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The frequency of work related-stress among physical therapists of Pakistan–an online survey

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ABSTRACT

BACKGROUND & OBJECTIVE: Job related stress an important predictor of quality of work among health care professionals. The stress can affect the efficiency and capability of a working team. The objective of this study was to determine the work-related stress among physical therapists from different regions of Pakistan.
METHODOLOGY: This was a cross sectional study having 264 participants after ethical approval from June 2020 to November 2020. The data was collected using convenient sampling technique. Physical therapist from the age range of 25 to 50 years old, both genders, with at least 2 years of clinical or teaching experience who were actively employed in either the public or private sector without a break were included. Data was collected through an online questionnaire "stress evaluation questionnaire for health care provider". Microsoft Excel and SPSS Version 21 were used to present and analyze data.
RESULTS: A total of 264 physical therapists from different regions of Pakistan participated in this study. Out of them 56% were males and 44% were females with a mean age of 34.5+ 9.5 and 31.5+8.5 respectively. From these, 38% of physical therapists were employed in academic organizations while 62% were working in clinical setups. Out of these, 211 (80%) participants were satisfied with their job but 57.6% of these participants had mild level of stress, while 14.4% had moderate stress and 2.7% had severe stress with p=0.295. There was no difference observed in work related stress in male and female.
CONCLUSION: The study concluded that 7.6% participants had mild, 14.4% had moderate and 2.7% had severe level of work related-stress.
KEYWORDS: Academic Faculty, Clinical faculty, Physical therapist, Work Related Stress.

INTRODUCTION

Research has shown high rates of stress and dissatisfaction among allied health professionals, including physical therapists, have an adverse impact on workforce retention rates [1]. In addition to the specific risk factors that cause occupational diseases in the workplace, there are other elements, such as stressful situations, that can cause non-specific occupational diseases with more or less severe effects on a person's biological, physical, psychological, and social levels [2, 3].

Stress is defined as the "Experience of a perceived threat (real or imagined) to one's mental, physical or spiritual health, resulting from a series of physiological responses and adaptations" [4, 5]. Work-related stress occurs when there is a mismatch between the job demand and the resources and capabilities of the individual worker available to meet those demands. Subjective and self-reported evaluations of stress are just as valid as 'objective' data, such as statistics on accidents or absenteeism. A recent report by the National Association of Mental Health distinguishes between stress and pressure, where pressure can be denied as a subjective feeling of tension or arousal that is triggered by a potentially stressful situation. However, where pressure exceeds an individual's ability to cope, the result is stress [6].

All the health care professionals' experiences high level of

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stress from the general practitioners to other specialties [7].

The European Agency for Safety and Health at Work has adopted the following definition for work related stress: "Work-related stress is experienced when requests from the work environment exceed the individual's ability to deal with this request [2]. Due to unique responsibilities, health care professionals usually affected from work place stress [8]. A high prevalence of occupational stress was detected among physical therapists in many countries [9]. Workplace stress may cause serious physical and mental issues, burnout, injuries relating to one's job leading to deterioration in one's health, and other negative effects [10].

Financial crisis, loss of job, and reductions in salary have been reported to significantly increase the prevalence of mental health disorders and can lead to substance abuse [11]. Furthermore, in times of crisis, changes in the resources available for health systems, changes in living circumstances, lifestyles, and consumer behaviors, as well as shifts in societal norms and values, may have an impact on health outcomes and the chance of suffering from a health-related financial hardship. On the other hand, several critical studies demonstrated that financial crises seemed to be linked with increased work-related stress, and in some cases, to the development of mental illness [12]. The analysts identified 6 work related stressors which are; demand, control, support, relationship, role and change. These six works linked stressors have negative impact on health care practitioner's wellbeing and performance [13]. It is well documented that health professionals experience high levels of job stress when work demands exceed their ability to cope[14].

There was lack of evidence, addressing the work-related stress among physical therapists, so the objective of this study was to examine and interpret the work-related stressors and stress responses among physical therapists from different regions of Pakistan. This study was conducted to document job stress, its sources and its effects on physical therapists working in different public and private sectors of Pakistan. It will help the organizations, associations and different authorities to implement strategies to improve quality of work by decreasing stressors.

METHODOLOGY

This cross-sectional online survey was conducted from June 2020 to November 2020 after ethical approval of Institutional Ethical Review Committee of Sialkot Medical College (Ref.No.SMC/PRI/IERC-461-A). The data was collected from physical therapist working in public and private sectors from different regions of Pakistan including Multan, Bahawalpur, Lahore, Karachi, Narowal, Hyderabad and Islamabad. The study comprised physical therapists from the age range of 25 to 50 years old, both genders, with at least 2 years of clinical or teaching experience who were actively employed in either the public or commercial sector without a break. Participants with any pre diagnosed psychological disorder causing stress, any hereditary disease and musculoskeletal disorders or neuromuscular disorders effecting their routine life were excluded.

The sample size of n=264 was calculated using Roa-soft with margin of error 5%, confidence interval 95%, and estimated population of physical therapist registered 10000 and response redistribution of 77%. (http://www.raosoft.com/samplesize.html). The data was collected using convenient sampling technique. The data was collected through an online questionnaire "Stress Evaluation Questionnaire for Health Care Provider". The online google document having consent form and a questionnaire was circulated after the permission from the respective institute. The questionnaire has 37 items, every item has two options "Yes" and" No" (0 and 1 respectively) and minimum score was 0 and maximum was 37. Scoring of questionnaires was done by researcher using the data entry using SPSS. The scores were calculated and participants were categorized as having no stress if the score was less than 25%, mild if 25-50%, moderated if 51-75% and more than its severe stress level.

The questionnaire was pre-tested on 30 participants before data collection. It has 37 items-based questionnaire reliability was Cronbach's alpha 0.71 and based on standardized items was 0.74. The data was kept confidential and participant's names were not disclosed at any stage. All the data was handled through planned strategies to avoid any bias approach, self-interest and respecting the ethics to reflect the true findings. The data was collected on Google document and incomplete or any missing data was removed. The final sample of 264 participants was analyzed. SPSS Version 21 were used to present and analyze data. The chi-square test was used to find association of stress level with gender.

RESULTS

The sample size was n=264 physical therapists from different regions of Pakistan. The current study comprised 56% males and 44% females with mean age of 34.5+ 9.50 years and 31.5+ 8.50 years respectively. Regarding marital status, 36% were married and 64% were unmarried. 38% of physical therapists were working in academic while 62% were working in clinical setups (Table-I).

Table-I: Socio demographic profile of participants (n=264).

Demographic details	Variables	n(%)
Gender	Male	148(56%)
	Female	116 (44%)
Marital Status	Married	96 (36%)
	Unmarried	168 (64%)
Socioeconomic Status	Upper Class	27 (10%)
	Middle Class	227 (86%)
	Lower Class	10 (4%)
Employment status	Academician	100 (38%)
	Clinician	164 (62%)
Years of Experience	2 -4 years	120 (45.45%)
	5-7 years	51 (19.31%)
	8-10 years	48 (18.18%)
	More than 10 years	45 (17.04%)

Table-II: Stress and its association with employment status and gender.

Variables	Response	Employment status		p-value	Gender		p-value
		Academic	Clinic		Male	Female	
Workload is just about, right?	Yes	62	95	0.30	95	62	0.005
	No	38	69		53	54	
Opportunities within your working day for rest and relaxation or exercise?	Yes	58	98	0.43	98	58	0.000
	No	42	66		50	58	
The amount of training available to you at work?	Yes	50	94	0.15	64	80	0.47
	No	50	70		52	68	
During the last year, have you had time off work because of ill-health, which you think was caused by stress at work?	Yes	45	88	0.10	59	74	0.49
	No	55	76		57	74	

The results of factors has stated that there was significant association of gender with workload, rest and relaxation with p-value 0.05 and 0.00. But training and time off due to illness was associated to any level of stress with P-value 0.47 and 0.49. But other factors were not significantly associated (Table-II).

Table-III shows that the results of factors has stated that there was significant association of marital status with training available to you at work with p-value=0.06 the other factors were non significantly associated with marital and socioeconomic status.

Table-III: Stress and its association with marital and socioeconomic status.

Variables	Response	Employment status		p-value	Socioeconomic Status			p-value
		Married	Unmarried		Upper Class	Middle Class	Lower Class	
Workload is just about, right?	Yes	58	99	0.45	19	135	3	0.08
	No	38	69		8	92	7	
Opportunities within your working day for rest and relaxation or exercise?	Yes	56	100	0.47	17	133	6	0.90
	No	40	68		10	94	4	
The amount of training available to you at work?	Yes	46	98	0.06	19	121	4	0.15
	No	50	70		8	106	6	
During the last year, have you had time off work because of ill-health, which you think was caused by stress at work?	Yes	49	84	0.48	12	115	6	0.68
	No	47	84		15	112	4	

Table-IV: Level of work-related stress.

Level of work-Related Stress	Participants (n=264)		Total	p-value
Category	Female(n=116)	Male (n=148)	264 (100%)	
No Stress	26 (9.8%)	41(15.5%)	67 (25.4%)	0.29
Mild	73 (27.7%)	79 (29.9%)	152(57.6%)	
Moderate to severe	17(6.4%)	28(10.6%)	45(17.0%)	

***p-value was calculated using chi-square test.**

Mild level of stress was observed in 57.6% participants, while 14.4% had moderate stress and 2.7% had severe stress, there was no difference observed in male and female (Table-IV).

DISCUSSION

The study's findings were based on a sample of 264 physical therapist, of which 56% were men and 44% were women. In this study, each gender was equally affected by stress although this association was statistically insignificant (p=0.0436), in contrast to other studies where stress was associated to gender and long working hours in health care professionals of Jordan [7]. This study reported that 42.0% of the male while 13.6% females had not been involved in decision making process which could be a source of stressor, because a better communication among the administration and hospital staff could facilitate both patient and health care providers. The changes in managerial roles, lack of support in those roles and other related circumstances could be the cause of this stress [8].

Only 64% of the respondents were satisfied as their knowledge and expertise were being used as they intended to while 36% indicated the opposite. According to the 28% of the respondents, the institution did not prioritize the health and welfare of its employees, while 33% were dissatisfied with the physical environment and 53% said that the availability

of rest intervals was satisfactory. But 44% asked about absence of possibilities to relax and exercise throughout their working days. About 52% physical therapists in our study reported that their work is not appreciated. Similar research revealed that physical therapists working under increased pressure due to inadequate management skills and limited resources, can be risky and result in physical discomfort and stress.

This practice was more commonly seen in private hospitals which could be due to disproportionate increase in patient ratio along with environmental and personal factors [15]. Similar findings were found in another study, where all physical therapists, whether employed in the public or private sectors, were neither totally satisfied nor fully dissatisfied with their jobs [16]. According to studies by Park, occupational stress causes a high prevalence of musculoskeletal discomforts that lowers the quality of life [17]. According to the Job Demand-Control (JDC) hypothesis, job stress is interaction between job control and psychological Job; which is due to the conflict between role demands and time pressure. While job control refers to a person's ability to manage work-related tasks. It is further divided into two parts: one is authority to take decisions, second is job breadth. This means that when workplace stress or stress is linked to high demands, it may have bad impact on both mental and physical health. There was result about this theory that high demands results in low control are main indicators of stress [18]. In Brazil, high control of the work and demands with low social support was taken as stress among health care workers including nursing and technical staff in hospitals [19].

According to this study, homework interference decreased the quality of work for 14.4% of women and 17% of men. Conflicts in one's personal life were strongly linked to poor job quality and prevented it, but on the flip side, acute care rehabilitation facilities found that less conflicts led to better skill development. The private life conflicts were highly linked with poor job quality but reduction of conflicts enhanced the performance and lad to better skill development in acute care rehabilitation hospitals. In order to improve the outcomes, the work stress reduction strategies should be implemented among healthcare professionals [20]. Another recent study on doctors reported that distress was more commonly found in females as compared to males that was in contrast to our study to some extent but that variation is minute [21]. As there was no significant difference found between gender and work-related stress, stating it that it can affect both genders equally despite of gender dependent known previously.

Many international studies have identified stress as a factor behind poor job performance, low job satisfaction and personal health problems [22, 23], but only few such studies have been reported from Pakistan. That is why this study was conducted to report the how stress (both at work place or private life) can affect the efficacy of the health professionals particularly physical therapist in Pakistan.

The study had limitation as the reliability of the questionnaire used hadn't been tested beforehand. The data was collected online and risk of small variations can affect the results. We have not included any associating variables like working hours, sector (public or private), age factor that can support the findings. The data was gathered from Punjab and Sindh only.

CONCLUSION

The current study concluded that 57.6% had mild, 14.4% had moderate and 2.7% had severe level of work-related stress. There association of stress with gender was insignificant in our study.

RECOMMENDATIONS

- Stress evaluation among the physical therapist should be implemented to increase the quality of work among working professionals.
- The stress reduction strategies should be offered to physical therapists.

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