RESEARCH ARTICLE

EFFECTIVENESS OF GUIDED IMAGERY ON PERCEIVED STRESS AND QUALITY OF LIFE AMONG ELDERLY IN SELECTED SETTINGS, CHENNAI.

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Abstract

The word “Stress” was originally an engineering term used to refer to the amount of force that a beam or other physical support could bear without collapsing under the strain. The problem comes when we push ourselves beyond our limitations, beyond what we were intended to bear without permanent damage. Stress is a normal part of everyday life. As long as we keep that stress with reasonable limits, there are no problems but when we allow it to exceed its reasonable limits, trouble begins. Guided imagery is a simple intervention which uses one’s imagination to promote mental and physical health. It helps the elderly to cope up with the activities including memories of plans as developed to solve the difficult situation. A pre experimental research design was used to evaluate the effectiveness of guided imagery regarding perceived stress and quality of life. The data was collected by using older adult perceived stress scale to identify the stress and quality of life to identify the quality leads by the elderly. Guided imagery (Audio – Walking on the beach) was administered for the group. The collected data were tabulated, analyzed and interpreted by using descriptive and inferential statistics. The findings showed that the 2(6.6%) doesn’t have stress level and they gain normal level, 18(60%) were fully developed mild stress level, 8(26.6%) having moderate stress level and 2(6.6%) were having severe stress level had neutral level after the post test. This study finding showed that the stress level of the elderly decreased quality of life has improved after received guided imagery. There was significant association for perceived stress with sex, education, type of family, and treatment. There was no significant association for the quality of life with any other demographic variable.

Introduction:

Old age (geriatric) has its derivation from a word ‘Gears’. The word ‘Geron’ means old man. Ageing is not a disease, but the final stage of normal life. Ageing is the process of time related change begins with birth and concentrates throughout life.
Ageing is a phase of life and a biological process which cannot be postponed indefinitely the people who lived past sixty years of age are commonly known as aged (or) elderly. They are also considered as persons in the “Third age”. Old age is the closing period of life span. Each grey hair can be considered as the reservoir of knowledge and experience.

According to Erik Ericson, this stage is a lamination of many previous intra psychics and interpersonal changes such as owing to retirement from job and due to reduction in income, elderly persons have a feeling of loneliness, rejection and insecurity. Also, the quality of life is determined by socio economic security, psychological wellbeing and perceived satisfactory health.

In 2014, old age population was 236/10,000 in the world. In 2016, almost 500 million people worldwide will be 65 and older. By 2030 it is estimated that total is projected to increase by one billion, accounting 13% of the total population. In India old age population contributes 1/20 in the total population. (WHO Health Statistics and health information system 2014).

In India the proportion of the population 60 years and above was 7% in 2009 and was projected to increase to 20% by the year 2050. In absolute number the elderly population in 2009 was approximately 88 million and is expected to sharply increase to, more than 315 million by 2050. The more developed states in the southern region and few others like Punjab, Himachal Pradesh, Maharashtra have experienced demographic transition ahead of others an therefore or growing older faster than other states.(Ministry of statistics and Programme implementation-India 2016)

Stress management is the need of the hour. Coping strategies and relaxation therapies such as (Breathing exercises, Yoga, Meditation, Physical exercise, Biofeedback therapy and Guided imagery) are the healthy ways to manage stress.

Geetha Mani, Sharath (2014) conducted a prevalence study in old age homes in kanchipuram districts. The study revealed that 18% of the participants had severe stress and 60% had moderate stress.

Guided imagery interventions helps on improving quality of life among persons with stress. Guided imagery is using one’s imagination in a special way to achieve a specific positive effect. Imagery is the generations either by oneself (or) guided by practitioner of different mental images. Using the capacities of visualization and imagination of individual images, usually either sensory (or) effective. These images typically visualized with goal of evoking a psycho physical state of relaxation (or) with some specific outcome in mind.

Anita R .M, et.al. (2012) Conducted a cross sectional study to assess the morbidity profile of elders in old age home at Chennai. The sample size was 210 elders in whom 132 were females and were 78 males from old age homes selected using by simple random sampling techniques. The data was collected by interviewing them using a pre designed and pre tested questionnaire as well as by clinical examination. The study revealed that overall (96.7%) of elderly had one (or) more health problems.

Priti Pandey (2012) conducted a study to assess the effectiveness of selected technique on subjective well being and level of stress among elderly in selected old age homes in Delhi. The research approach selected for this study was experimental approach, pre test and post test control group design. The sample size was 60 (30 experimental & 30 control groups). There was an association between level of stress and age of the elderly.

Statement of the problem:
A study to assess the effectiveness of guided imagery on perceived stress and quality of life among Elderly in selected settings, Chennai

Objectives:-
1. Assess the level of pre and post test perceived stress score among elderly.
2. Assess the level of pre and post test score of quality of life among elderly.
3. Assessment of effectiveness of guided imagery technique on level of perceived stress among elderly
4. Assessment of effectiveness of guided imagery technique on quality of life among elderly.
5. Association of the post test level of perceived stress and quality of life with selected demographic variables among elderly.

**Hypothesis:**

**RH1**
There will be significant difference between pre test and post test scores on level of perceived stress among elderly those who received guided imagery therapy.

**RH2**
There will be significant difference between pre test and post test scores in the quality of life among elderly those who received guided imagery therapy.

**RH3**
There will be statistically significant association in the post test level of perceived stress with selected demographic variables among elderly.

**RH4**
There will be statistically significant association in the post test level quality of life with selected demographic variables among elderly.

**Materials and methods:**

**Research approach:**
Quantitative Approach

**Research Design:**
Pre experimental - one group pre-test post-test research design

**Target population:**
Study population includes all the elderly people.

**Accessible population:**
The accessible population was the elderly people who were residing at the selected settings.

**Research setting:**
The study conducted in a MMDA colony, urban community area.

**Sampling technique:**
Non probability purposive sampling technique

**Criteria for sample selection:**

**Inclusion criteria:**
1. Those who are willing to participate
2. Age groups of above 60 years were included.
3. Both male and female elderly were included
4. Those who understand Tamil/English.

**Exclusion criteria:**
1. Those who are seriously ill during the period of data collection.
2. Clients who had sensory deficits.
3. Those who are mentally ill.

**Description of the tool:**

**Section A:**
It consists of demographic variable age, sex, education, occupation, income, religion, marital status, number of children, types of family.
Section B:
It is standardized tool. 1. Perceived stress scale -14 items and Quality of life scale-35 items were chosen for this study.

Perceived stress scale:
Score interpretation:
Perceived stress scale for older adults is designed to measure the degree to which life situations in one’s life are appraised as stressful by an individual. It was developed by colon et.al. It consists of 14 items. The reliability of the tool was 0.82 by using the method of Pearson correlation method. It is considered as a brief and easy scale to administer and complete. It consists of 7 negative and 7 positive items. It is rated on a 5 point scale (from 0 – never to 4 – very often). The highest possible score is 56. Positive questions are consider as direct scoring and negative questions rated in reverse scoring.

| Score | Level of stress |
|-------|-----------------|
| 0-14  | No stress       |
| 15-28 | Mild            |
| 29-42 | Moderate        |
| 43-56 | Severe          |

Quality of life:
Quality of Life -35 questionnaires is designed for older people. It has 5 point likert scales from strongly agree to strongly disagree representing with 8 domains. The reliability of the tool was 0.88 by using the method of Pearson correlation method. The scale ranges from 35 to 175 and higher scores gives equal higher quality of life.

| Score | Level of quality of life |
|-------|--------------------------|
| 35-80 | Dissatisfied             |
| 81-128| Moderately satisfied     |
| 129-175| Satisfied               |

Ethical consideration:
Research proposal was approved by the Institutional Research ethical approval committee of Right College of Nursing, Vanagaram, and Chennai. Prior to the pilot and the main study, permission was sought from the head of the Mental Health Nursing department. A formal consent was obtained from the respondents of the study (elderly) before administering the questionnaire.

Data collection procedure:
Prior to data collection, ethical clearance done and written permission was obtained from the institution. The purpose of the study and method of data collection explained to the participants and informed consent taken from them. An assurance was given regarding confidentiality before data collection procedure. Pre test was conducted to assess the level of perceived stress by using perceived stress scale and the level of quality of life by using quality of life scale. It took 15 minutes for the assessment with each participant. Guided imagery (audio) script was given and explained. It took 10-15 minutes. On the 15th day post test was conducted by using the same scales. The collected data were tabulated, analyzed and interpreted by using descriptive and inferential statistics.

Plan for data analysis:
The data was analyzed by using descriptive and inferential statistics.

Descriptive statistics:
1. Frequency and percentage distribution was used to analyze the demographic variables of the elderly.
2. Mean and standard deviation was used to analyze the pre test and post test level of stress.
3. Chi-square test to find the association with demographic variable
Inferential Statistics
1. pair t-test to compare the pre test and post test level
2. Karl Pearson method will be employed for determining the correlation.

Major findings:
1. The study revealed that all elderly peoples 24(80%) had moderate level of perceived stress and 6(20%) were had severe level of perceived stress level in pre test. In post test result revealed that 2(6.6%) had no stress 18(60%) were had mild perceived stress level, 8(26.6%) had moderate perceived stress level and 2(6.6%) were had severe perceived stress level.
2. The study revealed that 12(40%) were moderately satisfied and 18(60%) were dissatisfied .None of them lead a satisfied life. In post test 17(56.6%) were developed satisfied life, 8(26.6%) were developed moderately satisfied life and 5(16.6%) were leading dissatisfied life in the post test score after received guided imagery.
3. comparison of mean and standard deviation between the pre and post test level of perceived stress revealed that pre test mean score was 38 with SD 5.15 and post test mean score was 26 with the SD 7.The projected ‘t’ value is 1.699, which proves that there was statistical significant difference during the post test at the level of p<0.05.It is inferred that the elderly exposed to the guided imagery had reduction in the level of perceived stress.
4. comparison of mean and standard deviation between the pre and post test level of quality of life revealed that pre test mean score was 81 with SD 15.43 and post test mean score was 115.6 with the SD 18.44.The projected ‘t’ value is 1.699 which proves that there was statistical significant difference during the post test at the level of p<0.05.This showed that there was improvement in the quality of life after received guided imagery among elderly.
5. There was significant association for perceived stress with sex, education and type of family, and treatment. There was no significant association for the quality of life with any demographic variable.

Discussion:-
Guided imagery is a simple and convenient relaxation technique which helps to manage stress quickly and easily. This study reveals that there is a reduction in the level of perceived stress and improvement in the quality of life was identified after received the guided imagery intervention. The Research hypothesis was proved.

Conclusion:-
The severity of stress varies from individual to another individual which depends upon the severity, number of events within short period and also the person’s ability to cope up with it. Over the past 25 years, the effectiveness of Guided imagery has been increasingly established by research findings which show its positive impact on health, creativity and performance. It is a noninvasive procedure where the elderly can carry out easily to reduce the day today stressful life event.

Table 1:-Comparison of the mean and standard deviation for the level of perceived stress between the pre and post test score.

| Group of study       | Stress level | Mean | Standard deviation | t-variable | Degree of freedom | "p" Value |
|----------------------|--------------|------|--------------------|------------|-------------------|-----------|
| Pre-experimental study | Pre test [X] | 38   | 5.15               | 1.699      | 29                | P<0.05    |
|                      | Post test [Y]| 26   | 07                 |            |                   |           |
### Table 2: Frequency and percentage distribution of pre and post test level of quality of life among elderly.

| S.NO | Level of quality of life | PRE TEST | POST TEST |
|------|--------------------------|----------|-----------|
|      |                          | Frequency (N=30) | Percentage (%) | Frequency (N=30) | Percentage (%) |
| 1.   | Satisfied                | 00        | 0%        | 17           | 56.6%          |
| 2.   | Moderately satisfied     | 12        | 40%       | 08           | 26.6%          |
| 3.   | Dissatisfied             | 18        | 60%       | 05           | 16.6%          |

**FIG.1:** Frequency and Percentage Distribution of Pre and Post Test Level of Perceived Stress among Elderly.
FIG 2: Comparison of the Mean and Standard Deviation of Quality Of Life between the Pre and Post Test Score

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