



A Study to Assess the Effectiveness Gardening Therapy on Depression among Old Age People in Selected old Age Home in Kheda District

Vora Naurin¹, Kharadi Jagruti², Patel Nikita³, Pargi Pratiksha⁴, Koli sonal⁵, Valand Damini⁶ and Kiran Dolia^{7*}

¹⁻⁶Final year BSc Nursing student, Dinsha Patel College of Nursing, Nadiad, Gujarat, India

⁷Assistant Professor, Dinsha Patel College of Nursing, Nadiad, Gujarat, India.



Greentree Group Publishers

Received: 18.08.2018

Edited : 01.09.2018

Accepted: 06.09.2018

Published: 15.09.2018



ABSTRACT

According to WHO, the prevalence of depression over 60 years is increasing faster than any other aging population. A Quasi-experimental non randomized pre-test post-test control group design was used to evaluate effectiveness of gardening therapy on depression among old age people. 60 elderlies were selected non probability convenient sampling technique (30 experimental & 30 control group). Modified beck depression inventory II was used for data collection. Validity was checked by 7 experts. Intervention was given for daily 2 hours in morning for 15 consecutive days. Post-test was assessed on 16th day by using same tool. Post-test assessment of depression was assessed in both groups. The data will be analyzed by descriptive statistics such as mean, SD, frequency and percentage. The mean post-test level of depression score is significant lower than the mean pre-test level of depression. The calculated test value was 7.5714 (>table value). There for null hypothesis was rejected and research hypothesis was accepted. There was significant association between physical illness and recreation activity in experimental group. And significant association between financial support, no of children and physical illness in control group.

KEYWORDS

Gardening therapy, Effectiveness, Depression, Old age people, Old age home

INTRODUCTION

Depression is a serious medical problem in the society. The word depression used to describe a mood, symptoms or syndrome. It can be characterized by intensity as mild moderate and severe. Depression in elderly may be triggered by adverse life events including bereavement, loss of health, threat to bereavement and loss of health in loved one's and the factors which trigger the risk of depression in the elderly include being female, being single, unmarried, divorced, or widow, lack of supportive social network and stressful life event.

Depression are the most common affective illness found in old age. depression is a mood disturbance characterized by exaggerated feeling to sadness despair, lowered self-esteem, loss of incrusting formal activities and pessimistic thought.

the incidence of increased depression among the elderly is influenced by the variables of physical illness, functional disability and cognitive impairment.

The prevalence of depression varies throughout the world. The lowest rates are reported in Asian and southeast Asian countries. Percentages represent the life time chance that a person will experience a depressive episode that lasts a year or more.

OBJECTIVES

1. To assess the pretest and posttest level of depression before and after administration of gardening therapy.
2. To assess the effectiveness of gardening therapy on level of depression.
3. To find out the association of posttest level of depression with their selected demographic variables.



HYPOTHYSIS:

- H0: There will be no effectiveness of gardening therapy on depression among old age people of selected old age home of kheda district.
- H1: There will be effectiveness of gardening therapy on depression among old age people of selected old age home of kheda district.

METHODOLOGY

Research Approach: A quantitative evaluative approach was used in this study

Research design: A quasi experimental non randomized pretest and posttest control group design was used

Variable:

Independent variable: Gardening therapy.

Dependent variable: Level of depression.

Demographic variables: -

Age, Sex, Religion, Marital status, Education, Financial Support, Number of child, Recreation, Physical illness, Duration in old age home.

Setting of the study: -

The study was conducted at Jalaram old age home, pij and happy day's old age home, Area.

Population: -

Target population of the study was elderly residing in old age home.

Sample: -

In this study, the sample was elderly age above 50 years or above 50 years.

Sample size: -

60 subjects who fulfilled inclusion criteria. (30 experimental group and 30 control group.)

Criteria for sample selection: -

1. Inclusive Criteria:

- Sample who are present at the time of data collection and willing to participate in study.
- Sample who are living in old age home.
- Sample who are having age group of more than 50 years.
- Sample who know Gujarati Language.

2. Exclusion Criteria:

- Sample who have mental disability.
- Sample who are only day comers.
- Sample who have sensory defect.

Sampling technique: -

Non-probability convenient sampling technique was used to select sample.

Description of the tool: -

Part A: Demographic data

Part B: Modified beck depression was used.

Table 1 Scoring Procedure

Level Of Depression	Scores
Normal	0 to 10
Mild	10 to 20
Moderate	21 to 30
Severe	31 to 63
Total	63

Gardening Therapy Intervention:

Gardening Therapy was given for daily 2 hours in morning for 15 consecutive days.



Post-test was assessed on 16th day by using same tool.

Reliability:

Reliability was established through test retest method by Karl Pearson's correlation coefficient formula. In that $r = 0.78$ and hence the tool was reliable

Validity:

Content validity of the tool was evaluated by 7 experts. In that 2 psychiatric doctor and 5 M.Sc. in mental health Nursing.

Pilot study:

Pilot study was conducted among 6 old age people in happy day's old age home, Area. In that 3 from experimental group and 3 from control group.

Data collection procedure:

The subject was non- randomly selected to experimental and control group. On 1st day Pre-test assessment of level of depression was assessed then gardening therapy every morning 2hours for consecutive 15 days should give to experimental group. On 16th day post-test level of depression was assessed by using modified beck depression inventory –II tool to both group.

Plan for data analysis:

Demographic data were analyzed by using descriptive statistics. Effectiveness of gardening therapy was analyzed by using 't' test. Association between post-test level of depression and selected demographic

data were analyzed by using chi square analysis.

RESULTS

Table 2 Analysis of data related to find out effectiveness of gardening therapy on depression among old age people in selected old age home of Kheda district.

Administration	Mean	SD	Paired T-test	Table value
Experimental group (pretest)	27.8	3.010	-	-
Experimental group(posttest)	22.5	2.374	7.5714	2.09
Control group(pretest)	23	5.82	-	-
Control group(posttest)	23	5.82	0	2.05

Researcher applied paired T- test for the comparison of pre-assessment and post assessment of effectiveness of gardening therapy on depression among old age people on experimental group. Calculated value corresponding to this comparison were 7.5714 and corresponding Table value were 2.09 ($p < 0.05$). T-table Value is less than T calculated Value hence the null hypothesis is rejected. Means there is significance effectiveness of gardening therapy on level of depression.

Researcher applied paired T- test for the comparison of pre-assessment and post assessment of effectiveness of gardening therapy on depression among old age people on control group. Calculated value corresponding to this comparison were 0 and corresponding Table value were 2.09 ($p < 0.05$).



CONCLUSION

The study findings brought out the following conclusion:

There was a significant difference between mean pre-test and mean Post-test depression scores among elderly in the selected old age home at $P < (0.005)$ level of significance. There was a significant association between mean pre- test depressions education and history of physical illness among elderly in the selected old age home. There was no significant association between the post-test level of depression and the other socio demographic variables such as age, sex, religion, marital status, number of children, Recreation, duration of stay in the old age home $p < 0.05$ level of significance. The study conclusion that elderly in the selected old age home had depression. The daily intervention with gardening therapy for 2 hours 15 consecutive days among elderly had shown statistically significant difference in pretest and posttest level of depression. Thus gardening therapy was effective in terms of reducing the level of depression among elderly in the selected old age home. It indicates that gardening therapy can be used to all groups of elderly in terms of improving their quality of life. So the intervention gardening therapy is cost effective, noninvasive, non-

pharmacological, free from side effects and highly feasible. The researcher concluded that it can used as an effective intervention to improve the quality of life among elderly. The findings of the study have several implications on nursing practice, nursing administration, nursing Education and nursing research.



REFERENCES

1. Barua A, Kumar MK & Basilisk MA (2011). Prevalence of depressive disorder in the elderly, *Ann Saudi Niv-Dec*;32(6):620-624.
2. Dhara RD & Jobson (2013). Depression and psychological wellbeing in old age, *Rajkot India. Volume 3.J psychological psych other 3*:117.
<https://DOI:10.4172/2161-0487.1000117>.
3. Esther sheeba Rani D (April 2015). Effectiveness of Horticulture therapy on Depression among elderly at selected old age home in Madurai, Tamilnadu. Page No: 1,9,10.
4. A P Raj Kumar, P. Thangadurai & K.S. Jacob (2009). Nature, prevalence and factors associated with depression among the elderly in a rural south India. <http://www.ncbi.nlm.nih.gov>PubMed>.
5. Barua A and Nilamadhakor (2013). Screening for depression in elderly Indian population. *Indian Journal of Psychiatry. Volume 2. page No:150-153*.
6. Christos K (2013). The prevalence of depressive symptoms in an elderly population and their relation to life situation in home care. *Health science journal. 2013;7 (4)*.
7. Diane Heller RN, ph. D, Audrey Chadwick RN, MSN, HRT & Theresa O'Connell MA, HTR (2008). The meaning of gardening and the effect on perceived wellbeing of a gardening project on diverse population of elders, *Activities, Adaptation & Aging 24;3, 35-56*.
DOI:10.1300/J016v24n03.03.
8. Biswa SS, Gupta R, Vadhare HA, Bose S, Patel JA, Selvarajan S, Jacob NS, Aaron J, Iyer DS, John KR, Jacob KS (2009). Depression in the elderly in Vellore, south india. *Int psychogeriatr. 2009 App; 21(2):369-71*.
<https://DOI:10.1017/S1041610208008259>.
Epub 2009 Jan 13.
9. Chan HY, Ho RC, Mahendra R, Ng KS, Tam WW, Rawtaer, Tan CH, Kya Eh (2017). Effects of horticulture therapy on elderly health: protocol of a randomized controlled dtrail.
<https://www.ncbi.nlm.nih.gov> BMC Geriatr. 2017 Aug 20;17 (1): 192.doi:10.1186/s 12877-017-0588-z.
10. J. K. Djernes (2006). Prevalence and predictors of depression in population of elderly: A review, Denmark 21 February 2006. *Onlinelibrary.Wiley.com*.
<https://doi.Org/10.1111/j.1600-0447.2006.00770.x>.
11. <https://www.nicksdigitalsolutions.com/how-culture-and-society-impact-the-elderly>.
12. http://www.en.wikipedia.org/wiki/Horticulture_therapy.html.