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Association of Workplace stress with age among physiotherapists working in public and private sectors of Faisalabad

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Author`s Contribution

[1, 2 & 3] Conception and design, Collection and assembly of data, Analysis and interpretation of the data, [2,3&4]Critical revision of the article for important intellectual content, Statistical expertise [2&5]Final approval and guarantor of the article.

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A B S T R A C T

Background: Stress in the working environment occur when there is imbalance between demand and ability of physiotherapists to fulfill those demands.

Objective: This study aims to find out the stressors causing stress at the workplace and to determine the association of stress experienced by physiotherapists with their age.

Methodology: A total of 100 physiotherapists from Faisalabad was included in this study to see the effect of workplace stressors in relation to their age, by giving them questionnaires. Simple Random sampling technique was used in this study and written informed consent was taken from all the participants. Criteria included age between 24-60, working hours 4 to 7 and experience of 1 year or more prominent.

Results: Caseload Quantity, complexity of patients, staff shortage and increased work demand were identified as main workplace stressors. Physiotherapists aged below 25 years (junior physiotherapists) have experienced higher symptoms of the stress in their working environment as compared to senior and senior most physiotherapist ($X2 = 9.752$, $p<0.01$). Seventy-seven percent of junior physiotherapists taken leave from the duty ($X2 = 11.54$, $p<0.01$) because of above-mentioned workplace stressors.

Conclusion: Junior physiotherapists (age below 25) tend to be more affected at the workplace due to emotional and physical stress. Due to shortage of staff the have experienced more stress and have taken more leaves from duty and as a result their job performance becomes poor when contrasted with senior physiotherapists (age between 25-40) and most senior physiotherapists (age above 40).

Keywords: *Anxiety, Hypertension, Occupational health, Physiotherapists, Workplace stress.*

Introduction

Stress is defined as an environmental stimulus that influences people and can incite physical and mental stress responses. People feel stress and experience stress responses when their adapting strategies are unsuccessful.[1] Whenever stress occurs, it means that the demands set upon the individual have surpassed the individual's resources, regardless of whether these resources are physical, emotional, social, spiritual or financial. Thus, workplace stress occurs when the challenges and demands of work become excessive and job satisfaction changes into frustration and exhaustion.[2] and this can result into born out.[3]

Many abstract models demonstrated the potential relationship between workplace stress and health issues. These include Effort-Reward-Imbalance Model, Job-Demand-Control Model, and the concept of Organizational justice.[4] The Job-Demand-Control Model said that stress in the organization exists when there is imbalance between demand and Control. The Effort-Reward-Imbalance Model stated that stress at the workplace exist when the effort at the workplace is high

and the reward is low. According to Organizational Model, when there is injustice or non-professional behavior with the individual at workplace then the individual feel more stress at workplace.[4-6]

Organizational structural and management problems such as shortage of staff, long working hours, increase demand of work and feelings of insecurity regarding patients outcomes, conflict and uncertainty in performing their role[7, 8], lack of management and support, and have been identified as the major sources of workplace stress. Burnout has been related to continued stress that results in physical and mental exhaustion.[9] Burnout has having a negative impact not only on individual health but also affect the working environment and patients as frustration and stress surpassed individual's personal resources and coping strategies. Poor job attitude, lack of concern for problems of patients and a low self -motivation are the symptoms of burnout(10) Due to burnout there is a decrease in individuals job performance, quality of health services and the incidence of musculoskeletal problem, increased absentees and early retirement of the individual.[11]

The symptoms of workplace stress are Hypertension, Poor job performance, fatigue, Anxiety, Poor concentration, low quality of health services musculoskeletal pain like pain in neck and shoulder region due to spasm of neck muscles which causes compression of vertebral artery that ultimately lead to headache.[4] Junior physiotherapists aged beneath 25 years, were found to encounter more stressors and their indications when contrasted with senior physiotherapists and most senior physiotherapists. Moreover, many past investigations found a more elevated amount of passionate fatigue, physical and emotional tiredness and depersonalization, as estimated by the Maslach burnout stock, especially in fresh graduates than the individuals who had a more extended work history.[12] But the association of stress with age experienced by physiotherapists in Pakistan has not yet been clear. Therefore, the purpose of this study is to find out the stressors causing stress at workplace and to determine the association of stress experienced by physiotherapists at their workplace with their age. We hypothesized that there is negative association of stress with age experienced by physiotherapists in Pakistan.

Methodology

It was an observational study that was carried out at Faisalabad, Pakistan. Total of hundred physiotherapists was included in the study using simple random sampling. The inclusion criteria of the study was: 1) Age between 24-60 years; 2) had working experience of one and over one year; 3) and the subjects laboring for 4-7 hours. The participants were excluded if they were hypertensive (high blood pressure) and have experienced any physical or enthusiastic injury. Written informed consent was taken from the participants according to a declaration of Helsinki. The study was approved by the Review Board of the University. Data was collected from all Public/Private Institute and Hospitals of Faisalabad. A standardized NIOSH symptoms survey Questionnaire was used in the study.[13] The Questionnaire was comprised of 24 questions. Seven questions were related with emotional stress, Musculoskeletal problem due to stress were identified by fourteen questions and three questions were identified with the stressors. Shapiro–Wilk test was used to determine the normality of the data. Demographic data were reported as mean and S.D. Chi square test was applied to determine the association of stress with respect to age among physiotherapists. All the data was analyzed using SPSS version 24.0 (SPSS Inc., Chicago, IL).

Results

The result from the study showed that there is a strong association between age and stress. The result of descriptive analysis showed in Table I. Out of 100 physiotherapists, 63 were female, and 37 were male. Seventy-one physiotherapists working in the Private sectors and 29 were working in the Government sector of Faisalabad.

The result showed that 94.11% of junior physiotherapists (below 25) reported marked stress (29 out of 34) as compared to senior (66.66 %) and senior most Physiotherapist (50%) respectively (X^2 = *9.752*, p<0.01) (Table II). The result also indicate that high prevalence of emotional and physical stress has been reported by junior physiotherapists at workplace (age below 25) due to shortage of staff (X^2 = 14.562, p<0.01) and they have taken more leaves from the duty (X^2 =

11.544, $p<0.05$) as compared to senior and senior most Physiotherapists and their job performance become Poor.

In Table II. 85.29 % of junior physiotherapists (below 25) reported marked symptoms of fatigue due to stress as compared to senior (60%) and senior most Physiotherapist (50%) respectively ($X^2 = 12.322$, $p<0.05$). High workload leads to stress and other musculo-skeletal problems in junior physiotherapists as compared to senior physiotherapists and most senior physiotherapists. The general prevalence of stress is shown in figure 1.

Table I: Demographic Data

Variable	Public Sector	Private Sector
Participants	29	71
Age Below 25	7	27
Age Between 25-40	19	41
Age Above 40	3	3
Gender (Male)	12	24
Gender (Female)	17	47
Marital Status (Married)	13	16
Marital Status (Unmarried)	16	55

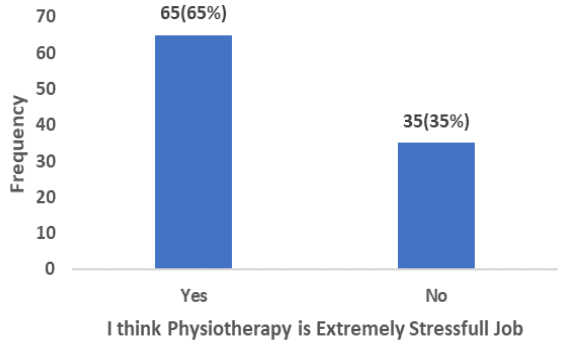

Figure 1: General prevalence of stress in physiotherapy.

Discussion

During a period of high appeal for physiotherapy for hospitalized patients, staff may feel constrained and grumble about the shortage of time to give all patients, a satisfactory treatment. Current study shows that physiotherapists feel stressed and worried between giving satisfactory time to everybody, which decline the measure of time they can commit to every treatment and giving superb care to meet the individual needs of their patients.

This finding matches with another study that reported the same study finding.[10] Multidisciplinary group gatherings, fundamental to a planned rehabilitative exertion, cut into patient consideration time and frequently serve to include further pressure when colleagues have clashing perspectives of patient need and staff obligations. Documentation prerequisites intensify the circumstance, cutting increasingly more into the time accessible to provide service.

The review questionnaire utilized in this study have agreeably met the gauges of validity, reliability and unwavering quality investigation so it might prompt the production of precise and solid research discoveries. This questionnaire has set up that there are specific working environment stressors that add to physiotherapist's feeling of anxiety and stress level. These prevalently spin around outstanding work-related burden, multifaceted nature of patients, inadequate time and staffing issues. This supports recently referred to stressors distinguished as influencing physiotherapist's behavior working in Pakistan and globally.

Table II: Association of stress with age.

Outcome measure	Age						P-value Chi-square
	Below 25		25-40		Above 40		
	YES	NO	YES	NO	YES	NO	
Feeling Neglected	22/34	12/34	25/60	35/60	1/6	5/6	0.004
Concentration Difficulty	25/34	9/34	22/60	38/60	2/6	4/6	0.04
High Workload	30/34	4/34	38/60	22/60	3/6	3/6	0.001
Tension	23/34	11/34	31/60	19/60	2/6	4/6	0.002
Neck Pain	18/34	16/34	22/60	38/60	1/6	5/6	0.007
Shoulder Pain	16/34	18/34	26/60	34/60	1/6	5/6	0.001
Muscle Stiffness	20/34	14/34	29/60	31/60	2/6	4/6	0.002
Headache	26/34	8/34	33/60	27/60	3/6	3/6	0.007
Fatigue	29/34	5/34	36/60	24/60	3/6	3/6	0.002
Hypertension	21/34	15/34	18/60	42/60	1/6	5/6	0.001
Stressful job	32/34	2/34	40/60	20/60	3/6	3/6	0.008

While looking at the factors adding to the pressure, it was discovered that junior physiotherapists (underneath 25) were bound to report a higher level of burden. Similar discoveries have been detailed in many other investigations.

In the current study it was demonstrated that due to stress, physiotherapists also experience some musculoskeletal disorders most commonly involved neck region and shoulder region. Physiotherapists might have some burning pain, stiffness or tingling sensations in their neck and shoulder area due to prolonged working and increased quantity of cases and this finding of the current study agrees with the findings of another study[14] which was performed to get to how singular characteristics and organizational factors in the work region are connected with early symptoms in the neck and shoulder area and the study demonstrated power extents for symptoms in the neck and shoulder district. High case quantity, more work-related tasks, low work substance and work vulnerability were considered as basic hierarchical hazard factors.[15]

The major drawback of this study is that, the research has identified stressors that are causing the workplace stress about different age groups of physiotherapists but no scale has been developed that can be used to determine the threshold value of stressors. Secondly, no coping strategy has been identified or employed to reduce or to manage the workplace stressors. We recommend the administrative staff and the Academician to focus on different methodologies that can increase the self-care and protect them from workplace stressors mentioned in this study. This study provides a basic for new researchers to investigate the workplace stressor and to develop a new coping strategy to reduce the musculoskeletal and mental problems among physiotherapists. It is necessary to develop some stress monitoring scales to measure the threshold of stress experienced during the working environment.

Conclusion

This study concludes that junior physiotherapists (age underneath 25) are continuously experiencing the emotional and physical stress at working environment. The stress results in more leaves from the duty and their performance become poor when compared from senior physiotherapists (age between 25-40) and most senior physiotherapists (age over 40). Outstanding burden prompts pressure and musculoskeletal issues which are higher among junior physiotherapists.

References

1. Yuwanich N, Sandmark H, Akhavan S. Emergency department nurses' experiences of occupational stress: A qualitative study from a public hospital in Bangkok, Thailand. Work. 2016;53(4):885-97.
2. Lambert VA, Lambert CE. Nurses' workplace stressors and coping strategies. Indian J Palliat Care. 2008;14(1):38.
3. Crawford SLJAjojotAAoOHN. Job stress and occupational health nursing: modeling health affirming choices. 1993;41(11):522-8.
4. Jarczok MN, Jarczok M, Mauss D, Koenig J, Li J, Herr RM, et al. Autonomic nervous system activity and workplace stressors—a systematic review. Neurosci Biobehav Rev. 2013;37(8):1810-23.
5. Pelfrene E, Vlerick P, Kittel F, Mak RP, Kornitzer M, Backer GDJS, et al. Psychosocial work environment and psychological well-being: assessment of the buffering effects in the job demand–control (–support) model in BELSTRESS. 2002;18(1):43-56.
6. Calnan M, Wadsworth E, May M, Smith A, Wainwright DJSjoph. Job strain, effort-reward imbalance, and stress at work: competing or complementary models? 2004;32(2):84-93.
7. Colligan TW, Higgins EMJJowbh. Workplace stress: Etiology and consequences. 2006;21(2):89-97.
8. Deckard GJ, Present RMJPT. Impact of role stress on physical therapists' emotional and physical well-being. 1989;69(9):713-8.
9. Hendriks O. An investigation of role conflict in physiotherapists practising in general hospitals in the Dublin area. Physiotherapy. 1990;76(6):326.
10. Lindsay R, Hanson L, Taylor M, McBurney H. Workplace stressors experienced by physiotherapists working in regional public hospitals.Aust J Rural Health. 2008;16(4):194-200.
11. 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.
12. Maslach C, Schaufeli WB, Leiter MPJArop. Job burnout. 2001;52(1):397-422.
13. Baron S, Hales T, Hurrell J. Evaluation of symptom surveys for occupational musculoskeletal disorders. American journal of industrial medicine. 1996;29(6):609-17.
14. Ekberg K, Karlsson M, Axelson O, Björkqvist B, Bjerre-Kjely B, Malm P. Cross-sectional study of risk factors for symptoms in the neck and shoulder area. Ergonomics. 1995;38(5):971-80.
15. Ridzuan AA, Ismail A, Zainol NAM, Ali SAH. Correlation Analysis of Occupational Stress and Job Performance in Lebanon. International Journal of Academic Research in Business and Social Sciences. 2018;8(6):1195-206.