Effects of Music Therapy on Anxiety Levels and Pain Perception

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An experimental study to evaluate the effects of music therapy on anxiety level, pain perception and labour outcome in primipara mothers during first stage of labour in a selected hospital of Kolkata was undertaken during the year 2005-2006.

Objectives
The objectives of the study were:

i) To assess and compare the anxiety level of primipara mothers during first stage of labour before and after the use of music therapy.

ii) To assess and compare the pain perception of primipara mothers during first stage of labour before and after administration of music therapy.

iii) To assess and compare the maternal outcome in primipara mothers with and without music therapy in terms of duration of labour, use of pain relieving drugs, nature of delivery and maternal complications.

iv) To assess and compare the fetal outcome with and without music therapy in terms of Apgar score and Birth injury.

The conceptual framework adopted for the study was based on nursing process model.

The experimental research approach with pre-test and post-test control group design was adopted for the study. The study was conducted in labour room of Chitta Ranjan Seva Sadan, Kolkata. The sample comprised of 60 primipara mothers, 30 in each experimental and control group. Purposive sampling technique was used to select the sample and the samples were assigned to the group randomly. Data collection was done from 26-12-2005 to 15-01-2006.

The music therapy was the independent variable in the present study. Relaxing music in the form of Indian classical, devotional and instrumental, was administered with help of audio tape and headphone. The dependent variables were assessment of anxiety score, pain perception score, maternal outcome in terms of duration of labour, frequency of use of pain relieving drugs, nature of delivery, maternal complications and fetal outcome in terms of Apgar score at birth and birth injury.

The tools used for gathering necessary data were structured interview schedule for demographic data, structured record analysis proforma for labour assessment, Spell-berger’s State Anxiety inventory for anxiety assessment. Numerical pain intensity scale for pain perception and structured record analysis proforma for maternal and fetal outcome. Content validity of the tools was established by eleven experts. Cronbach’s Alpha and inter-observer reliability methods were used to establish the reliability of the tools.

The collected data were analysed by using both descriptive and inferential statistics in terms of frequencies, percentage, mean, median, standard deviation ‘t’ value and chi value.

Findings
The important findings of the study were significant reduction in the post-test anxiety score in the experimental group mothers, whereas there was no significant reduction in the post-test anxiety score in the control group mothers during labour. There was significant difference in the post-test anxiety score in the experimental and the control group mothers. The mothers who were exposed to music therapy experienced significantly less pain perception during labour than the control group mothers. The music therapy during labour has been significantly effective in reducing the duration of labour, use of pain relieving drugs and better Apgar scores of the new born in the experimental group mothers than the control group mothers.

Therefore, the finding of the study revealed that therapy can make a difference to mothers, in allaying the anxiety, reducing the pain and discomfort of labour and can help them to feel relaxed during labour having a positive impact on labour outcome.

Based on the study findings, the recommendations for future researches were also made.