

A STUDY TO ASSESS THE STRESS LEVELS AND THE FACTORS INFLUENCING STRESS AMONG WORKING WOMEN PROFESSIONALS OF BANGALORE CITY.**Nimra Shireen¹, Shibi Selladurai², Selvi Thangaraj³, Swetha N B⁴**¹. ESIC Medical College, Gulbarga, ². Vinayaka Mission's Kirupananda Variyar Medical College, Salem, ³. Bangalore Medical College and Research Institute, Bangalore, ⁴ Sree Balaji Medical College and Hospital, Chennai.**Date of Submission** : 23-03-2018**Date of online Publication** : 18-04-2018**Date of Acceptance** : 18-04-2018**Date of Print Publication** : 30-06-2018***Author for correspondence:** Dr. Nimra Shireen, Assistant Professor, Department of Community Medicine, ESIC Medical College, Gulbarga. Email: dr.nimra22@gmail.com.**Abstract**

Introduction: Work plays a central role in the lives of many people, and the impact of occupational stress is an important issue both for individual employees and the organizations in which they work. As women take on the role of working professionals in addition to their traditional role of being homemakers, they are under great pressure to balance their work and personal lives. Thus this study attempts to assess the level of stress among working women professionals- doctors, engineers and lawyers, and the factors influencing stress in them. **Methodology:** A cross sectional study was conducted among 378 women professionals (Doctors, Engineers and Lawyers) working in Medical Colleges and Hospitals, Information Technology (IT) companies and civil courts of Bangalore city using Simple Random sampling method. The stress components of the Depression, Anxiety and Stress scale (DASS) were used to assess the stress levels. Data regarding socio demographic profile and the factors influencing stress was collected using a pre-tested semi-open ended and self-prepared questionnaire. **Results:** The overall prevalence of stress was estimated to be 38.1% among the working women professionals. Out of them, 13.8% had mild stress, 20.9% had moderate stress and 3.4% were severely stressed. The mean stress score was 12.58 ± 7.33 . **Conclusion:** More than two-third of the working women professionals were found to be under stress. This shows that many working women are stressed, trying to balance an ever-growing burden of professional responsibilities and personal commitments.

Key-words: Working Women Professionals, Stress levels, Doctors, Engineers, Lawyers, Information Technology.**Introduction**

Stress is a normal physical reaction to internal and external pressures placed on a person's system. A major source of stress, particularly in transitional societies, is the conflict generated by new opportunities and frustrations arising from social changes.¹ Stress have affected almost all professions of the society, posing a threat to mental and as well as to physical health. Work plays a predominant role in the lives of many people, and the impact of occupational stress is an important issue for the individual employees and also for the organizations in which they work.

A woman who earns a salary, wages or other income through regular employment usually outside the home is considered as working woman. A professional is a person who does a job that needs special training and a high level of education.² Out of the many professionals who are affected by emotional stress, doctors, engineers and lawyers comprise a major and important group.

One of the significant changes seen in last decade in our country is the emergence of large number of women professionals. As women take on the role of

working professionals in addition to their traditional role of being homemakers, they are under great pressure to balance their work and personal lives.

As per Census 2011, the workforce participation rate for females at the national level stands at 25.51% compared with 53.26% for males. In the rural sector, females have a workforce participation rate of 30.02% compared with 53.03% for males. In the urban sector, it is 15.44% for females and 53.76% for males.³

As per National Sample Survey (68th Round), the worker population ratio for females in rural sector was 24.8 in 2011-12 while that for males was 54.3. In Urban sector, it was 14.7 for females and 54.6 for males.³

Interest in professional stress research among women is growing primarily because of the increasing evidence of adverse effects of profession on psychological and physical health of women employees. This study attempts to assess the level of stress among working women professionals- doctors, engineers and lawyers, and the factors influencing stress in them, as the Indian society has witnessed a surge in the participation of women in the workforce.

Methods

A cross-sectional descriptive study was carried out from April 2015 to March 2016 among randomly selected working women professionals – namely doctors from selected Medical College and Hospitals, engineers from selected IT companies and lawyers practicing in selected Civil courts located in Bangalore South zone. The sample size obtained was 378 based on a previous study by Saini NK, et. al.⁴

A sampling frame of all the medical college and Hospitals, IT companies and civil courts in Bengaluru south zone was prepared. From the sampling frame six Medical College and Hospitals, six IT companies and two civil courts were randomly selected using lottery method. In order to ensure equal representation of the sample, 126 working women were included from each profession. From each Medical college and IT company 21 women professionals and from each civil court 63 lawyers were selected randomly. The employees who belonged to 25-45 years age group, working for minimum of six hours per day at their workplace and who give consent for the study were included in the study. The women who are under treatment for stress related illness and who are in their training period of work were excluded.

Data collection was started after obtaining clearance from the Institution Ethical Committee. Permission was obtained from the respective Dean of Medical College and Hospitals and Managing Director of the IT companies to conduct the study. The professionals were approached at their work place and after taking Informed consent for the study, questionnaires were personally distributed. The purpose of the study was explained and then the participants were told to give appropriate and exact response without any hesitation and free of bias. The filled questionnaires were collected on the same day.

A pre-tested, semi-structured and self-designed questionnaire was used in the study. It consisted of **four** sections;

Section one: Socio-demographic details like Contact number, Age, Religion and Occupation

Section two: Information regarding their workplace

Section three: Information regarding their home or personal life

Section four: The stress components of Depression Anxiety Stress Scale to elicit the presence of stress in the study population.

Data entry and analysis was done using Microsoft excel sheet and SPSS version 23.0. Data was presented in the form of tables, figures, graphs, wherever necessary. Statistical methods used include descriptive statistics (Percentages and Mean). Pearson Chi Square test of significance was used to find the association between variables. Fisher Exact probability test was used whenever the cell frequency was very small (< 5).

Results

The overall prevalence of stress was estimated to be 38.1% among the working women professionals. Out

of them, 13.8% had mild stress, 20.9% had moderate stress and 3.4% were severely stressed. The mean stress score according to the stress components of Depression, Anxiety and Stress scale was 12.58 ± 7.33 . Engineers (42.8%) were found to be with considerable more stressed followed by doctors (38.1%) and lawyers (33.4%). The statistical test indicates that there is significant difference in the occupational stress scores among the group of women professionals. (Figure 1)

Figure 1: Distribution of study subjects according to stress level

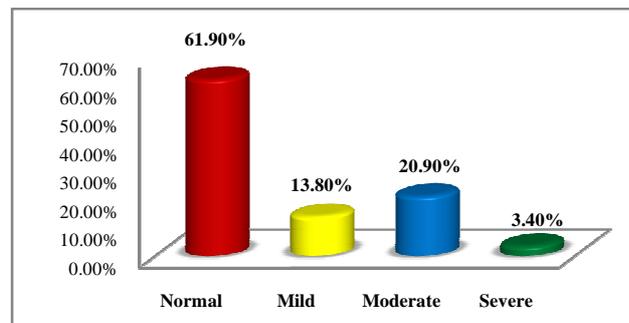


Table 1: Distribution of study participants according to age and religion.

Parameter	Frequency (%)	Significance
Age		
25 - 30 years	93 (24.6%)	$\chi^2 = 8.754$
31 - 35 years	121 (32.01%)	p = < 0.05
36 - 40 years	117 (30.95%)	
41 - 45 years	47 (12.43%)	
Religion		
Hindu	301 (79.6%)	$\chi^2 = 3.786$
Muslim	32 (8.46%)	p = > 0.05
Christian	45 (11.9%)	

* χ^2 = Chi-square value

The mean age of the study subjects was 34.57 ± 5.0 years. Nearly two-third of the doctors (63%) were aged between 31-40 years and majority of them (79.7%) belonged to Hindu religion. A statistically significant association was found between age of the women professionals and stress. Subjects between 36 years and 40 years of age had the highest prevalence of stress. (Table 1)

About 50.5% of the respondents had work experience of less than 5 years while 36.8% of them had 6 to 10 years of experience. Nearly 43% of women were working for more than 8 hours per day. The relation between working hours and stress was statistically significant (p<0.05). This explains that there is a direct impact of working hours on the stress percentage undergone by the working women. A large majority of

women professionals (82.3%) surveyed were satisfied with their profession and statistically significant association was found between dissatisfaction with job and high stress levels. (Table 2)

Table 2: Distribution of study participants according to factors related to their workplace.

Parameter	Frequency (%)	Significance
Work experience		
< 5 years	191 (50.52%)	$\chi^2 = 6.091$
6-10 years	139 (36.77%)	$p = > 0.05$
11-15 years	36 (9.52%)	
> 15 years	12 (3.17%)	
Working hours		
< 8 hours	217 (57.4%)	$\chi^2 = 4.287$
> 8 hours	161 (42.6%)	$p = < 0.05$
Can you speak your mind to your colleagues?		
Very frequently	51 (13.5%)	
Frequently	186 (49.2%)	$\chi^2 = 2.918$
Occasionally	119 (31.5%)	$p = > 0.05$
Rarely	18 (4.8%)	
Never	04 (1.1%)	
Do you feel most of the time that you have conflicts with colleagues?		
Very frequently	57 (15.1%)	
Frequently	162 (42.9%)	$\chi^2 = 55.627$
Occasionally	147 (38.9%)	$p = < 0.05$
Rarely	09 (2.3%)	
Never	03 (0.8%)	
Do you feel adequately valued for your abilities & commitment at work?		
Very frequently	34 (9%)	
Frequently	123 (32.5%)	$\chi^2 = 11.351$
Occasionally	154 (40.7%)	$p = < 0.05$
Rarely	65 (17.2%)	
Never	02 (0.5%)	
Do you feel your superiors actively hinder you in your work?		
Very frequently	04 (1.1%)	
Frequently	67 (17.7%)	$\chi^2 = 19.073$
Occasionally	146 (38.6%)	$p = < 0.05$
Rarely	116 (30.7%)	
Never	45 (11.9%)	
Job satisfaction		
Yes	311 (82.27%)	$\chi^2 = 42.395$
No	67 (17.72%)	$p = < 0.05$

* $\chi^2 =$ Chi-square value

Overall, 78.6% of the women professionals were married and comparatively they experienced high stress than unmarried and it was statistically significant. Stress was present in more than half of the women professionals

who were having children (68%) in comparison who were not having children. This difference was found to be statistically significant. About 44.2% of the women professionals occasionally felt that household work was tiring while 34% of them frequently felt it was tiring ($p < 0.05$). Household work is the main responsibility given to the women and not being able to manage it can be one of the stressors. Most of the study participants (i.e) 42.6% occasionally had conflicts with their family members and 12.7% of the women professionals were having sleep deprivation and was found to be statistically significant ($p < 0.05$). (Table 3)

Table 3: Distribution of study participants according to factors related to their home.

Parameter	Frequency (%)	Significance
Type of family		
Nuclear	261 (69.04%)	$\chi^2 = 5.786$
Joint	96 (25.4%)	$p = > 0.05$
Three generation	21 (5.55%)	
Marital status		
Unmarried	69 (18.25%)	$\chi^2 = 23.730$
Married	297 (78.57%)	$p = < 0.05$
Divorce / Widow	12 (3.17%)	
Having Children		
Yes	257 (68%)	$\chi^2 = 9.690$
No	52 (13.75%)	$p = < 0.05$
Not applicable	69 (18.25%)	
Help in doing household work		
Husband	111 (29.36%)	$\chi^2 = 5.897$
Children	12 (3.17%)	$p = > 0.05$
In-laws	32 (8.5%)	
Others	223 (59)	
Do you feel that household work is very tiring?		
Very frequently	13 (3.4%)	
Frequently	128 (33.9%)	$\chi^2 = 33.539$
Occasionally	167 (44.2%)	$p = < 0.05$
Rarely	65 (17.2%)	
Never	05 (1.3%)	
How often do you have conflicts with your family members?		
Very frequently	04 (1.1%)	
Frequently	21 (5.6%)	$\chi^2 = 56.406$
Occasionally	161 (42.6%)	$p = < 0.05$
Rarely	139 (36.8%)	
Never	53 (14%)	
Sleep deprivation		
Yes	48 (12.7%)	$\chi^2 = 43.419$
No	330 (87.3%)	$p = < 0.05$

* $\chi^2 =$ Chi-square value

Discussion

In the present study, more than two-third (38%) of the working women professionals were found to be under stress. This result was comparable with findings of a study conducted by Saini NK, et. al., where the prevalence of stress was found to be 32.8% among the study participants.⁴ This shows that many working women are found to be stressed, trying to balance an ever-growing burden of professional responsibilities and personal commitments.

Nearly two-third (63%) of the women professionals belonged to age group 31 - 40 years which is in contrast with the findings of another study by Gobbur SB, et. al., where only 13.4% were above 30 years of age.⁵ Overall about half of the respondents (50.5%) had work experience of less than 5 years which is similar to a study by Bhat R, et. al.⁶ In this study only 10% of them said that they frequently have conflicts with their colleagues leading to stress which is comparable with the findings of a study by Sathiya N, et. al.⁷, where 28.5% of the study participants experienced conflicts among colleagues which was affecting their performance at work. A large majority of women professionals (82.3%) surveyed were satisfied with their profession which is high when compared with the findings of a study by Kriti PA, et. al.,⁸ where the level of Job satisfaction was low (51.6%).

Majority (69%) of the women professionals had nuclear family; these findings were comparable with a study conducted by Patel KA, et. al.⁹ where 92% of the respondents were staying in nuclear family. Overall, 78.6% of the women professionals were married. This observation is in contrast to the results of a previous study by Mishra SK,¹⁰ where 66% of the women professionals surveyed were unmarried and another study by Darshan MS, et. al.,¹¹ where 70.5% of the study sample were single at the time of interview. Most of the study participants (42.6%) had conflicts with their family members occasionally. Overall only 12.7% of the women professionals were having sleep deprivation which is comparable with the findings of studies conducted by Kumari GK, et.al.¹² and Sathiya N et.al.⁷ where it was found that 28% and 33% of the respondents complained of not having enough sleep.

CONCLUSION: In this study, more than two-third (38%) of the working women professionals were found to be under stress. The factors that were found to be significantly associated with increased levels of stress among the study participants are: age of the women professionals (36 – 40 years), working for more than 8 hours per day, conflicts with colleagues, not valued for their abilities and commitment at work, active hindrance from superiors at work, job dissatisfaction, marital status (married, divorced or widow), having children, feeling household work tiring, conflicts with family members and sleep deprivation.

This shows that many working women, especially those who are working mothers are found to be stressed, trying to balance an ever-growing burden of professional responsibilities and personal commitments. Time management is the primary stress management mechanism that can be adapted by the working women professionals to overcome stress. Work to be done in a planned and systematic manner, to avoid time pressure and work overloading. Support from family members and their positive encouragement may help to reduce the stress. The stress of working women can also be relieved through some stress relief techniques like spending time with family, entertainment, rest, yoga, meditation, proper diet, etc.

LIMITATIONS: The chosen professional women only consisted of Doctors, Engineers and Lawyers and not other professions. The study was conducted on women professionals in Bangalore city, thereby restricting the scope to understand the stress of women outside Bangalore city. The study was on only working women so the scope to understand the non-working women was restricted. The study was on women and gender differences in occupational stress could not be assessed.

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