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RESEARCH ARTICLE

A STUDY TO ASSESS THE EFFECTIVENESS OF MUSIC THERAPY ON PSYCHOLOGICAL PROBLEMS OF THE ELDERLY RESIDING IN SELECTED GERIATRIC HOMES, KANCHEEPURAM DISTRICT, TAMIL NADU, INDIA

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ABSTRACT

Elderly population is considered as vulnerable group of population in the world. (World Population Prospects Sep'14 Census). Due to the changing trend towards nuclear families and materialism among the younger generation in modern industrial life led to a force on elderly to stay in old age homes. It has been observed that aged population in India needs recreational activities in the form of therapies especially music therapy which has got an effect on well being status of the elderly. The objectives of the study were to assess the effect of music therapy on psychological problems of the elderly residing in a selected geriatric and to associate the effect with selected demographic variables. The study was conducted in 'Little Drops' old age home (experimental group), and 'Little Angles' old age home (control group), Chennai, Tamil Nadu. A Quasi experimental design Pre-test/Post-test Control Group was used. Elderly samples of 101 in experimental group and 100 in control group were selected. Purposive sampling technique was used in selecting the samples. The effect of music therapy on psychological problems was assessed by using Subjective Well Being Inventory Scale, a modified WHO scale. Pre test was done before the intervention of administration of music therapy. It was administered to the participants who were included in listening to a pre-designed instrumental music based on raga Malkauns, for duration of 22 minutes at a specified time in the evening for a period of 30 days. The collected data were analyzed using the descriptive statistics and inferential statistics. The study results revealed that, there is a significant relationship between the effect of music therapy and the level of well being among elderly; also showed a significant relationship between age and occupational status with the level of well being. The study concludes that training in the field of geriatrics and gerontology for Para professionals in counseling the elderly including music therapy beneficial effects on the problems of the elderly.

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INTRODUCTION

Population ageing is the most significant result of the process known as demographic transition. Reduction of fertility leads to a decline in the proportion of the young in the population. Population ageing involves a shift from high mortality/high fertility to low mortality/low fertility and consequently an increased proportion of older people in the total population. India is undergoing such a demographic transition. In most gerontological literature, people above 60 years of age are considered as 'old' and as constituting the 'elderly' segment of the population. The Indian aged population is currently the second largest in the world.

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There are many more who retire without a pension, provident fund or modest savings. They lack access to even the most basic health care, and suffer abuse and neglect from the younger generation. India is home to one out of 10 senior citizens in the world. This population, estimated to be over 80 million at present, is projected to grow to 137 million by 2021. The elderly population in India is the second largest in the world, next only to China. This population, which was 77 million according to the 2001 census (7.5% of the total population), is projected by the UN to increase to 137 million by 2021. Three-fourth of the elderly population live in rural areas. The annual growth rate is higher (3%) as compared to the growth rate of the total population (1.9%). Population projections show that by 2050, the elderly population in India will surpass the population of children below 14 years. (A Report of Union Health Ministry, Govt of India, 2011).

Taking care of them was mainly the responsibility of their children. But the trend in family system is from joint family to nuclear family system led to their alienation and isolation from family and society. So elders are forced to stay in old age homes, resulting in significant reduction of daily activities and compromised satisfaction over life. Institutions are mushrooming since 1990s. In 1998, India had 728 old age homes. In 2006 it is increased to 1049. Dependency ratio is increasing in geriatric homes in rural and urban community. It has been observed that aged population in India needs recreational activities, which will promote emotional relief and well being and adjust to their home away from their homes. Mortality rates, will be higher among geriatric which is included in the vulnerable group by the year 2020. Music has positive effect on the hormone system that allows the brain to concentrate more easily; assimilate more information in less time thereby boosting learning and information intake; augmenting cognitive skills. Minimal studies were conducted even in developed countries. Training in the field of geriatrics and gerontology for Para professionals in counseling the elderly including music therapy beneficial effects on the problems of the elderly.

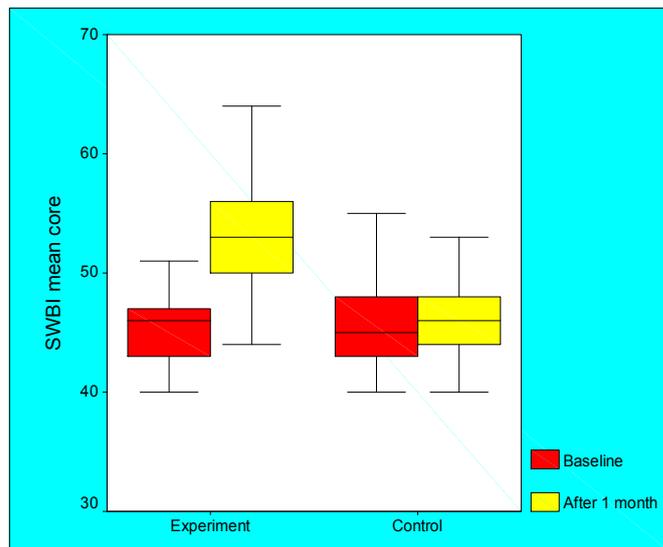


Figure 1. Box-plot comparing the baseline and after 1 month SWBI score between experiment and control of elderly people

Settings of the study

‘Little Drops’ old age home (experimental group), and ‘Little Angles’ old age home (control group), Chennai, Tamil Nadu.

MATERIALS AND METHODS

Research approach: Quasi-Experimental Research Approach

Research design: Quasi experimental design Pre-test/Post-test Control Group design

Table 1. Level of SWBI scores

Level	%	score
Poor	< 50%	0.0-37.0
Moderate	51-75%	38.0 -56.0
Good	76%-100%	57.0-75.0

Table 2. Comparison of Subjective Well-Being Inventory score between experiment and control group aged people

	Group		Student’s independent t-test		
	Experiment	Control	Mean	SD	
Baseline	45.41	45.93	2.50	3.80	t=1.14 p=0.25
1 st month	52.82	46.38	4.08	3.66	t=11.75 p=0.001***

* Significant at P<0.05 ** highly significant at P<0.01

*** very high significant at P<0.001 .Table no.2 Baseline, 1st month SWBI comparison between experiment and control group elderly people. Considering Bale line SWBI, experiment group aged people are having 45.418 where as in control group it is 45.93. So the difference between experiment and control group is 0.52, it is small difference and it is not statistically significant.

• Considering 1st month SWBI, experiment group aged people are having 52.82 where as in control group it is 46.38. So the difference between experiment and control group is 6.44. This difference is large and it is statistically significant.

• Statistical significance was calculated using student independent t-test.

Table 3. Identification of influence factors for SWBI Gain Score using Multivariate Logistic Regression

Demographic variables	Sig.	Odds ratio	95%CI	
			Lower	Upper
Age(< 70 yrs Vs > 70 yrs)	.014	1.952	1.066	6.342
Sex (Female Vs Male)	.929	1.029	.554	1.910
Marital status(Married Vs others)	.564	.818	.412	1.621
Education status(Literate Vs Illiterate)	.730	1.140	.541	2.404
Income(Income Vs No income)	.023	2.554	1.148	6.113
Exercise (Yes Vs No)	.932	1.035	.472	2.268
Interest (Yes Vs No)	.931	1.039	.435	2.484
Other habits(No Vs Yes)	.378	.742	.381	1.442
Family income(> Rs.1500 Vs <Rs. 1500)	.815	1.082	.558	2.101
Relationship(Yes Vs No)	.597	.838	.435	1.615

Population: Elderly residing in the geriatric homes

Sample: Elderly above 60 years of age, who can be able to read, write; also able to listen to the music.

Sample size: 101 samples in experimental and 100 in control groups who have met the inclusion criteria

Sampling Technique: Purposive sampling technique.

Criteria for Selection of Sample

Inclusion criteria: The inclusion criteria for the present study were:

- Males and females who are above the age group of 60 years.
- Those who can speak either Tamil or English language.
- Those who are willing to participate in this study
- Those who are able to listen to the music

Exclusion criteria: The exclusion criteria for the present study were:

- Those who are not available at the time of study.
- Those with the disability of deaf and dumb

Development and description of the tool

A modified WHO structured questionnaire was used for the study; through review of literature on related studies, journals, and books and the opinion from the experts. The instrument used in this study consists of two sections which are as follows: The instrument used in this study consists of two sections which are as follows:

Section A: demographic data

Section B: It consisted of multiple choice questions (25), including the questions on Quality of life(6), Relationship with family and others (8), Mood changes(6), Subjective feelings about health (4), and sleep (1) .

Method of scoring and interpretation

Method of data collection

The data was collected using structured questionnaire. SWBI scale was having a high score of '3' for negative aspects and '1' for positive aspects of emotional status.

RESULTS AND DISCUSSION

The collected data were entered in data sheet and analyzed using descriptive and inferential statistics. The distributions of the demographic data of the study participants are more than half the proportion (58.0%) of the elderly were in the age group of 60-70 years. With regard to the gender, males are found more (51%) than the females in the geriatric home (experimental group).

Higher proportions (37.6%) of the elderly were widows/widowers. Also higher proportion (39.6%) of the old aged finished their primary schooling Majority (67.3%) of was having self income in the form of pension. Table 3 shows the influencing factors to SWBI gain score among the demographic variables of experimental group elderly people. <70 yrs are having 1.95 times more gain score than males and income having people are having 2.55 times more gain score than others. It was found using multivariate logistic regression

Conclusion

Ageing, though it is a physiological phenomenon, needs much attention to alleviate physical and psychological problems of the elderly. Due to urbanization and industrialization old aged are forced to stay in the old age homes. Due to loneliness, feeling aloof, etc lead to psychological problems which can be treated with music therapy, one of the complimentary therapies. Music therapy helps the old aged by enhancing Subjective experiences of pleasure ,social interactions, and self-satisfaction through musical progress. Drawing the study, the article concludes by arguing for further research to contribute to the growing body of evidence placing music learning at the centre of healthy ageing agendas.

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