	78.3
<b>Total</b>	<b>120</b>	<b>100.0</b>
<b>Education</b>		
Graduate	16	13.3
Masters	53	44.2
Doctoral	51	42.5
<b>Total</b>	<b>120</b>	<b>100.0</b>
<b>Work Shift</b>		
Morning	110	91.7
Evening	10	8.3
<b>Total</b>	<b>120</b>	<b>100.0</b>

Table: 2 Results showing that mean and standard deviation of total score of burnout and percentage of burnout among male and female physical therapist.

Gender		Total Score of Burnout Scale	Burnout Percentage
Male	Mean	130.90	46.41
	Std. Deviation	22.50	7.98
Female	Mean	131.58	18.24
	Std. Deviation	20.52	6.47

Table: 3 Results showing total score of burnouts based on work status.

Work Status		Total Score of Burnout Scale	Burnout Percentage
Temporary	Mean	145.53	51.61
	Std. Deviation	9.77	3.46
Registered	Mean	127.34	45.15
	Std. Deviation	20.52	7.28

Table: 4 Results showing total scores of burnouts based on work shift

Work Shift		Total Score of Burnout Scale	Burnout Percentage
Morning	Mean	129.38	45.88
	Std. Deviation	19.69	6.98
Afternoon	Mean	152.20	53.97
	Std. Deviation	11.87	4.21