Health Sciences

"A STUDY TO ASSESS THE EFFECTIVENESS OF HORTICULTURE THERAPY ON DEPRESSION AMONG OLD AGE IN SELECTED OLD AGE HOME, CHENNAI"

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ABSTRACT
In 1991, the world population of 60 years and above was 56 million (6.8%). In 1999, it has increased to 70 million and expecting 177 million by 2025. The growth rate of elderly population (37.3%) is twice that of general population (16.8%). One out of seven elderly in the world is an Indian. Average expectation of life from 60 years in 1991 is expected to reach 70 years by the year 2025. Previous studies have found gardening is a very popular leisure activity for adults aged 65 or older. At least 30 minutes of moderate-intensity physical activity on most days of the week in order to maintain and improve optimal health. The variety of tasks associated with gardening is one reason older adults are more likely to stick with their regimen, gardening tasks change throughout the different activities are involved in daily. The many researchers concluded that gardening is a great way for older adults to meet the physical activity.

KEYWORDS :

INTRODUCTION
"**Prevention is better than cure",** and same applies for depression prevention. People who have suffered from depression before, at first time they will be able to notice that their mood is going down[1]. Such people should immediately try and beat depression by ensuring certain basic life style. Some important ways to deal with depression includes sticking to balance diet, keeping oneself occupied and engaged as much as possible in recreational activity like listening music, watching TV, working in garden.

Horticulture therapy is a remedial measure in which plants and gardening activity are used to improve the body, mind, and spirit of the people. It involves four different interventional approaches like "**virtual (effect), viewing, interaction, and action"**[4]. Action performance will be according to the client's ability. Gardening as a form of therapy benefits both mind and body. It can take off your mind pain and calm your spirit. When you are involved in gardening activity that gives pleasure, reduces stress and restores the physical and emotional balance.

Gardening gives sense of anticipation because when you are nurturing something that is alive and watching as it as grow it gives sense of hope and in this people engage since beginning time. Gardening is a great outlet almost every one can dig in the earth and create something useful and beautiful.

The intention of the study is to assess whether green environment and activity related to plants have an effect on depression among elderly living in long term care.

Statement Of The Problem
"A Quasi-Experimental Study to assess the effectiveness of Horticulture Therapy on depression among old age people in a selected old age home, Chennai.

Hypothesis
H1 - there is a significant difference in the pre test and post test score of depression in experimental group.
H2 -there is a significant association between the post-test score and selected demographic variables.

RESEARCH METHODOLOGY
Research design used for this study Quasi experimental research study in which non equivalent control group pre-test and post-test design was used for this study.

The setting of the study was Sivanandha Gurukulam, old age home, Chennai and the target population of the study was the old age people belong to Sivanandha Gurukulam in a selected old age home having depression. The total sample size was 60 old age people, selected as 30 in experimental group and 30 in control group under the convenient sampling technique.

The geriatric depression scale was used to assess the level of depression[2]. This scale was developed by Yesavage et al in 1983.

It is a 15 item questionnaire that is simple, clear, self administered scale that does not rely on somatic symptoms. The yes/no questions takes 10-20 minutes to complete. Depression responds are assigned 1 point with a maximum possible score of 15[3].

Procedure For Datacollection
Prior to the data collection, the necessary permission was obtained from the principal, Sree Balaji College of Nursing, the investigator met the authorities of the Sivanandha Gurukulam for aged destitute at Chennai. Self introduction was given and details regarding the nature of the study were explained to the old age.

The written consent was obtained from the participants, the selected samples were approached with study questionnaire and the level of test depression was identified.

Horticulture Therapy based on the incorporating suggestions of experts and knowledge gained. Horticulture therapy was taught and was encouraged to be performed for 27 consecutive days.

At the end of 27 days of practicing horticulture therapy, the level of test depression of the study subjects was reassessed, and the differences in score of test depression were considered as the effectiveness horticulture therapy.

Steps Involved In Horticulture Therapy:
1. Assess the soil in the field
2. Assess the humidity of the soil
3. Selecting the appropriate place for each plant.
4. Digging the soil of the selected place to make it ready for seedling.
5. Sprinkling water over the soil to maintain its humidity properly
6. Observing and maintaining the humid level in the soil for at least three consecutive days.
7. Slowly start sprinkling the seeds over the selected areas.
8. Different places must be chosen for different vegetable seeds with enough space for the further use.
9. Maintain humidity by sprinkling water. Make sure that the water should not be too more or too less.
10. Everyday sprinkle some water twice and close the seedled area with a plantain leaf or coconut palm to prevent the exposure to sunlight.
11. Once the leaf is visible outside the sowing, start pouring proper water and expose to sunlight.
12. Remove the tiny plants one by one and start Planting in different places with a small distance which helps them to grow as different plants.
13. Care the plant by watering daily and maintaining the humidity.
14. Observe the plant by watching new tender leaves, flowers and vegetable buds.

RESULTS
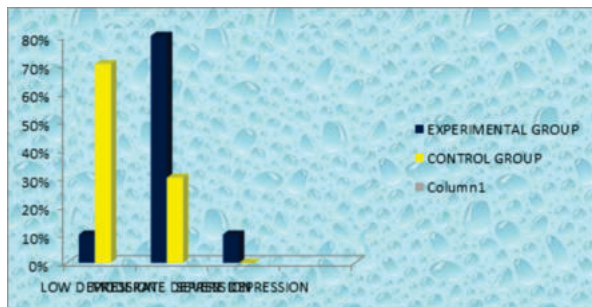
Fig .1 Comparion Of Pre- Test And Post- Test Level Of Stress Score

Fig.1 depicts thatpretest score were 1.6% of them are normal, 3.3% of them having mild stress, 15% of them having moderate stress, 30% of them having severe stress and 51.7% of them having extremely severe stress. In posttest, 61.7% of the elderly are normal. 21.7% of them having mild stress and 16.6% of them having moderate stress. 3.3% of them having severe stress and 1.6% of them having extremely severe stress.

Table 4.2: Distribution of samples according to the level of depression in experimental group and control group.

Depression Level	Experimental group n=30				Control group n=30			
	Pre test		Post test		Pre test		Post test	
	F	%	f	%	F	%	F	%
Mild 0-5	3	10%	21	70%	3	10%	1	3%
Moderate 6-10	24	80%	9	30%	19	63%	21	70%
Severe 11-15	3	10%	-	-	8	27%	8	27%

Table 4.2 depicts the pre test & post test scores of both experimental and control group. Among the experimental group majority of the samples 3(10%) experienced mild level of depression and 24 out of 30(80) had moderate depression and 3 out of 30(10%) had severe depression. In control group in the pre test , majority of the samples experienced mild level of depression (10%) 19 out of 30 (63%) experienced moderate level of depression and 19 out of 30 (63%) and samples experienced severe level of depression 8 out of 30 (24%)

Table 4.3: Comparison of mean pre test and post test level of depression of samples in experimental group.

Measurement	Mean	Mean Difference	SD	"t" value	"P" value
Pre test	3.4		2.0		
		3.0		9.4	< 0.001
Post test	0.4		2.4		

Table 4.3 represents that in experimental group the mean post test depression score of 0.4 The obtained "t" value 9.4 statistically significant. The above findings support the research hypothesis. So the researcher rejected the null hypothesis and accepted the research hypothesis

CONCLUSION

The result showed that most of the old age home suffered from mild to moderate level of depression. Horticulture therapy was effective in reducing the level of depression among the old age. Horticulture therapy activities are able to improve psychological well being of people and improvement of their daily activities, reducing loneliness and in reduction of symptoms. The colours and aromas of Flowers and buds of vegetables can reduce the depression.

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