A Comparative study to assess the effectiveness of Music therapy and Play Therapy in relieving depressive symptoms among senior citizens of selected old age home at Bangalore

Ms.Leena Dsouza
Lecturer, Dr. M.V. Shetty College of Nursing Mangalore, Rajiv Gandhi University of Health Sciences, Karnataka

Abstract; Senior citizens face physical, psychological, and emotional vulnerabilities, with depressive symptoms often exacerbated by factors such as loss of loved ones, financial insecurity, and physical illness. This study aimed to compare the effectiveness of music therapy and play therapy in alleviating depressive symptoms among senior citizens residing in selected old age homes. Pre-experimental research design was used. The data collected from 60 participants aged 65 years and older were divided into two groups: 30 for music therapy and 30 for play therapy, selected through purposive sampling. Tools such as the Geriatric Depression Scale (GDS) and Hamilton Rating Scale for Depression (HRSD) were employed for assessment. The study revealed that most participants experienced moderate depression (81.7%). Both therapies significantly reduced depressive symptoms within groups ($p < 0.05$). However, play therapy demonstrated greater effectiveness compared to music therapy, as reflected On the GDS, play therapy showed a greater reduction in symptoms compared to music therapy, with a significant difference ($p = 0.001$). On the HRSD, play therapy again showed a greater reduction, with a significant difference ($p = 0.029$). These findings emphasize the importance of incorporating engaging and interactive therapies, such as play therapy, to enhance the mental well-being of senior citizens in institutional care.

Keyword: Compare, Effectiveness, Depressive symptoms, Music therapy, Play therapy, Senior Citizen, and Old age home.

BACKGROUND OF THE STUDY

The growth as old age is an unavoidable period and all need to go through it. As elders grow in their age they experience series of changes in their life including physical, social, psychological, emotional and mental which result in discomfort and distress. Various prevalence studies have reported both physical and mental health problems among senior citizens to be very higher than other age groups. It can be due to several reasons such as changes in physical health and strength, death of spouse, separation from children, retirement, financial instability, dependency on others. Music therapy is powerful medicine. It has power to reduce stress, improve symptoms of depression and enhances productivity among elderly thus improve person's quality of life. One of most significant benefit of music is, it improves memory and gives positive energy among all. Though society has often viewed play as a childish and merry activity, we all engage in play over our entire lifespan, and engage in such play activities in which we forget about time and place. A lot of seniors enjoy keeping their brain sharp by playing fun games or solving satisfying puzzles. Many nursing homes and assisted living communities regularly organize fun games and encourage residents to participate. So it's said incorporation of music and Fun games into the life of senior citizens in old age homes might help in reducing depressive symptoms and improve quality of life.

RESEARCH OBJECTIVES

- To assess the level of depressive symptoms among senior citizens in selected old age homes.
- To assess the effectiveness of music therapy in relieving depressive symptoms among senior citizens in selected old age homes.
- To assess the effectiveness of play therapy in relieving depressive symptoms among senior citizens in selected old age homes.
- To compare the effectiveness of music

therapy and play therapy in relieving depressive symptoms among senior citizens in selected old age homes.

Research design

A Pre Experimental, Nonequivalent control group-pretest posttest design was adopted for this study.

Study Setting

The present study was conducted in 2 selected old age homes at Bangalore. Karnataka

Population

In this study the population consists of senior citizens who are residing in selected old age homes at Bangalore.

Sampling

Purposive sampling technique was used to select 30 elderly for music therapy and 30 elderly for play therapy in old age homes, who scored above 10 in geriatric depression scale and Hamilton rating scale for depression.

Instrument:

To select senior citizens following instruments were used Demographic Performa to get baseline information about the sample. The Geriatric Depression scale which was developed by Yesavage et al in 1983 to assess the depressive symptoms. The questionnaire consists of 30 yes/no items it includes 20 positive items, and 10 negative items. Each item consists of a given situation and Hamilton rating scale for depression which was developed by M Hamilton in 1960. It is consist of 17 items and answers were expanded to 0to 4 The same sets of tool were used for both pre-test, and post-test. Geriatric Depression scoring (0-9) normal, (10-16) mild, (17-23) moderate, (24-30) severe. Hamilton Rating scale for depression scoring (0-7) normal, (8-16)mild , (17-23) moderate, above24 severe

Data collection

Data collection was done in 2 old age homes and senior citizens who fulfilled the inclusion criteria were selected by purposive sampling techniques for administration of music therapy and play therapy. the data were divided into 2 groups one group received music therapy and another group received play therapy for 3 weeks for duration of 20 to 30min. at the end of 3 weeks both the groups were conducted post test

Data analysis method

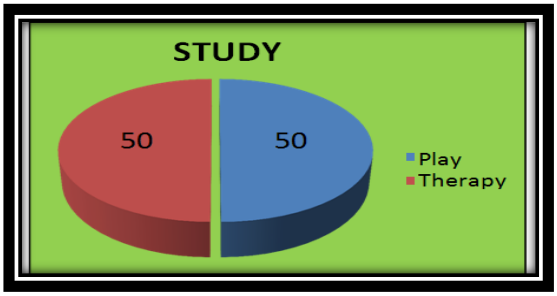
The collected Data was analyzed by using the Descriptive statistics and inferential statistics such as frequency; percentage, means and S.D. To find the effectiveness of music therapy and play therapy among senior citizens with depressive symptoms. the Paired “t” test was used. And to compare the effectiveness of music therapy and play therapy among senior citizens with depressive symptoms independent “t” test was used. The p value <0.05 will be considered as significant.

Ethical approval

The study was conducted only after the approval of ethical committee of institution. The formal consent was obtained from old age home authority before proceeding of the study. Senior citizens were explained about the study. Verbal and written consent was obtained before interviewing and study information was kept confidential.

RESULTS

Section1: This study was conducted among 60 senior citizens. Play therapy group included 50% of the citizens and music therapy group includes 50%.



SECTION II: Frequency and percentage distribution of samples based on the selected demographic variables among two experimental groups (Music and Play therapy)

(n = 60)		Frequency	%
Age	Between 65- 70	15	25
	Between 70-75	23	38.3
	Between 75-80	15	25

	Above 80	7	11.7
Gender	Male	16	26.7
	Female	44	73.3
Religion	Hindu	55	91.7
	Muslim	5	8.3
Education status	Secondary	38	63.3
	Higher secondary	16	26.7
	Under graduate	5	8.3
	Post graduate	1	1.7
Previous occupation	Home maker	36	60
	Private employee	18	30
	Daily wages laborer	6	10
Marital status	Single	3	5
	Married	8	13.3
	Separated	7	11.7
	Widow	42	70
No of children	Childless	18	30
	One	21	35
	Two	12	20
	More than two	9	15
Type of family	Nuclear	52	86.7
	Joint	8	13.3
Hobbies	Watching TV/ mobile	46	76.7
	Reading books	9	15
	Listening news	4	6.7
	Crafts/ Drawing	1	1.7
Nature of admission	Voluntary	25	41.7
	Involuntary	30	50
	Neither voluntary nor involuntary	5	8.3
Duration of stay in old age home	Less than one year	8	13.3
	3-5 years	37	61.7
	More than 5 years	15	25
Performance of activity	Active	45	75
	Passive	14	23.3
	Use of assistive devices	1	1.7

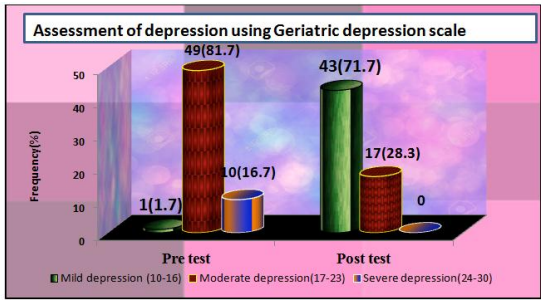
Table1 shows that majority of the senior citizens were in the age group: 70 to 75 years (38.3%) followed by 65 to 70 years (25%) and 75 to 80 years (25%). Also, 7 (11.7%) were in the age group of above 80 years. Most of the participants were females (73.3%) and 91.7% were followed Hindu religion (91.7%). The 63.3% of the senior citizens had secondary level of education, 26.7% had higher secondary level, 8.3% were under graduate and 1.7% was post graduates. The most of the citizens were home makers (60%), private employee (30%) and daily wages laborer (10%). Regarding marital status, the majority of the citizens were widow (70%) followed by married (13.3%), separated (11.7%), and single (5%). Among 60 senior citizens, the majority had one child (35%) and 30%

were childless, 20% had two children and 15% had more than two children. The majority were from nuclear family (86.7%) and 76.7% of the citizens reported watching TV/ mobile as hobbies. The majority reported involuntary (50%) nature of admission to old age home neither followed by voluntary (41.7%) and neither voluntary nor involuntary (8.3%). Most of the participant's duration of stay in old age home was 3-5 years (61.7%) followed by more than 5 years (25%) and less than one year (13.3%). Regarding performance of activity, 75% of the participants were active 23.3% were passive and 1.7% uses assistive devices.

SECTION- III: Assessment of the depressive symptoms using Geriatric depression scale

Geriatric depression scale		Frequency	%
Pre test	Mild Depression (10-16)	1	1.7
	Moderate Depression (17-23)	49	81.7
	Severe (24-30)	10	16.7
Post test	Mild Depression (10-16)	43	71.7
	Moderate Depression (17-23)	17	28.3

Table 2 shows that, while assessing depressive symptoms by using Geriatric depression scale during pre test, the majority of the citizens had moderate depression (81.7%) followed by severe depression (16.7%) and mild depression (1.7%). While, in post test 71.7% had mild depression and 28.3% had moderate depression.



Assessment of the depressive symptoms using Hamilton rating scale for depression

Hamilton rating scale		Frequency	%
Pre test	Moderate depression (17-23)	49	81.7
	Severe depression (Above 24)	11	18.3
Post test	Mild depression (8-16)	44	73.3
	Moderate depression (17-23)	16	26.7

Table 3 shows that while assessing depressive symptoms using Hamilton rating scale reveals that during pre test, the majority of the citizens had moderate depression (81.7%) followed by severe depression (18.3%). During post test, 73.3% had mild depression and 26.7% had moderate depression.

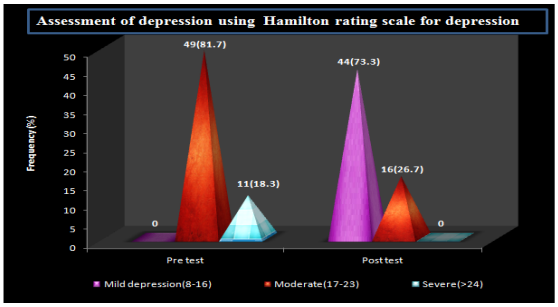


Fig. : Multiple bar diagram Representing Assessment of depression by using Modified Hamilton Rating Scale for Depression

SECTION –IV

Table 4: Effectiveness of play therapy using Geriatric depression scale and Hamilton rating scale for depression within the group

	Play therapy			
	Mean	S.D.	"t"	p value

Geriatric depression scale	Pre test	21.2	2.2	29.91	< 0.001*
	Post test	13.3	2.7		
Hamilton rating scale	Pre test	22.5	1.7	27.64	< 0.001*
	Post test	14.4	2.1		

("t" = Paired "t" test; * Significant)

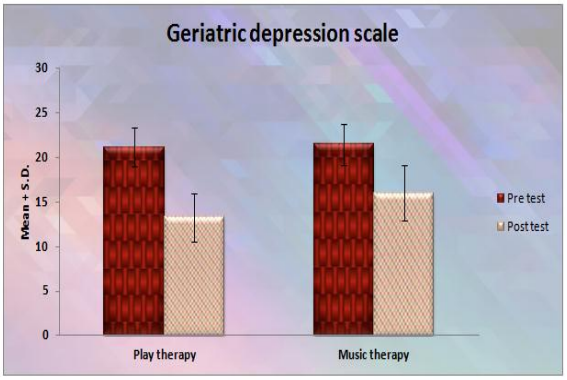
Table 4 depicts that the comparison of Geriatric depression scale and Hamilton rating scale within the group was done using paired't' test. There was decrease ($p < 0.05$) in modified geriatric depression scale and modified Hamilton rating scale within the group. Hence play therapy was effective in reducing depressive symptoms among senior citizens.

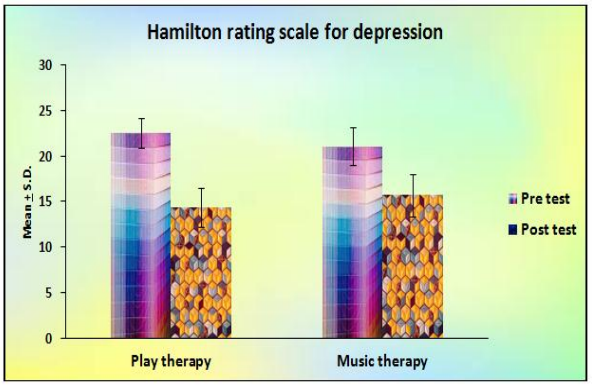
Table 5: Effectiveness of Music therapy using Geriatric depression scale and Hamilton rating scale for depression within the group

		Music therapy			
		Mean	S.D.	"t"	p value
Geriatric depression scale	Pre test	21.5	2.3	13.75	< 0.001*
	Post test	16.0	3.1		
Hamilton rating scale	Pre test	21.1	2.1	15.45	< 0.001*
	Post test	15.7	2.4		

("t" = Paired "t" test; * Significant)

Table 5 depicts the comparison of Geriatric depression scale and Hamilton rating scale within the group was done using paired't' test. There was decrease ($p < 0.05$) in geriatric depression scale and Hamilton rating scale within the group. Hence music therapy was effective in reducing depressive symptoms among senior citizens.





SECTION –V:

Table 6: Comparison of Geriatric depression scale and Hamilton rating scale for depression between the groups

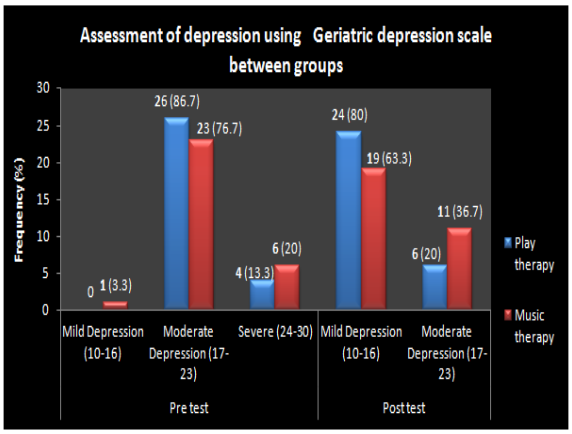
		Pre test				Post test			
		Mean	S.D	"t"	p value	Mean	S.D	"t"	p value
Geriatric depression scale	Play therapy	21.2	2.2	-0.52	0.607	13.3	2.7	-3.60	0.001*
	Music therapy	21.5	2.3			16.0	3.1		
Hamilton rating scale	Play therapy	22.5	1.7	2.97	0.004*	14.4	2.1	-2.25	0.029*
	Music therapy	21.1	2.1			15.7	2.4		

("t" = Independent sample "t" test; * Significant)

Table 6 highlights that the Independent sample "t" test was used to compare Geriatric depression scale and Hamilton rating scale between the groups. The pre-test mean scores are similar for both therapies (21.2 vs. 21.5 GDS) , (22.5 vs 21.1HRSD) . The(t-value of -0.52 and p = 0.607 GDS) indicate no statistically significant difference in depression severity between the two groups before therapy (The t-value of 2.97 and p = 0.004 HRSD) show a statistically significant difference at baseline,

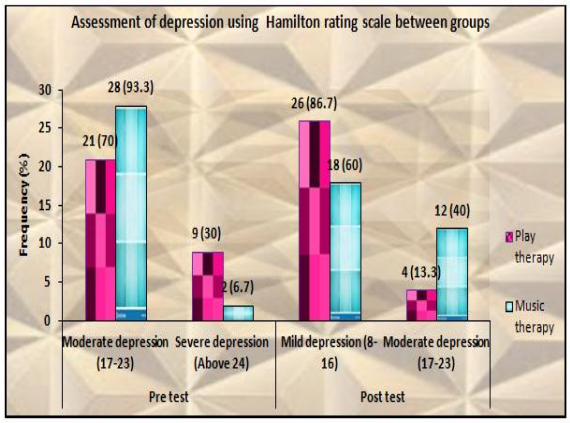
suggesting participants in the play therapy group started with slightly higher depression levels. During pre test, there was a difference ($p < 0.05$) in Hamilton rating scale between play therapy and music therapy groups. During post test, there was a difference ($p < 0.05$) in Geriatric depression scale as well as Hamilton rating scale between play therapy and music therapy groups.

In assessing by GDS The post-test scores are lower for play therapy (13.3) than music therapy (16.0),



Multiple Bar diagram showing the effectiveness of Music and Play therapy while using Geriatric depression scale between the groups

indicating a greater reduction in symptoms with play therapy. The t-value of -3.60 and $p = 0.001$ suggest this difference is statistically significant. While assessing by HRSD Post-test scores are lower for play therapy (14.4) compared to music therapy (15.7), indicating a greater reduction in depression symptoms with play therapy. The t-value of -2.25 and $p = 0.029$ suggest this difference is statistically significant



Fig, : Multiple Bar diagram showing the effectiveness of Music and Play therapy while using Hamilton rating scale for depression between the groups

DISCUSSION

The result of this study showed that in comparing within the group using paired‘t’ test there was decrease ($p < 0.05$) in depressive symptoms within both the group. Hence, music and play therapy were effective in reducing depressive symptoms among senior citizens. Independent sample “t” test was used to compare by using Geriatric depression scale and Hamilton rating scale between the groups. On the GDS, play therapy showed a greater reduction in symptoms compared to music therapy, with a significant difference ($p = 0.001$). On the HRSD, play therapy again showed a greater reduction, with a significant difference ($p = 0.029$).

CONCLUSION

Senior Citizens are at the greater risk in developing depression, and other psychological issues. What so ever the causes but preventing some stressors will help elders in living their life better. There are many ways where elderly can be helped specially therapies like music and play and many more recreational activities are found to be effective in reducing depressive symptoms. In the present study it was found that both Music and play therapy were found to be effective, specially play therapy can have greater impact on the geriatrics with depression One of the video which published by Julie Robinson from UK brings to enlightenment that how to bring back the fun aspects and socialization among elderly. So the curriculum shall be made in such a way that the students must be oriented to different modalities which would help the students to prevent depression among senior citizens. Nursing Curriculum shall incorporate practical training on complementary therapies.

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