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Effectiveness of Pranayama on Level of Anxiety among Clients with Myocardial Infarction.

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ABSTRACT

Myocardial infarction is the greater known of disease in the name of heart attack leading to death. OBJECTIVES: To assess the pre and post-test level of anxiety among clients with Myocardial Infarction in experimental and control group, To evaluate the effectiveness of Pranayama on level of anxiety among clients with Myocardial Infarction in experimental group, To determine the association between the level of anxiety among clients with Myocardial Infarction with their selected demographic variables in experimental and control group. The research design adopted was a quasi experimental pre and post test with control group design. Non-probability purposive sampling technique was adopted to select the desired sample. The sample size was 60. 10 minutes of Pranayama was given to experimental group (30) for once a day in the morning for 5 consecutive days. Routine nursing care was given to control group. Standardized Speilberger State Anxiety Rating Scale was used to assess the level of anxiety. The data collection tool was validated by 6 experts and was found to be valid. RESULTS: Analysis using paired 't' test found significant values 26.96 p < 0.01 level in experimental group. The findings of the study revealed that Pranayama was effective in reducing anxiety among Clients with Myocardial Infarction.

Keywords: Effectiveness, Pranayama, Myocardial Infarction.

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INTRODUCTION

"A happy heart makes the face cheerful, but heartache crushes the spirit."

Heart is the most important organ which helps to lead a healthy life. Coronary arteries are blood vessels that supply the heart muscle with blood and oxygen. Blockage of coronary artery up to 20 to 40 minutes leads to irreversible death of heart muscle will begin to occur, which is termed Myocardial Infarction. When an episode of Myocardial Infarction occurs, the clients afford to get psychological means of anxiety and reduce quality of life [1]. World heart day was created in 2000 to inform people around the globe that the heart disease especially Myocardial Infarction are in the world leading a major cause of death, claiming 17.3 million lives each year and the members are rising. By 2030, it is expected that 23 million people will die due to Myocardial Infarction annually. Anxiety is the common reason to death in Myocardial Infarction. Thus to reduce the anxiety, Pranayama helps the clients with Myocardial Infarction is more effective and capable in reducing the death rate.

METHODOLOGY

Evaluate research approach and a Quasi experimental (pre and post test with control group) design was used. Sample selected by using non – probability purposive sampling technique. The sample size for the study was 60 (30 in the experimental group and 30 in the control group).self administered standardized Speilberger State Anxiety Inventory was administered to assess pre- test and post test score of anxiety. Data collection procedure was done for a period of 6 weeks in general wards of Moorthy's Hospital at Trichy. Pre-test was conducted by self administered standardized Speilberger State Anxiety Inventory to experimental and control group. Pranayama was demonstrated to experimental group for 5 consecutive days. Post test was conducted the day of 6 to experimental and control group. Data collected was tabulated and analyzed by using both descriptive and inferential statistics.

RESULTS

Table 1: Distribution of Pre-test and Post-test level of anxiety among the experimental group with Myocardial Infarction.

n=30

S.No.	Variables	Mean	SD	MD	't' Value
1.	Pre-test	44.33	6.98	17.5	26.96**
2.	Post-test	26.83	6.64		(2.462)

**- Significant at p<0.01 level

Table.1 reveals that the mean pre test score was 44.33 with standard deviation 6.98 and the mean post test score was 26.83 with the standard deviation 6.64. The mean difference was 17.5. The obtained 't' value, 26.96 (2.462) was significant at $p < 0.01$ level. Hence there was significant difference in the experimental group between the pre-test and post-test.

Table 2: Distribution of Pre-test and Post-test level of anxiety among the control group with Myocardial Infarction.

n=30

S. No.	Variables	Mean	SD	MD	't' Value
1.	Pre-test	40.7	11.36	1.4	2.43
2.	Post-test	39.3	7.27		(2.462)

Not Significant at p<0.01 level

Table.2 revealed that the mean pre test score was 40.7 with standard deviation 11.36 and the mean post test score was 39.3 with the standard deviation 7.27. The mean difference was 1.4. The obtained 't' value, 2.43 (2.462) was no significant at $p < 0.01$ level. Hence, there was no significant difference in the control group between the pre-test and post-test.

Table 3: The effectiveness of   Level of Anxiety among Clients with Myocardial Infarction in Experimental and Control Group.

N=60

S. No.	Variables	Mean	SD	MD	't' Value
1.	Post-test Experimental Group	26.83	6.64	12.47	6.77** (2.462)
2.	Control Group	39.3	7.27		

**significant at p<0.01 level

Table .3 reveals that the mean post-test score was 26.83 with standard deviation 6.64 in experimental group and the mean post-test score was 39.3 with the standard deviation 7.27 in control group. The mean difference was 12.47. The obtained 't' value, 6.77(2.462) was significant at p<0.01 level. It is inferred that Pranayama was effective on level of anxiety among clients with Myocardial Infarction.

DISCUSSION

The present study was found that, among experimental group majority of the subjects 19(63%) had mild level of anxiety, 10(33%) had no anxiety, 1(4%) had moderate level of anxiety. In control group majority of the subjects 17(57%) had mild level of anxiety and 13(43%) had moderate level of anxiety during post-test. Hence, experimental group shows the effectiveness of pranayama when compare to control group.

CONCLUSION

The present study was associated with the effectiveness of pranayama on level of anxiety among clients with myocardial infarction in Moorthy's Hospital at Trichy. The investigator analyzed the data, there was significant (p<0.01) improvement in post- test level of anxiety in experimental group than control group. The mean score was   12.47 with the 't' value 6.77 which shows the effectiveness of pranayama on level of anxiety. Nursing measures of Pranayama are safe, very effective management in reducing the level of anxiety and controlling the cardiac morbidity [1-10].

Recommendation

* A similar study can be conducted with a larger sample size and in different settings.
* A True experimental study can be conducted among clients with Myocardial Infarction and with other chronic illness.
* A longitudinal study can be undertaken to see the long term effect of Pranayama, in reducing anxiety at various time intervals such as at 6 months, 1 year and 2 years.

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