



KEY POINT SUMMARY

OBJECTIVES

The purpose of the study was to investigate the effects of music therapy on women's physiological and psychological measures of stress, level of anxiety, and satisfaction during cesarean delivery procedures in Taiwan.

DESIGN IMPLICATIONS

There are no clear design implications to administering music to women undergoing cesarean delivery.

Effects of Music Therapy on Women's Physiologic Measures, Anxiety, and Satisfaction During Cesarean Delivery

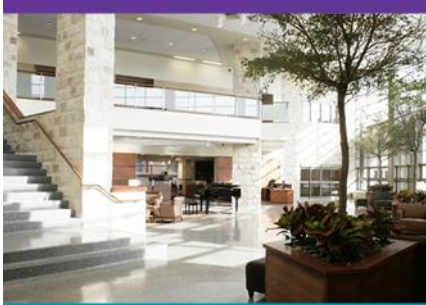
Chang, S-C., Chen, C-H.
2005 / Research in Nursing and Health
Volume 28, Issue 6, Pages 453-461

Key Concepts/Context

Due to many factors Taiwan has a high rate of cesarean birth deliveries. Childbirth causes high stress in women. In case of cesarean birth such stress increases because it is a major surgery. For many women cesarean birth has negative emotional consequences. Music therapy, the systematic application of music to aid in the treatment of physiological and psychological aspects of an illness or disability, has been shown in multiple studies to help reduce anxiety and stress, distract attention and increase threshold of pain during painful procedures. Music therapy has the potential to help women recover from cesarean deliveries.

Methods

The participants in this study were 64 women scheduled to receive a cesarean section delivery between June and October 2002 at a medical center in southern Taiwan. Multiple criteria were used for selecting women for the study. Women were randomly allocated to experimental and control groups. The experimental group received routine care and music therapy, whereas the control group received routine care only. Anxiety was measured with the visual analogue scale for anxiety (VASA). Physiological indexes included pulse hemoglobin oxygen saturation (SpO₂), temperature of the finger, respiration rate, pulse rates, systolic blood pressure, and diastolic blood pressure. Birth satisfaction was assessed with the satisfaction of cesarean delivery scale (SCDS) designed for the research study. Women in the experimental group were asked to evaluate the level of satisfaction with the music therapy on five-point scale, and to answer an open-ended question about the advantages of music. Participants had a choice of Western classical, new age, or Chinese religious music to which they listened to on earphones from the start of anesthesia till the end of surgery. A person administering the music therapy was



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present during the experimental condition. To minimize the impact of a supportive human presence on outcomes, the music therapist was also present in deliveries where music therapy was not provided. Data was collected at three points in the operating room - prior to anesthesia, upon end of maternal contact with the neonate during operation and after completing the skin suture. Experimental and control groups were compared using Chi-square tests, t-tests and ANOVA.

Findings

- Compared to the control group the music-listening group had significantly lower anxiety and a higher level of satisfaction regarding the cesarean experience.
- Participants who received music therapy reported that it effectively reduced anxiety-tension, distracted attention, and promoted mental support and relaxation.
- The two groups were not significantly different on physiological measures
- The two groups were not significant different on demographic and health-related measures
- The women who listened to music during their delivery rated the following items higher than those in the control group - health status, maintenance of physical comfort, seeking safe passage for herself, ego orientation, and birth atmosphere.
- Participants' satisfaction with the cesarean experience, in terms of perceived health status of the baby and maintenance of physical function, was not different between the two groups.

Limitations

The author identified the following limitations to the study

- Music therapy requires a supportive personal presence; it is possible that the favorable effects were, in part, due to continuous emotional support in both music receiving therapy and the control group.
- The possibility of novelty effect of music encounter could not be ruled out.
- Expectation of the experimental group of listening to music may have influenced their perceptions of the birth experience.