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STRESS, HEADACHE, HIGH BLOOD PRESSURE AND SELF-ESTEEM IN WORKING WOMEN

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Contribution

MM conceived the idea, planned the study and drafted the manuscript. The author contributed significantly in manuscript submission.

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ABSTRACT

Objective: The current study was conducted to explore the relationship of stress with headache, high blood pressure and self-esteem in working women.

Methodology: This cross-sectional study was carried out in Govt MAO College, Lahore, Pakistan from January, 2016 to November, 2016. Sample of the study consisted of married working women and was obtained from different departments of two universities of Lahore. Age range of the research participants was 25-45 years. Demographic information regarding age, monthly income, education, marital status, nature of job, residential area, number of children and family structure of research participants was obtained. Depression Anxiety and Stress Scale (DASS) designed to assess depression, anxiety and stress was used . Data on headache experienced during the last 6 months was obtained.. People who are diagnosed patients of migraine or any other type of headache disease were excluded from the study. Blood pressure and Rosenberg Self-Esteem Scale was used to assess the self-esteem of working women.

Results: Total 200 married women were included. Results indicated significant relationship of stress with headache (X^2= 19.52***, p < .001) and high blood pressure (X^2= 27.56***, p < .001) and self-esteem (X^2= -10.35***, p < .001) of working women. Similarly, stress had negative correlation with education (r = -.45***, p < .001), monthly income (r = -.38***, p < .001) and significant positive correlation with contractual job (r = -.38***, p < .001.) Similarly, monthly expenses (B = .25***, p <.001), being married (B = .37***, p <.001), more number of dependents(B = .45***, p <.001), contractual job (B = .49***, p <.001), tenure track job (B = .29***, p <.001) and joint family system (B = .38***, p <.001) appeared as positive predictors of headache and high blood pressure, whereas permanent job emerged as negative predictors of headaches (B = .-21***, p <.001) and high blood pressure (B = .-27***, p <.001) in working women.

Conclusion: Stress is a significant feature of working women affecting their physical and psychological health. University teachers experience stress, headache and frequently rise in their blood pressure.

Key Words: Stress, Headache, High blood pressure, Working women

INTRODUCTION

Experiencing stress in the workplace is an element of everyday life. Stress in working people results in various issues and feelings such as worry, fear and depression.[1] The consequences of stress in workers are lethargy, absenteeism at work, lack of productivity, burnout, and decrease in performance and production.[2] Increasing workplace requirements result in working women facing many hardships and usually suffering from health related issues. The most emerging psychological problem in working women is stress which can be due to work interfering in family or family interfering in work.[3] Similarly they face various health related problems however, one commonly reported health problem is headache.[3]

Headaches are internationally prevalent in a major portion of the world population, transcending all age groups, affecting individuals' performance and have been accepted as a main health problem by WHO.[4] Headache has substantial impact on the health of the individual, thus limiting physical activities and reducing quality of life and performance at workplace. Headache reduces activities of the affected people by 77%, disturb their routine by 50% and 30% of them must lie down during the headache attack.[5]

Biological, social and psychological factors are often considered as significant risks of hypertension.[6] Psychological state of an individual immensely affects the physical condition of human body. Empirical evidence reports high incidence of stress among people causing hypertension. Stress has been considered an important factor in the etiology of many cardiac problems, hypertension and is significantly correlated with high blood pressure. Natural reaction of the cardiovascular response to stress is the increase in heart rate.[6]

Literature establishes many emotional and physical health related issues associated with workplace environments. [7] Headache is the most recurrent health problem and is a great burden upon the affected, their families and society.[8] Headache is considered a neurological problem and almost every person experiences it at some stage of life.[9] Only migraine treatment results in the annual expenditure of € 27 billion and the prevalence of tension-type headache is greater than other types of headaches.[10]

Literature reports that working women enjoy high self-esteem. Stress is a mental strain from the external and internal stimulus that inhibit a person to respond towards its environment in a normal pattern. In addition stress has wide psychological and physical effects such as cardiovascular, musculoskeletal, system, headache, gastrointestinal problems, sleep disturbance and depression.[11]

Self-esteem is an indispensable asset in the life and has a myriad impact on normal and healthy self-development, and has a value for survival. It is believed that there are many benefits to have a positive view of the one's own self. Those who have high self-esteem are assumed to be psychologically happy and healthy whereas people with low self-esteem are believed to be psychologically distressed and perhaps even depressed.[12] Self-esteem is the evaluative characteristic of the self-concept that corresponds to an overall view of the self as worthy or unworthy.[13]

Most women in Pakistan step out of their comfort zone to share the economic burden of their families. They face stress not only from their workplaces but also from their family members for going out of their homes. The present research was conducted to explore the relationship of stress with headache, blood pressure problems and self-esteem of working women.

METHODOLOGY

This cross-sectional research was carried out in Govt MAO College, Lahore, Pakistan from January, 2016 to November, 2016. Purposive sampling technique was used for data collection. Sample of the study consisted of married working women. The sample of working women was obtained from different departments of two universities of Lahore. Age range of the research participants was 25-45 years. A demographic information form was prepared by the researcher, keeping in view the age, monthly income, education, marital status, nature of job, residential area, number of children and family structure of research participants etc. Depression Anxiety and Stress Scale (DASS) consisting of 42 items self-report inventory developed by Lovibond and Lovibond (1995), which includes three subscales designed to assess depression, anxiety and stress. Only stress items were included in the current study. The Cronbach's alpha for stress items is 0.90 as reported by authors.[14] Data on headache experience was obtained by using a self-structured questionnaire which contained questions on the existence of headache experience during the last 6 months on affirmative (yes/no) response style, if yes then it was categorized into 3 types i.e., mild headache, moderate headache and severe headache experienced. People who were diagnosed as patients of migraine or any other type of headache disease were excluded from the study.

Data on rise in blood pressure was obtained by self-reported blood pressure questionnaire. They reported frequent raise in their diastolic blood pressure from 80mm hg to 95mm Hg but the participants were not using antihypertensive medicine. The Rosenberg self-esteem scale (Rosenberg, 1965) consisting of 10 items and has high test-retest reliability of .82 - .85 waas used to assess self esteem.

RESULTS

Total of 200 working women were included in the study. About 62% of working women were Masters, 18% M.Phil and 30% were PhD. Their monthly income was between 40,000-160,000 rupees. Fourteen percent of working women had no child, 14% of working women had 1 child, 26% had 2 children, 24% of working women had 3 children, 14% of working women had 4 children, 6% of working women had 5 children and 2% of working women had 6 children. About 40% of working women were living in nuclear family structure and 60% of working women had joint family structure. Demographic characteristics are shown in table 1.

About 74 (37%) of the working women were passing through mild stress, while 70 (35%) were experiencing moderate level of stress and 56(28%) were experiencing severe stress. Similarly, 80(40%) were experiencing mild headaches, while 94(42%) moderate headaches and 26(13%) had severe headaches. About 110(55%) of working women had mild blood pressure, 56(28%) moderate blood pressure and 34(17%) had severe blood pressure (Table 2)

Chi-square statistics was used for exploring association of stress with headache, blood pressure, self-esteem and other demographic variables. Results shown in the Table 3 indicate statistically significant association of perceived stress with headaches (0.52^{***}) and blood pressure (0.56^{***}). Stress also had significant negative correlation with self-esteem (-0.35^{***}) in working women. Moreover stress also had statistically significant positive relationship with demographic variables like being married, more monthly expenditures, long working hours, dependents, contractual job, tenure track job and living in joint family system.

Correlation analysis was carried out to explore the relationship of stress and self-esteem with demographic variables. The results given in Table 4 indicate statistically significant positive correlation of age with stress ($r = .34^{***}$), self-esteem ($r = .41^{***}$), Education was significantly related with stress ($r = -.45^{***}$), and self-esteem ($r = .39^{***}$)while

Table 1: Demographic Characteristics of the Research Participants (n = 200)

Variable	f	%	Variable	F	%
Age in years			**Monthly income in thousands**		
25-33	110	55	35-47	112	56
34-41	90	45	48-65	88	44
Experience in years			**Number of dependents**		
1-07	88	44	0-2	130	65
08-16	76	38	3-5	56	28
17-24	36	18	5-7	14	7
Marital status			**Nature of job**		
Single	46	23	Permanent job	136	68
Married	120	60	Contractual job	64	32
Divorced/widow with children	34	17	Tenure track system		

Note; f = frequencies, % percentages

Table 2: Distribution of Stress, Health Problems and Self-Esteem in Working Women (n =200)

Variables	M	SD	α	f	%
Mild stress	16.69	6.32	.72	74	37
Moderate stress	20.51	6.28	.84	70	35
Severe stress	28.73	7.80	.81	56	28
Mild headaches	24.43	6.72	.70	80	40
Moderate headache	37.42	8.70	.82	94	42
Severe headaches	31.53	7.31	.80	26	13
Mild blood pressure	34.60	8.67	.81	110	55
Moderate blood pressure	29.31	7.90	.79	56	28
Severe blood pressure	30.62	7.92	.83	34	17
Mild self-esteem	15.16	3.45	.85	58	29
Moderate self-esteem	20.81	6.20	.80	72	36
Severe self-esteem	26.42	67.27	.82	70	35

monthly income was significantly correlated with stress (r =-.38***), self-esteem (r =.35***). Number of children was also correlated with stress (r =.42***), headache (r = .36***) and blood pressure (r=.21*) significantly .Similarly contractual job was associated with stress (.35***), self-esteem (r =-.23***). Joint family system with significantly correlated with stress (r= .29**).

Statistically significant association of stress was found with headache (x2= .21**) and blood pressure (x2= .52***). Monthly income, job situation and joint family system was significantly associated with headaches (x2 = .33**) and blood pressure (x2 = -.52***).(Table 4)

Table 3: Association of Stress with Headache, Blood Pressure and Self-Esteem in Working Women (n =200)

Variables	χ^2	Variables	χ^2 (df =1)
Headache	19.52***	Working hours	10.62***
Blood pressure	27.56***	Number of dependents	7.40***
Self-esteem	-10.35***	Contractual job	1.52***
Married	0.41***	Tenure track job	3.56***
Monthly expenditures	110.56***	Joint family system	3.42***

Note; ***p < .001

Table 4: Association of Demographic Variables with Stress and Self-Esteem of the Working Women (n = 200)

Variables	Stress (r)	Self-esteem (r)	Headache χ^2 (df =1)	BP χ^2 (df =1)
Age	.34***	.41***	24.22**	76.52***
Education	-.45***	.39***	16.05	11.07
Monthly income	-.38***	.35***	87.33***	76-.52***
No of children	.42***	.02	4.36***	5.21*
Contractual job	.35***	-23**	2.52***	2.41***
Joint family system	.29**	.10	2.37***	3.35***

Note; *p < .05;**p < .01; ***p<.001

DISCUSSION

This present study was conducted to explore relationship of stress with health related problems and self-esteem of working women. The study also predicted different health problems as a result of stress. It was hypothesized that stress is significantly correlated with and predict headache experience, rise in blood pressure and self-esteem at the work place in working women. Additionally, stress appeared as a significant positive predictor of health problems in working women.

Results showed that there is significant positive relationship between stress and physical and psychological health of working women. Stress is an established risk factor of many health problems including headache, blood pressure elevation and sleep problems in working women.[12] The present findings are consistent with the findings of those who also find significant positive relationship of stress with health problems in working women.[15,1] It is established that stress changes migraine in various ways and further it may work as onset of headache disorder. Further, headache itself is a great stressor affecting myriad spheres of an individual's life and leads to the vicious cycle of headache disease. It has also biological basis because stress raises the activation level of hypothalamic-pituitary-adrenocortical (HPA)-axis and sympathetic nervous system activity in response to stress.[16] Teaching is considered as one of the most stressful profession which affects both the teacher and the student.[12,17] Teachers face hardships in dealing with students of diverse personalities and aptitudes, tension and in maintaining balanced relationship with colleagues and in the management of household affairs. Less achievement motivation among students, their attitude and disciplinary problems and ultimately very low grades in their final semesters creates a lot of stress which resulted in health related problems in working women. Low support from their

colleagues, less salary, long working hours, work load, bad-working conditions and always demanding attitude from family and friends contribute to create stress and affect the physical and psychological health of the working women.

Many other sources of stress in teachers may be summarized as low motivation in students, discipline problems, the pressure of time and the work load, being evaluated by students, relationship with colleagues, conflict and indefiniteness of roles, bad working conditions and self-respect, students' discipline problems, the inadequate support of colleagues, family and friends. In addition many demographic variables play a significant role in tension headaches and in the rising of blood pressure. Moreover, stress has significant positive relationship with monthly income and contractual job. Job on contract basis is a continuous threat for the employees. The fear of removal from job keeps them in stressful condition which affects their body.

The second hypothesis of the study that there will be a negative relationship between stress and self-esteem reveals that there is significant negative relationship between stress and self-esteem in working women. Working women enhance the financial resources of the family which has positive impact in their self-esteem. The findings from the existing study reveal that education is a significant predictor of self-esteem in working women. The present findings are consistent with those of who have also found significant relationship between stress and self-esteem. [18-20] Thus it is concluded that stress and self-esteem are significantly correlated. Maslow presented the hierarchy of needs and self-esteem comes after fulfilling basic needs of food, safety and love. Working women contribute in the family income and enjoy good level of self-esteem. The family depends upon their income and show compliance to them. A research found that family income had significant association with women's self-esteem in family relations.[13] Besides, university teachers are educated members of society and while living in majority of illiterate masses they earn more respect which enhances their self-esteem.

CONCLUSION

Thus the present research concluded that stress is a significant feature of working women which affect their physical and psychological health. University teachers experience stress, headache and frequent rise in their blood pressure. Similarly they enjoy high self-esteem due to their respect from society.

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