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Effect of Music therapy on negative affectivity and social inhibition in elderly women

Srilatha Bashetti[1], Sai Sailesh Kumar G[2,*]

[1]*Dept. of Biochemistry, R.D Gardi Medical College, Ujjain, Madhya Pradesh, India*
[2]*Dept. of Physiology, R.D Gardi Medical College, Ujjain, Madhya Pradesh, India*

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ABSTRACT

Introduction: Music is a divine mode for management of several conditions. Extensive literature is available to support the importance of music in health care management.
Objective: The present study was undertaken to observe the effectiveness of raga Bhairavi on negative affectivity and social inhibition in elderly women.
Materials and Methods: Thirty elderly women between 50-65 years were included in the study after obtaiing the informed consent. Willing participants were recruited in the study and those with any severe complications were excluded from the study. The study used type D (DS-14) questionnaire to assess the negative emotions like negative affectivity and social inhibition. Raga therapy was administered for 15 minutes duration wherein first five minutes they listened to OM and then 10 minutes of listening to Raga Bhairavi. The intervention was given once in a day for five days in a week for six weeks.
Results: There was a significant decrease in both negative affectivity and social inhibition followed by the raga therapy.
Conclusion: The study results suggest that the raga therapy is effective in the management of negative emotions in elderly women with type D personality. The study recommends implementation of Raga therapy in routine life style for management of negative emotions.

1. Introduction

Music is a divine mode for management of several conditions. Extensive literature is available to support the importance of music in health care management.[1] In ancient context this mode of treatment is called as raga chikitsa. Indian classical music consists of several ragas. The literary meaning of raga (sankrit word) is 'Mood' or 'colour'. It was reported that certain ragas are effective in relieving stress and balance emotions. Hence, there is a tradition of music therapy, used as an adjuvant mode of treatment for various physical and psychological illnesses. The ancient manuscript named Raga Chikitsa had enlisted various ragas and their therapeutic effects. Few among those are, to treat hysterics (mental tension) Khamaj, Pooriya and Darbari kanada ragas are used. For excess mental instability, over excitement and anger malhar raga had proven to be effective. To cope up with emotions, gain peace and stability Jaijaivanti raga is found effective. Individuals with negative emotions like negative affectivity and social inhibition are considered as type D personality. In current life style all individuals are experiencing high levels of stress. Listening to ragas is a simple and cost effective method to regulate negative e motions. The present study was undertaken to observe the effectiveness of raga Bhairavi on negative affectivity and social inhibition in elderly women (type D personality).

2. Materials and M ethods

2.1. Study design

Cross sectional study

* *Corresponding author*.
E-mail address: dr.saisailesh@gmail.com (S. S. Kumar G).

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2.2. Study setting

The present study was conducted at Little Flower Hospital & Research Centre, Angamaly, Kerala.

2.3. Study population

Thirty elderly women within the age group of 50-65 years were part of the study after obtaining the informed consent. Willing participants were recruited in the study and those with any severe complications were excluded from the study.

2.4. Study tools

2.5. Questionnaire

The study used type D (DS-14) questionnaire to assess the negative emotions like negative affectivity and social inhibition.[2]

2.6. Intervention

Raga therapy was administered for 15 minutes duration where first five minutes is listening to OM and then 10 minutes of listening to Raga Bhairavi. The intervention was given once a day for five days in a week for six weeks.

2.7. Ethical considerations

The present study was approved by ethical committee of the institution and confidentiality of the data was maintained. (No EC/17/112-14)

2.8. Statistical analysis

Data was analyzed using SPSS 20.0. Student t test was applied to observe the significance of difference between the pre and post intervention values.

3. Results

Data was presented in table no 1. The mean value of negative affectivity was 8 before the intervention and it was reduced to 6 after the intervention. The mean value of social inhibition was 7 before the intervention and it was reduced to 5 after the intervention. There was a significant decrease in both negative affectivity and social inhibition followed by the raga therapy.

Table 1: Negative affectivity and social inhibition before and after intervention in elderly women

Parameter	Pre-intervention	Post-intervention	P value
Negative affectivity	8±0.22	6±1.3	0.0001***
Social inhibition	7±1.44	5±0.67	0.0001***

(*P<0.05 is significant, **P<0.01 is significant, ***P<0.0001 is significant)

4. Discussion

Music therapy is one of the traditional therapies used in treating the mental and physical of the patients suffering from various health aliments. It is learnt to reduce stress, anxiety and depression and also will make the patient to respond positivity to the treat given for the disease the patient suffering with. Music therapy is learnt to reduce certain dementia related disabilities like Alzheimer's.[3] Music used by the music therapists to enhance the interpersonal or social, affective, behavioral and cognitive functions.[4] A randomized controlled trial using music exercises was conducted in Belgium to observe the cognitive functions and mood in the patients with dementia. The results showed a positive and statistical significance in the improvement of cognitive functioning in the experimental group.[5] Ancient Indian therapy was performed by applying classical music which includes various raagas and each raaga is known to have specific type of effect on various systems. The present study was undertaken to observe the effectiveness of raga Bhairavi on negative affectivity and social inhibition in elderly women (type D personality). There was a significant decrease in both negative affectivity and social inhibition followed by the raga therapy. Ragas were reported to heal both body and mind and also activate the chakras .[6–9] Several diseases were healed using the music therapy as per the available literature. Interestingly, Raga therapy was used as a supplementary therapy in the management of diseases like cancer, Alzheimer's also.[10–12] Raga therapy was reported to balance emotions acting through brain structures.[13,14] Raga therapy was reported to activate the thalamus, cerebellum and insula through which it stimulates the reward centers of the brain. Ragas activate the opiod system of the brain and causes analgesia effect.[14] Further, the raga therapy inhibits the stress axis and relieves the stress and other negative emotions like depression, anxiety.[15,16] It was reported that raga therapy increases secretion of dopamine and also increases secretion of hormones like growth hormone and limits the production of interleukins.[16] Ragas also improve the cognitive functions by activating the brain areas like frontal gyrus.[17] In a research performed to learn the effectiveness of live music when compared to recorded music, it was observed that participant on live music showed less tension and anxiety when compared to those attending tape-recorder music. Suggesting that live music is preferably better than recorded.[18]

In study music therapy was applied in the older adults to observe their depression level. It was reported that the there was a positive effect of music, wherein the participants showed reduced depression level along with controlled blood pressure.[19] Music therapy when given to

oncology patients, the patients undergoing chemotherapy had observed that there was a significant improvement in their mood states and showed a positive response to the treatment leading to improved quality of life.[20] This states that music therapy not only reduces stress but also helps in improvement in quality of life, mood states and also improves memory and cognitive skills of the individuals on regular practice. Hence music therapy can be considered as one of the effective non-pharmacological, non-invasive treatment used to relieve stress, reduce anxiety and depression. It is also an adjunctive therapy helping the patients with various diseases to cope-up with and positively respond to the treatment given. It improves quality of life, mood states and cognitive skills when practiced regularly as a part of daily activities.

5. Conclusion

The study results suggest that the raga therapy is effective in the management of negative emotions in elderly women with type D personality. The study recommends regular implementation of Raga therapy living with the present life style for management of negative emotions.

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6. Source of funding

None.

7. Conflict of interest

None.

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Author biography

Srilatha Bashetti Assistant Professor

Sai Sailesh Kumar G Associate Professor

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