Effectiveness of Benson's Relaxation Therapy on Stress and Coping among High-risk Antenatal Women Admitted in Antenatal Ward

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Abstract

Pregnancy is a period of immense joy and excitement. High-risk pregnancy is one that is complicated by factor or factors that adversely affect the pregnancy outcome, maternal or prenatal or both. Hospitalization leads to stress and that may lead to decreased coping ability of the mother. Relaxation techniques are a powerful tool for coping with stress and promoting long-term health in mothers with high-risk pregnancy by slowing down the body and quietening the mind. To evaluate the effectiveness of Benson's relaxation therapy on stress and coping mechanism among high-risk antenatal women. Preexperimental design was used for the study. The population for the study was 30 high-risk antenatal women selected by using the nonprobability purposive sampling technique and setting was the antenatal ward. Pretest was done by using the structured questionnaire and the perceived stress scale and coping scale. Posttest was conducted after administration of Benson's relaxation therapy. The result shown that the level of stress and coping among high risk antenatal women in pretest mean value of stress was 3.27 and the posttest mean value of stress was 7.27. The obtained Wilcoxon value of stress was 4.829 and the pretest mean value of coping was 25.1 and posttest mean value of coping was 16.63 and the obtained paired t-test value of coping was 19.298. It was statistically significant at $p < 0.001$. Therefore, the Benson's relaxation therapy was more effective. Thus, the study concludes that Benson's relaxation therapy was found to be effective to reduce the stress and coping among high-risk antenatal women.

Keywords: Antenatal ward, Assess, Benson's relaxation therapy, Coping, Effectiveness, High-risk antenatal women, Stress.

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Introduction

Being a mother is the happiest moment in a women's life, but every pregnancy may not always progress smoothly. Sometimes, it can be complicated by medical conditions or any other health problems and termed "high risk."[1] The high-risk mother should be identified early to ensure prompt vigilance, proper attention, extra care, and follow-up to prevent prenatal and neonatal mortality.[2,3] Worldwide, about 1,000 women die each day due to complication during pregnancy and childbirth because of four major causes such as postpartum hemorrhage, infections, hypertensive disorders, and unsafe abortions.[4]

Relaxation techniques are powerful tools for coping with stress and promoting long-term health in mothers with high-risk pregnancy by slowing down the body and quietening the mind.[5] Benson's relaxation therapy is a meditative technique that was pioneered by the physician Hebert Benson during 1970s and it is based on his observation that the relaxation therapy produces a single "relaxation response" characterized by diminished sympathetic arousal.[6–8] It trains the individuals daily to enhance the relaxation by improving the mood, bringing down blood pressure, and stressful events in life (Marty, 2008).[9,10]

Objectives of the Study

- To assess the level of stress and coping among high-risk antenatal women.
- To evaluate the effectiveness of Benson's relaxation therapy on stress and coping among high-risk antenatal women.
- To find out the association between the level of stress and the coping with their selected demographic variables.

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Hypothesis

H_1: There is a difference in the level of stress and coping among high-risk antenatal women after Benson's relaxation therapy.

H_2: There is an association between the level of stress and coping among high-risk antenatal women with their selected demographic variables.

Materials and Methods

Research Approach

The quantitative approach was used by the investigator to evaluate the objectives of the study research adopted for this study.

This study aims at assessing the effectiveness of Benson's relaxation therapy on stress and coping among high-risk antenatal women.

Research Design

Preexperimental design (one group pretest and posttest) was used to conduct this study. The study was conducted in the antenatal ward and the population for the study includes high-risk antenatal women at MGMCRI, Puducherry. The sample size was 30 high-risk antenatal women.

Nonprobability Purposive Sampling Technique

The tool used for this study was demographic variables and the perceived stress scale consists of 10 statement related to the assessment of stress among high-risk pregnant mothers with options ranging from never to very often. The score of the perceived stress score (PSS) is 40.

Results

Distribution of Demographic Variables of High-risk Antenatal Women

With regard to the age of the antenatal, the number of samples was 30: age group of 18–22 years—2 (6.75%), 23–27 years—17 (56.75%), 28–32 years—11 (36.7%). In that, majority of them were Hindu (28, 93.3%). Distribution of education in antenatal women: high school—9 (30%), higher secondary—4 (13.3%), graduate UG and PG—17 (56.7%). Distribution of income: Rs. 5000–10,000 per month—19 (63.3%), Rs. 10,001–15,000 per month—6 (20%), Rs. 15,001–20,000 per month—3 (10%), Rs. 20,000 per month—2 (6.7%). The type of family of antenatal women: nuclear family—11 (36.7%), joint family—19 (63.3%). Distribution of residence: rural—21 (70%) and urban—9 (30%). Distribution of antenatal women undergone any therapy: majority of them (30, 100%) had not undergone any therapy. Distribution of gestational age of antenatal women: 32–42 weeks—21 (70%), 13–28 weeks—8 (26.7%), and 1–12 weeks—1 (3.3%). Distribution of order of pregnancy of antenatal women: primigravidae—19 (63.3%), multigravidae—11 (36.7%). Distribution of regular checkup of antenatal women: majority of them (30, 100%) had undergone regular checkup in hospital.

Effectiveness of Benson's Relaxation Therapy on Stress among High-risk Antenatal Women

Table 1 and Figure 1 indicate that mean of 25.1 with SD 1.99 in the pretest were decreased to 16.63 with SD 1.9 in the posttest after Benson's relaxation therapy. Statistically, Benson's relaxation therapy was found highly significant in reducing the stress level

of high-risk antenatal women. So, it can be inferred that Benson's relaxation therapy was highly effective in reducing the stress level of high-risk antenatal women.

Table 2 and Figure 2 indicate that mean of 3.27 with median 3 was increased to 7.27 with median 7 in the posttest after Benson's relaxation therapy. Statistically, Benson's relaxation therapy was found highly significant in increasing the coping level of high-risk antenatal women.

Association between the Stress and Coping of High-risk Antenatal Women and the Selected Demographic Variables

There is an association between the level of stress and coping of the selected demographic variables such as age, week of gestation, educational status, occupation, type of family, area of residence, high-risk condition of high-risk antenatal women at $p < 0.001$ level.

Major Findings

The result shows that the level of stress among high-risk antenatal women in pretest mean value was 3.27 and posttest mean value was 7.27 and the obtained Wilcoxon value was 4.829. The level of coping among high-risk antenatal women in pretest mean value was 25.1 and posttest mean value was 16.63 and the obtained paired t-test value was 19.298. It was statistically significant at $p < 0.001$. Therefore, the Benson's relaxation therapy was more effective.
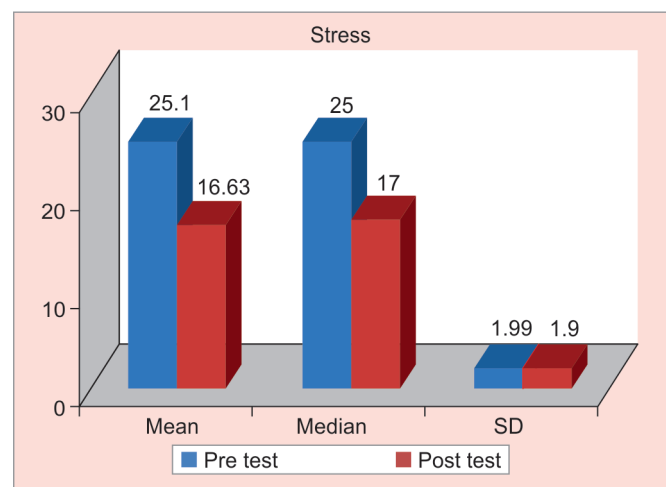

Fig. 1: Level of stress among high-risk antenatal women in pretest and posttest values

Table 1: Comparison of mean, median, standard deviation, paired t-test, and p value of pretest and posttest of Benson's relaxation therapy among high-risk antenatal women

Stress	Mean	Median	Standard deviation	Paired t test	p value
Pretest	25.1	25	1.99	19.298	<0.001
Posttest	16.63	17	1.9		

Table 2: Comparison of mean, median, standard deviation, Wilcoxon test, and p value of pretest and posttest of Benson's relaxation therapy among high-risk antenatal women

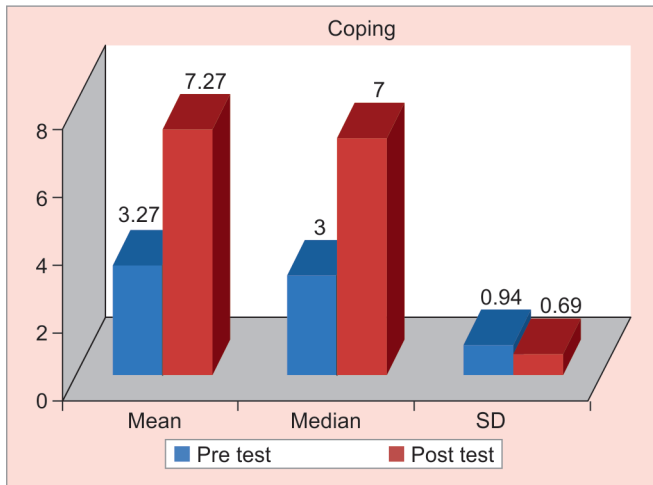| Coping	Mean	Median	Standard deviation	Wilcoxon test	p value
Pretest	3.27	3	0.94	4.829	<0.001
Posttest	7.27	7	0.69		

Fig. 2: Level of coping among high-risk antenatal women in pretest and posttest values

CONCLUSION

Thus, the study concludes that Benson's relaxation therapy was found to be effective to reduce the stress and improve coping among high-risk antenatal women.

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