"A STUDY TO EVALUATE THE EFFECTIVENESS OF RELAXATION TECHNIQUES ON LEVEL OF STRESS AMONG GROUP –D WORKERS IN SELECTED HOSPITAL, MEERUT."

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Abstract: This study has been undertaken to evaluate the effectiveness of relaxation techniques on level of stress among group –D workers in selected hospital, Meerut.” The objectives of this study are to assess the 1. To assess the level of stress among group-D workers working in selected hospital. 2.To evaluate the effectiveness of relaxation techniques on level of stress among group-D workers in experimental group.3. To compare the post test score on level of stress in experimental and control group. 4. To find out the association between the post test score on level of stress among group-D workers in experimental and control group with their selected demographic variables. A quasi experimental study was conducted on 40 sample of group D workers, 20 in control group and 20 in experimental group selected by the Non-probability purposive sampling technique. Demographic variables and perceived stress scale was used to collect by applying quasi experimental research design the result shows that The study revealed that the data depicted that in experimental group in post test majority of group-D workers were had low level of stress compared to pre test by using paired t-test (t=8.0511 and p=<0.0001). that there was partially significant association between pot-test level of stress in experimental group and control group among group-D workers with their socio demographic variables such as age, gender, types of family, types of occupation and total working experience were significant and marital status, education, personal habits and mode of travel were not significant.

Key words: Effectiveness, Relaxation techniques, Group-D workers, Level of stress

I. INTRODUCTION

The origin of the concept of stress predates antiquity. The word "Stringere," which means hardship, strain, adversity, or affliction, is taken from the Latin word. Stress is the emotional and physical strain caused as a result of our response to what happens around us. Stress is a multifaceted phenomenon that focuses on the dynamic interaction between the person and their environment.
However, high levels of stress can have a number of negative effects, such as physical and mental illnesses, sleep issues, restlessness, irritability, forgetfulness, abnormal tiredness, lowered immunity, recurrent infections, headaches, poor concentration, memory loss, and a decrease in problem-solving skills. According to studies, group D employees include ward boys, ayah, watchmen, sweepers, hospital peons, laundry supervisors, stretcher bearers, and lift men deal with a variety of stressors. Due to their enormous workloads, extended long shifts, and strict time limitations, Group- D hospital employees are faced to significant levels of occupational stress. Hospitals are one of the most stressful places to work just because there, it is a part of individual life and death. Workplace stress can lead to poor health and work-related injuries.
Stress is only damaging when it overwhelms us and prevents our nervous system from returning to its normal state of equilibrium. Our bodies are overrun by chemicals that prime us for "fight or flight" when stress overwhelms the neurological system. The stress response wears down our body when it is continually triggered by the demands of daily life, even if it can be lifesaving in emergency situations where we need to act rapidly. Employee job stress in the clinical setting may have a negative effect on the standard of patient treatment. Among group D workers, there are various causes of stress, including varied working hours, heavy work load, night shifts resulting in sleep deprivation, imbalance between work and life, isolated feelings, and minimal control over the workplace accompanied by minimal autonomy.

Among group D workers, job satisfaction has a great impact on work quality and efficiency, including health care cost. Job fulfillment is influenced by stress, fatigue, and challenging work shifts, job satisfaction among Group D workers is influenced by many factors, including sex, age, level of education, work experience, working conditions, salary, working hours, and the possibility of promotion. Results of various researchers show that stress, fatigue, burnout, depression, and general psychological distress negatively affect health care systems and patient care. The relationship between overwork, tiredness, stress, and clinical performance is complex and needs thorough investigation. You may decrease the incidence of stress on your body and manage it with the help of these techniques. Any approach, process, procedure, or action that facilitates a person in relaxing, achieving a state of enhanced relaxation, or otherwise lowering levels of pain, anxiety, tension, or aggression is referred to as a relaxation technique (also known as relaxation training). Some relaxation techniques that can help to reduce stress are: yoga, relaxation, progressive muscle relaxation, breathing exercises, mental imagery, breath focus, body scan, guided imaginary, mindfulness meditation, body exercises, listening soft music repetitive prayer and progressive muscles relaxation techniques. As the practice of stress relaxation techniques among group-D workers reduces workplace stress as well as personal stress and it will provide a great comfort for the workers in a multitude of situational and developmental stressors that are impeding in their learning as well as the psychological health.

CONCEPTUAL FRAMEWORK:-
Learning
(The researchers learns to assess the level of stress among group-D workers)

Other relationship
(approaches other health care team members)

Preconception
(values, belief regarding the group-D workers as well as the planned intervention.

Demographic variables
Age, gender, marital status, education, types of family, types of occupation, total working experience, personal habits and mode of travel.

Tool: PSS

Self understanding
Researcher prepares herself by gaining insight about the group-D workers and would be stress problem of workers)

Health
Free from disease condition and workers effectively in reducing level of stress.

Thinking
(About the group D workers)

Assess the level of stress with the help of perceived stress scale among experimental and control group.

Pre-test

EXPERIMENTAL GROUP

CLIENT–RESEARCHER RELATIONSHIP

Orientation phase: The details of the group-D workers are being collected.


Exploitation phase: Provided information and administered stress relaxation techniques on the level of stress among group-D workers and assisted their level of stress.

Resolution phase: Mutual Termination

In control group:
No intervention was given

In experimental group:
Successfully learns to ventilate other health care workers and their family members so stress relaxations techniques are effectively reduce the stress.

Reduce in the level of stress

No reduce in the level of stress

FIGURE 1: SCHEMATIC REPRESENTATION OF CONCEPTUAL FRAMEWORK
RESEARCH METHODOLOGY

RESEARCH APPROACH
Quantitative evaluative research approach

RESEARCH DESIGN
Quasi Experimental research design.

SAMPLE AND SAMPLING TECHNIQUES
The samples of group D workers were selected in Chhatrapati Shivaji Subharti Hospital, Meerut selected by Non-probability purposive sampling technique. The sample size is 40. 20 in experimental group and 20 in control group.

DATA COLLECTION
The study includes demographic variables. It included variables like age, gender, marital status, qualification, types of family, types of occupation, total working experience, personal habits and mode of travel and used of Standardized perceived stress scale for assessing the level of stress. The scale consists 14 items that measures the level of stress. At the level of education, the group-D workers did not understand the English language so that the PSS was used in the translation of Hindi language.

CONTENT VALIDITY OF THE TOOL
The content validations of tools and criteria checklist were prepared which consist of items with three responses for rating against each criteria like relevant, non-relevant and need notification with the suggestion column. The tools along with the request letter, statement of the problem, objectives, Standardized perceived stress scale and demographic variables was submitted to seven experts from the different fields of psychiatric department for validation. Based on experts’ suggestions, necessary modifications were made. The tools were found to be valid for the purpose of the study.

RELIABILITY OF THE TOOL
The reliability for the (Standardized) perceived stress scale (14 items) is \( r=0.82 \) by Cronbach’s alpha value which shows highly positive correlation.

DATA ANALYSIS
Score were planned to be organized tabulated and analyzed by using both descriptive and inferential statistics such as mean, standard deviation, paired and unpaired t-test and chi square.

RESULT AND DISCUSSION
Analysis and interpretation were done as per the objectives of the study and the hypothesis was formulated. Descriptive and inferential statistics were for analysis of the data. The data and findings have organized and presented under the following section.

SECTION 1
1.1 Frequency and percentage distribution were used to analysis the demographic data of group- D workers in experimental and control group.

SECTION 2
2.1 Frequency & percentage distribution of level of stress among group d workers in experimental group.
2.2 Frequency & percentage distribution of level of stress among group D workers in control group.
2.3 Evaluate the effectiveness of stress relaxation techniques on level of stress in experimental group.
2.4 Evaluate the effectiveness of stress relaxation techniques on level of stress in control group.
2.5 Compare the post test level of stress score in experimental and control group.
2.6 Compare the post test score of effectiveness of stress relaxation technique on level of stress in experimental and control group.
SECTION 3

3.1 Find the association between the pre-test score on level of stress among group D workers in experimental groups with their selected demographic variables.

3.2 Find the association between the post test score on level of stress among group D workers in experimental groups with their selected demographic variables.

3.3 Find the association between the pre-test score on level of stress among group D workers in control groups with their selected demographic variables.

3.4 Find the association between the post-test score on level of stress among group D workers in control groups with their selected demographic variables.

1.1: Frequency and percentage distribution to analysis the demographic data of group-D workers in experimental and control group.

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Socio-demographic variables</th>
<th>Control group (n= 20)</th>
<th>Experimental group (n=20)</th>
<th>n=40</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td>1.</td>
<td>AGE (IN YEARS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19 - 24</td>
<td>2</td>
<td>10%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>25-30</td>
<td>2</td>
<td>10%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>31-36</td>
<td>4</td>
<td>20%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>37 AND ABOVE</td>
<td>12</td>
<td>60%</td>
<td>12</td>
</tr>
<tr>
<td>2.</td>
<td>GENDER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MALE</td>
<td>5</td>
<td>25%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FEMALE</td>
<td>15</td>
<td>75%</td>
<td>15</td>
</tr>
<tr>
<td>3.</td>
<td>MARITAL STATUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MARRIED</td>
<td>11</td>
<td>55%</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>UNMARRIED</td>
<td>4</td>
<td>20%</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>WIDOW</td>
<td>2</td>
<td>10%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>DIVORCED/SEPARATED</td>
<td>2</td>
<td>10%</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>EDUCATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UPTO HIGHER SEC.</td>
<td>3</td>
<td>15%</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>UPTO SEN. SEC.</td>
<td>15</td>
<td>75%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>GRADUATE</td>
<td>2</td>
<td>10%</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>TYPES OF FAMILY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NUCLEAR FAMILY</td>
<td>13</td>
<td>65%</td>
<td>6</td>
</tr>
</tbody>
</table>
The data presented in table depicts in experimental group that:

- The data represented in the table shown in this group that majority of 12(60%) were in the age group of 37 and above years. Majority of sample were belong to 15(75%) female, and 5(25%) male. Majority of sample 11(55%) were married. Majority of sample as per the education 13(65%) were belong to upto higher secondary. Majority of sample 13(65%) were belongs to joint family. Majority of sample 13(65%) were belongs to joint family 9(45%) were manual labor. Majority of sample as per total working experience 9(45%) were above 5 years experience. Majority of sample as per personal habits 8(40%) were tea totalor. Majority of sample as per mode of travel 7(35%) were used public transport.

Data presented in table depicts in control group that:

The data represented in the table shown in this group majority of 12(60%) were in the age group of 37 and above years. Majority of sample were belong to 15(75%) female. Majority of sample 11(55%) were belong to married. Majority of sample as per the education, 15(75%) were belong to upto senior secondary. Majority of sample, 13(65%) were belong to nuclear family, Majority of sample,17(65%) were belong to manual labor. Majority of sample as per total working experience 13(65%) were above 5 years experience. Majority of as per personal habits 7(35%) were tea totalor, Majority of as per mode of travel 6(30%) were used by institute vehicle.
2.1: Frequency and percentage of pre-test & post test score on level of stress among group-D workers in experimental group.

![Bar Graph]

Fig.1 The above column graph showing the percentage distribution level of stress among group-D workers in experimental group before and after administration of relaxation techniques.

Data represented that in pre-test majority of group-D workers, 15 (75%) were had high level of stress, 4 (20%) were had moderate level of stress and 1 (5%) were had shown low level of stress. But in post-test majority of group-D workers were had, 16 (80%) have low level of stress, 4 (20%) were had moderate level of stress and 0 (0%) had shown high perceived stress.

This indicates that the stress relaxation techniques were effective to reduce the level of stress among group-D workers in selected hospital in Meerut.

2.2 Frequency and percentage of pre-test & post test score on level of stress among group-D workers in control group.

![Bar Graph]

Data represented in table depicted that in pre-test majority of group-D workers, 17 (85%) were had high level of stress, 3 (15%) were had moderate level of stress and 0 (0%) were had shown low level of stress. But in post-test majority of group-D workers were had, 18 (90%) had high level of stress, 2 (10%) were had moderate level of stress and 0 (0%) had shown low stress.
2.3 Evaluate the effectiveness of stress relaxation techniques on level of stress in experimental group. 

<table>
<thead>
<tr>
<th>Level of stress</th>
<th>Mean</th>
<th>Mean difference</th>
<th>SD</th>
<th>SD difference</th>
<th>Paired t-test</th>
<th>Table value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- test</td>
<td>42.30</td>
<td>24.2</td>
<td>9.14</td>
<td>3.31</td>
<td>8.0511</td>
<td>2.09</td>
<td>0.0001</td>
</tr>
<tr>
<td>Post - test</td>
<td>18.10</td>
<td>5.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df- 19

Data represents in table show – The Mean of the pre-test and post test score Mean was 42.30 and 18.10 respectively and the Standard Deviation score of pre and post test was 9.14 and 5.83 respectively. The mean difference was 24.2 and paired t” test score was 8.0511 that is more than the table value (2.09) so, that shows the results were significant and stress relaxation techniques helps to reduce the level of stress among group-D workers.

Hence the research hypothesis H1 was accepted at 0.05 level of significance.

2.4 Evaluate the effectiveness of stress relaxation techniques on level of stress in control group. 

<table>
<thead>
<tr>
<th>Level of stress</th>
<th>Mean</th>
<th>Mean difference</th>
<th>SD</th>
<th>SD difference</th>
<th>Paired t-test</th>
<th>Table value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- test</td>
<td>45.95</td>
<td>2.15</td>
<td>7.47</td>
<td>0.1</td>
<td>0.9485</td>
<td>2.09</td>
<td>0.177</td>
</tr>
<tr>
<td>Post - test</td>
<td>48.10</td>
<td>7.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df- 19

Data represents in table show – The Mean of the pre-test and post test score Mean was 45.95 and 48.10 respectively and the Standard Deviation score of pre and post test was 7.47 and 7.57 respectively. The mean difference was 2.15 and paired t” test score was 0.9485 that is less than the table value (2.09) so, that shows the results were not significant at 0.05 level of significance.

2.5 Frequency and percentage of post-test score level of stress among group-D workers in experimental and control group

![Post test score of experimental and control group](image)

Data represented that in experimental post-test were had, 16(80%) have low level of stress, 4(20%) were had moderate level of stress and 0(0%) had shown high perceived stress. Where in control group post-test were had, 18(90%) have high level of stress, 2(10%) were had moderate level of stress and 0(0%) had shown low stress.
This indicates that the stress relaxation techniques were effective methods to decrease the level of stress among Group-D workers in the selected hospital at Meerut.

Table 4.

2.6 Compare the level of stress between experimental and control group

<table>
<thead>
<tr>
<th>Level of stress</th>
<th>Post – test mean</th>
<th>Post-test Mean difference</th>
<th>SD</th>
<th>SD difference</th>
<th>unpaired t-test value (cal.)</th>
<th>t-test value (tab.)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>18.10</td>
<td>30</td>
<td>5.83</td>
<td>1.73</td>
<td>14.053</td>
<td>2.02</td>
<td>0.001</td>
</tr>
<tr>
<td>Control group</td>
<td>48.10</td>
<td>7.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data represents in table shows the difference of mean post test score was 18.10 in experimental group and 48.10 in control group and the standard deviation score was 5.83 in experimental and 7.56 in control group. The mean difference score was 30. The calculated unpaired “t” score was 14.053 at 0.05 level of significance which is higher than the table value (2.02).

So the stress relaxation techniques were effective methods to decrease the level of stress among Group-D workers. **Hence the research hypothesis H2 was accepted at 0.05 level of significance.**

3.1 Chi square values showing the association between pre-test score of experimental groups with their selected demographic variables.

The data presented in the table shows that it is evident that there was partially significant association between pre-test level of stress in experimental group among group-D workers with their socio demographic variables such as age, gender, types of family, types of occupation and total working experience were significant and marital status, education, personal habits and mode of travel were not significant. **Hence, the research hypothesis H3 was accepted at 0.05 level of significance.**

3.2 Chi square values showing the association between post-test score of experimental groups with their selected demographic variables.

The data presented in the table shows that it is evident that there was partially significant association between post-test level of stress in experimental group among group-D workers with their socio demographic variables such as age, gender, types of family, types of occupation and total working experience were significant and marital status, education, personal habits and mode of travel were not significant. **Hence, the research hypothesis H3 was accepted at 0.05 level of significance.**

3.3 Chi square values showing the association between pre-test score of control groups with their selected demographic variables.

The data presented in the table shows that it is evident that there was partially significant association between pre-test level of stress in control group among group-D workers with their socio demographic variables such as age, gender education, types of occupation and total working experience were significant and marital status, types of family, personal habits and mode of travel were not significant. **Hence, the research hypothesis H3 was accepted at 0.05 level of significance.**
3.4 Chi square values showing the association between post-test score of control groups with their selected demographic variables.

The data presented in the table shows that it is evident that there was partially significant association between post-test level of stress in control group among group-D workers with their socio demographic variables such as age, gender education, types of occupation and total working experience were significant and marital status, types of family, personal habits and mode of travel were not significant. Hence, the research hypothesis H3 was accepted at 0.05 level of significance.

REFERENCES


