‘Effectiveness of Music therapy on level of Stress among elderly in selected old age homes of Pune City.’

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**ABSTRACT**
In this study the effectiveness of Music therapy on level of stress among elderly in selected old age homes of Pune City. 50 samples each from the experimental and the control group were selected by non-probability convenient sampling technique. The research design used was Nonrandomized control group design. The conceptual frame work of the study was based on General Systems Model by Ludwig von Bertalanffy. Data was collected using perceived stress scale, analysed and interpreted by using descriptive and inferential statistics. Mean value at pre-test was 30.2 which decreased to 16.8 in post-test.
This study depicted that Music therapy is very effective in stress reduction among elderly in selected old age homes of Pune City. It is suggested that Music therapy should be practised as an integral part of the nursing profession by the nurse working in old age homes, community and hospital.

**KEY WORDS**
Music Therapy, Stress, Elderly, Old-age home

**INTRODUCTION**
Stress is an unavoidable part of life. But, there are some things you learn best in calm; and some in storm. The quickening of your heartbeat and the heightening of your senses that you experience with normal stress is just your body preparing to respond to stress. It is the fact that stress does not kill us; it is our reaction to perceived it. But when stress goes on for too long it can be dangerous. For older adults, prolonged stress can come from chronic illness, disability, or the loss of a spouse. Other sources of stress may involve money, change in living situation, or family problems. These types of stressors are long term and can be more difficult to deal with. Stress causes your body to release stress hormones, which stimulate your brain and body. Over time, that type of stimulation can take a negative toll on an older person.
Music is a therapy. It is a communication far more powerful than words, for more immediate, far more efficient. Music has a powerful impact on everyone, but can release a tripwire of powerful memories to the elderly; because of that music therapy is one of the most effective treatments for the elderly. Music is good for the spirit, at all age especially in elderly. Classical music is one such music genre that has the ability to create a positive aura around elderly. The rhythms harmonize with the vibrations present inside mind and feel intensely relaxed. Classical music is capable of mellowing down the agitated mind and soothing senses in a unique way.
The number of older adults is growing fast all over the world. People aged 60 and over are more than 800 million. 76.6 million people at or over the age of 60, constituting above 7.7% of total population in our country. Maharashtra is the second most populated state of India contributing old age people, 9.2% (Male: Female - 8.7:9.7).

Music therapy helps to provide the old age people with ways of understanding and developing
- Their self-identity and connecting with other people,
- Maintaining wellbeing
- Experiencing and expressing spirituality.
- Provides strong associations with memories of a person’s life.

PROBLEM STATEMENT
‘A Quasi experimental study to assess the Effectiveness of Music Therapy on Level of Stress among Elderly in Selected old age Homes of Pune City’

OBJECTIVES OF THE STUDY
1. To assess the level of stress among elderly in both experimental and control group.
2. To find out the effectiveness of music therapy on level of stress of elderly in experimental group.
3. To find out the association between level of stress and demographic variables.

HYPOTHESIS
H₀: There is no significant difference between in the post-test level of stress among elderly in experimental and control group after music therapy.
H₁: There is a significant difference between in the post-test level of stress among elderly in experimental and control group after music therapy.

METHODOLOGY
An evaluatory approach with Non-randomized control group research design was used. The participants were divided into experimental and control group consisting of 50 samples each by convenient sampling in selected old age homes. A standardized tool of perceived stress scale to measure level of Stress among elderly was used.

On the first day samples from both group were finished with pre-test, Music therapy (Indian Classical Music) was given to the experimental group for seven consecutive days for 30 minutes thereafter. On the eighth day the samples from both groups were finished with post-test. Permission to conduct the study was taken from the respective old age homes and informed consent taken from all participants. The participants took who could understand English or Marathi. The data was collected and analyzed based on objectives of the study using descriptive and inferential statistics.

DATA ANALYSIS AND RESULT

Section-I
Table: Distribution of samples according to their demographic variables in terms of frequency and percentage among elderly.

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-65 years</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>66-70 years</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>71-75 years</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>75-80 years</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>56</td>
</tr>
</tbody>
</table>
Section II:- Assessment level of stress among elderly in both experimental and control group in Pretest

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>30.2</td>
<td>5.1</td>
<td></td>
<td>27.5</td>
</tr>
<tr>
<td>Post Test</td>
<td>16.8</td>
<td>4.8</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>13.4</td>
<td>0.3</td>
<td></td>
<td>2.01</td>
</tr>
</tbody>
</table>

Table: Paired t-test for effectiveness of music therapy on stress of elderly.

Section III:- To find out the effectiveness of music therapy on level in experimental group

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>SD</th>
<th>z- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>13.3</td>
<td>3.4</td>
<td>13.2</td>
</tr>
<tr>
<td>Control</td>
<td>-0.8</td>
<td>3.4</td>
<td>(P&lt; 0.05)</td>
</tr>
</tbody>
</table>

Table: Two sample z-test for comparison of experimental and control group:
Therefore the null hypothesis (H₀) was rejected and research hypothesis (H₁) was accepted. The study revealed that the level of Stress among elderly was significantly reduced after implementation of music therapy. It is inferred that music therapy was highly effective in reduction among elderly in selected old age homes.

**Section IV:** To find out the association between level of stress and demographic variables

It is inferred that there was a significant association between length of stay in old-age home and meeting with family member (Less than 0.05) with level of Stress in elderly in selected old age homes.

### RECOMMENDATION

1. The study may be replicated using a larger population of elderly.
2. A survey to assess other such alternative modes of treatment to reduce on level of stress in the patients can be undertaken.
3. A study can be conducted on the attitudes of the hospital personnel to the policy of administration of music therapy during treatments or procedures.
4. A comparative study can be done to study the effects of other non-pharmacological measures to reduce stress due to various reasons.
5. A study can be done to assess the effect of different type of classical musical instruments or music on level of stress or other physiological parameters.
6. A study can be done using other alternative method or technique like yoga, massages therapy, aroma therapy, etc. in related to stress.

### REFERENCES


The findings reveal that the music therapy was very effective in reducing stress of elderly in old age homes. The statistical analyses were found that there is a positive relationship between music therapy and stress level. And music therapy can be administered as an alternative treatment for the treating of stress in patients involved in long-term care.