ABSTRACT: This study was conducted to assess the effectiveness of Laughter Therapy on occupational stress adaptation among the Staff Nurses at Deepak Hospital Jalna, Maharashtra. By using simple random sampling method, 30 staff nurses were selected for the study. The structured questionnaire was prepared to obtain data related to demographic variables such as age, gender, education, experience as a nurse, marital status, nurse-patient ratio among staff nurses within the Deepak Hospital Jalna, Maharashtra. Data was collected with the help of demographic profile and was done in Deepak Hospital at Jalna, Maharashtra. Approach was made to the staff nurses and was explained regarding the benefits of Laughter Therapy. On the first day, the pre-test was done with structured Likert scale to assess the occupational stress adaptation among staff nurses. Each consecutive day, visit was done to the samples and Laughter Therapy practices were implemented on daily basis. On the seventh day post-test was conducted to monitor the effectiveness of Laughter Therapy outcome by using structured Likert scale. The result showed that Laughter Therapy is effective on reduction of occupational stress and there is a significant relationship between performance of pre-test and post-test outcome.

INTRODUCTION: Stress is the second in frequency health problem regarding the occupational environment. Occupational stress is defined as the adverse emotional state experienced when the demands due to occupational factors overcome the ability of an employee to address or control the situation.

There is a subjective aspect in occupational stress, since a certain factor may be the cause of stress for some individuals but not for others (Lazarus, Folk man, 1984). The triggers usually connected with stress are physical, physiological and behavioural.

In particular, physical symptoms include increased arterial pressure, allergies, ulcer, heart conditions and general symptoms concerning the employee’s health, while psychological symptoms involve lack of concentration, increased tension, boredom and low work consistency. Finally, the behavioural symptoms are evident in the employee’s performance and satisfaction.

Laughter Therapy is one of the finest anti-stress measures. It ideally suited for today’s stress ridden lifestyle since it is economical and easy to practice. It can be compared to any form of medication or relaxation. It has been scientifically shown that Laughter lowers the blood pressure, relaxes muscles, improves blood circulation, increases oxygen level in the body, elevate mood, bring hope, and enhance communication.

NEED FOR STUDY:

Fears are the strongest driving force for the majority of humans and it is the most basic cause of stress. Any event in a person’s life which causes excess pressure can be a potential cause of stress. There are literally hundreds of different types of stressors, which are mainly classified under certain factors like emotional factors, environmental factors, physical factors, psychological factors & situational factors under situational factors, occupational stress is considered to be the greatest threat for health.

BACKGROUND OF THE STUDY

In a study conducted by the university of Maryland medical centre in 2010 on 46,000 health care professionals, found that health care professionals are living in an environment which can cause more stress and frustration than any other professionals. Furthermore, according to another survey, 40% of American workers describe their jobs as very stressful, causing them impaired concentration, sleeplessness, and increases the risk for illness, back problems, accidents, and lost time from work.
STATEMENT OF PROBLEM

A study to assess the effectiveness of Laughter Therapy on occupational stress adaptation among the Staff Nurses at Deepak Hospital Jalna, Maharashtra.

OBJECTIVES

- To assess the Pre-test level of occupational stress among the Staff Nurses.
- To assess the post-test level of occupational stress among the Staff Nurses.
- To determine the effectiveness of Laughter Therapy on occupational stress adaptation among the Staff Nurses before and after the intervention.
- To evaluate the difference in level of occupational stress adaptation among the staff nurses before and after the intervention.
- To find out the pre-test association between the level of occupational stress adaptation with selected demographical variables.

ASSUMPTION

1. Staff Nurses working at Deepak Hospital, Jalna may experience certain level of stress.
2. Laughter Therapy has effect on occupational stress adaptation among the Staff Nurses working at Deepak Hospital, Jalna.

HYPOTHESIS

H1 – There will be significant difference in level of occupational stress adaptation among the Staff Nurses before and after intervention.

H2 - There will be significant association between the levels of occupational stress adaptation with selected demographic variables.

CONCEPTUAL FRAME WORK:

The conceptual frame work deals with the interrelated concepts that assembled together in some relational schemes by virtue of relevance to a common theme.

The conceptual framework of the present study is Modified Dorothy Johnson’s (1980) open system theory.

According to the general system theory a system consists of a set of interacting components that are regulated by biological, psychological and sociological factors. An individual composed of open and interactive subsystem. An open system consists of input, throughput and output.

According to the theorist view the information, matter and energy that the system receives from the environment are called as input for the system. The systemises, organizes transforms the input in a process called as throughput and releases information, matter and energy as output into the environment. Output that returns to the system as input is called as feedback.

METHODS AND MATERIAL

The chapter comprises the methodology for the study. It comprises of the approach, research design and variables of the study, research setting, population, sample, sample size, sampling techniques, criteria for sampling selection, development and description of tool, validity and reliability of the tool collection procedure and plan for data collection.

Research Approach: It is defined the approach as a general set of orderly discipline procedure used to acquire information. The quantitative approach was used in this study.

Research design: research design is the plan and strategy of investigation for answering the research question. One group pre-test - post-test design.

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test</th>
<th>Intervention</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quasi experimental design (One group pre-test post-test design)</td>
<td>To assess the level of occupational stress among the Staff Nurses by using Structured Likert scale</td>
<td>Practicing Laughter Therapy among Staff Nurses.</td>
<td>To assess the level of occupational stress among the Staff Nurses by using Structured Likert scale</td>
</tr>
<tr>
<td>Design</td>
<td>O₁</td>
<td>X</td>
<td>O₂</td>
</tr>
</tbody>
</table>

POPULATION AND SAMPLING

Population: The population is the total number of people, who meet the criteria that the researcher has established for the study from which subjects will be selected and with whom findings will be generalized.

Target Population: The target population of the study constitutes all the Staff Nurses.

Accessible Population: The accessible population of the study constitutes of all the Staff Nurses who are working in Deepak Hospital at Jalna, Maharashtra.

Sampling Technique: Non probability convenient sampling method.
Sample: Staff Nurses who are working in Deepak Hospital Jalna.

Sample size: Sample size for this study is approximately 30 samples.

Sample setting: Deepak Hospital Jalna, District Maharashtra.

CRITERIA FOR SELECTION OF SAMPLES

Inclusion Criteria
1. Staff Nurses who are willing to participate?
2. Staff Nurses who have completed their ANM/ GNM/ B.Sc. Nursing.
3. Staff Nurses between the age group of 21yrs-50yrs.
4. Staff Nurses who are working in Deepak Hospital.

Exclusion Criteria
1. Staff Nurses not available at the time of practicing.
2. Staff Nurses who are members of laughter club / other related activities.

INTERVENTION

The Laughter Therapy was administered for 20 minutes per day for 7 days.

➢ Introduction to Laughter Therapy.
➢ Clapping and warming up exercise.

Activity session included
1. Just laugh
2. Laugh at yourself
3. Silent laughter
4. Greeting laughter
5. Gibberish talk
6. No money laughter

PILOT STUDY:

Pilot study was conducted in Deepak Hospital at Jalna, Maharashtra 5 sample were selected for pilot study through simple sampling technique. The pre-test were conducted and the sample were taught about Laughter Therapy in a calm and quite environment. Each day the sample were made to practice Laughter Therapy about 30 minute in the morning in the presence of the researcher. The researcher conducted post-test on 7th day of intervention. The data analysis done with statistics. The tool was found feasible and practicable.

DATA COLLECTION PROCEDURE:

The study was conducted at selected area, jalna. In the beginning survey was done from which sample were selected by simple sampling technique based on sample criteria. Introduction about investigator was given to sample. Verbal consent was obtained and confidentiality was assured.

The pre-test was conducted. Researcher selected 30 sample through simple random sampling technique. Total sample were divided in 4 group for convenience of implementing Laughter Therapy. Structured Likert scale was used to assess the level of occupational stress among the Staff Nurses. The time taken by the researcher to complete the tool for each sample was 10-15 minute. The sample were asked to choose the correct response from the given options.

After the pre-test sample were taught about Laughter Therapy in a calm and quite environment daily. The duration of procedure was about 30 minute. The sample were made to practice the technique daily in the morning in the front of the researcher. The researcher conducted post-test on 7th day of intervention.

PLAN FOR DATA ANALYSIS:

Data were collected, arranged and tabulated. Descriptive statistics like frequency, percentage and mean were used for categorical data. Inferential statistic was used to find out effectiveness of Laughter Therapy on occupational stress among staff nurses. And chi-square test was used to associate the occupational stress with demographical variables.

METHOD OF DATA ANALYSIS

Paired ‘t’ Test - Analysis of ‘T’ test is applied to test the effectiveness Laughter Therapy regarding adaption of occupational stress among Staff Nurses who are working in Deepak Hospital Jalna.

Chi Square Test Chi square was used to measure an association between Socio demographical variables post-test and level of stress among Staff Nurses.

3.11 Reliability and Validity of tool:
Reliability: Reliability has to do with the quality of measurement. In its everyday sense, reliability is the "consistency" or "repeatability" of measures. Reliability is the consistency of a set of measurements or measuring instrument. Reliability does not imply validity.

Validity: A validity refers to getting results that accurately reflect the concept being measured. A valid measure to degree to which and instrument measure what it is supposed to be measuring. In practice, validity can also refer to the success of the research in retrieving "valid" result.

RESULT

• The Staff Nurses belongs to age of 21-30 years, 31-40 years, and 41-50 years. Among the Staff Nurses (30), 23 Staff Nurses belongs to 21-30 years of age, and 07 belongs to 31-40 years of age and none belongs to the age group 41-50.
• Among the total Staff Nurses (30) the male Staff Nurses are 05 and female Staff Nurses are 25.
• Among the 30 Staff Nurses 11 were ANM Nurses and 15 staff were GNM Nurses, 04 staff were B.Sc. Nursing Degree Holder and Trainee staff nil.
• Among the Staff Nurses 30, 19 staff has 6 months to 3years experience, 05 staff has 4-7years experience, 03 staff has 7-8years experience and the 03 staff has experience of above 11years.
• Among the 30 Staff Nurses 14 were unmarried and 16 were married, widow are nil
• Among the 30 Staff Nurses, 15 staff belong to the 1:3 ratio, 08 staff belong to the 1:5 and 07 staff belongs to the 1:10 ratio.
• The calculated t value of occupational stress is 14.50, were more than tabulated value at 0.05 level which shows that there is significance between pre-test and post-test of occupational stress. Hence First Hypothesis (H1) was accepted.
• The chi square test was used to find out association between effectiveness of Laughter therapy and selected demographic variables among staff nurses. The calculated p value were greater than 0.05 which confirmed the fact that there is no significance association between effectiveness of Laughter Therapy and selected demographic variables among staff nurses. The Demographic variables such as age, gender, education, experience as a nurse, marital status, nurse patient ratio are not associated with pre-test pranayama score. Hence the research hypothesis (H2) is rejected and the null hypothesis is accepted.

Bibliography:

**TOOLS:**

**SECTION A:**

**DEMOGRAPHIC DATA OF STAFF NURSES:**

**INSTRUCTIONS:**

This questionnaire is related to the selected personal variables. You are requested to answer all the questions. This information will be treated as confidential and only used for the research purpose. Kindly write down the appropriate information in the space provided or write down the appropriate alphabet of the category to which you belongs to, in the bracket given on the right side of the each item.

1. **Age (in years)**
   - a) 21 – 30 years
   - b) 31 – 40 years
   - c) 41 – 50 years

2. **Gender**
   - a) Male
   - b) Female

3. **Education**
   - a) ANM
   - b) GNM
   - c) BSc. Nursing
   - d) Trainee

4. **Experience as a nurse**
   - a) 6 months - 3 years
   - b) 4-7 years
   - c) 8-11 years
   - d) Above 11 years

5. **Marital Status**
   - a) Single
   - b) Married
   - c) Widow/widower
6. Patient Nurse Ratio

a) 1:3

b) 1:5

c) 1:10

SECTION B:

STRUCTURED LIKERT SCALE

Instructions: Below is a list of Subscales and Component Items that you commonly encounter in your work setting which are stressful. Please indicate HOW FREQUENTLY you experience these situations as stressful by placing a tick [√] in the space provided on your right hand side. You are requested to answer all the questions. This information will be treated as confidential and only used for the research purpose. You should give an immediate response without thinking too long for your answer.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Subscales and Component Items</th>
<th>RARELY</th>
<th>OCCASIONAL</th>
<th>OFTEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Work Demands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I am worried about receiving complaints from patients or their relatives for not meeting their demands.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>I have to bear the negative sentiment of patients or their relatives.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>I do not have sufficient time to meet patients’ and their relatives’ demands.</td>
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<tr>
<td>(B) Work–Family Conflict</td>
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<tr>
<td>4</td>
<td>The amount of time my job occupies makes it difficult for me to fulfil family responsibilities.</td>
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<tr>
<td>5</td>
<td>The burden of work makes it difficult for me to undertake my personal chores and/or engage in hobbies.</td>
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<tr>
<td>6</td>
<td>Problems at work make me irritable at home</td>
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<td></td>
<td></td>
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<tr>
<td>(C) Insufficient Support from Co-workers or Caregivers</td>
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<td>7</td>
<td>I cannot instantaneously obtain patient-related information because of inadequate communication within the team.</td>
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<tr>
<td>8</td>
<td>I feel upset when criticized by doctors.</td>
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<tr>
<td></td>
<td>I feel tensed when team members do not appear to help in a timely manner under urgent circumstances.</td>
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<tr>
<td>9</td>
<td>(D) Workplace Violence and Bullying</td>
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<tr>
<td>10</td>
<td>I feel depressed when verbally abused by the patient’s family.</td>
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<td></td>
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<tr>
<td>11</td>
<td>I feel depressed when Psychological abuse such as threats, discrimination, bullying, and harassment</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td>I feel depressed when Physical abuse by patient relative such as hitting, kicking, pushing, pinching, pulling, and dragging</td>
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<td></td>
<td></td>
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<tr>
<td>13</td>
<td>(E) Organizational Issues</td>
<td></td>
<td></td>
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<tr>
<td>14</td>
<td>I feel disturbed when informed of a change to my schedule at less than 24 hours’ notice</td>
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<tr>
<td>15</td>
<td>I feel sad when not achieving a promotion (e.g., level 1 or 2) within the expected period affects my income.</td>
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<tr>
<td>16</td>
<td>(F) Occupational Hazards</td>
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<tr>
<td>17</td>
<td>I feel fear when I Exposure to radiation or strong light such as Xray, ultraviolet light, and lasers</td>
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<tr>
<td>18</td>
<td>I feel stressed considering that my patients might be have contagious diseases such as SARS or AIDS.</td>
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<tr>
<td>19</td>
<td>(G) Difficulty Taking Leave</td>
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<tr>
<td>20</td>
<td>I feel disturbed when asking leave for household emergencies.</td>
<td></td>
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<tr>
<td>21</td>
<td>(H) Powerlessness</td>
<td></td>
<td></td>
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<tr>
<td>22</td>
<td>I feel tensed when teaching student nurses and newcomers while caring for patients.</td>
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<tr>
<td>23</td>
<td>I worry that my colleagues’ incompetence will affect patient safety.</td>
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<tr>
<td>23</td>
<td>I feel sad when the manager or head nurse not supports me in the event of a conflict between me and a patient.</td>
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<td></td>
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</tr>
<tr>
<td>(J)</td>
<td><strong>Unmet Basic Physiological Needs.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I feel stress when no time to fulfil my personal needs (e.g., water consumption and toilet breaks).</td>
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<td></td>
<td></td>
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<tr>
<td>25</td>
<td>I feel bad when cannot take an uninterrupted 30-minute mealtime break.</td>
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</tbody>
</table>

**Rating of the scale:**

1-Rarely stressful.
2-Occasionallya stressful.
3-Often stressful.

**Rating of score:**

<table>
<thead>
<tr>
<th>Rating of score</th>
<th>Percentage</th>
<th>Rating of scale.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>33% and Below</td>
<td>Low stress</td>
</tr>
<tr>
<td>26-50</td>
<td>34% - 67%</td>
<td>Moderate stress</td>
</tr>
<tr>
<td>51-75</td>
<td>68% to 100%</td>
<td>High stress</td>
</tr>
</tbody>
</table>

**SCORE INTERPRETATION:**

Individual score on each item of structured Likert scale range from 1 to 75 with higher score indicating higher perceived stress.

1. Score ranging from 1 to 25 [33% and below] would be considered Low Stress.
2. Score ranging from 26 to 50 [34% - 67%] would be considered Moderate Stress.
3. Score ranging from 51 to 75 [68% to 100%] would be considered High Stress.