

Efficacy of Stress among Mature People of Selected Old Age Home, Kancheepuram

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Abstract

Stress is an important factor when it comes to ageing. Stress puts man at risk of going through ageing process while age also puts man at risk of stress in other way round. A pre experimental study was conducted to evaluate the effectiveness of "Jacobson's progressive muscle relaxation technique" to reduce stress among elderly people of at Ekanapuram Village, Kanchipuram District, and Tamilnadu. The samples above 60 years were selected by Convenience sampling technique Chronic stress and immune system are inter related when it comes to general wellbeing of the body, though it depends partly on the individual nature but chronic stress worsens the state of immune system. And also relationship between stress and ageing is so complex to define but ability to cope with stress determines how successful the ageing would be. In posttest 68.3% had mild stress, 21.7% had no stress and 5% had moderate stress. The analysis revealed that the mean value 21.9167 with SD 4.88266 of pretest and the mean value 15.7667 with SD 4.78165 posttest projects 't' value of 29.381 was statistically significant ($P < 0.05$) (i.e $P = 0.0001$). It indicates that the intervention was effective in reducing stress among elderly people.

Key words: Chronic Stress • Immune System • Stressor • Muscle Relaxation

Introduction

Health is essential human right and basic to all. Health is a resource for life, not the object of living; it is a positive concept emphasizing social and personal resources, as well as physical capacities Total sample size 30 both male and female senior citizens are selected for the study by Purposive sampling technique. The questionnaire has 2 parts consisting of Demographic variables these are age, gender, religion, education, previous occupation, income, marital status, type of family. In the second part of questionnaire perceived stress scale was used. Chronic stress and immune system are inter related when it comes to general wellbeing of the body, though it depends partly on the individual nature but chronic stress worsens the state of immune system. And also relationship between stress and ageing is so complex to define but ability to cope with stress determines how successful the ageing would be. [1-3].

They further defined psychological stress as a situation in which man finds himself in an immediate surrounding that he could not manage his health and it is placed at risk due to inability to control the situation. Aging is coming up as one of the biggest challenges all over the world. At any age stress may become part of life. Many older adults undergo painful life style changes including retirement, disease, caring for grand children or sick spouse, deterioration of physical abilities and chronic illness, loss of spouse, friends and at time even children. These stressful events may lead to depression or may worsen existing mental and physical illness. An ideal preventive health package should include various components such as knowledge and awareness about disease conditions and steps for their prevention and management, good nutrition, physical exercises and relaxation techniques [4].

Each person handles stress differently. How well we adapt depends on our ability to cope. During a health history, past coping patterns and perceptions of current stressors and anticipated outcomes are explored to identify the persons overall ability to handle. Coping patterns and the ability to a stress are developed over the course of a life time and remain consistent later in life. Experiencing success in younger adulthood helps a person to develop a positive self-image that remains solid through even the adversities of old age [5].

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Stress is a situation where the organism's homeostasis is threatened [6]. Stress is the non-specific response of the body to any kind of demand made upon it. Stress is the arousal of the mind and body in response to demands made upon them [7,8]. It is used as a signal for being part of a group, it signals acceptance and positive interactions with others. Laughter is the best relaxant as even one minute of laughter 3 can give the body an effect of 45 minutes of therapeutic relaxation and 10 minutes of laughter is enough for the effect to last throughout the day. A stressor is any person or situation that produces anxiety responses. There will be statistically significant association of the post test scores with their selected socio demographic variables. Stress and stressors are different for each person consequently it is person in command to seek in order and to practice leisure techniques to reduce the stress [5].

Materials and Method

It includes the research approach, research design variables, setting of the study, population, sample and sampling techniques, development and description of the tool, data collection procedure and plan for data analysis. The research approach adopted for the study was evaluative in nature. After considering and analyzing the research problem, I selected pre-experimental (one group pretest and posttest design) research design.

Inclusion Criteria

- ✓ Both male and female elderly people those who were residing at Ekanapuram Village, Kanchipuram District, and Tamilnadu.
- ✓ The elderly people with stress in the age group of 60-70 years. The elderly people who were available during the data collection period. Who were willing to participate in the study

Exclusion Criteria

- ✓ The elderly people who had previous laughter therapy intervention.
- ✓ The elderly people those who are suffering with systemic illness like asthma and COPD. Elderly people who were selected for pilot study.

Pilot study was conducted from 3.12.12.to 14.12.12. Written permission was obtained from the Medical officer of at Ekanapuram Village, Kanchipuram District, Tamilnadu. 10 samples were selected for pilot study. A brief introduction about self and study was given to the elderly people and oral consent obtained and the confidentiality of the response was maintained. Pretest was conducted among elderly people of Mudimadugu village at V Kotamandal. The stress among elderly people was assessed by using Sheldon Cohen 10 items

perceived stress scale. Jacobson’s progressive muscle relaxation technique was demonstrated for a period of 20-30 minutes. Then after seven days posttest was given to evaluate the stress levels among elderly people. Pilot study results showed that the stress among elderly people was more in pretest. But after giving Jacobson’s progressive muscle relaxation technique the stress levels were reduced in posttest. As the p value is <0.05 there is a significant difference between the pre and post scores. It showed that the intervention was effective in reducing the stress.

Data Collection

It is a systematic technique for people managing stress and achieving a deep state of relaxation. The duration of the intervention was 20-30 minutes. This intervention was given individually to the elderly people in their homes. And the intervention was practised by elderly people for the period of 7 days under my supervision. Then the post test was given to evaluate the stress among elderly people and it was assessed by using Sheldon Cohen 10 items perceived stress scale. The main study was conducted from 27.11.14 to 27.04.15 among elderly people of Patrapalli and Dasarlapalli Village at V.Kotamandal. Permission was obtained from medical officer to conduct study. And oral consent was obtained from subjects who were participated in this study. Pre experimental research design (One group pre-test and post-test) was used. And the samples were selected by using Convenience sampling technique. Pre-test was done by using Sheldon Cohen 10 items perceived stress scale to assess the level of stress among elderly people. The Jacobson’s progressive muscle relaxation technique was demonstrated.

Results

The analysis and interpretation of data collected from the selected samples of 60 elderly people to study the effectiveness of “Jacobson’s progressive muscle relaxation technique” on stress among elderly people of Patrapalli and Dasarlapalli Village at V.Kotamandal, Chittoor District, Andhra Pradesh. Data analysis includes both descriptive and inferential statistics. The demographic variables were coded and analyzed. The data was tabulated and analyzed according to the objectives and interpreted in the following sections:

Frequency and percentage distribution of elderly people according to demographic variables, Frequency and percentage distribution of pretest level of stress among elderly people. Frequency and percentage distribution of posttest level of stress among elderly people, comparison of pre and posttest level of stress among elderly people. Association between posttest levels of stress with demographic variables (Figure 1).

With regard to the age, majority 42 (68%) elderly people were in the age group of 60-65 years and 18 (35%) elderly people were belongs to 66-70 years of age group (Figure 2).

Considering the sex of the elderly people, majority 35 (61.3%) were females and 25 (38.7%) were males

It evident that the educational status, 36 (59%) elderly people were found to be illiterates, 16 (28.7%) were studied primary education, 7 (12.7%) were studied secondary education and 1 (1.3%) found to be higher education (Figure 3).

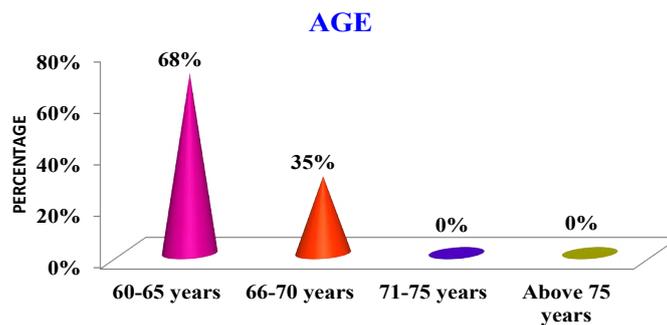


Figure 1. Frequency and percentage distribution according to age.

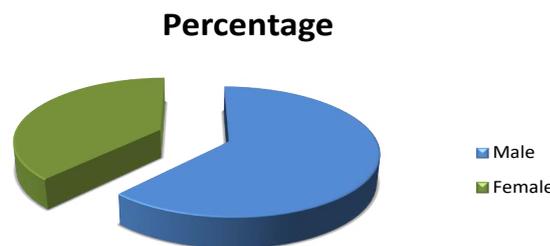


Figure 2. Frequency and percentage distribution according to sex.

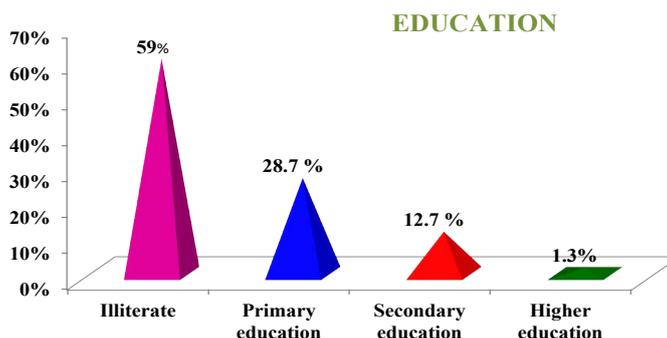


Figure 3. Frequency and percentage distribution according to education.

OCCUPATION

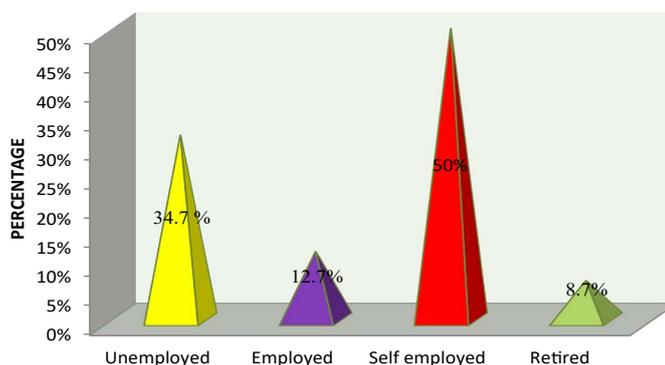


Figure 4. Frequency and percentage distribution according to occupation.

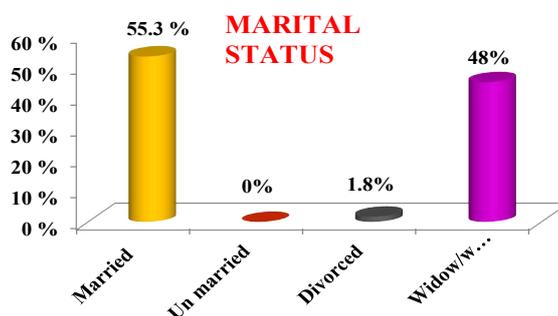


Figure 5. Frequency and percentage distribution according to marital status.

Considering the occupational status 30 (50%) elderly people were self-employed, 19 (31.7%) were unemployed, 7 (11.7%) were employed and 4 (6.7%) were retired (Figure 4).

Regarding the marital status, 32 (55.3%) elderly people were married, 27 (48%) were widow/widower and 1 (1.8%) elderly was divorced (Figure 5).

Discussion

“A study to evaluate the effectiveness of “Jacobson’s progressive muscle relaxation technique” on stress among elderly people at Ekanapuram Village, Kanchipuram District, Tamilnadu. Analysis of the frequency and percentage distribution of demographic variables related to stress among elderly people. In this study the majority of the elderly belonged to the age group of 60-65 years (70%), 35 (58.3%) were males, 36 (60%) elderly people were illiterates, 30 (50%) were self-employed, 32 (53.3%) elderly people were married, 27 (45%) were having more than 5000 income, 37 (61.7%) were belonged to joint family and 46 (76.7%) elderly people belonged to religion of Hindu. The first objective was to assess the pretest level of stress among elderly people [9].

Analysis of posttest level of stress among elderly people revealed that 38 (63.3%) elderly people were had mild stress, 19 (31.7%) were had no stress and 3 (5.0%) were had moderate stress and none of them had severe stress. The pre and posttest level of stress among elderly people reveals that the mean value 21.9167 with standard deviation 4.88266 of pretest and the mean value of 14.7667 with standard deviation of 4.38165. Post test projects ‘t’ value of 29.381 is statistically significant at P=0.001 level. The analysis reveals that there is significant association of posttest level of stress with the age and education is significant at the level of P=0.05 and 0.03 level of significant [10].

Religion wise most (90.0%) of the elderly people were Hindu. As far as the educational status of the elderly people is concerned, higher proportion (36.7%) of the elderly people had higher secondary. Most of them (70.0%) were widowed. According to their occupational status, mostly (61.7%) they are belongs to private. Higher proportion (88.3%) of the elderly people had no sources of financial support and they belong to the Old Age Home only. Among

the respondents, almost half of the people (45.0%) had no children. Most of the elderly people (48.3%) got admitted into the old age home by their own. As per their recreational activities, the higher proportions of the elderly people (38.3%) were willing to talking with others. Higher proportions of the elderly people (35.0%) who were staying at the Old Age Home nearly below one year. My study consistent with this study conducted by Manju et al. on elderly belonging to different socioeconomic and varying demographic groups of Surat city [11]. A total of 105 elderly people were interviewed comprising of 35 people each from the elderly living in the Old Age Home. They are living in the affluent areas and living in the slums of city [12].

A probability sample was obtained by approaching all the subjects in a consecutive manner. The prevalence of stress was moderately high 39.04% among the elderly in their study population and it was observed that several important socio demographic variables had shown a significant association with stress in the elderly as follows 46.67% of elderly age group between 55- 65 years, 70% of them were female, 83.34 % of them belongs to Hindu, 63.34% of elderly had higher secondary, 66.7% of them were married, 80% of people from nuclear 73 family and 23.33% of them was pensioner. The study revealed that there would be 6% to 50% prevalence rates on stress in the community samples of the elderly in India. The results showed that mean level of anxiety during pretest was 89.82 and during posttest, it was reduced to 69.55. The study concluded that there was an effectiveness found after progressive muscle relaxation technique.

The higher than study revealed that there was an connection between stress and demographic variables. The current study also showed that there was an increased stress levels in pretest and after intrusion decreased stress levels in posttest amongst aged people.

Conclusion

Hence it is concluded that Jacobson’s progressive muscle relaxation technique is one of the cost effective non pharmacological intervention found to be very effective in reducing stress among elderly people. It indicates that the intervention was effective in reducing stress among elderly people.

Funding

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Ethical Approval

The study was approved by the Institutional Ethics Committee.

Conflict of Interest

The authors declare no conflict of interest.

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