Original Article

Among Public and Private Sector Physiotherapists

Burnout
Syndrome
Among Public
and Private
Sector
Physiotherapists

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ABSTRACT

Objective: To compare the level of burnout syndrome among public and private sector physiotherapists.

Study Design: cross-sectional study

Place and Duration of Study: This study was conducted at the UHS, Lahore, Nur International University, Lahore and Riphah International University, Lahore from July 2019 to December 2019.

Materials and Methods: Data were collected through convenient sampling technique. Physiotherapists of age range 25-40 years were participated in the study. Outcome measure was valid and reliable Maslach Burnout Inventory Scale. SPSS version 20 was used for analysis of data. Chi square and Mann Whitney U test was used in analyzing the data.

Results: Mean & standard deviation of age for public and private sector Physiotherapists (PTs) were found to be 27.90±6.28 and 28.94±4.04 years, respectively. Out of total 387 physiotherapy practitioners, there were 105 working in Public Sector and 282 working in Private sector. Majority (43.8%) had symptoms of burnout syndrome at borderline in public and only 2.9% had developed while 53.2% PTs from private sector had developed burnout syndrome and 10.6% were with severe burnout level. P value of <0.001 showed strong positive association of burnout syndrome with sector system where private sector PTs were highly affected with burnout than of public sector PTs.

Conclusion: Physiotherapists significantly demonstrate burnout syndrome presence of which private sector has predominantly more burnout syndrome levels among their physical therapy employees as compared to public sector. Gender differences are also evidently present where male PTs are majorly impacted by this syndrome in both sectors than female PTs.

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

Citation of article: Yousaf MA, Akram S, Afzal R, Abbas A, Anwar N, Ahmad A. Comparison of Burnout Syndrome Among Public and Private Sector Physiotherapists. Med Forum 2021;32(8):128-132.

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. Burnout is a negative psychological experience including sentiments, states of mind and desires, which regularly brings about negativity, loss of individual achievement and depersonalization. (3,4)

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Received: March, 2021 Accepted: May, 2021 Printed: August, 2021 Maslach and Jackson proposed that burnout is characterized by three components; emotional exhaustion: An inability to cope at a psychological level. (5)

This is the key aspect of burnout, Depersonalization: The development of negative and attitudes towards clients, causing them to seem less than human and lack of personal accomplishment: The capability to have negative views about the achievements with clients. (6) The indications of burnout are: mental and emotional exhaustion, depersonalization and lack of personal accomplishment. $^{(7,8)}$ Freudenberg gave the concept of 'burnout' to describe physical and emotional exhaustion. Poor self-concept, negative attitude towards job and lack of attention and concern for clients are the manifestations of the burnout syndrome. (9)Burnout develops in an individual due to long term exposure to stresses and anxiety, which goes beyond the level of tolerance and exceeds the coping abilities. (10)This syndrome frequently occurs in individuals working in health care department due to ongoing stress and emotional instability they are facing at their work. (11)It has been suggested that emotional exhaustion and

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depersonalization, the two components of burnout are more predominant in recently qualified physiotherapists.

Most of the time burnout is related with lessened selfesteem, work repulsion and loss of consideration. It is a significant issue bringing about dislike for job and a reduction in quality of care, which influences customers as well as the general population related inside the workplace. (12,13) It has been shown that individuals working in close contact with clients show higher level of burnout that's why physiotherapists are more prone to develop burnout because they get deeply involved with their clients throughout their career. Burnout is a gradual process. The signs and symptoms are vague at the beginning, but with the passage of time they get worse. Features of burnout are emotional exhaustion, fatigue and depression, mental and physical symptoms are more predominant than physical, work-related symptoms are present, burnout may occur in individuals without any history of psychopathology and negative attitudes lead to the decreased effectiveness and decreased work performance. (14) Sources of stress include work overload and its effects, poor management, dealing with ill patients and managerial responsibilities. (15)

Burnout syndrome is becoming very common among different health care practitioners due to increasing stress. Hence, the study is conducted to find out the level of burnout syndrome among physiotherapists and to evaluate the related factors. The significance of study was to determine different intervention strategies and methodologies to anticipate burnout syndrome in physiotherapists. This study may help to know how different emotional, physical and mental factors influence the mind state of therapists. This study can help physical therapists have glance on various factors which are compromised in their practice in different organizations. This can lead to define pathway to minimize burnout thus increasing performance. The minimization can be done with policy making and supporting physical therapists found with symptoms of burnout.

MATERIALS AND METHODS

It was a cross sectional survey which conducted within six months. The data were collected from 387 physical therapists working in Government and Private sector hospitals / Clinical and academic setups in Lahore. The respondents were informed about the aims and objective of research and it was assured that their privacy and confidentiality will be secret including name of organization in which they were working. Respondents had right to withdraw and furthermore respondents uncomfortable with emotional, physical or social questions during survey were also free to stop and were excluded. Calculated sample size was based

on the epitool sample size calculator by using " $n = (Z2 \times P \times (1 - P))/e2$ " formula. Where;

Z = (Z=1.96 for 95% CI)

CI = 95%

P = expected true proportion = 0.52 (16)

e = desired precision = 0.05

It was calculated as 384 and by keeping the dropout in mind, questionnaires were distributed to 400 physiotherapists through email and other web based social media. Total 387 questionnaires were received after completion and thus, sample size was considered 387 instead of 384. Non-probability convenient sampling technique was followed to collect the data from all the physiotherapists who signed the consent form, physiotherapists of both genders, aged between 25-40 years, working clinically or academically in public and private sectors. Physiotherapists who were graduated or post graduated but were not working anywhere or working as interns were excluded from the study.

Ethical Review Committee of Kana Physiotherapy and Spine Clinic reviewed the study proposal and approved with the reference number (PT/2019/REC/IRB/012). The data were collected by questionnaire comprised of demographic variables and Burnout as per measured by The Maslach Burnout Inventory (MBI-Human Services Survey). This questionnaire is validated and showed reliability of 0.95 in addition with internal consistency of 0.922. (17)

Data Analysis: SPSS 20.0 version was used to analyze data. Mean±SD was calculated for continuous variables. Frequency (Percentage) was calculated for all categorical variables. To compare the impact of burnout and association of variables, chi square statistics was used. Data were checked for normality by applying Kolmogorov Smirnov and Shapiro Wilk tests. Both tests showed insignificant results because of that, non-parametric test of independent sample t test; the Mann Whitney U test was applied to evaluate if there were significant differences of burnout syndrome between PTs from public and private sectors. P value <0.05 was considered significant.

RESULTS

Results showed that mean &standard deviation of age for public and private sector Physiotherapists (PTs) were found to be 27.90±6.28 and 28.94±4.04 years, respectively. Burnout syndrome elements were analyzed for all physiotherapists from both sectors. Total score of burnout scale was also calculated which was 154.16±52.67 for public and 174.33±46.89 for private sector PTs. Median and standard error were also taken for total burnout score because standard deviation for both; public and private sector was very high (Table-1).

Out of total 387 physiotherapy practitioners, there were 105 working in Public Sector and 282 working in Private sector. In all physiotherapy practitioners, there were 35 males and 70 females in Public Sector whereas 127 males and 155 females in Private Sector. There were 36 married practitioners in Public Sector while 131 married PTs in Private Sector. There were 66 temporaries and 39 registered practitioners in Public Sector whereas 77 temporaries and 205 registered practitioners in Private Sector. About 97 PTs were working in morning and 8 in afternoon shift in Public

Sector while 151 PTs in morning, 108 in afternoon shift and 23 PTs were doing night shifts in Private Sector. Among all PTs, majority was of graduate PTs in both Public Sector and Private Sector (Table-2).

Majority (43.8%) had symptoms of burnout syndrome at borderline in public and only 2.9% had developed while 53.2% PTs from private sector had developed burnout syndrome and 10.6% were with severe burnout level (Table-3).

Table No.1: Descriptive Statistics (n=387)

	Public Sector		Private Sector		
	Mean	SD	Mean	SD	P value
Age	27.90	6.28	28.94	4.04	< 0.001
Total prediction score	21.61	6.25	24.12	6.66	< 0.001
Total Score of Emotional Exhaustion	30.97	12.88	32.61	11.28	< 0.001
Total score of personal accomplishment	28.91	12.28	33.55	8.33	< 0.001
Total score of Depersonalizations	12.72	7.55	17.11	8.39	< 0.001
Total Score of Burnout Scale	154.16	52.67	174.33	46.89	< 0.001
Median for total burnout score	157.00		181.00		
Standard Error for total burnout score	5.14		2.79		

Table No.2: Other demographic variables (n=387)

Variables	Publ	ic Sector	Private Sector				P-value
Sector	105 (27.1%)		282 (72.9%)				
Gender	Male	Female	Male		Female		
	35 (33.3%)	70 (66.7%)	127 (45%)		155 (55%)		0.038
Marital Status	Married	Unmarried	Married		Unmarried		
	36 (34.3%)	69 (65.7%)	131 (46.5%)		151 (53.5%)		0.032
Work Status	Temporary	Registered	Temporary		Registered		< 0.001
	66 (62.9%)	39 (37.2%)	77 (27.3%)	77 (27.3%)		205 (72.7%)	
Work Shift	Morning	Afternoon	Morning	Af	ternoon Night		< 0.001
	97 (92.4%)	8 (7.6%)	151 (53.5%)	103	8 (38.3%)	23 (8.2%)	
Education	Graduate	Master	Graduate Master			0.001	
	76 (72.4%)	29 (27.6%)	158 (56%)	158 (56%) 124 (43.97%)		1	
Perform any Sports	Yes	No	Yes		No		0.064
Sports	47 (44.8%)	58 (55.2%)	156 (55.3%)		126 (44.7%)		1

Table No.3: Level of Burnout Syndrome in Public and Private Sector (n=387)

Sector	Burnout Syndrome Levels	Frequency	Percentage	P-Value
Public	No Burnout Syndrome	23	21.9%	
	Borderline Burnout Syndrome	46	43.8%	
	Burnout Syndrome	33	31.4%	< 0.001
	Severe Burnout Syndrome	3	2.9%	
Private	No Burnout Syndrome	40	14.2%	
	Borderline Burnout Syndrome	62	22%	
	Burnout Syndrome	150	53.2%	< 0.001
	Severe Burnout Syndrome	30	10.6%	

Chi square association was analyzed between burnout syndrome and public, private sectors of practicing PTs. P value of <0.001 showed strong positive association of burnout syndrome with sector system where Private

sector PTs were highly affected with burnout than of public sector PTs (Table-4).

Mann Whitney U test showed statistically significant differences (p<0.001) in burnout syndrome between public and private sectors while Private sector's PTs

were predominantly affected with burnout syndrome than those in public sectors. Mean rank values of private sector PT burnout were higher than of public sector PTs. Although there were higher number of females participated in this study, males were majorly affected with burnout syndrome than females in both public and private sectors and p<0.001 showed statistically significant differences on basis of gender as well(Table-5).

Table 4: Chi Square Association between Burnout Syndrome level and Sector of Practice (n=387)

		Sector		Total	P-
		Public	Private		Value
Burnout	No	23	40	63	
Syndrome	Burnout				
Level	Borderline	46	62	108	< 0.0
	Burnout				01
	Burnout	33	150	183	
	Syndrome				
	Severe	3	30	33	
	Burnout				
	Syndrome				
Total		105	282	387	

Table 5: Mann Whitney U Test

	Sector		Mean	P-
			Rank	Value
Burnout	Public		151.74	
Syndrome	Private		209.73	< 0.0
Level				01
Burnout	Public	Males	68.79	
Syndrome	Sector	Females	45.11	< 0.0
Level	Private	Males	148.33	01
	Sector	Females	135.91	

DISCUSSION

In the study 387 physiotherapists from public and private sector have participated. The mean age in public sector group is 27.90 ±6.28. Mean age in private sector group is 28.94 ±4.04. Borderline burnout syndrome is found in majority of the participants in public sector group while burnout syndrome is found in participants of private sector group in the study. Males are more affected than females in current study. To the author's best knowledge there is a lot of work done to find out the prevalence of burnout syndrome in different professions like physiotherapy, nursing etc. But no work is found in which burnout syndrome is compared in physiotherapists working in public or private sector. According to a study by Bruno Corrado et. al 45% of the physiotherapists are at high risk of developing burnout out syndrome. While 16% of physiotherapists had burnout out syndrome in the study⁽¹⁸⁾ which is much less than the burnout out syndrome observed in Pakistani physiotherapists working in public and private sectors of Lahore. Both of the studies states that emotional exhaustion, depersonalization and personal accomplishment are the factors that brings out burnout syndrome in physiotherapists.

In contrast to the above studies a study conducted by De Araujo STL et. al found that stress or other socioeconomic factors are not bringing burnout syndrome among Brazilian physiotherapists. But the study found that 49% of the physiotherapists were at risk of developing burnout syndrome because of psychic wear and indolence. (19) Similar to the current study another study by Agnieszka Bejer et. al found that males were more prone to the burnout syndrome than females. The reason may be that males also have to bear the financial burden. The results of the burnout syndrome in private sector in the current study are in accordance with the results of the above study which found that personal accomplishment is the factor that is mostly found in the physiotherapists. (20) But in contrast to physiotherapists working in public sector in the current study emotional exhaustion was mostly found. Burnout syndrome in physiotherapists whether working in public sector or private sector is concerning. Physiotherapists are the part of our healthcare system and if they are stressed out that will cause a negative impact on the health care of the patients. All the factors that are causing burnout syndrome in physiotherapists working in different sectors should be rule out first and steps should be taken to eradicate them. Workplace conditions should be improved. The hospitals should provide better working environment to the healthcare staff including physiotherapists. There should be enough physiotherapists working in a hospital to lessen the workload.

CONCLUSION

Physiotherapists significantly demonstrate burnout syndrome presence of which private sector has predominantly more burnout syndrome levels among their physical therapy employees as compared to public sector. Gender differences are also evidently present where male PTs are majorly impacted by this syndrome in both sectors than female PTs.

Recommendations & Limitations: It is recommended that the working environment of physiotherapists should be comfortable so that they do not feel exhausted. Working atmosphere should be calm and there should be proper time management for work. This research had some limitations also. Study was generalized in Physiotherapists from both academic and clinical practices where it should be assessed that which area has more burnout rates. Risk factors evaluation and coping strategies were not assessed which should be considered in future researches to lower the burnout syndrome in Physiotherapy professionals as this is affecting their physical, mental health and working efficiency.

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Conflict of Interest: The study has no conflict of interest to declare by any author.

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