



INFLUENCE OF OCCUPATIONAL STRESS ON HEALTH AMONG THE MEDICAL TRANSCRIPTORS

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ABSTRACT

Occupational stress is one of the major problem in our modern world and it leads to various stress conditions..The purpose of this study was to assess the influence of occupational stress on health among medical transcriptors. After initial assessment of occupational stress,a module was given to provide information on stress reduction. The study result showed thatfemales have higher occupational stress compared to males. It was also observed that the symptoms including somatic symptoms and psychological symptoms are higher in females compared to males.

KEY WORDS: occupational stress, medical transcriptors, health symptoms



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INTRODUCTION

Healthy citizens make a healthy nation. Occupation is very important for all the individuals. Stress is the arousal of mind and body in response to demands upon them. Stressors are disruptive forces operating within or on any system¹. Long working hours and irregular timing cause stress, when excessive it can be threatening to one's ability to cope with the work and also with the environment. Estimates indicate that 52 to 80 percent of all physical disorders have psychosomatic or stress related origin². Computers have become an epitome of modern life and being used in every aspect of our day to day life. India has been in the forefront in cyber world with Information Technology (IT) industry developing into a major service provider. This has also ushered in a new genre of occupational health problem called computer related health problems.³ Information Technology (I.T) professionals are burdened by stress and burnouts are becoming too common. India is going through a growth phase and our corporate are enveloped in growing and changing business processes. The role of I.T in such a competitive environment has led to stiff project deadlines with fewer resources resulting in increased pressure and expectations from the Information Technology teams. Medical transcriptors who are forced to operate computer throughout the whole day at high speed with their performance and behavior closely monitored are at risk of developing health problems. Some of the health problems include eye strain, headache, visual fatigue, backache, muscle fatigue, musculoskeletal injuries and visual problem. The three acts of listening, watching and typing are all at a stretch never gets a break. This performance monitoring also put enormous stress on the employees⁴. A study is conducted among 200 Information Technology (IT) Professionals revealed that Visual problems are seen in 76% and musculoskeletal in 77.5% while 35% felt stressful symptoms.. The study has brought forth a very high prevalence of computer related morbidity among I.T professionals and it further concluded that all aspects of ergonomic

variables appear to be acting in cohesion in relation to computer related health³. The mental health charity has estimated that 30 to 40 percent absence from the work is due to sickness attributable to mental and emotional disturbances⁵. The term stress means pressure and in human life it represents an uneasy experience. It is an unpleasant psychological and physiological state caused due to some internal or external demands that beyond our capacity⁶.

Stress is a condition or feeling experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize⁷. Stress is the negative sense of the root cause of all problems but in a positive sense stimulates all creative and constructive activities⁸. A study conducted on occupational stress and job satisfaction among managers; the study is planned to investigate the effect of age on occupational stress and job satisfaction among managers of different age groups. Sample of 105 industrial managers working in different large scale organization are selected randomly for study⁹. The Occupational Stress Index (OSI) developed by Srivastav and Singh Kendal are used to access the level of job stress and job satisfaction of the sample the findings of the study reveals higher level of job stress and less job satisfaction among the managers of 25-35 years of age, middle age and the old age groups 36-45 and 46-55 years. The study also found that the age is positively correlated with job satisfaction while the correlation of occupational stress was negative. Occupational stress is directly associated with state of health and inversely associated with global constructive thinking and job satisfaction.

A study conducted at Okayama University Medical School to examine psychological symptoms and job stress in Japanese workers. The study shows that anxiety and depression had a significant stable relationship with work¹⁰. A study conducted on occupational stress, attitudes and health problem of Information System professional. The study examines occupational stress among

Information Systems person. The health behavior instrument is completed by 580 respondents in 18 large companies in South Western sections of the United States. The data indicates that the stress vary with different individual¹¹. A study conducted to explore the relation between psychosocial factors and musculoskeletal pain in Chinese off shore oil installation worker. Logistic regression analyses are used to study the relations between psychosocial factors and musculoskeletal pain in each body region. And found that there is a direct relationship between these two¹². A study on job stress in the Nursing Profession is conducted and it examines the influence of changes in work conditions on stress outcomes as well as influence of changes in stress outcomes on work conditions. The result shows changes in work conditions are predictive of the outcomes, especially of job satisfaction and emotional exhaustion. The strongest predictors of job satisfaction are social support from supervisor, reward and control over work. The strongest predictors of emotional exhaustion are work, time pressure and physical demands¹³.

The threshold score is used to identify the stressors more associated with mental – ill health effects. A significant association between gender and mental ill-health is found, with females more likely to score more than males¹⁴.

MATERIALS AND METHODS

The study was designed to assess the influence of occupational stress on health among medical transcribers in a selected company at Coimbatore, Tamil Nadu, India. The research approach adopted for the study was descriptive design. It was concerned to assess the influence of occupational stress on health. An assessment was made with appropriate tool. A standardized Questionnaires were given to each sample. After the assessment, the module was given to provide information on stress reduction. Finally the scores of occupational stress and health symptoms are compared to know the influence of occupational stress on health. 100 medical transcribers were randomly selected for the

study, in that, 50 were males and 50 were females. Education module was prepared by the present investigator with the help of literature Review and expert opinion. The content of education module included definition, types, cause and how we can reduce stress etc.

RESULTS

The socio demographic data of medical transcriptionists were described in terms of age, gender, education status, type of work, shift, income per month, marital status, number of children, type of family, number of family members, food preference, mode of transport, distance traveling in km per day, experience in years, hours of work, hours of work at a stretch, break between work in minute & activity during break time were studied in detail. Among male respondents 56% belonged to age group of 26-33 years, whereas in case of female 56% samples between the age group of 18-25 years. Regarding gender 50% of the samples were males and 50% of the samples were females. Among 100 samples, the following demographic differences were observed. Among them 62% of both males and females were graduates and 8% of total respondents were post graduates. In the working schedule 60% of male respondents and 72% of female respondents were working in the first shift, while 40% of males and 28% of females are working in second shift. In case of earning, 42% of respondents have a monthly income between Rs.11000 – Rs.18000, 57% of have a monthly income between Rs.3000- Rs.10000 and only 2 % of respondents have a monthly income of Rs. 27000 & above. Among 100 samples 52% of male respondents and female respondents were married and 48% of the samples were unmarried. Out of 100 samples 68% of male respondents and 66% female respondents have no children. 4% of male respondents and 2 % of female respondents have more than 2 children. Among 100 samples 76% of male respondents and 78% of female respondents were from nuclear family and 24% of the samples were from joint family. Among 100 samples 66% of male respondents and 72% of female

respondents have 4-7 members in the family. Out of 100 samples 60% of male respondents and 60% of female respondents were non-vegetarian. Among 100 samples 72% of male respondents have their own vehicle as mode of transport and 42% of female respondents have the company cab as their mode of transport. Out of 100 samples 66% of male respondents and 62% of female respondents have a travel of less than 30 km per day to reach the company. Out of 100 samples 66% of male respondents and 54% of female respondents have the work experience of 5-10 years and only 2% samples have the work experience of

more than 10 years and above. Among 100 samples 64% of male respondents and 70% of female respondents are working for 6-10 hours per day and 36% of the samples are working for 10-14 hours per day. Out of 100 samples 66% of male respondents and 62% of female respondents have less than 80 minutes of break between the work hours. Out of 100 samples 42% of male respondents and 42% of female respondents have the activity of taking snacks during the break time. 32% samples have the activity of chatting and 26% of the samples, both males and females have the activity of reading.

Table 1
Comparison of Different Stress level in Male and Female

	Mean±SD		P value
	Male	Female	
1.Occupational stress score	38±9	40±10	*0.03
2. Health Symptoms			
a. Somatic Symptoms	27±6	31±7	*0.002
b. Psychological Symptoms	31±8	39±11	*0.000
c. Resilience	11±6	12±7	0.44

*statistically significance, $P < 0.05$

The data presented in the Table1 indicated that females have higher occupational stress score compared to male. A statistically significance difference in the occupational stress score in male and female at 5% significance level was observed. Regarding health symptoms, female have higher mean score of somatic symptoms compared to males and the result showed statistically

significant at 5% significance level. Similarly the mean psychological score were higher in female compared to male and it's also showed statistically significant at 5% significance level. The mean resilience score was higher in females compared to male, However there was no statistical significance difference observed.

Table 2
Comparison of occupational stress score on somatic symptoms

Occupational Stress score	Somatic Stress score		
	<35	35-50	>50
<50	16	6	8
50 – 75	9	14	10
>75	6	10	21

$\chi^2 = 15.12$, $P = 0.004$. Statistically significant

The table 2.depicts the influence of occupational stress on somatic symptoms. We noticed that, among the study respondents, 30 % of respondents having occupational stress score less than 50 and

37% having more than 75 .And observed that those who are having more somatic symptoms , their occupational score is also higher and the result showed statistically significant association between occupational stress and somatic symptoms.

Table 3
Comparison of occupational stress score on psychological stress score

Occupational Stress score	Psychological stress score		
	<35	35-50	>50
<50	14	9	7
50 – 75	9	13	11
>75	5	10	22

$\chi^2= 13.353$, $P=0.009$, *Statistically significant*

The table 3 Depicts the influence of occupational stress on psychological symptoms found that those who were having more occupational stress, experienced more psychological symptoms. The results also showed that statistically significant association between psychological symptoms and occupational stress.

Table 4
Comparison of occupational stress score on Resilience score

Occupational Stress score	Resilience stress score		
	<30	30-60	>60
<50	6	10	14
50 – 75	9	15	9
>75	22	10	5

$\chi^2= 16.47$, $P=0.002$. *Statistically significant*

The above table 4 depicts the influence of occupational stress on resilience. When the occupational stress was less, the respondents have more resilience score. The results also showed that statistically significant association between occupational stress and resilience.

Relationship between demographic variables and score of the respondents

Karl Pearson's coefficient of correlation was used to find out the relationship between the demographic variables and occupational stress scores of the respondents. Table 5 revealed that educational status, number of family members, experience in years, work load for day & Income for month were positively correlated with the occupational stress scores of male respondent, whereas distance traveling in kilometer per day, hours of work at a stretch, break between work in minute and number of children work were inversely correlated with occupational stress scores of male.

Table 5
Relationship between Demographic Variables And Score Of The Respondents

Demographic variables	r value	
	Male	Female
Educational status	0.80	-0.182
Number of family members	0.412	-0.085
Traveling distance in km per day	-0.023	-0.077
Experience in years	-0.320	-0.022
Work load per day	0.143	-0.136
Hours of work at a stretch	-0.084	-0.099
Break between work in minutes	-0.037	0.216
Number of children	-0.366	0.139
Income per month	0.101	0.103

Educational status number of family members, distance in km in day, experience in years, work load per day and hours of work at stretch were inversely correlated with occupational stress scores of females whereas break between work in minutes, number of children and income per month are positively correlated occupational stress scores of female

CONCLUSION

A descriptive design study is conducted among medical transcribers in a selected company. An assessment is done to know the influence of stress on health. After assessment, stress reduction module is provided for the respondents. Data obtained are analyzed with regards to the effect of occupational stress on health among medical transcribers.

REFERENCES

1. Brunner and Suddarth, Text of Medical Surgical Nursing, 10th Edn, J.B. Lippincott Company, (2004).
2. Khera S, Computer related health problems among information Technology professional. Indian Journal of Community Medicine, 31:36-38, (2006)
3. Sharma HK, Occupational Health problems and role of Ergonomics in information technology professionals. Indian Journal of occupational and environment Medicine, 9(3):1-4, (2005)
4. Satye Sudaran, Stress Management. Social Welfare :37-38, (2007).
5. S. Joseph Xavier, Stress :A global problem for BPO service employees. Health Action: 15-17, (2007).
6. Sreevan R, All about your stress. Nightingales Times:24-27 (2006).
7. Antony Paul, Managing stress. Health Action : 10-12, (2007).
8. Black M Joyce and Esther Jacobs, Text Book of Medical Surgical Nursing, 6th Edn, W.B Saunders, (2001).
9. Chandraiah K, Occupational stress and Job satisfaction among managers. Indian Journal of occupational and Environmental medicine, 7(2): 6-11, (2003).
10. Jun Shigemi, Stability of factor structure of correlation with perceived Job stress in General Health Questionnaire. Journal of Occupational Health, 42:284-291, (2000).
11. James S, Occupational stress and Health Among men and women in the Tecumseh Community Health Study. Journal of Health and Social Behaviour, 27:1-1 (1986).
12. WQ Chen, Impact of occupational stress and other psychosocial factors on musculoskeletal pain among Chinese offshore oil installation workers. Indian Journal of occupational and environmental medicine, 62: 251-256, (2005).
13. Tanyor Gelsema "A longitudinal study of Job stress in Nursing Profession. Journal of Nursing Management, 14:289-299, (2006).
14. Colins PA, stress in police officers" Journal of Occupational medicine, 53:256-264, (2005).