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Efficacy of Music Therapy as an Intervention in Decreasing Anxiety and Managing Discomfort during Labor and throughout Pregnancy

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Efficacy of Music Therapy as an Intervention in Decreasing Anxiety and Managing Discomfort during Labor and throughout Pregnancy

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Background

Labor pain or discomfort varies amongst nulliparous and multiparous woman. Major contributors to labor pain include physiological factors, such as uterine contractions and cervical dilation, however psychological factors such as stress, anxiety and fear also play a huge role.

According to the National Center for Health Statistics **more than 60% of women in labor use an epidural anesthesia, however the other 40% optout of its use due to the risks and desire to go through the process naturally** (American Society of Anesthesiologists, 2014).

At times however, the patient goes through uncontrolled labor pain because an epidural is not advised to be given by the obstetrician. This usually occurs if the woman is in the late stages of labor or the woman's pain tolerance is higher than expected. To support this, one study showed that **even after the administration of pain relief, 50% of multiparous women and 19% of nulliparous women still reported high pain scores rated as 8 or 10 on a 10-point pain scale** (National Collaborating Centre for Women's and Children's Health, 2014).

Based on these statistics it deems necessary to incorporate other means such as the use of music therapy in relieving pain and anxiety during childbirth leading to **improved pain management and patient satisfaction.**

Purpose

To evaluate the effectiveness of music therapy as an intervention in decreasing psychosomatic symptoms of pain and anxiety felt throughout pregnancy and most importantly during labor. This understanding is pertinent in providing the knowledge needed to establish an effective nonpharmacological nursing intervention for labor pain management.

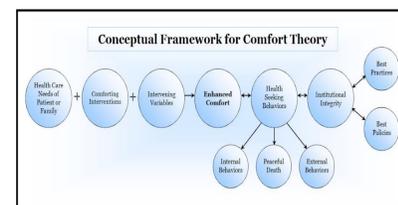
Research Questions

1. To what extent does providing nonpharmacological music therapy have on decreasing labor pain and anxiety during all stages of labor in both nulligravida and multigravida patients?
2. What effect would incorporating music therapy throughout pregnancy have on the patient's overall wellbeing and on the outcome of labor?

Conceptual Model & Theoretical Framework

Katherine Kolcaba's Comfort Theory can be closely tied to the topic of utilizing music therapy during labor and throughout pregnancy as a means of decreasing discomfort and anxiety of the patient. According to Kolcaba, comfort is **the product of holistic nursing art which includes looking at the patient as a whole and paying attention to the mind, body and the spirit of the patient** (Nursing Theory, 2016).

Kolcaba described comfort as existing in three forms: **relief, ease, and transcendence.** Relief occurs when the patient feels comfortable, in this case it occurs when each gravida feels relief after the use of music therapy during labor. The second form of comfort is ease, which is the state of contentment and in this case would occur when the pain, anxiety and discomfort level would be decreased to a level one finds tolerable or comfortable. The third form of comfort is transcendence in which the patient can rise above their challenges. In this case, transcendence occurs when the patient finds mental comfort even though physical pain is still there. This mental comfort is obtained by focusing on the objective at hand or the delivery of the child.



Methodology

An integrative literature review was conducted using databases of CINAHL, PubMed and PsycInfo to help identify, analyze and synthesize results from independent studies, obtained from both quantitative and qualitative research articles.

The following key words were used in the search: music therapy, labor, pregnancy, delivery, preterm, term, childbirth, anxiety, pain, fear, discomfort, quantitative, evidence-based and trial.

The articles included in the literature search were peer-reviewed and published over the last 10 years or between 2009-2019.

Results

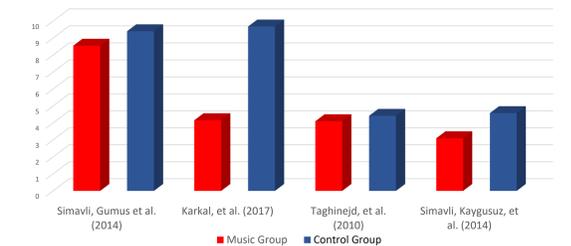
The effectiveness of utilizing music therapy during labor and throughout pregnancy was analyzed in the literature. Half of the articles focused on either the active or latent stages of labor, however the other half focused on the use of music therapy throughout pregnancy more specifically during procedures and prenatal care. The measurement tools used primary were the Visual Analog Scale (VAS) and the State-Trait Anxiety Inventory (STAI).

One of the studies focused on utilizing music therapy during all stages of labor. Looking at statistics, the VAS results for pain were, for music group a mean of 8.55 +/- 0.63 which in fact showed a significant decrease in pain versus the control group mean of 9.40 +/- 0.71 (Simavli, Gumus, et al., 2014). The study also noted significantly lower pain levels, lower maternal hemodynamics and fetal heart rate as well as less requirements for postpartum analgesia in the music group.

Another study investigated the effectiveness of music therapy on anxious primigravida women during the first stage of labor. The results show that the mean post test scores for anxiety were 28.26 +/- 2.24, which in fact was lower than mean pretest score of 61.58 +/- 1.46 (Karkal, Kharde & Dhumale, 2017). This study concluded that music therapy was effective in lowering anxiety during the first stage of labor.

Music therapy was also utilized as a nursing intervention in decreasing pregnant women's anxiety during a transvaginal ultrasound as well as during a nonstress test at a prenatal visit. Both studies showed statistically significant data showing that music therapy is effective in decreasing both pain and anxiety in a gravida.

Comparison of Pain Mean Scores using VAS after Music Therapy Intervention



Conclusion

This integrative literature review has provided knowledge about how music therapy can be incorporated throughout pregnancy and during labor as means of alleviating both pain and anxiety.

Statistically significant data showed that the use of music throughout pregnancy and during childbirth lowered levels of pain and anxiety therefore resulting in better maternal hemodynamics and fetal heart rate as well as less requirements for postpartum analgesia.

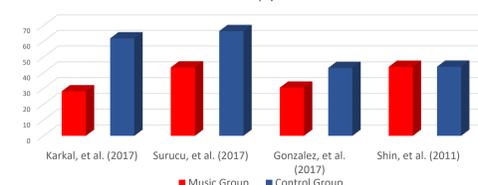
Recommendations

Further research is necessary in determining the effectiveness of music therapy during all stages of pregnancy and during labor with adjunction of a pharmacological intervention such as the use of an epidural.

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Comparison of Anxiety Mean Scores using STAI after Music Therapy Intervention



Comparison of Anxiety Mean Scores using VAS after Music Intervention

