



## International Journal of Engineering, Business and Enterprise Applications (IJEBA)

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### Impact of Stress on Health of Human Resource

Ms. Varsha Gunjal

Matoshri College of Management and Research Centre (MCMRC), Nashik, Maharashtra, India

Dr. Yogesh Gosavi

Director, Matoshri College of Management and Research Centre (MCMRC), Nashik, Maharashtra, India

**Abstract:** Job stress is an unpleasant emotional situation that employee experience due to target pressures, deadlines, job insecurity, unhealthy environment, poor boss and peers relationship, change and unclear role. The study investigated the effects of job stress on the physical and mental health. It is observed that stress, whether physical stress or mental stress, has been proven to instigate changes in blood pressure levels which can be problematic. The study was carried out among 118 employees of pharmaceutical company with questionnaire measuring various parameters related to cause of stress, health problems and impact on employee health. The study established that job stress has significant effect on physical and mental health of the employee especially leading to hypertension.

**Index Terms:** human resource, health, work pressure, stress

#### I. Introduction

Human Resource Management is an art of managing people at work in such a manner that they give their best to the organization. Human Resource Management has employee health care as one of key aspects. Stress is factor that affect employee health and that in turn affects their work and the overall development of industry. Stress can be broadly defined as the negative reactions people have to aspects of their environment. Stress is therefore mainly interpreted by each of us differently. As it is a feeling, and as our emotions are involved, it is not something entirely definable or describable. However, we all recognize the unpleasant, usually anxiety-related state, when we think of the term 'stress' as applying to us. Most organizations do not have an accurate assessment of how much employee stress costs them each year [1,4,7].

Stress has been shown to affect the cost of doing business in a number of ways. Work stress is stress which is caused due to work and related things. It simply refers to effects due to target pressures, deadlines, job insecurity, unhealthy environment, poor boss and peers relationship, change and unclear role. Stress occurs when an individual perceives an imbalance between the demands placed on them on the one hand, and their inability to cope up with it. It often occurs in situations characterized by low levels of control and support. Some of the serious consequences of employee stress are absenteeism, litigation, grievances, accidents, errors of judgment and action, conflict and interpersonal problems, violence, customer service problems, resistance to change, no time to do it right, and loss of intellectual capital [2,8,11].

Although the relationship between stress and health care costs is receiving considerable attention, the true price tag is far greater than that of health care alone. Therefore, it is the intention of this study to review past literature on the impact of job stress due to the significant factors and its relationship with health issues. With this reference the work is devoted to study these aspects for Glenmark Pharma of Nashik.

#### II. Related work

Stress will give a variety of consequences and the effect will different among each individual. The experience of stress is related with feeling of increasing distress, which leads to anxiety and depression. People in stress may find difficult to make decision, to think logically and to concentrate. Besides that, they also feel tired and exhausted, become bad-tempered, and hard to rest and sleep. Stress also gives negative effect on health such as headache, raised blood pressure, back pain, digestive disorder and heart diseases. Among the source of stress that had been found are long hours, unpleasant noises, sights, undue quiet, sudden shift from intense to mundane tasks, time pressure, no second chance and enclosed environment [1,6].

Job stress has become one of the most critical health issues in the modern world. The Health and Safety Executive in United Kingdom had documented how prolonged or intense of job stress can be resulted of both physical and mental ill-health. Nevertheless, the negative effect of job stress is not on the part of the employee only since the organization also yields the unfavorable outcome. Job stress will boost up the medical expenses, higher rates of absenteeism and affects turnover, leads to more accidents and poorer performance. Thus, it is not surprising if job stress has been widely recognized as a significant business concern [2,10].

In the literature on job stress there is strong evidence for two major propositions. Firstly, that work organization factors predict strain and adverse health and other outcomes, even after controlling for other possible causes of

the same outcomes such as socioeconomic status and personality characteristics. Secondly, that various stress prevention or intervention strategies have demonstrated effectiveness in the prevention or control of job stress [3,4,5].

Stress, whether physical stress or mental stress, has been proven to instigate changes in blood sugar levels, which for people with diabetes can be problematic. While stress can affect diabetes control, both directly and indirectly, it can also be caused by various diabetic factors such as being diagnosed with diabetes, adjusting to a diabetes treatment regimen, or dealing with psychosocial pressures of the disease. Simply, stress is a state of emotional strain or tension that occurs when we feel that we can't cope with pressure. When we become stressed, the body quickly responds by releasing hormones that give cells access to stored energy - fat and glucose - to help the body get away from danger [14,15,16]. This instinctive physiological response to perceived threats is known as the "fight-freeze, or flight" response. Over the time, both physical and mental stress can wear us down mentally and lead to depression and other mental health issues. We live in a very stressful society which is constantly putting us under pressure. This pressure can sometimes be too much to handle, leading us to feel "stressed out" [11,17].

### III. Impact of stress on health

The work is carried out at pharmaceutical company located in Nashik, Maharashtra, India. There are 280 employees in company. They were requested to complete the job stress questionnaire consisting of 50 questions concerning reasons of stress, stressful situations at work and its impact on health. Using a random sampling method stratified based on the site of work, 116 samples were selected. The study aims in analyzing impact of stress on health classifying questionnaire in broadly categorizing factors as-

- Biographical information- gender, age, height, weight
- Employment information- type of appointment, qualification, experience, designation, shift, working hours
- Target and deadlines- target, deadlines, attainability, unrealistic expectations
- Flexibility and control- flexibility and control for speed, breaks, working hours, speed, freedom at way of working
- Manager/Boss and peers- feedback, encouragement, support, help, relations and healthy discussions
- Role- clarity of role, objectives, goal, duties and responsibilities
- Change- change in role, boss, peers, department, and supportive training
- Job security, increments and promotions- assurance, prompt promotions, unbiased and satisfactory decisions
- Personal health information- exercise, food, health checkups, health issues as BP, diabetes etc.
- Stress- what, when, why, symptoms, effects on work, mental state, physical health, behavior

Stress is divided into sub-scales, which collectively assess sources of stress. The objective is to know interrelationship between each factor, stress and its impact on health. Work aims to know a range of possible sources of workplace stress. The factors relating to domestic and social life-related pressures are avoided. Relationship with boss and peers is one of the sources of stress. Poor or unsupportive relationships with colleagues and/or superiors, isolation and unfair treatment are also potential sources of stress.

Job Security is one of the factors to be considered. While significantly fewer employees now expect a "job for life", the fear of losing one's job or one's job becoming obsolete still remains a major potential source of stress. The questionnaire consequently measures the extent to which insecurity; increments and promotion are a source of stress. Control and flexibility is one of the most important parameters that induce stress. The experience of stress is strongly linked to perceptions of control. Lack of influence over the way in which work is organized and performed can be a potential source of stress. The extent to which a lack of control is perceived by individuals to be a source of stress is addressed by these scale and subscales.

Regular stress gives you warning signs that something is ignored. These warning signs should not be ignored, they are telling you that you need to slow down and give your body a break. Common warning signs of stress are Physical signs like Dizziness, general headaches and pains, indigestion, difficulty in sleeping, sweaty palms, tiredness, weight gain or loss, and upset stomach to name a few. Consequences of mental stress are difficulty in making decisions, forgetfulness, and lack of creativity. Often stress shows emotional effects as anger, anxiety, depression, frequent mood swings, irritability, loneliness, negative thinking, nervousness, and sadness. Behavioral signs noticed due to stress are unnecessary dominance, critical attitude towards others, eccentricity and impulsive actions.

### IV. Research Design

Research is a way of thinking, examining critically the various aspects of our day to day professional work; understanding and formulating guiding principles that govern a particular procedure; and developing and testing new theories that contribute to the advancement of our practice and profession. Research is process for

collecting, analyzing, and interpreting information to answer questions like “What is impact of stress on health?” Our research is empirical, which means any conclusions drawn are based upon hard evidence gathered from information collected from real life observations. The approach used is structured; as everything that forms the research process- objectives, design, sample, hypothesis and questions for respondents is predetermined. Research design is blue print or detailed plan for how research study is to be completed, selecting samples, collecting data for testing and analyzing. Our study is quantitative approach. Quantitative design is specific, well structured, have been tested for validity and reliability. Selection of appropriate research design is crucial. Anything that becomes a mean of collecting information for study is research tool like observation form, questionnaire or interview. We have used questionnaire as research tool.

## V. Impact of stress on health

The project was carried out to define how the various parameters creating stress among employee, symptoms and its impact on health especially leading to blood pressure. Major purpose is to know various stress generating reasons and its impact on health. Survey approach is used. Questionnaire was filled in by 116 persons. It covered details on biographical and employment information, various reasons that create stress, visual symptoms, General Health Questionnaire, food behavior work- physical activity life balance and stress impact on health. The objective is to know interrelationship between each and stress and impact on health. Aim to know a range of possible sources of workplace stress. The analysis of survey done is presented here.

### A. Factors causing stress

Relationship with boss and peers is one of the sources of stress. Poor or unsupportive relationships with colleagues and/or superiors, isolation and unfair treatment can all be potential sources of stress. Job Security is one of the factors to be considered. While significantly fewer employees now expect a “job for life”, the fear of losing one’s job or one’s job becoming obsolete still remains a major potential source of stress.

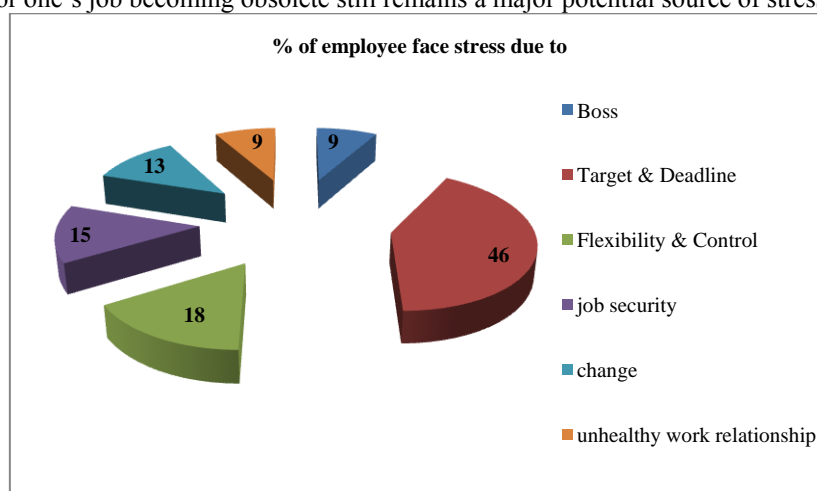


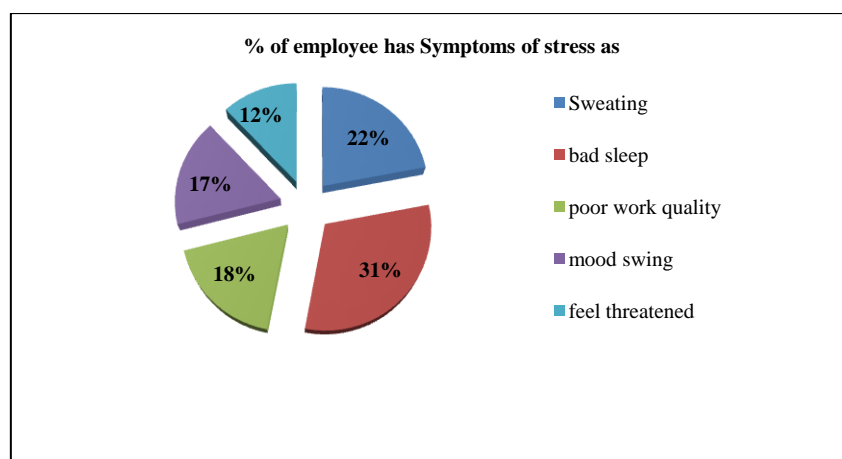
Figure 1: Pie chart showing % of Employee under stress for given reason.

Control and flexibility is one of the most important parameters that affects stress. The experience of stress is strongly linked to perceptions of control. Lack of influence over the way in which work is organized and performed can be a potential source of stress. The extent to which a lack of control is perceived by individuals to be a source of stress is addressed by these scale and subscales. Table 1 tabulates opinion score against factors causing stress. Figure 1 shows that 46% of employee get stressed due to target and deadline, 18% due to unhealthy relationship with boss and peers, 18% due to less flexibility and control, 15% due to job security, and 9% due to change in job role or place.

### B. The observed effects/symptoms of stress

The most common symptoms observed when stressed are feeling threatened, sweating, mood swings, loosing temper, less sleep, effect on work quality etc. Regular stress gives you warning signs that is mostly ignored. These warning signs should not be ignored, they are telling you that you need to slow down and give your body a break. Common warning signs of stress are Physical signs like dizziness, general headache and pains, indigestion, difficulty in sleeping, sweaty palms, tiredness, weight gain or loss, and upset stomach to name a few. Mental signs of stress are difficulty making decisions, forgetfulness, and lack of creativity and laxity. Often stress shows emotional effects as anger, anxiety, depression, frequent mood swings, irritability, loneliness, negative thinking, nervousness, and sadness. Behavioral signs noticed due to stress are undue dominance, critical attitude of others, impulsive actions and eccentricity. The data analyzed for symptoms is shown as pie

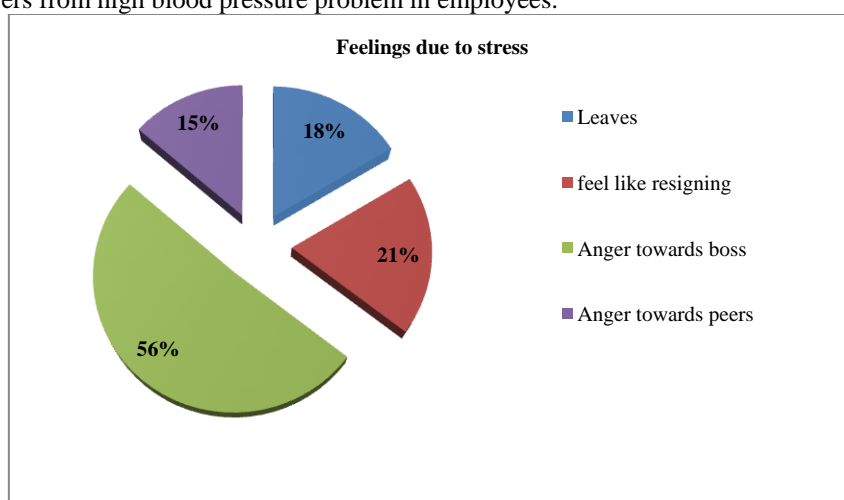
chart in fig. 2. It is observed that 31% people sleep is affected, 22% has problem of sweating, 17% observe mood swing, for 18% stress affects work quality and 12% feel threatened.



**Figure 2: Pie chart showing % the symptoms of stress as impact on health**

### C. *The Feelings when stressed*

For whatever may be the reason of stress, variable effects are noticed among employee. Most of the people; 56% of stress people feel about boss, 18% feel like taking leaves, 21% feel like resigning current job, and 15% blame their peers for their stressful situation. This is shown as pie chart in figure 3. Employee under stress for long period suffers from high blood pressure problem in employees.



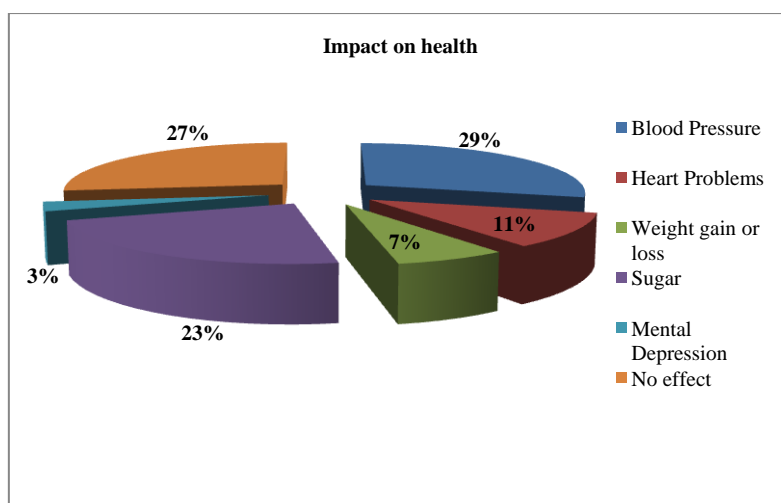
**Figure 3: % of employee taking decisions or behavior due to Stress**

### D. *Impact of stress on health*

Although India currently is not as hypertensive as its neighborhood, yet the fear of the disease becoming a major health concern in the coming years appears to be real. According to the World Health Statistics 2012 report, India has low rates of hypertension compared to world figures. In India, 23.10 per cent men and 22.60 per cent women above 25 years suffer from hypertension. India also fares better than the global average of 29.20 in men and 24.80 in women respectively.

### E. *Experience and Impact of stress*

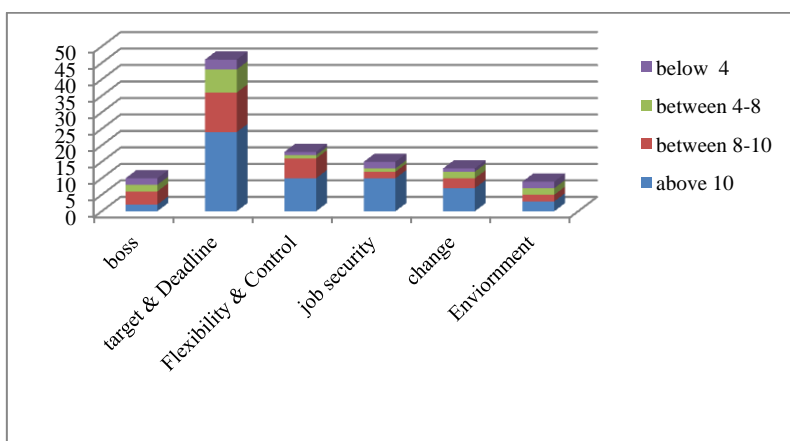
Figure 5 is a graph plotted for stress reasons and experience of employee. It is observed that experience and stress are proportional for target & deadline, change and job security whereas for environment and boss stress is inversely proportional to experience.



**Figure 4: % of employee suffering from health problems due to stress**

#### **F. Stress and Hypertension**

Experts here, however, discount the findings, arguing that the country might actually be headed to be among the most worst disease (hypertension) afflicted countries in the near future. An estimate touts the number of blood pressure patients in the country to rise to about 214 million by 2030 up from about 118 million in 2000. Family history of high blood pressure, obesity, stress, smoking, excess alcohol consumption, increased salt consumption and diabetes increase your risk for high blood pressure. The employee who are often stressed, it is noticed (fig 5.4) that 27% of them has currently have hypertension problem. 11% employee are suffering from heart related problem, 7% obesity issues, 23% have diabetes or sugar level on boundary, and 3% suffer mental depression. It is also observed that 29% people had no bad impact of stress on health. Dr. K K Aggarwal, consultant, at Moolchand Medcity, New Delhi, says, 'Symptoms are headache, dizziness, palpitations and breathlessness on minimal exertion.' 'Neglect of the disease might affect blood vessels of heart leading to pre-mature heart disease and most significant of all is the irreversible damage to the kidney leading to chronic renal failure,' warns Dr. Aggarwal [ 13,14,15].



**Figure 6: % of employee suffering from health problems due to stress**

### **VI. Findings**

The study investigated the effects of job stress on the physical health. It is observed that stress, whether physical stress or mental stress, has been proven to instigate changes in blood pressure. The study was carried out among 116 employees of pharmaceutical company with questionnaire measuring various parameters related to cause of stress, health problems and diabetic employee health.

Analysis of data revealed some major Findings as listed ahead-

The employees undergo stress mainly due to either one or more of these reasons-

- Deadline of work which was often hard to achieve,
- Intensive work and Heavy target,

- Role or department change,
- Job security pressure,
- Unhealthy environment and relationship with boss and peers
- The employees facing more stress on their deadlines.
- There is significant relationship between stress & health
- The symptoms like sweating, high rate of heart beats, depression, mood swings, feeling threatened, poor work performance and uncomfortness.

Employees under stress for long period suffer from high blood pressure problem in employees.

Such kind for stress further has resulted in absenteeism, job resigns, losing temper unnecessarily, and arguments with peers and with boss. The study noticed that job stress has significant effect on physical and mental health of the employee especially hypertension.

## **VII. Major Suggestions**

It is observed that for employees under stress has noticed symptoms like depression, mood swings, feeling threatened, low productivity, absenteeism, job resigns and depression. Employee under stress for long period suffers from high blood pressure problem in employees. Following are the suggestions based on observations and analysis:

*For Employer:*

There are few solutions which will help to reduce stress and reduce its side effects as

- Keeping achievable deadlines and target,
- Healthy relationship through support and help of peers,
- Frequent communication, feedback and encouragement by boss
- Regular counseling sessions by Professional
- Regular health checkup schemes, healthy diet guidance, laughing club, Zumba- exercise can be fun and Yoga cum meditation & gym at industry
- The working environment should be improved to make the staff member feel happier.
- Ultimate aim to exercise is relaxation, which is key to controlling and dealing with stress.

*For Employees:*

Meditation -Mindfulness meditation is the art of becoming aware of our present moment experiences, including thoughts, emotions and sensations in a non-judgmental and accepting manner. Mindfulness meditation courses have been shown to significantly reduce stress and its impact on BP. When feel stressed it is suggested to take a walk, go dancing, stretch, take deep breathes, laugh, play a game, see a movie, express affection, share feelings, sing, paint, write, make new friends, tackle problems head on, give thanks, let go, relax on holidays, try something new and laugh some more.

## **VIII. Conclusion**

The key aim of study is to provide baseline data so that stress and its impact on health at work could be realized, conquered and avoided over time. This survey has noted few factors/reasons for stress and its effect on health especially high BP. A study to find out reasons as why the employees are facing stress in the organization, its impact on health was carried out by selecting 116 members working in the pharma company. The data was collected through questionnaire. The data collected was analyzed based on objectives. The analysis helped to come out with the mentioned findings and suggestions as listed. Stress, whether physical or mental stress, has been proven to instigate changes in blood pressure or changes in sugar level which for high BP and diabetes patient can be detrimental. When one is under stressed the body quickly responds by releasing hormones that give cells access to stored energy that is fat and glucose to help body get away from danger. There is an increase in glucose for energy and increased blood pressure to take fresh oxygen to working muscles, and the release of adrenalin for heightened vigilance and alertness. This further increases bad cholesterol level in blood and deteriorates blood veins. Though Extent of impact varies from person to person, over time, both physical and mental stress can wear us down mentally and lead to depression and consequently high blood pressure. All suggestions are given to HR and general manager of company. Hope that they would incorporate my suggestions. The suggestions will surely help to reduce stress and raise the satisfaction among the employees. This in turn will avoid impact of stress on health especially high blood pressure.

## **IX. Future Scope**

Research continues to show that our satisfaction at work is very much related to how work makes us feel, even more than how much we get paid, or what our career prospects are. Stress has impact on health and addressing these issues is challenging, is a vehicle for positive change, better, more productive relationships at work and increased creativity and productivity. Therefore addressing relationship between work stress and health is in everyone's interest and will continue to be studied. As future scope following issues will be taken into account-

Consider external factors as household problems, marriage and relationships etc contributing to stress in study. Also the survey was done collecting data through questionnaire that was filled in offline; personal interviews may add more light to stress issues.

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