Effects of Guided Imagery on Pregnancy-Specific Stress in Pregnant Adolescents

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Introduction

• Pregnancy-specific stress (PSS) is a distinct stress construct characterized by worries related to being pregnant, giving birth, the health of the child, and being a mother.1
• PSS may have a stronger association with negative birth outcomes (i.e. preterm birth) in comparison to general stress.1
• Pregnant adolescents are a subgroup of pregnant women who are likely to experience higher levels of stress.2
• Higher levels of PSS have been associated with demographic factors such as younger age, single marital status, less education, and unwanted pregnancy.3
• Relaxation techniques, such as guided imagery, have been effective in reducing stress and anxiety in pregnant women.4

Purpose: To examine whether a guided imagery intervention would reduce the pregnancy-specific stress experienced by pregnant adolescents.

Hypothesis: The pregnancy-specific stress of pregnant adolescents will decrease following a guided imagery intervention.

Research Design & Methods

Design
Quasi-experimental pre-test-post-test within subjects design.

Participants
Eighteen pregnant adolescents from the SAPAR classroom.
• 14 to 18 years old (M = 16.4), estimated gestational age (EGA) 13 to 34 weeks (M = 22.47, SD = 6.61).
• 15 of the 18 participants completed all 4 sessions of GI within 1 to 4 weeks and were included in analysis.

Measure
• Prenatal Distress Questionnaire (PDQ): a 12-item survey that assesses pregnancy-specific stressors on a Likert scale (0 = not at all concerned to 4 = extremely concerned).
• Total scores can range from 0 to 48.

Procedures
• Participants listened to a 13-minute, pregnancy-specific GI audio file.
• Lights were dimmed and distractions were limited as much as possible.
• Participants completed 4 GI sessions to receive the full intervention.
• Participants completed the PDQ prior to the first GI session and after the fourth and final GI session.

Data Analysis
• A dependent t-test compared mean PDQ scores between pre- and post-intervention.
• Pearson product moment correlations were used to examine the relationship between change in PDQ scores and demographic variables of age and EGA, as well as pre-test and post-test scores on the PDQ.

Results

Change in Pregnancy-Specific Stress
• 60% of participants (9/15) reported a lower PDQ score after 4 sessions of GI, although overall change in PDQ scores for the sample was not significant, (t(14) = 1.66, p = .119).
• Participants’ change scores ranged from -24 to 9 (M = -3.13, SD = 7.30).

Stability of pre- and post-test PDQ scores
• Although the majority of participants experienced a slight decrease in their PDQ score, pre- and post-test scores were significantly correlated, (r(13) = .79, p = .001).
• Scores on the PDQ were highly variable between participants.
• Pre-test M = 19.53, SD = 10.23.
• Post-test M = 16.40, SD = 10.74.

Conclusions

• On average, PSS did not change after 4 sessions of Guided Imagery, contrary to the hypothesized outcome.
• Duration and intensity of effective GI interventions are highly varied in the literature, and the optimal intervention protocol remains unclear, particularly for this population.
• Results suggest:
• The use of the PDQ with this population appears to accurately capture their PSS as evidenced by the broad range of scores.
• A more intense GI intervention may be necessary to see the effects on PSS.
• A larger sample size may be necessary to demonstrate trends of PSS and the response to GI in this population.
• Future studies could explore a more individualized program to address PSS and the specific needs of pregnant adolescents, such as teen-focused Mindfulness-Based Stress Reduction.

Imlications for Practice

• Guided Imagery is safe to use with pregnant adolescents and could be a component of an intervention plan to reduce stress and promote health on an individual basis.
• Occupational Therapists have the expertise to support this population in implementing lifestyle changes that could improve their health as well as the health outcomes of their children.

References


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