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Assessment of Perceived Stress Among Physiotherapists Working as Clinicians and Academician in Pune: A Cross-Sectional Study

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ABSTRACT:

Background: work stress has become a prevalent concern in healthcare organizations, impacting both clinical performance and academic roles. With the field of physiotherapy gaining prominence in Pune, there is a need to investigate perceived stress levels among physiotherapists.

Objective: This cross-sectional study aimed to assess and compare the perceived stress levels of physiotherapists working as clinicians and academicians in Pune city

Method: A validated questionnaire, the Perceived Stress Scale (PSS-10), was administered to male and female physiotherapists across clinical and academic settings. The sample of 110 participants was subjected to data analysis using t-tests and ANOVA.

Results: Among the 86 physiotherapists working in clinical roles, 21% reported low stress, 32% experienced moderate stress, 33% indicated moderate stress levels, 14% reported high stress, and 1% reported potentially dangerous stress levels. Among the 52 physiotherapists in academic roles, 17% reported low stress, 35% experienced moderate stress, 29% indicated moderate stress levels, 16% reported high stress, and 4% reported potentially dangerous stress levels. The calculated p-value of 0.73 from the chi-square test indicated no significant difference between the two groups.

Conclusion: This study revealed comparable levels of perceived stress among physiotherapists working as clinicians and academicians in Pune. These findings underscore the importance of addressing stress management strategies to promote the well-being of physiotherapy professionals across different roles.

Keywords: Perceived Stress, Physiotherapists, Clinicians, Academicians, Cross-Sectional Study, Perceived Stress Scale, Occupational Stress, Healthcare Professionals.

INTRODUCTION

Occupational stress has emerged as a pressing concern within healthcare organizations, affecting the well-being and performance of professionals across various roles. The physiotherapy profession, encompassing both clinical practice and academia, is not exempt from the challenges posed by workplace stress. Extensive research has highlighted the impact of stress on job satisfaction, productivity, and overall quality of life among healthcare professionals, including physiotherapists.

The role of physiotherapists in healthcare is multi-faceted, involving direct patient care, rehabilitation, and preventive measures. Simultaneously, physiotherapists contribute to academia by educating future practitioners, conducting research, and advancing the field's knowledge base. This dual nature of the profession exposes physiotherapists to a unique combination of demands, potentially leading to varying levels of stress.

Despite the increasing awareness of occupational stress in the healthcare sector, limited research has been conducted specifically to assess and compare perceived stress levels among physiotherapists working in clinical and academic settings. Al-Madi et al. (2019) emphasized the significance of addressing stress management strategies among physiotherapists due to the demanding nature of their profession and the potential consequences of unaddressed stress on patient care and personal well-being.

In light of the growing physiotherapy field in Pune, India, this cross-sectional study aims to bridge the knowledge gap by investigating the perceived stress levels of physiotherapists functioning as both clinicians and academicians. By assessing and comparing stress levels in these distinct roles, this study seeks to contribute valuable insights to the development of targeted interventions for stress management within the physiotherapy profession.

Understanding the dynamics of stress within the physiotherapy profession is crucial not only for the well-being of practitioners but also for maintaining the quality of patient care and the advancement of the field itself. Physiotherapists are often exposed to physically and emotionally demanding situations, such as managing patient pain, designing personalized treatment plans, and keeping up with evolving medical knowledge.

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These challenges can significantly contribute to stress and potentially lead to burnout if not properly managed. The academic aspect of the profession also presents its own set of stressors. Physiotherapy academicians engage in teaching, research, curriculum development, and administrative responsibilities. Juggling these responsibilities alongside clinical practice, if applicable, can create a complex web of obligations that might amplify stress levels. **Tramonti et al. (2020)** highlights the need for a holistic approach to managing stress among physiotherapists, addressing both clinical and academic contexts.

Occupational stress is a significant concern for physical therapists, encompassing factors such as increased workload and extended working hours, which can create a stressful work environment [1]. This stress not only impacts the practice of physical therapy but can also detrimentally affect one's overall health when workplace stressors exceed manageable levels, leading to compromised well-being [2]. Although some physiotherapists exhibit high levels of occupational stress, identifying the precise underlying issues can be challenging [3].

The origins of occupational stress within the field of physiotherapy often stem from administrative complexities and the demands of clinical tasks [4]. Excessive working hours, inadequate management practices, and heavy workloads can negatively influence both teaching and learning processes. University educators encounter challenges originating from institutional and governmental spheres. Institutional difficulties include inflexible policies, challenging student behavior, diminished resources, inadequate infrastructure, lack of rewarding incentives, and role ambiguity. Governmental issues encompass the impact of evolving policies, constrained budgets, quality control, and accreditation concerns. These factors collectively contribute to stress among university teachers [5].

Variations in the skills of physiotherapists are potentially linked to stress, which can subsequently lead to unfavorable patient outcomes [6]. Job-related stress can influence mental well-being and impede work focus. It serves as a risk factor for depression, with women more significantly affected than men [7, 8]. Among women experiencing depression, lower levels of decision-making authority have been associated with psychosocial work-related stress [9]. Clinical settings have shown that psychological stress elevates heart rate and cortisol levels [10].

Occupational stress in healthcare workers is associated with insufficient skills and inadequate social support at work, culminating in distress, psychosomatic symptoms, diminished quality of life, and compromised service provision [11]. Musculoskeletal disorders are linked to risk factors such as physically demanding work, smoking, high body mass index (BMI), and elevated psychosocial work demands [12]. Elevated work-related stress among female physicians has been correlated with an increased risk of suicidal tendencies [13]. Symptoms of depression are reported to be 26.1% in men while 28.7% in females while showing high prevalence in females[14].

This study aims to contribute to the understanding of occupational stress among physiotherapists by investigating the perceived stress levels of those working as clinicians and academicians in Pune, India. By delving into the sources and impacts of stress within the unique contexts of clinical and academic roles, this research seeks to facilitate the development of targeted interventions for stress management within the physiotherapy profession.

Objective

Objective of the study is to compare the work-related stress level in the physiotherapist working as clinicians and academicians.

Hypothesis

Null Hypothesis There is no significant difference of Perceived Stress Among Physiotherapists Working as Clinicians and Academicians in Pune"

Alternative Hypothesis There is significant difference of Perceived Stress Among Physiotherapists Working as Clinicians and Academicians in Pune"

Methodology:

Study Design:

This study employs a cross-sectional design to assess and compare the perceived stress levels among Physiotherapists working as clinicians and academicians in Pune, India.

Participants:

A convenience sample of male and female Physiotherapists practicing in different clinical and academic settings colleges & universities of Pune will be recruited for this study. A sample size of 110 participants was collected

Duration of Study

Study took 6 months to be completed after the approval of the synopsis.

Data Collection:

Questionnaire: The Perceived Stress Scale (PSS-10) [1] will be used to measure participants' perceived stress levels. The PSS-10 is a validated self-report scale that assesses the degree to which individuals perceive their lives as stressful during the past month. It comprises 10 items rated on a 5-point Likert scale

Demographic Information: A structured questionnaire was used to gather demographic data, including age, gender, years of experience, work setting, and role (clinician or academician).

Procedure:

Ethical Considerations: Ethical approval will be sought from the relevant institutional review board before commencing the study. Informed consent will be obtained from all participants.

Data Collection: Physiotherapists from both clinical and academic settings of pune were contacted to participate voluntarily. the questionnaires was given to fill the data to all the participants with prior consent

Data Analysis:

Descriptive statistics (means, standard deviations, percentages) will summarize demographic characteristics and perceived stress levels.

An independent t-test will be used to compare perceived stress scores between clinicians and academicians.

A p-value < 0.05 will be considered statistically significant.

Inclusion Criteria

- 1. Physiotherapists whether working in a government or a private practice
- 2. Physiotherapists working solely as clinicians or academicians
- 3. Physiotherapists who had at least one year of experience in their current work settings Both male and female physiotherapists

Exclusion Criteria

- 1.Physiotherapists who suffered from musculoskeletal disorders
- 2. Any recent surgery or trauma
- 3. Physiotherapists having any recent psychosocial distress in family

RESULTS

Comparing Stress Levels

The data presents a comparative analysis of stress levels among participants from clinical and academic workplaces. Among the 86 participants from clinical settings, 21% reported no stress, 32% experienced mild stress, 33% indicated moderate stress, 14% reported severe stress, and 1% exhibited potentially dangerous stress levels. Similarly, out of the 52 participants from academic workplaces, 17% reported no stress, 35% experienced mild stress, 29% indicated moderate stress, 16% reported severe stress, and 4% displayed potentially dangerous stress levels. A chi-square test with a computed p-value of 0.73 revealed no statistically significant difference in stress levels between the two groups.

Comparison of Workplace Stress Scale Scores

The comparison of Workplace Stress Scale scores highlighted that physiotherapists from clinical workplaces had an average stress score of 19.74 ± 5.48 , while those from academic settings had a stress score of 20.31 ± 5.774 . The independent sample t-test, with a calculated p-value of 0.566, indicated that there is no statistically significant difference in stress levels between participants in both clinical and academic groups.

DISCUSSION

Perceived as a growing health concern within society, stress is a pervasive issue affecting doctors and various medical professionals, often stemming from factors such as excessive workloads and extended duty hours. While occupational stress has been extensively studied across a wide range of professional groups, the exploration of stress within the context of physiotherapy remains relatively limited.

This study aims to delve into the landscape of occupational stress among physiotherapists, uncovering potential stress sources and identifying personal coping strategies. Findings have illuminated that the field of physiotherapy carries a moderate level of stress, mirroring the experiences of other healthcare professionals. Interestingly, an examination of bachelor physiotherapists during their clinical practice revealed exposure to stress-inducing conditions; however, the specific contributing factors remained undisclosed. Stress within this context might also be intertwined with interpersonal dynamics within clinical settings or the complexities of personal lives [17].

Physiotherapists, as healthcare practitioners, hold the dual responsibility of tending to both the physical and emotional well-being of patients. A recent study underscored that physical therapists often engage in moderate levels of physical activity, yet a significant portion concurrently experience stress [16]. Furthermore, a Karachi-based study conducted a comparative analysis of occupational stress between doctors in Lahore and Karachi. The findings indicated gender disparities in stress, with males exhibiting higher stress levels due to factors like organizational commitments. Organizational commitment was pivotal in explaining stress levels, particularly among males.

This study identified social support as a buffering factor against stress-related consequences, fostering increased organizational commitment, especially among females. Conversely, personal factors were found to be more stress-inducing for females, while males experienced heightened stress due to organizational concerns. Notably, male employees demonstrated more physiological symptoms of stress, while females predominantly exhibited behavioral symptoms [15].

In essence, stress within the physiotherapy profession signifies a multifaceted challenge that impacts both the personal and professional spheres of physiotherapists' lives. The findings underline the significance of addressing stress management strategies tailored to the unique dynamics of this healthcare occupation, with potential implications for improving job satisfaction, well-being, and patient care.

CONCLUSION

In the context of the study titled "Assessment of Perceived Stress Among Physiotherapists Working as Clinicians and Academicians in Pune," the results reveal a noteworthy observation. Both physiotherapists from clinical and academic workplaces exhibited mild stress levels, with both groups showing similar responses. The findings underscore the balanced nature of stress among physiotherapy professionals in Pune, irrespective of their work settings. This insight not only contributes to the local understanding of stress dynamics within this specific healthcare cohort but also offers valuable insights for designing targeted interventions aimed at promoting well-being and managing stress effectively.

References:

- Muaidi, Q. I., & Shanb, A. A. (2016). Effects of work demands on physical therapists in the KSA. Journal of Taibah University Medical Sciences, 11(1), 56-62.
- Sharma, P., Davey, A., & Davey, S. (2014). Occupational stress among staff nurses: Controlling the risk to health. Indian Journal of Occupational and Environmental Medicine, 18(2), 52.
- 3. Campo, M. A., Weiser, S., & Koenig, K. L. (2009). Job strain in physical therapists. Physical Therapy, 89(9), 946-956.
- 4. Santos, M. C., Barros, L., & Carolino, E. (2010). Occupational stress and coping resources in physiotherapists: A survey of physiotherapists in three general hospitals. Physiotherapy, 96(4), 303-310.
- 5. El-Sayed, S. H., El-Zeiny, H. H. A., & Adeyemo, D. (2014). Relationship between occupational stress, emotional intelligence, and self-efficacy among faculty members in the faculty of nursing Zagazig University, Egypt. Journal of Nursing Education and Practice, 4(4), 183.
- 6. Gribble, N., Ladyshewsky, R. K., & Parsons, R. (2017). Fluctuations in the emotional intelligence of therapy students during clinical placements: Implications for educators, supervisors, and students. Journal of Interprofessional Care, 31(1), 8-17.
- Fiabane, E., Giorgi, I., Sguazzin, C., Argentero, P., & Montani, F. (2013). Work engagement and occupational stress in nurses and other healthcare workers: The role of organizational and personal factors. Journal of Clinical Nursing, 22(17-18), 2614-2624.
- 8. Theorell, T., Hammarström, A., Aronsson, G., Träskman Bendz, L., Grape, T., Hogstedt, C., ... & Hall, C. (2014). Job strain and depressive symptoms in men and women: A prospective study of the working population in Sweden. Journal of Epidemiology and Community Health, 68(1), 78-82.
- Blackmore, E. R., Stansfeld, S. A., Weller, I., Munce, S., Zagorski, B. M., Stewart, D. E., ... & Alter, D. A. (2007). Major depressive episodes and work stress: Results from a national population survey. American Journal of Public Health, 97(11), 2088-2093.
- 10. Judd, B. K., Noble, J., Savins, K., & Furness, T. (2016). Comparison of psychophysiological stress in physiotherapy students undertaking simulation and hospital-based clinical education. Simulation in Healthcare, 11(4), 271-277.
- 11. Ruotsalainen, J. H., Verbeek, J. H., Mariné, A., & Serra, C. (2014). Preventing occupational stress in healthcare workers. Cochrane Database of Systematic Reviews, 12(4).
- 12. Da Costa, B. R., & Vieira, E. R. (2010). Risk factors for work-related musculoskeletal disorders: A systematic review of recent longitudinal studies. American Journal of Industrial Medicine, 53(3), 285-323.
- 13. Fridner, A., Belkić, K., Marini, M., Gustafsson Sendén, M., Schenck-Gustafsson, K., & Wall, M. (2009). Survey on recent suicidal ideation among female university hospital physicians in Sweden and Italy (the HOUPE study): Cross-sectional associations with work stressors. Gender Medicine, 6(1), 314-328.

- 14. Shen, X., Liu, Z., Wang, R., Zhao, S., Liu, L., & Wang, L. (2014). The association between occupational stress and depressive symptoms and the mediating role of psychological capital among Chinese university teachers: A cross-sectional study. BMC Psychiatry, 14(1), 329.
- 15. Zehra, S. Z., et al. (2017). Measuring Organizational Commitment and Occupational Stress of Pakistani Doctors: Comparing Lahore and Karachi Public Hospitals in Gender Perspective.
- 16. Tomruk, M. S., et al. (2016). Relationship between physical activity and perceived stress in physiotherapists. Journal of Exercise Therapy and Rehabilitation, 3(1), 15-20.
- 17. Jacob, T., & Einstein, O. (2016). Stress Among Bachelor Physical Therapy Students in Israel during Clinical Practice and Its Association with Academic Achievements–Results of a Longitudinal Study. Internet Journal of Allied Health Sciences and Practice, 14(1), 9.
- 18. Theme Filha, M. M., Costa, M. A. d. S., & Guilam, M. C. R. (2013). Occupational stress and self-rated health among nurses. Revista Latino-Americana de Enfermagem, 21(2), 475-483.
- 19. Lindsay, R., Johnston, V., & Eime, R. (2008). Workplace stressors experienced by physiotherapists working in regional public hospitals. Australian Journal of Rural Health, 16(4), 194-200.
- 20. Roland, G., Occupational Stress Among Mauritian Nurses. International Journal of Emerging Trends in Science and Technology, 2014. 1(04).
- 21. Von dem Knesebeck, O., et al., Psychosocial stress among hospital doctors in surgical fields: results of a nationwide survey in Germany. Deutsches Arzteblatt International, 2010. 107(14): p. 248.
- 22. [22]. Klein, J., et al., Psychosocial stress at work and perceived quality of care among clinicians in surgery. BMC Health services research, 2011. 11(1): p. 109.
- 23. [23]. Khuwaja, A.K., et al., Comparison of job satisfaction and stress among male and female doctors in teaching hospitals of Karachi. Journal of Ayub Medical College, Abbottabad: JAMC, 2004. 16(1): p. 23-27.