International Journal of Community Medicine and Public Health
Arasu SK et al. Int J Community Med Public Health. 2019 Mar;6(3):1079-1082
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20190589

Original Research Article

Evaluation of professional stress in IT professionals

S. Karthikeyan Arasu*, R. Dhivakar, J. Cibi Chakravarthi, M. Kausik, M. Arun Kumar

Coimbatore Medical College, Coimbatore, Tamil Nadu, India

Received: 06 August 2018
Revised: 07 December 2018
Accepted: 05 February 2019

***Correspondence:**
Dr. S. Karthikeyan Arasu,
E-mail: karthik4rocking@gmail.com

ABSTRACT

Background: Stress has become common among the working people in this era. This may lead to further dire psychological consequences such as anxiety, depression etc. India being the information technology (IT) hub with lakhs involved as IT Professionals, there is a need to assess prevalence of professional stress. Not many studies have been conducted regarding this research topic in urban areas. Hence, this study has been exclusively done in Coimbatore which is an urban area in which IT is still developing. Aim of the study was to assess the stress levels of IT professionals in a software company in urban Coimbatore, Tamil Nadu.
Methods: Cross–Sectional Study based on a validated questionnaire based on professional life stress scale (PLSS).
Results: Out of the 105 employees interviewed 68% were in mild degree of stress. The remaining 32% had moderate degree of stress and none of the participants had high degree of stress.
Conclusions: India being a leading sector in IT, its development largely depends on its employees' physical and mental health. Occupational stress (job stress/work stress) need to be kept harnessed and minimized to provide conducive work environment in the organization.

Keywords: Stress, Occupation, Information technology

INTRODUCTION

Stress has touched almost all professions posing threat to mental and physical health. It has become common among the working people in this era because of the competitiveness, job complexity, advanced technologies and various other reasons. The major cause of stress is the rapid change in technology.

People who try to establish themselves at the beginning of their carrier often experience stress. India being the information technology (IT) hub with lakhs involved as IT professionals, there is a need to assess prevalence of professional stress. Software organizations such as the IT sector are often observed under huge stress.[1] These researches are mainly conducted because of the increasing incidence of the adverse effects of profession on psychological and physical health of employees.[2]

Physical symptoms that may occur because of occupational stress include fatigue, headache, stomach upset, muscular aches and pains, chronic mild illness, sleep disturbances, and eating disorders. Psychological and behavioural problems that may develop include anxiety, irritability, alcohol and drug use, feeling powerless and low morale. The spectrum of effects caused by occupational stress includes absenteeism (the practice of regularly staying away from work without good reason), poor decision making and even lack of creativity. If exposure to stressors in the workplace is prolonged, then chronic health problems can occur.[3]

Therefore, this research highlights work stress among the employees in the information technology sectors in Coimbatore city using professional life stress scale questionnaire to find out the amount of stress caused by professional work alone.[4]

METHODS

The study was a cross–sectional study, conducted in an IT Centre in Saravanampatti, Coimbatore.The study was done for a duration of 5 days from 2017 July 10-14.We included professionals working in the current job since past 6 months, working on computer for at least 4 hours/day and excluded professionals with any major illness and family distress from the study.

Out of a total of 250 employees a total of 110 IT professionals were found to be eligible out of which 5 were unable to participate due to their busy schedule. The participants were given a duration of 20 minutes to fill up the modified PLSS questionnaire. Each questions were given points and at the end the total of those points were used to assess the stress leveling the participant. The data were processed and statistical significance was calculated using the software SPSS version 19.

Interpretation of scores

Score=15: stress isn't a problem in your life. Score= 16-30: this is a moderate range of stress for a busy professional person. It's nevertheless well worth looking at how it can reasonably be reduced. Score=31-45: stress is clearly a problem, and the need for remedial action is apparent. The longer you work under this level of stress, the harder it often is to do something about it. There is a strong case for looking carefully at your professional life. Score =45-60: At these levels, stress is a major problem, and something must be done without delay.

RESULTS

The study population consists of 58% males (61/105) and 42% females (44/105) (Figure 1). According to the grading done based on their scores obtained, 67.2% of the males had mild stress and 32.8% had moderate stress. Among the females, 68.2% of them had mild stress and 31.8% had moderate stress. Comparing the overall levels of stress in regard to gender, males had comparatively more stress than females. But based on the chi-square value, there is no association between stress and gender (Table 1).

The total study population was divided into three groups based on their age. First group includes individuals between 21 and 30 years of age (54/105). The second group consists of individuals whose age is between 31-40 years (41/105). The third group consists of individuals more than 40 years of age (10/105) (Figure 2). Based on their scores, 51.43% of individuals in the first group had mild stress and 39.04% of them had moderate stress. Among the second group individuals, 68.3% had mild stress and 31.7% of them had moderate stress. In the third group, 40% had mild stress and 60% had moderate stress. Comparing the levels of stress with regard to age, individuals whose age is between 21-30 years had more stress when compared to the individuals with age more than 30 (Figure 4). But the chi-square value shows that there is no association between stress levels and age (Table 1).

The study population consists of 56% of individuals who work more than 8 hours a day and 44% of individuals who work less than 8 hours a day. Among them 54.3% of individuals who work less than 8 hours experienced mild stress and 45.7% of them experienced moderate levels of stress. Among the people who worked more than 8 hours, 78% of them experienced mild stress and the remaining 22% of them experienced moderate levels of stress. The chi square value shows that there is association between working hours and levels of stress (p=0.010).

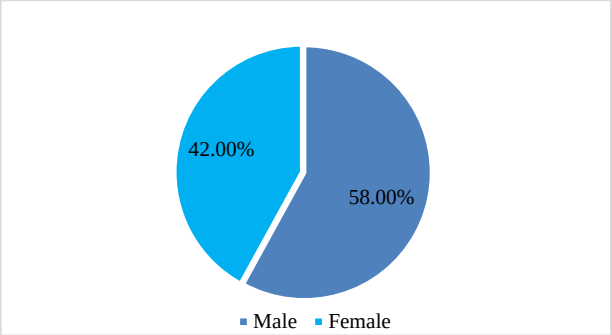

Figure 1: Distribution of study population based on the gender.

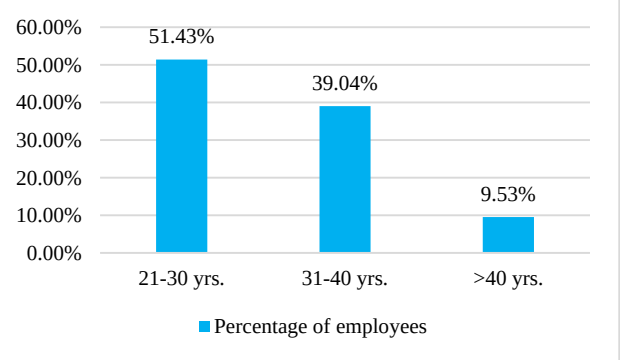

Figure 2: Percentage distribution of age in the study population.

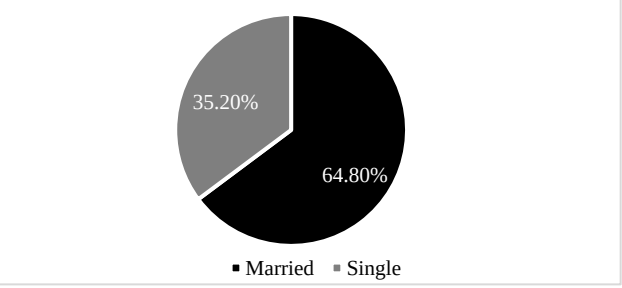

Figure 3: Percentage distribution of the study population based on the marital status.

Table 1: Associations between factors affecting stress and levels of stress.

Factors		Stress levels		P value
		Mild	Moderate	
Gender	Male	41 (67.2)	20 (32.8)	0.917
	Female	30 (68.2)	14 (31.8)	
Age distribution (years)	21-30	39 (72.2)	15 (28.8)	0.134
	31-40	28 (68.3)	13 (31.7)	
	>40	4 (40.0)	6 (60.0)	
Marital status	Married	44 (64.7)	24 (35.3)	0.387
	Single	27 (73.0)	10 (27.0)	
Working shift	Day	62 (68.9)	28 (31.1)	0.496
	Night	9 (60.0)	6 (40.0)	
Working hours	≤8	25(54.3)	21(45.7)	0.010
	>8	46(78.0)	13(22.0)	

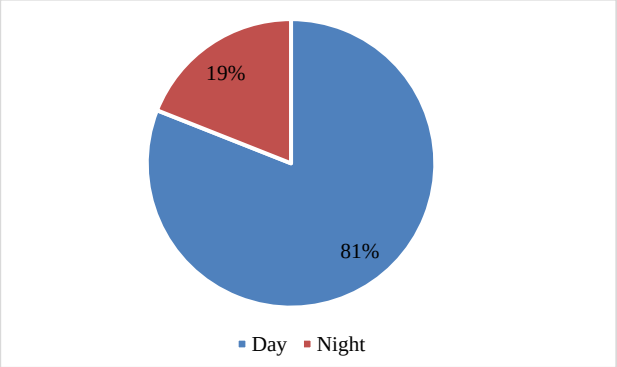

Figure 4: Percentage distribution of study population based on working shift.

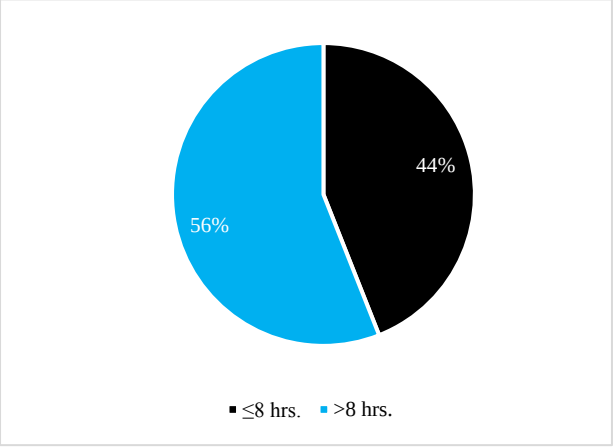

Figure 5: Percentage distribution of study Population based on working hours.

DISCUSSION

Our study was aimed at assessing the level of stress in IT Professionals. The study population consisted of 105 individuals (58% males; 42% females). The grading of the stress was done based on their scores. They were categorized into mild (≤15), moderate (16–30), severe (3–45), very severe (46–60). Overall stress was more among males than females. Individuals of age 21-30 years have comparatively more stress than individuals of age 31 to 40 and more than 40.

In our study sample males were more in number than females. The gender difference may be largely due to cultural and social influences.[5] Additional responsibilities in woman life might have led them to opt professions which are less time consuming and less stressful unlike software profession.

Males showed slightly higher stress score than females. This might be due to additional responsibility shouldered by male population for the attainment of physiological needs of the family. Based on the duration of working hours, we found that individuals with more than 8 hours of work showed higher stress scores. This might be due to the increased fatigue experienced as their shift draws to a close. In recent years, new employees are given better training and hence can cope with longer working hours better.

Stress is a negative consequence of modern living. People are stressed due to over work, job insecurity, information overload and increasing pace of life. In this study we have shown the influence of professional life stress alone as measuring tool to find that the exact nature of work place stress in IT professionals. In this study we found only mild to moderate degree of stress among the IT professionals.[6]

Incidence of mild to moderate degree of stress in our study might be probably because of having realistic targets, proper time management with improved work culture, better opportunities for carrier development and recognition for their good performance. In the present study, singles reported a higher level of job stress than the married.[7] This may be because married workers derive emotional support from the spouse which may not be available to single workers.

CONCLUSION

India being a leading sector in IT, its development largely depends on its employees' physical and mental health. Moderate stress in long term might be a risk factor for various health problems.

Too much stress at work place has a toxic effect whereas too little stress may result in boredom and apathy and low performance. Occupational stress (job stress/work stress) need to be kept harnessed and minimized to provide conducive work environment in the organization.

ACKNOWLEDGEMENTS

Department of Community Medicine, Coimbatore Medical College, Coimbatore.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Kumar S. An analytical study of job stress among software professionals in India. Int J Res Computer Application & Management. 2012;2:65-70.
2. Light KC, Turner JR, Hinderliter AL. Job strain and ambulatory work blood pressure in healthy young men and women. Hypertension. 1992;20:214–8.
3. Chaly PE, Anand SPJ, Reddy VCS, Nijesh JE, Srinidhi S. Evaluation of occupational stress among software professionals and school teachers in Trivandrum. Int J Med and Dent Sci. 2014;3(2):440-50.
4. Fontana D. Professional stress test scale UK. Managing Stress. The British Psychological Society and Routledge Ltd; 1989.
5. Gefen D, Straub D. Gender differences in perception and adoption of E-mail: An extension to the technology acceptance model, 21. MIS Quarterly. 1997;389-400.
6. Cooper CL, Marshall J. Occupational Sources of Stress: A Review of Literature Relating to Coronary Heart Disease and Mental Health. J Occupational Psychology. 1976:49:11-20.
7. Vimala B, Madhavi C. A study on stress and depression experienced by women IT professionals in Chennai, India. Psychological Res Behavioral Management. 2009:2:81-91.

Cite this article as: Arasu SK, Dhivakar R, Chakravarthi JC, Kausik M, Kumar MA. Evaluation of professional stress in IT professionals. Int J Community Med Public Health. 2019;6:1079-82.