



## Getting Old Age Home Residents out of Depression: Effect of a Physical Exercise Program

Authors

Ms. Seema Samudre<sup>1</sup>, Ms. Shubhangi Pangam<sup>2</sup>

<sup>1</sup>Lecturer, P. D. Hinduja College of Nursing

<sup>2</sup>Professor, P. D. Hinduja College of Nursing

### Abstract

Depression is often referred as the “common cold” of mental illness. Prevalence of depression in elderly is high worldwide. In India it contributes to a substantial burden. Treatment of depression is inadequate for older people, being complicated by medication side-effects and poor adherence to treatment. The present study is undertaken to assess the effectiveness of a planned physical exercise program on depression scores among elderly residents of old-age home in Mumbai, India. Among 76 elderly residents of selected old age home, 47 of them scored living with depression based upon Geriatric Depression Scale (GDS). A standardized 15 item self-reported GDS and observation checklist for observable manifestations of depression ( $r=0.87$ ) were applied. Among the latter group, 38 elderly residents (women:20 & men:18) met the inclusion criteria to participate in the exercise program. The pretest Geriatric Depression Score of 7.58 reduced to 5.11 in posttest. There was a positive effect of the exercise program on depression scores of the respondents ( $t$  value 15.152;  $P \leq 0.05$ ). The mean value of observable manifestations of depression in the pretest was 4.18 which reduced to 2.05 in posttest. The research hypothesis ( $H_1$ : There is a positive effect of planned physical exercise program on depression among elderly residents of a selected old age home) was accepted as ( $t$  7.90,  $P \leq 0.05$ ). An exercise program can be considered as an alternative treatment for depression in geriatrics. Development and efficient use of exercise program in old-age homes can be a prudent strategy.

**Keywords:** Depression, Old age home, Exercise program.

### Introduction

‘National Policy on Older Persons’, India defines ‘senior citizen’ or ‘elderly’ as a person who is at an age of 60 years or above. Ageing brings many losses and adjustments along with a few surprises. Some of the major social problems faced by the elderly people are economic insecurity due to financial dependence, emotional insecurity, loss of spouse, family members ignoring their advice, etc. Depression in the elderly is a widespread problem,

leading cause of disability as measured by Years Life Disability and the 4<sup>th</sup> leading contributor to the global burden of disease (DALYs) in 2000. Depression is common among such people who live without family support. Therefore, elderly residents of old age homes can be considered as “risk group” for depression.

According to Holroyd & Anita H. Clayton (2000) depression in the elderly is often undiagnosed or untreated. Reasons for the lack of treatment in this

population include the widespread belief that depression is normal or expected with ageing, conscious underreporting or denial of symptoms by patients due to shame or stigma. Unrecognized depression eventually leads to untreated depression. Untreated depression can delay recovery or worsen the outcome of other illnesses. In addition to the numerous treatments for depression, exercise has become an appealing new alternative to alter ones mood. The basic reasoning behind this theory is that exercising has positive effects on one's body and mind. The present study intends to focus on the detection of depression among elderly population through assessment and implementation of exercise program as a management therapy for depression at an Old Age Home.

### Research problem

An evaluative study to assess the effectiveness of planned physical exercise program on depression among elderly residents of a selected old age home in Mumbai.

### Objectives

1. Identify the incidence of depression & the presence of selected manifestations related to depression among elderly residents before & after planned physical exercise program in a selected old age home.
2. Compare the incidence of depression & presence of selected manifestations related to depression among elderly residents before and after planned physical exercise program in a selected old age home.
3. Associate the incidence of depression with selected demographic variables among elderly residents of a selected old age home.

### Methodology

An evaluative pre-experimental single group pre-test post-test design was adopted. Subjects selected using non-probability convenient

sampling technique. Among 76 elderly residents of selected old age home, 47 of them scored living with depression based upon Geriatric Depression Scale (GDS). A standardized 15 item self-reported GDS and observation checklist for observable manifestations of depression ( $r=0.87$ ) were applied. As per GDS score, depression classified as 0-4: Normal, 5-8: Mild depression., 9-11: Moderate depression, 12-15: Severe depression. Observation checklist for observable manifestations of depression included disturbances observed in general appearance, speech & mood. Among the latter group, 38 elderly residents (women:20 & men:18) met the inclusion criteria to participate in the exercise program. which was implemented 5 days a week for 30 days; comprising of breathing (3 min.), Range of Motion and flexibility exercise (24 min.), laughter therapy (3 min.).

### Results

#### Demographic profile

Majority of the elderly residents 19 (50%) belong to >70-80 years of age group and 13(34.21%) were from age group of 60-70 years. Majority of them 21 (55.3%) belong to widow(er) group whereas 12 (31.6%) belong to group of single. More than half of them 22 (57.9%) were suffering from physical illness. More than half of the elderly residents 22(57.9%) have visit by their relatives for at least once in a month. 7 of them don't have any visits by their relatives.

**Assessment of pre test and post test depression scores**

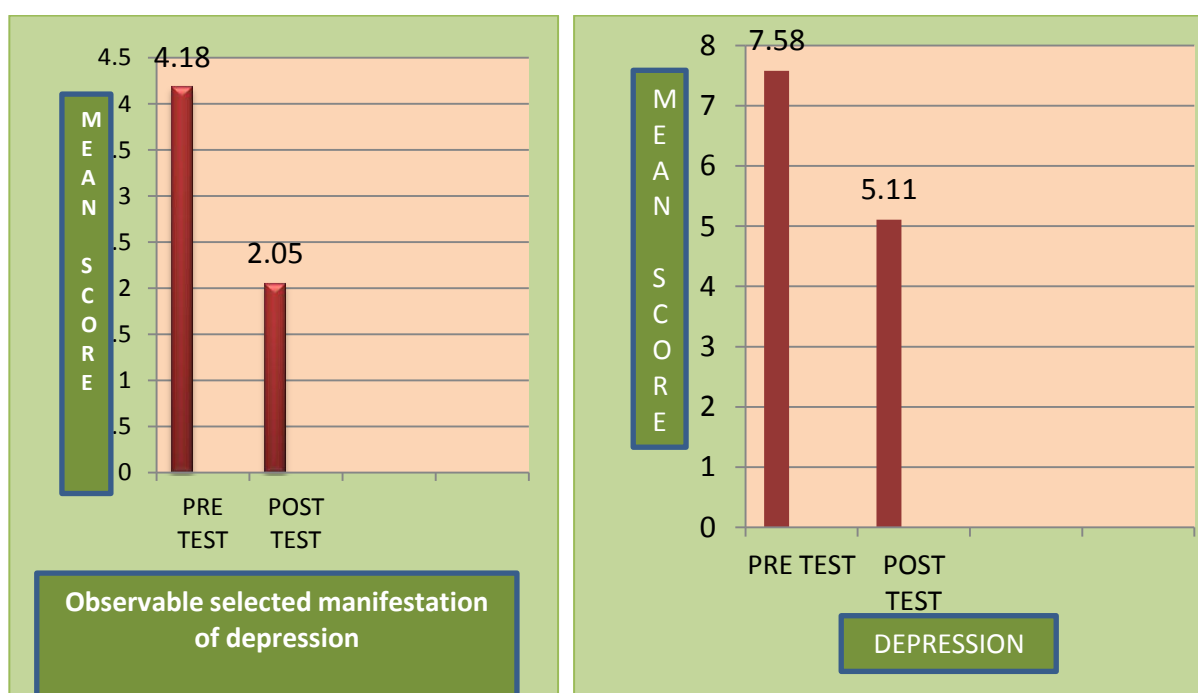
**Table 1:** Distribution of pretest and posttest depression score of subjects

N= 38

SR.NO	CATEGORY OF DEPRESSION	PRE TEST		POST TEST	
		f	f%	f	f%
1	Normal (0-4)	Nil	Nil	15	39.5
2.	Mild depression (5-8)	23	60.5	21	55.3
3	Moderate depression (9-11)	14	36.8	02	5.3
4	Severe depression (12-15)	01	2.6	Nil	Nil

The pretest geriatric depression score of 7.58 was reduced to 5.11 in posttest. There was a positive effect of the exercise program on depression scores of the respondents ('t' value 15.152; P≤ 0.05)

The mean value of observable manifestations of depression in the pretest was 4.18 which reduced to 2.05 in posttest. The research hypothesis was accepted as P≤ 0.05('t' 7.90, P-0.05).



**Figure 1:** Pre test and post test depression mean score

**Conclusion**

This study revealed an exercise program has significant effect on reducing depression scores. Health care provider must use the standardized GDS tool in assessment of depression for early detection of unrecognized depression. An exercise program can be considered as an alternative treatment for depression in geriatrics. Development and efficient use of exercise program in old age homes can be a prudent strategy.

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