A study on stress management among paramedical and auxiliary staffs at apollo hospital, Bangalore

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ABSTRACT
Stress Management involves controlling and reducing the tension that occurs in stressful situation by making emotional and physical changes. The degree of stress and the desire to make the changes will determine how much change takes places. It is beneficial when employees feel challenged and stimulated, but negative if employees feel overloaded or under stimulated. Stress in the workplace reduces productivity, increases management pressures, and makes people ill in many ways, evidence of which is still increasing. Workplace stress affects the performance of the brain, including functions of work performance; memory, concentration, and learning. The Main Objective of the study is to find out the level of stress among the employees, to determine the cause and perception of the employees about his work life. This research paper gives a comprehensive coverage of the facts and figures related to stress with the help of research analysis using hypothesis test and applications gives the clear status of Apollo hospital, Bangalore.

Introduction
Stress Management involves controlling and reducing the tension that occurs in stressful situation by making emotional and physical changes. The degree of stress and the desire to make the changes will determine how much change takes places. Its goal is not to eliminate stress but to learn how to manage it and how to use it. The key component in stress management is all about striking a balance. What we need to do is find the optimal level of stress, which will individually motivate us. A recent survey showed that 70-90 percent of people feel stressed at work and outside. Today's fast-paced lifestyle is putting the toll. In organization, today, employee stress is of great concern. People employed in organizations are stressed out from the workloads they have and also the long hours they are required to put in, the dominant boss, the targets, the commitments, so on and so forth, are the underlying factors, which cause strain, tension, anxiety and depression.

Significance of Stress at Work Place
Stress in the workplace has become an increasingly hot topic over the past few decades. Stress in the workplace is obviously important to employees but management is also concerned about stress in the workplace for several reasons. Stress in the workplace reduces productivity, increases management pressures, and makes people ill in many ways, evidence of which is still increasing. Workplace stress affects the performance of the brain, including functions of work performance; memory, concentration, and learning.

The Yerkes-Dodson law demonstrates an empirical relationship between performance and stress. It dictates that performance increases with stress but only to a certain point; when levels of stress become too high, performance will decrease. A corollary is that there is an optimal level of stress for a given task.

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It is a scientific principle developed by psychologists Robert M. Yerkes and J. D. Dodson in 1908 and is grounded within the discourses of biopsychology and neuroscience.

Stress is beneficial when employees feel challenged and stimulated, but negative if employees feel overloaded or under stimulated. At opposite ends of the spectrum employees can suffer from ‘burn out’ or ‘rust out’. It is part of good management to keep the amount and nature of people’s workload at or near the optimum point.

Stress is a well-known and identified problem within the nursing and paramedical profession. According to Atkinson stress occurs when one is faced with events or encounters that they perceive as an endangerment to their physical or psychological wellbeing (as sited in McGowan, 2001). Additionally stress levels will increase when controllability and predictability in a situation decrease. There is an inverse relationship between stress and job satisfaction, as stress goes up, job satisfaction falls. As a result this increased stress could commonly results in decreased job satisfaction and decreased quality of life. This could potentially contribute to nurses leaving the profession and as an end consequence, account for the current nursing shortage.

The cause of stress for nurses has found to be related to the nature of the profession. Included in these stressors are an intense work environment with extended work hours, weekends, night and holidays. According to Ruggiero (2003) stress could be related to variables of shift work, which is both physically
and mentally taxing. This study also found varying degrees of depression in nurses and paramedics ranging from mild to severe. Finally this study revealed that nurses were indifferent and disconnected to the job by feeling neither satisfied nor unsatisfied with the work. Results such as these expose how large a problem stress is for the profession of nursing and paramedics.

**Growth and Development of Healthcare Industry In India**

Health care Industry plays an important part in the economy of a country. The health care industry determines the GDP or the gross domestic product of country. It determines exports status, employment, capital investment. Health care segment provides employment openings to many individuals directly associated with the health care sector or other associated sectors, related to the health care industry in some way. Efforts are usually made to keep the dollars rolling within the country economic set up. The health care industry consists of the following: Dentists and doctors, Protective care and nursing, Pharmacies Allied medical, services, Hospitals.

Different countries like Indonesia, Russia, Mexico, Brazil, India, Turkey and China comprise approximately 1/5th of the worldwide health care sales. Health care industry trends suggest that the medical related conditions in the developing countries which are chronic in nature will be similar to the ones existing in the developed countries. In order to meet international standards, the existing health care industry is required to alter the mode of operation for generation of higher revenue and greater contribution to the Gross Domestic Product of the country.

Indigenous or traditional medical practitioners continue to practice throughout the country. The two main forms of traditional medicine practiced are the Ayurveda (meaning science of life) system, which deals with causes, symptoms, diagnoses, and treatment based on all aspects of well-being (mental, physical, and spiritual), and the unani (so-called Galenic medicine) herbal medical practice. A vaidya is a practitioner of the ayurvedic tradition, and a hakim (Arabic for a Muslim physician) is a practitioner of the unani tradition. A variety of institutions offer training in indigenous medical practice. Only in the late 1970s did official health policy refer to any form of integration between Western-oriented medical personnel and indigenous medical practitioners.

The fast pace of development of the private medical sector and the burgeoning middle class in the 1990s have led to the emergence of the new concept in India of establishing hospitals and health care facilities on a for-profit basis.

**Present status of Health care Industry in India and the GDP or Gross Domestic Product:**

Expenses incurred by the Indian Government on health care are the highest among developing countries. India's expenses on health care sector comprise 5.25 per cent of the GDP. Chances are that the health care market could experience a hike and attain a figure ranging from $53 to $73 billion five years from now. This in turn will reflect an increase in the gross domestic product to 6.2 per cent GDP. The health care industry in India earns revenues accounting for 5.2 per cent of gross domestic product. Employment opportunities are provided to as many as 4 million people in the health care segment or other related sectors catering to the health care industry in India in some way or the other. Owing to the vast differences in medical expenses in western countries and that of India, India has become one of the favorites for health care treatments. Due to the progressive nature of the health care sector in India, several foreign companies are intending to invest in the country.

From the above table it reveals that the health care industry.

The data given in the above table depicts the current and the future status of the health care industry, it helps to gives a picture of the growth that is been awaited by the Indian healthcare industry.

![Diagram showing share holding pattern](image)

From the above graph it reveals that Apollo hospitals being a pioneer in the field of private hospitals prevail to be infront row of the market with the highest Share value, Sales turnover and profit and market capital. The competition in the current scenario is getting tougher day by day.

**Statement of The Problem**

The Healthcare Industry is highly fragmented and healthcare systems vary from country to country. It provides services including prevention, diagnosis, and treatment of illness or other health issues, and rehabilitation. Healthcare providers are suffering due to the rising costs and demand exceeding capacity so they have started teaming up with private care providers to handle the excess demand.

The cost of healthcare and providing advance treatments has increased rapidly. This emphasis leads to higher standards on operating physicians. The higher standards mean that physicians must go through more years of school and training, making the occupation much less attractive. For these reasons, there is expected to be a shortage of physicians and other operating medical professionals in upcoming years.

The United States federal government is predicting that by 2020, nurse and physician retirements, without suitable replacements, will contribute to a shortage of approximately 24,000 doctors and nearly 1 million nurses. People are both living longer and expecting a higher quality of life. Both of those will increase demand for the healthcare industry.

Certain health indicators that indicate the health status of a country are the population rate, birthrate, infant mortality rate, life expectancy at birth, disease ratio, and per capita income of the individual by having a look on it conclude about the healthcare.

**Objectives of The Study**

- To find the level of stress among the employees.
- To determine the stressor that cause stress in the employee.
- To assess the perception of the employee about his work life.
To identify whether sufficient training is given to the employee to deal with his technical and general problems faced in the work and the measure taken to redress his grievance.

**Hypothesis**

- **Null Hypothesis (H0)** - There is no significant stress among the paramedical / auxiliary staffs at Apollo hospitals.
- **Alternate Hypothesis (H1)** - There is a significant stress among the paramedical / auxiliary staffs at Apollo hospitals.

**Scope of The Study**

Bearing in mind the fact that management style are changing, the study was conducted to examine the stress among employees of the hospital and how the hospital is managing stress.

**Research Methodology**

**Research Design**

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The study conducted is descriptive and analytical in nature. Descriptive research includes surveys and fact finding enquiries of different kinds. The major purpose of descriptive research is description of the state of facts as it exists at present.

**Descriptive Research**

Descriptive studies are concerned with describing the character of a particular individual or group. The study reveals who, what, when, where or how much. The descriptive study well-structured it is necessary that the researcher give sufficient thought to frame the research questions and deciding. Thus the study is descriptive in nature where the data is collected through well-structured questionnaire and from the information available in the organization.

**Limitations:**

- The research has been restricted to Apollo hospitals, Bangalore
- Findings will be based on the respondent’s information.

**Methods of data collection**

**Source of data collection**

**Primary Data**

The primary data have been collected through the method of interview schedule and structured questionnaire. There were one set of questionnaire prepared, for the nurses as well as for the paramedical staffs. Questionnaire contains five point scale questions with 4 parameters. The extent of influence of different variables is measured on a 5 point like scale.

**Instrumentation**

Here the primary data has been collected through a structured questionnaire. A set of questionnaire used, for both nurses and paramedic staffs. The questionnaire contains factors that cause stress and they are called stressors. The main objective of the study is to find out the level of stress among the employee. The questionnaire contains Likert’s scale. The questionnaire has 4 parameters. The parameters used are work environment, Social needs, professional and personal needs.

**Field Work (administration and data collection)**

In the study the questionnaire was administered to the employees using simple random sampling. Nurses and paramedics of different shift were covered by the researcher.

**Sampling plan**

**Sample frame**

This study focuses on the stress management among the nurses and paramedical staffs.

**Sample Unit**

For the study the population consists of nurses and paramedics. The questionnaire was distributed to 160 employees.

**Sample Techniques**

Here the sampling technique used is simple random sampling, it is used where the respondents are selected using the following formula

**Where:**

- \( n = \) sample size
- \( Z = \) level of confidence
- \( \sigma = \) population standard deviation
- \( E = \) acceptable amount of sampling error

If the value obtained by the above formula will be greater than 5per cent of the total population then we will have to use another formula for the calculation of the final minimum required sample size.

\[ N = \frac{n}{1 + \frac{n-1}{N}} \]

**Sample Design**

A sample design is definite plan for obtaining a sample from a given population. It refers to the technique or procedure the researcher would adopt in selecting items for the sample. The survey was conducted for a population of 450 employees of which 160 were taken for the study.

**Sample Size And Area**

The sample size for the study was limited to 160, of which 120 are nurses and 40 are paramedical staffs, the geographic area of the study was Apollo Hospitals, Bangalore.

**Tools And Techniques Of The Data**

**Tools of Data Collection**

**Interview:** This method is a two way systematic conversation between the Researcher and Respondent. Observation: It is a systematic viewing of a specific phenomenon in its getting for the specific purpose of gathering data for a particular study this method includes both seeing and listening. Questionnaire: It is described as a document that contains a set of questions the answers to which are to be provided personally by the respondents.

**Techniques used for data collection:**

- Frequency analysis: Anova (one way) analysis

**Summary of findings:**

- 86.3 per cent of the respondents are female, and 13.8 per cent are male so it is inferred that the majority of the staff among the paramedical and auxiliary staffs are females.
- 75 per cent of the respondents are nurses, 13.8 per cent are lab technicians, 5 per cent are dieticians, 1.3 per cent is physiotherapist, 5 per cent are radiologist so it is inferred that auxiliary staffs are more than that of paramedical staffs in these organisation.
- 61.3 per cent of the respondents have the designation of staff nurse, 5 per cent are nursing supervisors, 10 per cent are team leaders, and 2.5 per cent nursing in charge, 21.3 per cent are technicians. So it is inferred that the population of nurses are more so the per cent of respondents are more compared to others
- 17.5 per cent of the respondents have an experience of 0-1 yrs., 45 per cent have an experience of 1-2yrs, 18.8 per cent have an experience of 2-3yrs, 1.3 per cent has an experience of 3-4yrs, and 17.5 per cent have an experience above 4 yrs.
- 15 per cent of the respondents have spent about 0-1yrs in the organisation, 35 per cent has spent about 1-2yrs in the organisation, 25 per cent has spent about 2-3yrs in the organisation, 6.3 per cent has spent about 3-4yrs in the organisation.
organisation, and 18.8 per cent has spent above 4yrs in the organisation. So it is inferred that the majority of the employee has spent about 1-2yrs in the organisation.

Work Environment

- It is inferred that the Communication gap and lack of interaction between the colleagues and superiors can be a reason for the 8.9 per cent to disagree about the cordial and co-operative atmosphere of the organisation.

- It is inferred that 71 per cent of the respondents agree that the atmosphere of the organization helps them to better utilize their talents and skills, 27.6 per cent Employee feels that their work in the organisation is not satisfactory because only 50 per cent of the respondents agree that their services are appreciated.

- It is inferred that the employees of the organization are satisfied and are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded, 32 per cent of employees are being rewarded.

Social Needs

- 62.5 per cent of the respondents agree that their services are being recognized and appreciated, 20 per cent of employee’s feel services are not appreciated.

- 55 per cent of the respondents agree that the promotion in the organisation is based on merit and is transparent, 37 per cent feel that the promotions in organisation are not based on merit. Parameters considered by the organisation are not clear to the employees.

Personal

- 51 per cent of the respondents disagree that the pay they get is in accordance to their expectations and experience.so it is inferred that the employees are not satisfied with the scale of pay that they get in the organisation.

- 67 per cent of the respondents agree and 31 per cent of the employee disagree that the duration of the work along with the relaxation time is not a good combination to makes employee productive.

- 52.5 per cent of the staff agree that work stress has caused some health problems, 8.8 per cent strongly agree, so it can be inferred that some health problem has caused to the employee of the organisation due to work stress.

- 40 per cent of the staff agree that their work is not in its ease due to improper communication skills, 2.5 per cent strongly agree, so it is inferred that employees of the organisation does not face the problem regarding communication.

- 53.8 per cent of the respondents agree that they have a balance between their personal and professional life that they get time for relaxing, so it is inferred that there exist a balance between both personal and professional life.

- 61.3 per cent of the staff agree that they are interested in their work that they enjoy and get motivated, 20 per cent strongly agree, so it is inferred that the employee of the organisation are interested in their work and get motivated.

Professional

- 50 per cent of the respondents agree that if they are asked to define their life in one sentence they would say it to be stable, so it is inferred that the employees of the organisation are satisfied with their life.
50 per cent of the staff agree that they take the problem in their work place as challenging, 22.5 per cent strongly agree, so it is inferred that the employees has a positive attitude towards their work.

38.8 per cent of the respondent’s agree that they will complain if they are given work that they can deal, 8.8 per cent strongly agree, so it can be inferred that the employees face stress if they are given with more work because on about 50 per cent is agreeing to carry on with the work without complaint.

51.3 per cent of the respondent’s agree that if the organization forces them to change they will adopt to it, 11.3 per cent strongly agree, so it can be inferred that the employees has an attitude to change themselves for the organisation.

56.3 per cent of the staff agree that they get annoyed when they are forced to work overtime, 17.5 per cent strongly agree so it is inferred that the employee get annoyed when they are forced to work overtime.

53.8 per cent of the respondent’s agree that they experience bullying in work, 12.5 per cent strongly agree, so it can be inferred that the employee feel stress in their work.

Sugestions:
• Ensure that the workload is in line with workers' capabilities and resources.
• Design jobs to provide meaning, stimulation, and opportunities for workers to use their skills.
• Clearly define workers' roles and responsibilities.
• Give workers opportunities to participate in decisions and actions affecting their jobs.
• Improve communications-reduce uncertainty about career development and future employment prospects.
• Provide opportunities for social interaction among workers.
• Establish work schedules that are compatible with demands and responsibilities outside the job.
• Combat workplace discrimination (based on race, gender, national origin, religion or language).
• Bringing in an objective outsider such as a consultant to suggest a fresh approach to persistent problems.

Conclusion:
Workplace stress is the harmful physical and emotional response that occurs when there is a poor match between job demands and the capabilities, resources, or needs of the worker.

A combination of organizational change and stress management is often the most useful approach for preventing stress at work. The present study was conducted at Apollo hospitals, Bangalore. The main aim was to find the stress level; this was done by a detailed questionnaire. The study revealed that the employees face stress at their work place and needed prevailing in organization to some extent. At the end of study researcher conclude that though there are signs of stress among the employees and this stress is affecting their behavior, it can be controlled and reduced effectively. This can be done by giving counseling and incorporating the suggestions given here in at individual and organizational level.

References:
4. Levin and Rubin, Statistics, Pearson, 7e
9. Journals, Magazines, Annual Reports of Apollo hospital
11. http:// www.hr.com

FUTURE AND GROWTH PROSPECTS OF HEALTHCARE INDUSTRY:

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<thead>
<tr>
<th>Parameters</th>
<th>Current</th>
<th>By 2012</th>
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<tr>
<td>No. Of Beds</td>
<td>1.2 beds per 1000</td>
<td>9,14,543</td>
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<tr>
<td>No. Of Doctors</td>
<td>50,00,000 doctors</td>
<td>6,25,130</td>
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<tr>
<td>No. Of Nurses</td>
<td>0.8 per 1000</td>
<td>8,36,000</td>
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<tr>
<td>Infant Mortality Rate</td>
<td>34:1000</td>
<td>10:1000</td>
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<tr>
<td>Maternal Mortality Rate</td>
<td>4:1000</td>
<td>1 :1000</td>
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<td>per cent of population Insured</td>
<td>12.00 per cent</td>
<td>50.00 per cent</td>
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<tr>
<td>Total Private Spending</td>
<td>69,000 Crores</td>
<td>156,000 Crores</td>
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<td>OPD Spending</td>
<td>44,000 Crores</td>
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<td>Hospitals</td>
<td>30,000 hospitals approx, 17300</td>
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<td>Primary Health Centers / Community Health Centers</td>
<td>1,50,000 approx, 1,64,000</td>
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<td>Retails chemist outlets</td>
<td>3,50,000</td>
<td>24,000</td>
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<tr>
<td>Medical Colleges</td>
<td>229</td>
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<td>Est. Current market size</td>
<td>103,000 Crores</td>
<td>1,80,000 Crores</td>
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<td>Average life Expectancy</td>
<td>63.3 years</td>
<td>74 years</td>
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Leading Players of Healthcare Industry in India

Table: 2

<table>
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<tr>
<th>Hospitals</th>
<th>Last price (Rs. Cr)</th>
<th>Market cap (Rs. Cr)</th>
<th>Sales turnover (Rs. Cr)</th>
<th>Net profit (Rs. Cr)</th>
<th>Total assets (Rs. Cr)</th>
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<td>Apollo hospital</td>
<td>477.65</td>
<td>5956.81</td>
<td>1457.98</td>
<td>118.07</td>
<td>2231.78</td>
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<td>Fortis Health</td>
<td>134.15</td>
<td>5343.46</td>
<td>174.45</td>
<td>-7.15</td>
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<td>Opto circuits</td>
<td>258.3</td>
<td>4743.67</td>
<td>401.23</td>
<td>140.25</td>
<td>1055.93</td>
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<td>Indraprastha</td>
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<td>436.48</td>
<td>31.06</td>
<td>164.99</td>
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<td>Kovai Medical</td>
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<td>143.84</td>
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<td>Lotus Eye care</td>
<td>13.05</td>
<td>27.14</td>
<td>14.17</td>
<td>-0.24</td>
<td>54.19</td>
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Table: 3

SERVICES AT APOLLO HOSPITALS:

1. Emergency
2. Ambulance Service
3. Air Evacuation
4. Apollo Health Checkups
5. Tariff & Important Instructions of Health Checks
6. Out Patient Consultations

OUTSTANDING FACILITIES AT APOLLO HOSPITALS:

1. Apollo Cardiac Centre
2. Apollo Cancer Institute
3. Apollo Centre for Advanced Pediatrics
4. Apollo Neuroscience Centre
5. Hyperbaric Chamber
6. IVF Lab
7. I/T
8. Sleep Disorder Center
9. Apollo Center for Urology (1170)

DIAGNOSTIC SERVICES:

1. Lab Services
2. Radio-Diagnosis
3. Nuclear Medicine
4. Endoscopy Lab
5. Bronchoscopy Lab
6. Blood Bank

MAIN OPD (Outpatient Dept) BLOCK

1. Emergency Registration
2. Ambulance Service Consultation
3. Air Evacuation OPD Schedule
4. Apollo Health Checkups 24 Hours Pharmacy
5. Tariff & Important Instructions of Health Checks
6. Out Patient Consultations

INPATIENT SERVICES:

1. Admission
2. Room Categories
3. Intensive Care Units
4. Day Care Rooms
5. TPA / Insurance
6. Inpatient Pharmacy
7. Outpatient Pharmacy
8. Corporate Helpdesk
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<th>AREA OF OPERATION (global, national and regional)</th>
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