

# “To Assess the Effectiveness of Pranayama on Depression among Geriatric People in Selected Old Age Home at Saroornagar, Hyderabad in Telangana”.

G.SAMBA SUKANYA<sup>1</sup>, K. SUVARNA<sup>2</sup>

<sup>1</sup>Dept.of mental health nursing, <sup>2</sup>Associate Professor

SIMS college of Nursing, Mangaldas Nagar, Guntur. Andhra Pradesh

\*corresponding Author E-Mail: sambasukanya9@gmail.com

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## ABSTRACT

**Background:** Elderly depression can be quite common as ageing presents its own set of challenges - many elderly people have to face some very difficult situations where certain health conditions could be taking a toll on the person on the one hand and, on the other, failing health or death of a spouse could contribute heavily to depression in the elderly.

**Objective:** To evaluate the effectiveness of pranayama on depression among geriatric people in selected old age home by post test.

**Materials and Methods:** To evaluate the effect of selected interventions the investigator selected pre experimental design .Quasi experiments are effective because they use the “pre-post testing” . This means that there are tests done before any data is collected to see if there is any person confounds or if any participants have certain tendencies.Then the actual result experiment is done with post test results recorded.

**Results:** In the level of depression score shows that majority 61% were moderate level of depression, were as 18% under mild lever of depression and 21% were under severe levels of depression score.

**Conclusion:** A pre experimental descriptive design, with descriptive approach was used for the present study. The data was collected from 60 samples through non probability convenient sampling technique using a geriatric depression scale .

**Keywords:** one test group , effectiveness, depression ,geriatric people

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## I. INTRODUCTION

The Indian family has traditionally provided natural social security to the old people. However, in more recent times, the traditional role of the family is being shared by institutions such as old age homes. Many of the elderly parents are compelled to leave their children and stay in old age homes. The old age homes, which were a rarity, have recently spread across the country, a fact that indicates the growing rift between the generations. Elderly depression can be quite common as ageing presents its own set of challenges - many elderly people have to face some very difficult situations where certain health conditions could be taking a toll on the person on the one hand and, on the other, failing health or death of a spouse could contribute heavily to depression in the elderly.

Sometimes, people who have led a fairly independent life might be required to depend on another because of disabilities and coming to terms with these changes and challenges can be heart wrenching for the elderly. In such cases, it is only natural one begins to feel terribly lonely and in the absence of a support system in terms of spouse, family, and friends, elderly depression sets in during old age. So the researcher is interested to use the pranayama on reduction of depression among old age persons because the prevalence rate was more among elderly persons. Pranayama will have greater impact on the improvement of the emotional status of old age persons and it will change the attitude of elderly persons to accept the old age a global phenomenon.

## NEED FOR THE STUDY

Demographic ageing is a global phenomenon. By 2025, the world's population is expected to include more than 830 million people at an age of 65. With a comparatively young population, India is still poised to become home to the second largest number of older persons in the world. Recent statistics related to elderly people in India,(according to census 2001), showed that as many as 75% of elderly persons were living in rural areas. About 48.2% of elderly persons were women, out of whom 55% were widows. A total of 73% of elderly persons were illiterate and dependent on physical labour. One-third was reported to be living below the poverty

line, i.e., 66% of older persons were in a vulnerable situation without adequate food, clothing, or shelter. About 90% of the elderly were from the unorganized sector, i.e., they have no regular source of income. The socio-economic problems of the elderly are nowadays aggravated by factors such as the lack of social security and inadequate facilities for health care, rehabilitation etc. Living arrangements of older people are influenced by several factors such as gender, health status, and presence of disability, socio-economic status and societal traditions.

## **II. OBJECTIVES**

1. To assess the level of depression among geriatric people in selected old age home by pre-test.
2. To demonstrate and practice the pranayama among geriatric people in selected old age home.
3. To evaluate the effectiveness of pranayama on depression among geriatric people in selected old age home by post test.
4. To find out association between post test study findings with selected socio demographic variables.

## **HYPOTHESIS**

**H<sub>1</sub>.** There will be a significant difference in the level of depression and after pranayama among old age people.

## **CONCEPTUAL FRAME WORK**

The present study was aimed to help in reducing depression among geriatric people by demonstrating of pranayama. The investigator adopted the modified Roy's adaptation of clinical nursing theory as a base for developing conceptual frame work.

Sister callista Roy began on her model in 1964. She developed an adaption model of clinical nursing prescriptive theory in 1976. She considered individual as an open system, adjust with stimuli of self and environment.

## **III. MATERIALS AND METHODS**

**Research approach:** Quantitative research approach.

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

**Setting of the study:** The setting selected for the present study was the old age home; Study is planned to conduct in selected old age home at saroonagar, in Hyderabad.

**Sample and sampling technique:** 60 geriatric people were selected using purposive sampling technique.

**Method of data collection:** A structured knowledge questionnaire on effects of geriatric people. The tool was organized under the following sections:

### **PART-A**

Includes demographic data such as age, gender, religion, types of the family they lived in before, education, marital status, number of children, source of economical support for old age, do you have previous information regarding pranayama, if yes source of information.

### **PART-B**

Includes Geriatric Depression Scale.

**Data collection procedure:** The data were collected in the following phases:

#### **Phase 1**

Pre-test will be conducted to assess level of Depression of old age people by using Geriatric Depression Scale.

#### **Phase 2**

Pranayama will be demonstrated to the old age people.

#### **Phase 3**

After 4 week post test will be administered to assess the level of Depression among old age people with the help of same Geriatric Depression Scale.

## **DATA COLLECTION PROCEDURE:**

The investigator obtained ethical clearance and formal permission from the director of Yashoda college of nursing, Malakpet, Hyderabad, Telangana, to collect data for main study was conducted from 1-4-2016 to 1-5-2016. The data was collected from 1-4-2016 to 1-5-2016 which consisted of Geriatric Depression Scale. It is the method of gathering information from respondents. After assessing their depression and pranayama demonstrated to the old age people.

#### **PLAN FOR DATA ANALYSIS:**

Descriptive and inferential statistics will be used to analyze the data. Data analysis was done using the following statistical methods. Descriptive statistics methods like numbers, percentages mean and standard deviation were used to assess the level of depression among old age people. Inferential statistical methods like paired "t" test were used to determine the effectiveness of pranayama and chi-square test were used to associate the selected variables with the effectiveness of pranayama.

#### **IV. RESULTS:**

The data obtained from the study subjects were analysed and interpreted in terms of the objectives and hypothesis of the study. Descriptive and inferential statistics were used for data analysis, the level of significance was set at 0.05.

The above table reveals in regard to type of family they lived in before are in that the nuclear family are 20(33.33%), joint family 25(41.00%), extended family 15(25%).hence maximum of geriatric people are joint family.

The above table reveals in regard to marital status are married 21(35%), unmarried/single 15(25%), widow/widower 10(16.66 %), divorced/separated 14(23.33%).hence there is maximum of the geriatric people are married 35%.

The above table reveals in regard to No. of children are none are 25(41.66%), 1 are 5(8.33%), 2 are 10(16.66%), 3 and above 20(33.33%).hence there is maximum no of none of children of parents.

The difference between pre-test and post test depression scores showed that the mean post-test score 51.9 was lower than mean pre-test score 64.6. The computed 't' value 23.09 (p<0.05) indicates that there was a significant difference between pre-test and post-test depression scores. This states that the alternative hypothesis H<sub>1</sub>, that is pranayama is effective in reduction of depression.

The association between depression score and demographic variables showed that there is no significant association between depression and selected demographic variables like Age, Gender, Religion, Type of family they lived in before, Education, Marital status, Number of children, Source of Economical support for Old Age, Previous information regarding pranayama, Source of information.

#### **Interpretation and Conclusion :**

The study revealed that there was depression among Geriatric people and a significant decrease in depression was noticed after pranayama. So the old age people can be given guidance about pranayama which will promote their activities in their life.

#### **Validity:**

The validity of an instrument is a determination of how well the instrument reflects the abstract concept being examined.

To determine the content validity, the tool was given to the experts in the field of medicine and nursing. After obtaining their suggestions, necessary modifications were done accordingly.

#### **Reliability:**

The reliability of the measuring instrument is a major criterion for assessing its quality and adequacy.

The reliability of the tool is composed by using alpha crohn technique.

$$r = \frac{k}{k-1} \left[ 1 - \frac{\sum \sigma_i^2}{\sum \sigma_j^2} \right]$$

r = the estimated reliability

k = total no.of items

$\sigma^2$  = variance of each individual item.

The tool was tested for reliability in 6 geriatric people. The reliability of the tool was established by using split half method, which measure the co efficient of internal consistency. The reliability of the split half was found by using the Karl Pearson's correlation co efficient formula. The reliability of the tool was found to be r=0.88 for geriatric scale and r=0.88 for degree of risk factor index which indicated that the tool was reliable.

#### **Pilot study:**

Pilot study was conducted on 6 geriatric people on 1-2 -2016 to 4-2 -2016.

## V. RESULTS

**N=60**

Frequency and distribution of level of depression scores among geriatric people

S.No	Levels Of Depression Scores	Frequency	Percentage
1.	MILD	10	16.66%
2.	MODERATE	26	43.33%
3.	SEVERE	24	40%
	Total	60	100

Mean, medium, mode, standard deviation and range of the levels of depression and pranayama on depression scores among geriatric people in pre test and post test.

Depression variables	Pre test		Post test	
	Mean	SD	Mean	Standard deviation
Area of analysis	Mean	SD	Mean	Standard deviation
Levels of depression scores	20.03	2.9	14	4.3
Levels of depression scale after pranayama scores	21.61	2.5	15	5.9

### Evaluation of effectiveness of pranayama

#### Comparison of pre and post test level of depression scores of the Geriatric people

S.No.	Areas	Mean difference	Standard Deviation	Df	't' Calculated value	't' table Value	P Value
1.	Depression Level	12.7	3.94	49	22.9	1.645	0.05

\* Significant  $p < 0.05$  level

### Section-III

**N=60**

**Association between demographic variables with level of depression scores , Association between demographic variables with pre-test level of depression**

Sl.No.	Demographic variables	< Mean 64.6	> Mean 64.6	Total	X <sup>2</sup>	Df	Table value
1.	Age						
	60-65 years	14	17	31	2.93	1	3.84
	66-70 Years	11	4	15			
	70 and above	6	4	10	Out of		
2.	Type of family they lived in before						
	Nuclear family	20	18	38	0.1417	1	3.84
	Joint Family	7	5	12			
	Extended family	4	3	7			
3.	Marital Status						
	Married	8	11	19			
	Unmarried/Single	8	4	12	2.92	3	7.81
	Widow / widower	8	4	12			

	Divorced / Separated	3	4	7			
4.	No. of children						
	None	21	18	19	0.1116	1	3.84
	1	6	5	11			
	2	4	6	10			
	3 and above	5	4	9			

NS denotes Non-Significant, \* denotes significant

## VI. DISCUSSION

The present study assesses the level of depression on geriatric people. The study was conducted on 60 geriatric people in selected old age home in saroonagar, Hyderabad, Telangana. Data collection was done from 1-4-2016 to 1-5-2016 with the help of the Geriatric Depression Scale. The data was analyzed with the help of statistics. In regards to marital status of old age people 24% were unmarried/single, 26% were married, 16% were widow/widower, 34% were divorced/separated.

## VII. CONCLUSION

The study concluded that the geriatric people did not have adequate knowledge regarding effects of depression before the demonstration of pranayama and decreased depression levels after intervention given to geriatric people. Therefore, it is the responsibility of the nursing personnel to create awareness on the effects of depression among geriatric people to control by the pranayama

## VIII. RECOMMENDATIONS

1. A similar study can be replicated on a large sample to generalize the findings.
2. A similar study can be conducted to find the differences in stress and coping on the basis of various institutional factors such as government and private institutions.
3. An experimental study can be undertaken with control group for effective comparison.
4. An experimental study can be conducted to assess the levels of depression among geriatric people in old age home

**Ethical clearance:** Written permission from the authorities of the geriatric old age home, saroonagar, Hyderabad was obtained before conducting the study.

**Sources of funding:** Self

**Conflict of interest:** Nil

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