

Music therapy for institutionalised elderly persons with depression

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Abstract

Background: The geriatric population of India accounts more than six per cent of the total population. The number of elderly in Kerala is expected to reach 7.2 million by 2021 and 11.9 millions in 2051. The present study was conducted to (a) assess the level of depressive symptom in institutionalised elderly persons before and after the music therapy, and (b) to evaluate the effect of music therapy on depressive symptoms in elderly.

Materials & Methods: An experimental research design with a one group pre-test post-test design was adopted. The purposive sample consisted of 40 elderly with depressive symptom. The tools used were (a) a proforma to collect socio-demographic data, (b) Geriatric Depression Scale, (c) Mini Mental Status Examination, and (d) Beck's Depression Inventory. Each of the selected samples was given music therapy through individual walkman for 30 minutes in the evening hours for a regular period of 21 days. Post test was conducted a week after the completion of this exercise.

Result: There was a significant reduction in the depressive symptoms before and after the experiment ($t=3.65$, $p<0.001$).

Conclusion: The study has major implication in the mental health practice, education, administration, and research. It's a cost-effective and safe nursing intervention proven effective in reducing depressive symptoms. Applying music therapy shall augment the effect of alternative therapies and to apply it, there is no need for the nursing professionals to undergo any additional training.

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Introduction

Every human being passes through different phases of life and reaches old age at some point of time. This stage demands extra care and affection as the process of ageing is said to be the constant with bodily function and efficiency gradually declining. The later years of life are conventionally seen as ones with pathologies of mind, body, and social relationships. Elderly persons were respected and cared in the traditional families in the country. However, in the modern nuclear families, there is erosion in the status of the

elderly persons. Placing the elders in old age homes is not uncommon; at times for valid reasons, and sometimes forcefully. Old age thus has become a matter of concern both in developed and developing nations.

Ageing impacts memory, cognition, intelligence, behaviour, and personality, and may lead to mental illness among elderly. Disease conditions such as depression, hypothyroidism can also cause depreciation in the mental capacity or performance of elderly persons. Changes in brain, physical weakness, psychological problems, and socio-en-

environmental situations could be the causative or maintaining factor in the incidence and prevalence of mental illness among elderly persons.[1]

Depression is one of the most disabling mental health conditions identified among elderly persons. It affects their cognition and functionality leading to depreciation in the quality of life. In various studies among elderly, the prevalence of depression was found as 15-25% among community dwelling older adults,[2] 20-45% among elderly hospitalised patients,[3] 15-20% among community residents and inpatient settings,[4] and 24% in primary care settings.[5] Neuropsychiatric problems such as depression are often misdiagnosed, mistreated, or simply overlooked, leading to high comorbidity, increased health care cost, unnecessary suffering, and diminished quality of life.[6]

The present study focused on depression among elderly in old age homes. Specifically, the attempt of the researcher is to see the effectiveness of music therapy on institutionalised elderly persons in terms of enhancing their happiness in life. There are evidences that music can enhance the subcortical reactions and responses,[7] physiological and psychological wellbeing,[8] and activate the flow of stored memory material across the corpus callosum so that the right and left hemisphere could work in harmony than in conflict.[9]

Review of literature

Studies on depression among elderly: Literature is available in plenty on the prevalence of depression among elderly persons. The prevalence of depressive symptoms reported among elderly persons in China was 30.8% (men 12.6%, women 18.2%).[10] A study from Southern India[11] reported 12.7 % prevalence of depressive symptoms among elderly. Another study[12] reported a much higher prevalence of 44.5 % among the inmates of old age homes in Kerala; 38.6% women and 56.5% men had depressive symptoms. Depression depreciates the quality of life,[13] decreases life satisfaction,[14] and impairs self-maintenance skills.[15]

Studies on the effectiveness of music therapy for depression and other conditions: In a study[16] conducted to evaluate the effect of music therapy on 30 depressed older adults with major depressive disorder, groups exposed to

music conditions reported better outcome than the unexposed group. Therapeutic recreation comprising music therapy, poetry, and exercise programme done among 75 elderly home care persons with depression for a month showed significant improvement in the depressive behaviour of the participants during post evaluation.[17]

The effect of reminiscence music therapy sessions on changes in depressive symptoms was studied in elderly persons with in USA.[18] Results indicated a reduction in the depressive symptoms among participants. A ten week long music therapy programme for the elderly persons was found to be effective in overcoming the depression among 28 elderly participants in Tamil Nadu, India.[19]

Apart from depression, music therapy was found to be effective in varied conditions. Music therapy was effective in normalisation of physiological indicators and reducing the stress among women with pregnancy induced hypertension,[20] reducing pain perception, producing a better outcome, and positive attitude towards labour,[21] reducing the post operative anxiety,[22] enhancing the feeling of wellbeing, relaxing ability, reducing of anxiety and stress of adult, lightly sedated patients with invasive cardiac procedures,[23] decreasing anxiety and promoting relaxation among critically ill adult patients admitted in Medical Intensive Treatment units,[24] decrease postoperative pain, anxiety, and morphine consumption,[25] reducing anxiety in the patients after coronary artery bypass grafting,[26] decrease pain and anxiety among cancer patients,[27] bring behaviour change in persons with cerebral palsy,[28] and improving in the cognitive functions of the persons with schizophrenia.[29]

Methodology

The aim of the study was to assess the effect of music therapy on depressive symptoms among elderly in selected geriatric homes of Calicut. The major objectives were (a) to assess the level of depressive symptoms in elderly before and after the music therapy, and (b) to evaluate the effect of music therapy on depressive symptoms in elderly. The hypothesis adopted was that “there will be significant change in the level of depressive symptoms in the elderly population before and after the music therapy”. Experimental research design with a one group pre-test post-test design was chosen. A purposive sample of 40 elderly drug naïve per-

sons with depressive symptoms was recruited for the study from two old age homes, namely (a) Home of Love, Thodayad, and (b) Mercy Bhavan, Vellimadukunnu, both in Kozhikode District, Kerala, India. Elderly persons above 60 years, who have consented, without any cognitive impairment, and/or chronic medical diseases, are able to read and write

Malayalam were included in the study. The tools used were (a) Mini Mental State Examination (MMSE)[30] to rule out cognitive impairment, (b) Geriatric Depression Scale (GDS) to screen the population for depressive symptoms,[31] (c) a proforma to collect socio-demographic characteristics of the subjects, (d) Beck Depression Inventory (BDI-short form) to assess the level of depression.[32] Study was approved by the institutional ethics committee, Calicut Medical College on 25/11/2008.

Procedure

The data was collected through interview and self-reporting. Initially the subjects were screened for cognitive impairment using MMSE. Those persons without any cognitive impairment were then screened for depressive symptoms using GDS. Those who scored above ten were selected as samples. Then, the pre assessment of the level of depressive symptoms in the subjects was done using BDI and subsequently categorised them into the ones with mild, moderate, and severe depressive symptoms. Music therapy is given half an hour a day for 21 days. Post test was done again using BDI one week after intervention.

Intervention programme

The package of the programme for music therapy consisted of the following categories:

- Old film songs based on raga 'mohanam' (1960-1980)
- New film songs based on raga 'mohanam' (1980-1990)
- Classical music based on raga 'mohanam'
- Instrumental music based on raga 'mohanam'

Music therapy was given to the subjects with the help of individual head set. The songs are played according to the preferences of the subject.

Results

The data collected was analysed using Statistical Package for Social Sciences (SPSS) software. More than half of the elderly persons (57.5%) were in the age group of 71-75

Table 1: Depressive symptoms before and after the intervention

Characteristics	Pre test		Post test		't' value	'p' value
	Mean	SD	Mean	SD		
Depressive symptoms	15.12	4.08	9.82	5.53	9.23	< 0.001

SD=standard deviation

years. Majority of the respondents (60%) were males. Respondents with primary education were 42.5%. Before the intervention, majority of the respondents (72.5%) were of moderate depressive symptoms and 27.5 % were of severe depressive symptom. After the intervention, half of the subjects (50%) reported mild depressive symptoms and 22.5% were found to have moderate depressive symptoms. However, there was no change in the level of depression (27.5%) among the respondents in the severe category after intervention. A significant reduction ($t=9.23$, $p<0.001$) in the mean depression score (table 1) before intervention (15.12) and after intervention (9.82) was reported in this study.

Discussion

Support from the near and dear ones in the family are natural buffers against all forms of stress. It is this support that brings meaning and happiness to human life. Support system is crucial throughout the life, particularly in the last phase of the life, i.e., in the old age. It is noted that in the fast moving world today, children seldom finds time to care for their older parents or in other words they least bother about their older parents.

It is not uncommon in the western world to see the elderly parents spending their last days in old age homes. Indian conditions are not different in the present globalisation era and old age homes are mushrooming in every part of our country. According to Help Age India, Kerala has the largest number of old age homes in the country.[33] Many elderly persons spent their last days at old age homes, at times due to valid reasons and sometimes due to the force of the near ones. Elder abuse as a social concern remains hidden within the domain of family problem.[34] Irrespective of voluntary or forceful admission to old age homes, it is the responsibility of the mental health professionals in such homes or centres to ensure the psychological happiness of the inmates.

Though announced in 1999 lately, Government of In-

dia had out brought a National Policy on Senior Citizens[35] in tune with the recommendation of United Nations (UN) General Assembly in 1991. This policy document advocates pensions, travel concessions, income tax relief, medical benefit, extra interest on savings, security of older persons, and financial support to be provided for Homes, Day Care Centres, Medical Vans, Help Lines, etc.

Few instances of central and state government initiatives for old age persons includes National Old Age Pension Scheme (NOAPS), National Family Benefit Scheme (NFBS), formation of senior citizen associations like Alzheimer's association, organization like Help Age India, geriatric departments in hospitals, setting up of day care centres, 'varista bima yojana' of Life Insurance Corporation (LIC) allowing higher interest rate to senior citizens, tax exemption up to 1.53 lakhs for senior citizens, and much more.

National Policy on Senior Citizens[35] insists that preventive, curative, restorative, and rehabilitative services needs to be expanded and strengthened, and geriatric care facilities are to be provided at secondary and tertiary levels. It implicates additional inputs to doctors and nurses in managing the elderly population. Education and training in geriatric care should include evidence based practices in mental health related to the elderly. Present study becomes relevant in this context. It was found that depressive symptoms decreased following music therapy and the significant difference between depressive symptoms scores of pre and post intervention indicated its effectiveness. Apart from the routine interventions for elderly, psychiatrists, psychiatric nurses, psychiatric social workers, and clinical psychologists can recommend or practice music therapy as an adjunct therapy which doesn't require any additional training and is cost-effective.

In this study, a change in the level of depression among the respondents in the severe category after intervention was not seen. It calls for medical attention and psychosocial interventions to this group at the earliest.

Conclusion

The present study was able to demonstrate the effectiveness of music therapy for old age persons with mild to moderate depression. Mental health professionals as part of such institution like old age homes can ensure the imple-

mentation of music therapy for its evident benefit. This can enhance the level of happiness and satisfaction of the inmates within the setting.

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