# Prevalence of Stress Level in Physiotherapy Professors in Gujarat - An Observational Study 

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#### Abstract

ABSRACT BACKGROUND: Physiotherapist as a professional, is impacting professionally and personally. Due to job instability and job viability especially for private practitioners which affecting psychological status. AIM: The aim of this study was to find out the prevalence of stress level in physiotherapy professors in Gujarat METHOD: The observational study was carried out among 103 physiotherapy professors. In which 69 female and 34 male who had willingness to participate in the study according to inclusion and exclusion criteria. Written consent was taken by individuals. The participants filled a Google self-designed, close-ended questionnaire of PSS (10 items) which was circulated via WhatsApp in different physiotherapy groups. Descriptive analysis was done using Microsoft excel. RESULT: 8.73\% high stress,72.81\% moderate stress, $18.45 \%$ low stress found in physiotherapy professors. In this study $67.94 \%$ stress found in assistant professors, $28.15 \%$ in associate professors and $3.88 \%$ in Principle. CONCLUSION: So, this study concluded that high prevalence of stress is found in Assistant Professors, moderate prevalence in Associate Professors and low prevalence in Principal. Study also depicting female perceiving high stress rather male.


KEYWORDS: Stress, Physiotherapy, Professor, Gujarat

## INTRODUCTION

It is well documented that health professionals experience high levels of job stress when work demands exceed their ability to cope. [1,2] Many Studies in the west have identified stress as a factor in poor Job performance, low job satisfaction, physical and mental Health problems among health professionals including medical practitioners (doctors from different specialities). [3-7]
Over the years the stress defined in different ways. The accepted definition of stress today's scenario is the One of interaction between individual and the situation. "When the individual resources are not sufficient to Manage the demands and pressures of circumstances Which results due to psychological and physical state." In stress people have seen especially with change in Behaviour. Its acute responses may be in the behaviour (as being aggressive, withdrawn, unmotivated), areas of feelings -anxiety, depression, irritability, fatigue, thinking like difficulties in concentration and solving Problem or physical symptoms -nausea, headache, Palpitation. When stress persists, change the autonomic, Neuroendocrine, cardiovascular and immunological Function which affect mental and physical health for example anxiety, depression, heart disease and the situation causing stress and it could be from Unpredictable or uncontrollable situation, ambiguous or Unfamiliar or conflict, expectation, work load pressure, Job insecurities, loss of performance. [8]

Kyriacou [9] further defined teacher stress as a teacher's experience of unpleasant emotions, such as tension, frustration, anxiety, anger, and depression, resulting from aspects of his or her work as a teacher. According to some published research, teaching is a "highly" or "extremely highly" stressful occupation. [10] Mild stress can improve working efficiency, whereas excessive chronic stress among teachers has serious implications for their work performance [11,12], physiological health, and psychological status [13-17] and can even lead to burnout, which is defined as a syndrome of exhaustion, cynicism, and reduced professional efficacy. [13,18] Furthermore, teacher stress is also associated with problems of recruitment and retention of teachers. [19,20] Work stress has consistently been shown to negatively correlate with job satisfaction and positively correlate with turnover intention and turnover. [21-24] Teacher turnover has been reported to be associated with many serious educational problems, such as a low quality of education for students.
Physiotherapy is an established Profession throughout the world. [25] In our Health care profession, this is impacting our Personal and professional life. In personal Aspects we experiencing economical, Mental, social, and physical health as Including concerns about re household job Security and business viability (for private Practitioners), others like cancelation of Marriage and travelling plans. [26]
The mental health problems of Physiotherapist would negatively affect their Attention, cognitive functioning and clinical Decision- making, leading to a subsequent Increase in the incidence of medical errors and incidents, and thus putting patients at Risk. It was also known that acute stress in Disasters can have a long-term effect on Overall well-being of individual.[27] So, this study aimed to find out Prevalence of Stress Level in Physiotherapy Professors in Gujarat - An Observational Study

## MATERIALS AND METHOD

Study design: Cross sectional survey
Sample selection: According to inclusion \& Exclusion criteria Sample design: Random sampling Study duration: 1 time study Sample size: 103Physiotherapy professor Source: Physiotherapy professor of different colleges.

## SELECTION CRITERIA

 INCLUSION CRITERIA: Participants who willingly wants to participate, Age Between 25 to 35 years, both gender, Physiotherapy proffers who work at $7-8 \mathrm{hr}$,EXCLUSION CRITERIA: Severe Medical condition, who have suffering from Previous depression symptoms, who have Suffering from previous anxiety symptoms, any neurological conditions

STUDY PROCEDURE: A goggle survey form was generated and circulated through online Mode via mail, WhatsApp, messenger, Telegram among the physiotherapy professors. Informed consent was taken from the Physiotherapy professors in the beginning of the Questionnaire. The form was self-generated from with the questions regarding their Demographic, qualification, work as, working hour. 103 Physiotherapy professor included into the study.
According to inclusion and exclusion Criteria. stress was Evaluated by the help of perceived stress scale questionnaire. The data was collected and prevalence has been found out.

## OUTCOME MEASURE

PSS was used to Assess level of stress in past one month. PSS scores Ranged from 0 to 40 with higher scores indicating higher Perceived stress. The PSS score was calculated by summing Up the scores of all respondents. As per the manual of the Scale, scores ranged from 0-13 was considered low stress, Scores between 14-26 was considered moderate stress and Scores ranging from 2740 was considered severe stress. Reliability
and validity of scales (Cohen and Williamson 1988) reported PSS-10 score having internal consistent reliability $\alpha=0.78$ and validity of concurrent criteria with experience of stress during an average week $\mathrm{r}=0.32, \mathrm{p}<0.05$ [28]

## RESULT \& DISCUSSION

- Statistical analysis was done using the Microsoft excel 2019 and was represented in form of table chart.

The online survey has been done for the study. A Total 103 number of physiotherapy professors were included in this study with response. Among respondents, majority were female 69 ( $66.98 \%$ ) while the majority of moderate stress 52 (50.48\%).
Data analysis on the basis of PSS 10 questionaries found prevalence of perceived stress level $8.73 \%$ high, $72.81 \%$ moderate and $18.45 \%$ low stress in total physiotherapy professors [Table 1].

TABLE 1: TOTAL SAMPLE WITH STRESS PERCEIVED

| TOTAL SAMPLE | HIGH STRESS | MODERATE STRESS | LOW STRESS |
| :--- | :--- | :--- | :--- |
| 103 | $8.73 \%$ | $72.81 \%$ | $18.45 \%$ |

Based on post of physiotherapy professors, in assistance professors total perceived stress $67.94 \%$, in associate professors $28.15 \%$ and in in charge principal $3.88 \%$ [Table2]

TABLE 2: STRESS LEVEL OF DIFFERENT POST GROUP

| BASED ON INDIVIDUAL POST DATA |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| RAW <br> LABLE | HIGH STRESS | MODERATE STRSS | LOW STRESS | GRAND TOTAL |
| ASSISTANCE | $7.76 \%$ | $51.45 \%$ | $8.73 \%$ | $67.94 \%$ |
| ASSOCIATE | $0.97 \%$ | $19.42 \%$ | $7.76 \%$ | $28.15 \%$ |
| PRINCIPAL | $0 \%$ | $1.94 \%$ | $1.94 \%$ | $3.88 \%$ |
| GRAND TOTAL | $8.73 \%$ | $72.81 \%$ | $18.43 \%$ | $99.97 \%$ |

On the basis of gender female perceived $5.83 \%$ high, $50.48 \%$ moderate and $10.63 \%$ low stress while in male perceived $2.91 \%$ high, $22.33 \%$ moderate and $7.76 \%$ low stress. Total stress perceived $66.98 \%$ by female respondents and $33 \%$ by male respondents [table 3].

TABLE 3: STRESS PERCEIVED IN MALE AND FEMALE

| BASED ON INDIVIDUAL DATA |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| RAW <br> LABELS | HIGH SRESS | MODERATE STRESS | LOW STRESS | GRAND STRESS |
| FEMALE | $5.83 \%$ | $50.48 \%$ | $10.67 \%$ | $66.98 \%$ |
| MALE | $2.91 \%$ | $22.33 \%$ | $7.76 \%$ | $33 \%$ |
| GRAND TOTAL | $8.74 \%$ | $72.81 \%$ | $18.43 \%$ | $99.98 \%$ |

In this study different results are observed as separate group of population has been selected for conducting the survey.

## CONCLUSION

This study concluded that there is the high prevalence of moderate perceived stress in assistance professors. Study also concluded that female perceiving high stress rather male.

## Declaration by Authors

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## REFERENCES

1. Firth-Cozens J, Payne R. Stress in health professionals: Psychological and Organizational Causes and Interventions. London: Wiley, 2000.
2. Sharma, E. Role Stress among doctors. Journal of Health Management, 2005; 7(1), 151-156.
3. Ruitenburg MM, Frings-Dresen MH, Sluiter JK . The prevalence of common mental disorders among hospital physicians and
their association with selfreported workability: a cross-sectional study. BMC Health Services Research. 2012;12(1):292.
4. Chrousos GP. Stress and disorders of the stress system. Nature Reviews Endocrinology, 2009;5(7):374.
5. Grover S, Sahoo S, Bhalla A, Avasthi A. Psychological problems and burnout among medical professionals of a tertiary care hospital of North India: A cross-sectional study. Indian Journal Psychiatry. 2018 AprJun;60(2):175-188.
6. Swami MK, Mathur DM, Pushp BK. Emotional intelligence, perceived stress and burnout among resident doctors: an assessment of the relationship. National Medical Journal of India. 2013;26(4):2103.
7. Saini NK, Agrawal S, Bhasin SK, Bhatia MS, Sharma AK. Prevalence of stress among resident doctors working in Medical Colleges of Delhi. Indian Journal of Public Health, 2010;54:219-23.
8. 8.Michesusan. Causes and Management of Stress at Work, Occupational and Environmental Medicine2002; 59(1):67-72.
9. 9.Kyriacou C. Teacher stress and burnout - an international review. Educ Res. 1987 Jun;29(2):146-152. PubMed PMID: WOS:A1987J608000007; English.
10. 10. Pithers RT. Teacher stress research: problems and progress. Brit J Educ Psychol. 1995 Dec;65:387- 392PubMed PMID: WOS:A1995TL04300002; English.
1. Roeser RW, Schonert-Reichl KA, Jha A, et al. Mindfulness training and reductions in teacher stress and Burnout: results from two randomized, waitlist control field trials. J Educ Psychol. 2013 Aug;105 (3):787-804. PubMed PMID: WOS:000322752200016; English.
2. Collie RJ, Shapka JD, Perry NE. School climate and social-emotional learning: predicting teacher stress, job satisfaction, and teaching efficacy. J Educ Psychol. 2012 Nov;104(4):1189-1204. PubMed PMID: WOS:000310861600022; English.
3. Steinhardt MA, Jaggars SES, Faulk KE, et al. Chronic work stress and depressive symptoms: assessing the mediating role of teacher Burnout. Stress Health. 2011 Dec;27(5):420-429. PubMed PMID: WOS:000298298900009; English.
4. Ra D-S, Hwang H-W. The effects of social support and perceived job stress on the mental health of teachers in child care
centers. Journal of Korean Council for Children \& Rights. 2004;8(4): 733-756. PubMed PMID: KJD:ART001116390.
5. Liu R, Guo DJ. Teacher stress and psychosomatic health: a longitudinal study. Int J Psychol. 2004 Oct-Dec;39(5-6):456. PubMed PMID: WOS:000226118004137; English.
6. Shen X, Yang YL, Wang Y, et al. 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. 2014;14:329. PubMed PMID: 25433676; PubMed Central PMCID: PMC4261521
7. Di Donato A, Di Giampaolo L, Reale M, et al. Effect of occupational stress and anxiety on natural killer lymphocyte activity of men and women employed in a university. International Journal of Immunopathology and Pharmacology. 2006 OctDec; 19(4 Suppl):79-84. PubMed PMID: 17291412.
8. Burke RJ, Greenglass ER, Schwarzer R. Predicting teacher burnout over time: effects of work stress, social support, and selfdoubts on burnout and its consequences. Anxiety Stress Copin. 1996;9(3): 261-275. PubMed PMID: WOS:A1996VG64900007; English.
9. Makela K, Hirvensalo M, Whipp P. Determinants of PE teachers career intentions. J Teach Phys Educ. 2015 Oct;34(4):680-699. PubMed PMID: WOS:000365554100009; English.
10. You S, Conley S. Workplace predictors of secondary school teachers' intention to leave: an exploration of career stages. Educ Manag Adm Lead. 2015 Jul;43 (4):561-581. . PubMed PMID: WOS:000360483100006; English.
11. Underwood A. Evaluation of work stress, turnover intention, work experience, and satisfaction with preceptors of new graduate nurses using a 10 -minute preceptor model. Journal of Continuing Education in Nursing. 2015 Dec 1;46(12):533-534. PubMed PMID: 26641146.
12. Hu YC, Chen SR, Chen IH, et al. Evaluation of work stress, turnover intention, work experience, and satisfaction with preceptors of new graduate nurses using a 10 -minute preceptor model. Journal of Continuing Education in Nursing. 2015 Jun;46 (6):261271. PubMed PMID: 26057163.
13. ShuJie L, Onwuegbuzie AJ. Chinese teachers' work stress and their turnover intention. International Journal Of Educational Research. 2012;53:160-170.
14. Conley S, You S. Teacher role stress, satisfaction, commitment, and intentions to leave: a structural model. Psychological Reports. 2009 Dec;105(3 Pt 1):771-786. PubMed PMID: 20099538.
15. Thomas P, Baldwin C, Bissett B, Boden I, Gosselink R, Granger CL, et al. Physiotherapy management for COVID-19 in the acute hospital setting: clinical practice recommendations. J Physiother [Internet]. 2020;66(2):73-82. Available from: https://doi.org/10.1016/j.jphys.2020.03.011
16. Kimberley J Haines, Sue Berney. Physiotherapist during COVID-19: usual business, in unusual times. J Physiotherapy. April 2020;66(2): 67-69.
17. Aly HM, Nemr NA, Kishk RM, Elsaid NMA bakr. Stress, anxiety and depression among healthcare workers facing COVID19 pandemic in Egypt: A cross-sectional onlinebased study. BMJ Open. 2021 Apr 30;11(4)
18. Nayak BS, Sahu PK, Ramsaroop K, Maharaj S, Mootoo W, Khan S, et al. Prevalence and factors associated with depression, anxiety and stress among healthcare workers of Trinidad and Tobago during COVID-19 pandemic: A cross-sectional study. BMJ Open. 2021 Apr 13;11(4).

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