Effectiveness of Music Therapy in Reduction of Anxiety among Patients undergoing Dialysis

USN Volume 5, Number 1 © Red Flower Publication Pvt. Ltd

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Abstract

A study was undertaken to evaluate the effectiveness of Music Therapy in reduction of Anxiety among Patients undergoing Dialysis in selected Hospitals in Hyderabad, Telangana. Patients were selected by random sampling technique. The conceptual framework of the study was based on modified Imogene King's Goal Attainment Model. Data were collected by using modified Zung Anxiety Rating Scale from 50 patients undergoing Dialysis. The study revealed that majority of the patients (88%) reported moderate to severe anxiety in pre-test, whereas (56%) reported mild to minimum anxiety level after the Music Therapy. The statistical "t" test value was found to be significant at 0.001 level and thus it is inferred that Music Therapy is highly effective in the reduction of Anxiety level among Patients undergoing Dialysis.

Keywords: Effectiveness; Music Therapy; Dialysis; Patients; Anxiety.

Anxiety is associated with an undefined threat to one's physical as well as psychological self, resulting in numerous physical conditions and psychiatric disorders. It affects the endocrine, autoimmune and metabolic systems and causes toxic disorders.

The Patients who are undergoing dialysis may develop anxiety. Anxiety, an emotion characterized by feelings of apprehension and helplessness, most patients would prefer to be relieved of.

Music is universal and connects across language barriers. Most people can respond to music in some way regardless of illness or disability. Music is known to reduce stress thereby producing related benefits such as lower blood pressure, improved respiration, reduced heart rate, better cardiac performance and reduced tension in muscles.

Statement of the Problem

"Effectiveness of Music Therapy in reduction of Anxiety among Patients undergoing Dialysis at selected Hospitals in Hyderabad, Telangana."

Objectives of the Study

i. To assess the level of Anxiety among Patients

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- undergoing Dialysis before and after administering Music Therapy.
- ii. To evaluate the effectiveness of Music Therapy in reduction of Anxiety among Patients undergoing Dialysis in terms of gain in post-test scores.
- iii. To find out the association between the pre-test scores of Patients undergoing Dialysis with selected Demographic Variables.

Hypotheses

- H₁: There is a significant reduction in Anxiety level among Patients undergoing Dialysis after receiving Music Therapy at 0.05 level of significance.
- H₂: There is a significant association between the pre-test scores of Anxiety level among Patients undergoing Dialysis with selected Demographic Variables at 0.05 level of significance.

Conceptual Framework

The Conceptual Framework adopted for this study was based on modified Imogene King's Goal Attainment Model (1981).

Research Methodology

This study used a quasi-experimental study design.

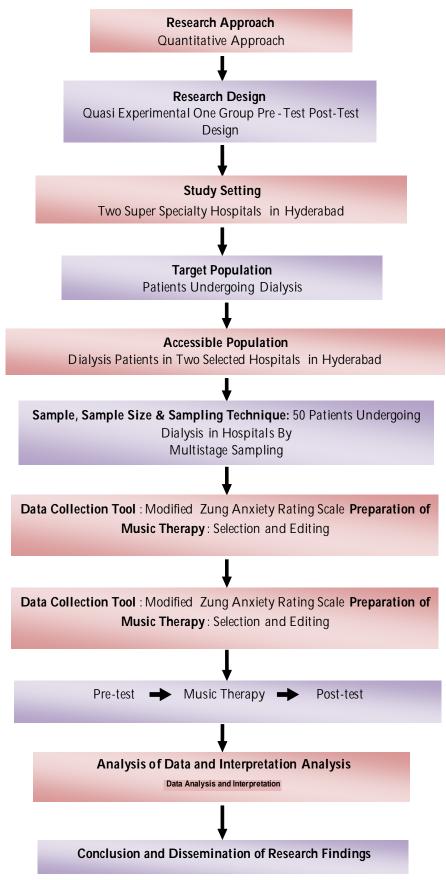


Fig. 1: Schematic representation of study

Group Pre-test Intervention Post-test RE O_1 X O_2

RE: Randomly selected experimental group

O₁: Pre-test before administration of Music therapy.

- **X:** Administration of Music therapy to the patients undergoing Dialysis.
- **O**₂: Post-test after administration of Music therapy.

Research Variables

- The independent variable is Music therapy.
- The dependent variable is level of anxiety among patients undergoing Dialysis.

Sample and Sampling Technique

This study used a multistage sampling. Two Super Specialty Hospitals in Hyderabad were selected randomly. The total study sample was 50 patients undergoing Dialysis, who were selected by simple random sample.

Data Collection Tool

Modified Zung Anxiety Rating Scale was used to assess the Anxiety level of Patients undergoing Dialysis.

Pilot Study

The pilot study was conducted in February 2015. It revealed the feasibility and practicality of the study.

Main Study

The main study was conducted in March 2015. The data collected was analyzed using descriptive and inferential statistics.

Results

Findings related to Demographic Variables

> The maximum number (36%) of patients was

- between the Age group of 31-40 years. Majority of patients (52%) were females.
- Majority of patients (46%) were graduates and half of them (50%) had monthly income ranging from Rs.5, 001-10,000.
- All the patients (100%) had previous experience of Dialysis and some patients (40%) had Dialysis treatment three times in a week.
- Majority of patients (86%) had not used any relaxation techniques before this study.

Findings Related to the Level of Anxiety in Pre- and Post-Test Scores

Majority (88%) of patients had moderate to severe level of Anxiety in pre-test, while (56%) of patients had mild to minimum level of Anxiety in post-test. This revealed that Music Therapy was effective in reducing the Anxiety level of patients undergoing Dialysis.

Findings Related to Effectiveness of Music Therapy on Anxiety among Patients undergoing Dialysis.

The post-test mean Anxiety score was 64.00, which is significantly lower than the pre-test mean score of 71.84 with a mean anxiety reduction of 13.82. Hence, it is inferred that the mean reduction in anxiety was due to music therapy.

The calculated t value, 5.99 was greater than the tabulated value with 49 degrees of freedom at 0.001 level of significance. Hence it is inferred that Music therapy was effective in lessening post-test anxiety scores among Patients undergoing Dialysis.

Findings Related to Association Between Anxiety with Selected Demographic Variables

There was statistically significant association between the level of Anxiety and the demographic variables of patients such as Age, Family Monthly income and Duration of the Disease.

Implications of the Study

Nurses are obliged to provide patients with nonpharmacological therapies to cope with altered life style.

Table 1: The mean, standard deviation, standard error and paired t-value on pre- and post-test level of anxiety scores

Test	Mean	SD	SE	t-value	
				Cal Value	Table Value
Pre-test	71.84	7.27	1.029	*5.99	3.551
Pre-test	64.00	10.39	1.469		

n=50 *Significant at 0.001 level

- Nurses need to assume roles as motivators, educators and researchers and counselors.
- Nurses are the key providers in promoting relaxation techniques to help the overall well-being of the patient in hospital and other care settings.
- The administration should enable the nursing personnel to develop newer skills through continuing education programs.
- Nursing research is the means to develop advanced patient education interventions and there by contribute to the development of Nursing Profession.

Recommendations

- A similar study can be undertaken on large samples, so that results can be generalized.
- A comparative study can be carried out between Music Therapy and other relaxation techniques like Yoga and meditation.
- A descriptive study can be conducted to assess the anxiety level among End Stage Renal Disease patients.

Limitations of the Study

- The sample in this study was small and had no control group, hence generalization was not possible.
- Study results were confined only to selected Hospitals in Hyderabad among patients undergoing Dialysis which possibly would decrease the credibility of the study.

Conclusion

On the basis of study results, it is concluded that Renal Disease and its ensuring treatments negatively affect the patients' quality of life. Music Therapy has the potential to be a cost effective, safe, non-pharmacological tool for lowering anxiety among Patients undergoing Dialysis.

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