

Research Paper

## Prospective study on impact of stressors in psychological stress among working individuals

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### ABSTRACT

**Objective:** The stress is an emotional condition in which individual experiences strain/pressure. In this study we attempted to study the effect of various stressors on the mental health of working men and women and also categorised the stress levels among the study subjects. **Methods:** This was a prospective observational study conducted among working men and women. The study included 377 subjects who were in the age group of 20-65 years. A well formatted questionnaire was employed and the severity of stressors was assessed by using Holmes and Rahe scale. **Results:** Among the total subjects surveyed, 202 were identified to be males (53.58%) and 175 were females (46.42%). The five major stressful events among males were found to be change in work responsibilities (50.49%), change in financial status (47.02%), change in sleeping habits (42.07%), major holiday (37.62%), and revision of personal habits (35.64%). Whereas, the major stressful events among females were sleeping habits (45%), change in work responsibilities (38%), change in family members health (37.71%), change in financial status (33.71%) and change in no. of family gatherings (32%). **Conclusion:** This study concluded that working individuals were at increased risk of developing psychological stress. The various stressors were identified which plays a key role in imparting stress. Working individuals are suggested for maintaining healthy mental condition by performing regular yoga, exercise and healthy diet. Immediate medical care is suggested for those who are experiencing severe stress to avoid future life crises.

**Keywords:** Stressors, Psychological stress, Holmes and Rahe, Mental health

Some predictable biochemical, physiological and behavioural changes may lead to uncomfortable emotional experience called as stress [1]. The physical or physiological demands from the environment which cause stress are called stressors. People create potential for stress when an individual perceives them as representing a demand that may need or an opportunity gives more than the demand, in either ways it affects the person's ability to respond. So, each person would fancy stress in their own way depending on their perceptions, their past experiences, the amount of social support they get and their individual stress reaction. Positive form of stress is called as eustress [2-4]. Stress is a severe threat to

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health and safety as well. It is also evident from the past studies that work stress is a worldwide problem which has less impact in the undeveloped countries as less attention is paid on an employee's health. Psychosocial factors affect the health very severely at the workplace as workplace is one of the social determinants of health [5].

When there are low levels of stress at job, it motivates an employee which in turn results in higher performance of an employee at job. When an employee faces high levels of stress at job, these dangerous stress levels lead to many physical and mental hazards [6-8]. Females are expected to have more stress due to their biological differences, the way they react and also from the literature review we presume women would be more open to learn stress reduction techniques [9-10].

### MATERIALS AND METHODS

This was a prospective observational study conducted in collaboration with department of psychology in the various localities of Andhra Pradesh with prior permission from the institutions, firms and Industries heads. The study was conducted for a period of 6 months.

**Inclusion criteria:** Subjects working in private and government sectors,  
Individuals of both female and male gender,  
Age: 20-65 years

**Exclusion criteria:** Unemployed individuals, students, and subjects who rejected to give consent.

A well-designed subject stress level form was adopted from Holmes and Rahe stress questionnaire. The data collection form was developed by consulting staff of pharmacy practice department and physicians of psychiatry department. The questionnaire was distributed among the working individuals in institutions, organisations and firms. Each event in the questionnaire and the purpose of study were explained to subjects who were uneducated and educated. The data was accurately entered in data collection form and analysed properly with the help of severity scale. The interpretation of severity scale with regarding to risk of becoming ill in near future is as follows:

**11-150: low to moderate**  
**150-299: moderate to high**  
**300-600: very high**

### RESULTS AND DISCUSSION

#### *Gender and age wise distribution*

Among the total of 377 subjects surveyed, 202 were identified to be males i.e. 53.58% and 175 were identified to be females i.e. 46.42%. This data was classified in Table 1. Majority of the working male and female candidates were found to be in the age group of 20-40 years. The age and gender wise distribution of study subjects were classified in Table 1.

**Table 1: Distribution of study participants based on age and gender**

Age (in years)	Male (n=202)	Female (n=175)
20-40	166 (82.17%)	161(92%)
41-50	25 (12.37%)	11 (6.8%)
>=51	11 (5.44%)	3 (1.71%)

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### *Event wise categorisation of stress*

According to the answers given by the study subjects in the questionnaires the five major stressful events among males were found to be change in work responsibilities (50.49%), change in financial status (47.02%), change in sleeping habits (42.07%), major holiday (37.62%), and revision of personal habits (35.64%). Whereas, stressful events among females were sleeping habits(45%), change in work responsibilities (38%), change in family members health (37.71%), change in financial status (33.71%), change in no. of family gatherings (32%). Table 2 gives the summarised information of the questionnaires.

The results in questionnaires were interpreted with the help of severity scale (Table 3) to analyse the extent of risk of becoming ill. Subjects with no stress were 5.44% among males and 9.14% among females; mild stress were 32.17% among males and 36.57% among females; moderate stress were 27.72% among males and 32.57% among females; severe stress were 30.69% among males and 19.42% among females; very severe stress were 3.96% among males and 2.28% among females. It was clear that males were under more stress compared to women. When we compared stress levels among both genders it was found that women were more prone to mild and moderate stress, whereas men are more prone to severe stress. From the data in table 3, it was analysed that males were suffering with severe stress and with 80% chances of developing psychological disturbances in near future if the same stressful events are continued for long period [11, 12].

**Table 2: Summary results of questionnaires based on Holmes and Rahe stress scale**

Event	Number of male	% of male	Number of female	% of female
Death of spouse or partner	6	2.97	10	5.71
Divorce	3	1.48	5	2.85
Marital separation	8	3.96	5	2.85
Imprisonment	7	3.46	1	0.75
Death of close family member	47	23.26	39	22.28
Personal injury	28	13.86	33	18.85
Marriage	28	13.86	19	10.85
Fire from work	43	21.28	19	10.85
Marital reconciliation	0	0	2	1.14
Retirement	1	0.49	1	0.57
Change in family members health	64	31.68	66	37.71
Pregnancy	0	0	7	4.00
Sexual difficulties	10	4.95	1	0.57
Addition to family	34	16.83	13	7.42
Business readjustment	30	14.85	19	10.85
Change in financial status	95	47.03	59	33.71
Death of close friend	37	18.31	12	6.85
Change to different line of work	64	31.68	49	28.00
Change in frequency of arguments	65	32.17	35	20.00
Major mortgage	41	20.29	27	15.42
Foreclosure of mortgage	46	22.77	26	14.85
Change in work responsibilities	102	50.49	68	38.00
Son or daughter leaving home	20	9.90	17	8.57
Trouble with in-laws	15	7.42	10	5.71
Outstanding personal achievement	38	18.81	36	20.75
Spouse begins or stops work	13	6.43	8	4.57
Beginning or end of school	13	6.43	21	12.00
Change in living conditions	59	29.20	43	24.57
Revision of personal habits	72	35.64	23	13.14
Trouble with boss	32	15.84	13	7.42

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Event	Number of male	% of male	Number of female	% of female
Change in work hours or conditions	63	31.18	44	25.14
Change in residence	60	29.70	36	20.57
Change in schools	6	2.97	7	4.00
Change in recreational habits	40	19.80	19	10.85
Change in religious activities	52	25.74	30	17.14
Change in social activities	42	20.79	17	9.71
Minor mortgage	66	32.67	43	24.57
Change in sleeping habits	85	42.07	80	45.00
Change in number of family gatherings	68	33.66	57	32.00
Change in eating habits	68	33.66	54	31.42
Vacation	32	15.84	23	13.14
Major holiday	76	37.62	26	14.85
Minor violation of law	34	16.83	18	10.28

**Table 3: Total score interpretation**

Severity	Score range	Number of male (n=202)	% of male	Number of female(n=175)	% of female
No stress	0	11	5.44	16	9.14
Mild stress	11-150	65	32.17	64	36.57
Moderate stress	151-299	56	27.72	57	32.57
Severe stress	300-600	62	30.69	34	19.42
Very severe	>=601	8	3.96	4	2.28

During the course of our survey, we found that work stress was more among men when compared to women. We assume that women are under more stressed conditions as they play dual role as a housewife and as well as working women. These attributes might act as stressors for the women to develop stress. We suggest that working individuals follow stress reduction techniques like meditation, yoga, and exercise. In our study there was almost equal participation among men and women [13-15]. Among both genders major participation was between 20 to 40 age group and the common major stressed events were change in work responsibilities and change in sleeping habit. We assumed that more males will have zero stress but in contrast, it was concluded that more females (9.14%) are under zero stress than males (5.44%).

### CONCLUSION

It was clear that the working men or women were undergoing psychological stress to various extents which was imposed by different stressors. There is a need of psychological examination among the working employees to avoid uncertain future life crises. Those who are categorised under high risk are suggested to seek immediate medical attention. More studies are required in this field for clear distinction of impact of stress.

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### ***Conflict of Interest***

The author declared no conflict of interest.

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