

Effectiveness Of Benson's Relaxation Therapy Reduction Of Stress Among Primigravida Mother Attending Out Patient Department In A Selected Hospital At Vadodara

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Abstract:

A Quasi Experimental Research aimed effectiveness of Benson's Relaxation therapy reduction of stress among primigravida mothers at Selected hospital, Vadodara, Gujarat. A quantitative research approach with Pre-test Post-test control design was employed. A total of 60 Primigravida mothers were selected using a non-probability purposive sampling technique based on inclusion criteria. Data were collected using PSS-10 developed through literature review, expert validation, and pretesting. The educational intervention was delivered via a Benson's relaxation therapy program. The same questionnaire was administered as a pre-test and post-test with a 7-day interval to assess Stress level improvement. Statistical analysis using paired t-test showed a significant decreased in post-test scores, indicating the module's effectiveness. The chi-square test was used to find associations between post-test knowledge and demographic variables. Reliability of the tool was confirmed through test-retest ($r = 0.84$). The study concludes that therapy interventions can effectively decreased Stress among Primigravida mothers. In Present study a Quasi-experimental research design Pre-test Post-test control design. This method enabled the assessment of the effectiveness of Benson's Relaxation therapy by comparing Participants' stress level before and after the intervention within the same group. In experimental group mean pre-test score was 25.27 ± 5.12 , while the post-test mean decreased to 14.07 ± 6.03 , a paired t-test showed a calculated t-value of 8.91 grater than table value $t=2.0$ at $p \leq 0.01$. In control group mean pre-test score was 25.57 ± 4.09 , while the post-test mean same as pre-test score was 24.80 ± 5.03 , a paired t-test showed a calculated t-value of 0.61 less than table value $t=2.0$ at $p \leq 0.0$.

Keywords:

Stress, Benson's Relaxation therapy, Primigravida mothers, Out Patient Department.

INTRODUCTION

Stress is a complex genetically determined pattern of response of the human physiology to a demanding situation. The element of perception indicates that human stress responses reflect differences in personality, as well as differences in physical strength or general health.^[1] Pregnancy is the privilege of experiencing the gods miracle on earth. It is the stage of joyful anticipation which brings many changes in the body, the emotion and the family life. One can welcome these changes, but they can add new stress to the life which can have both beneficial and negative effects.^[2] Stress during pregnancy is common, but too much of uncopied stress can make the pregnancy risk for both the mother and the foetus. It causes sleeping problems, headache, loss of appetite or overeating, high blood pressure, premature fetus or a low-birth-weight baby etc. The causes of stress are different for every woman, but there are some common causes during pregnancy like nausea, vomiting, constipation, being tired or having backache. Changing hormones can also cause mood changes. If pregnant women work, it can also lead to stress^[3]. During third trimester the emotional reaction centre on the ability and appearance of her body. A feeling of being overweight, less attractive, a decrease in sex interest, less tolerance level and wants the pregnancy to get over. The emotions' reaction may increase when there is marital tension, stresses in life circumstances, difficulties in the pregnancy and conflicts around the pregnancy.^[4]

The maternal- placental- fetal interaction that play important functional roles during development. If maternal stress signals are excessive in early pregnancy, cortisol can cross the placenta and inhibit fetal pituitary function. Increased cortisol can also affect fetal growth^[5]. Childbirth is being a joyous event, at the same time, it is a time of pain, fear, and stress. Stress is a part of human life, and we are never completely free from stress. Stress in one area can lead to stress in another. Many things in our life can be stressful, such as period of development, marriage, childbirth, etc.^[6] Benson's relaxation

therapy is a technique, which includes deep relaxation, slowed heartbeat and breathing, reduced oxygen consumption, and increased skin resistance. It is around 20 minutes when practiced.^[7]

METHODOLOGY

This study adopted a Quantitative research approach and employed a Quasi-experimental research design Pre-test Post-test control design. This method enabled the assessment of the effectiveness of Benson's Relaxation therapy by comparing Participants' stress level before and after the intervention within the same group. The research was conducted at selected Hospital, Vadodara, Gujarat, Targeting Primigravida mothers. This cohort was selected for its relevance, as these primigravida mothers are in the foundational phase of their study, where building awareness about stress is essential. A sample of 60 Primigravida mothers was choose through Non-probability Purposive sampling. Participants were selected based on inclusion criteria such as willingness to participate and presence during both testing period. Students who had prior formal therapy for stress or were absent during either phase were excluded. Data collection was performed using Perceived stress scale, formulated through extensive literature review and expert consultation. The tool assessed Scoring of stress. The therapy providing was reviewed by professionals in nursing and public health. The tool demonstrated good reliability, with a test-retest correction coefficient of $r=0.84$. The procedure involved three phases. Initially, informed written consent was obtained from all participants. This was followed by a pre-test using the validated tool to determine baseline stress reduction programme. The intervention phase involved delivering a Benson's relaxation therapy that utilized by demonstration. Sessions were conducted interactively in the Hospital .

One-week post-intervention, the same checklist was administered as a post-test. The chosen interval aimed to provide adequate time for Primigravida mothers to internalize the information without allowing significant recall loss. Descriptive statistics, including mean, Standard Deviation (SD), Frequencies (f), and Percentage (%), were used to describe demographic variables and stress Score. A paired t-test was employed to evaluate the effectiveness of the intervention by comparing pre-test and post-test scoring. Chi-square (χ^2) tests were used to examine Associations between anxiety score and selected demographic variables such as Age, Religions, Duration of Marriage, education status of mother, education status of husband, occupation of mother, occupation of husband, Monthly income, type of family, place of residence, dietary pattern, Pregnancy planned or unplanned.

Ethical approval was granted by the Institutional Ethics Committee of the Parul Institute of Nursing. All participants were assured of confidentiality, anonymity, and voluntary participation, in line with ethical principles of autonomy, beneficence, non-maleficence, and justice.

RESULTS

Figure 1: Percentage distribution of demographic variables of the participants

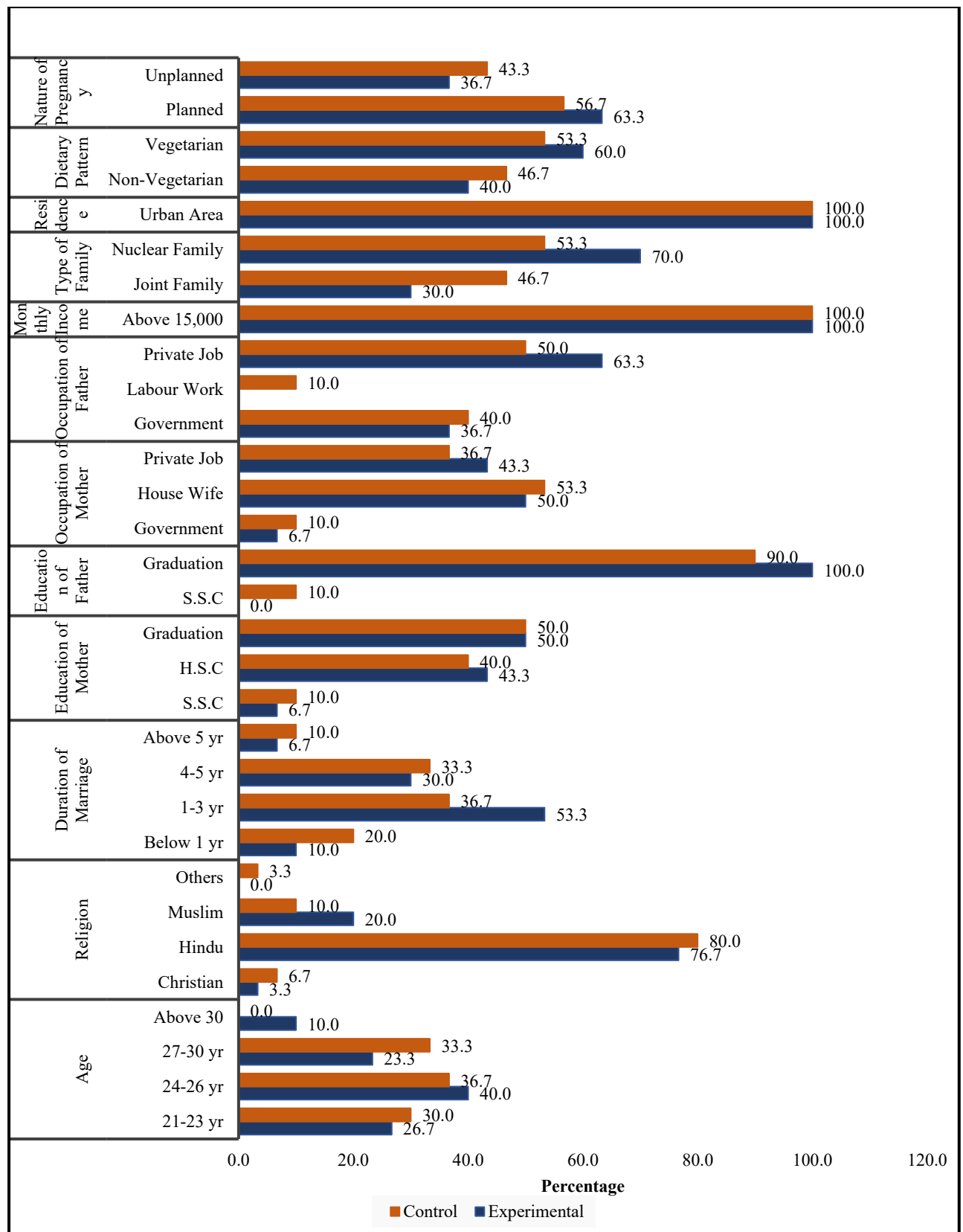
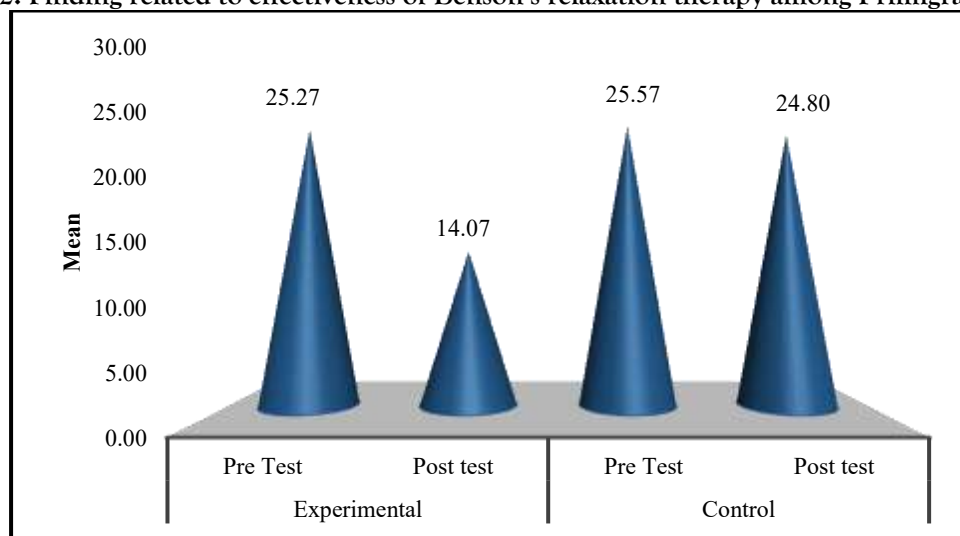


Table 1: Finding related to pre-test stress scoring among Primigravida mothers (n=60)

	Experimental		Control	
	Frequency	Percent	Frequency	Percent
High Stress	12	40.0	11	36.7
Moderate stress	18	60.0	19	63.3

Table 2 : Finding related to post-test stress scoring among Primigravida mothers (n=60)

	Experimental		Control	
	Frequency	Percent	Frequency	Percent
Mild Stress	17	56.7	0	0
Moderate stress	13	43.3	19	63.3
High Stress	0	0.0	11	36.7

Figure 2: Finding related to effectiveness of Benson's relaxation therapy among Primigravida mothers

As per the table no 4, the finding revealed a significant decreased the stress scores following the therapy programme. In experimental group mean pre-test score was 25.27 ± 5.12 , while the post-test mean decreased to 14.07 ± 6.03 , a paired t-test showed a calculated t-value of 8.91 grater than table value $t=2.0$ at $p \leq 0.01$. In control group mean pre-test score was 25.57 ± 4.09 , while the post-test mean same as pre-test score was 24.80 ± 5.03 , a paired t-test showed a calculated t-value of 0.61 less than table value $t=2.0$ at $p \leq 0.0$.

Experimental group Chi-square association between the post-test score of primigravida mothers regarding stress score and the selected Demographic Variables

Chi-square analysis showed significant association between post-test anxiety score and the variable: Religions ($\chi^2 = 6.982$, $t = 5.99$), Dietary pattern ($\chi^2 = 5.792$, $t = 3.84$). Chi-square analysis showed No-significant Association between pre-test score and the Variables: Age ($\chi^2 = 1.614$, $t = 7.82$), Duration of Marriage ($\chi^2 = 7.63$, $t = 7.82$), education of mother ($\chi^2 = 1.639$, $t = 5.99$), Occupation of mother ($\chi^2 = 2.182$, $t = 5.99$), Occupation of Father ($\chi^2 = 0.032$, $t = 3.84$), Type of family ($\chi^2 = 0.524$, $t = 3.84$), Nature of Pregnancy ($\chi^2 = 0.032$, $t = 3.84$).

Control group Chi-square association between the post-test score of primigravida mothers regarding stress score and the selected Demographic Variables

Chi-square analysis showed No-significant Association between pre-test score and the Variables: Age ($\chi^2 = 1.992$, $t = 5.99$), Religions ($\chi^2 = 3.624$, $t = 7.82$), Duration of Marriage ($\chi^2 = 3.902$, $t = 7.82$), education of mother ($\chi^2 = 1.938$, $t = 5.99$), Occupation of mother ($\chi^2 = 0.582$, $t = 5.99$), Occupation of Father ($\chi^2 = 2.44$,

$t = 5.99$), Type of family ($\chi^2 = 2.625$, $t = 3.84$), Dietary pattern ($\chi^2 = 0.741$, $t = 3.84$), Nature of Pregnancy ($\chi^2 = 0.032$, $t = 3.84$).

Demographic factors such as Age, Religions, Dietary Pattern, type of family, duration of marriage, education of husband and wife, occupation of husband and wife significantly influenced baseline knowledge. These finding underscore the role of social-cultural and educational exposure in shaping Primigravida mothers' understanding of public health topic like stress Reduction Program.

DISCUSSION

The present study confirmed that a checklist for primigravida mothers stress score. In experimental group mean pre-test score was 25.27 ± 5.12 , while the post-test mean decreased to 14.07 ± 6.03 , a paired t-test showed a calculated t-value of 8.91 grater than table value $t=2.0$ at $p \leq 0.01$. In control group mean pre-test score was 25.57 ± 4.09 , while the post-test mean same as pre-test score was 24.80 ± 5.03 , a paired t-test showed a calculated t-value of 0.61 less than table value $t=2.0$ at $p \leq 0.0$.

(Harichandana S., 2023) An experimental pretest and posttest study was conducted to evaluate the effectiveness of the Benson relaxation therapy on prenatal anxiety among 30 antenatal mothers who were admitted to antenatal wards of a tertiary-level hospital. The antenatal mothers with gestational age 28 and above, with anxiety score above 21 according to the Prenatal Anxiety Screening Scale (PASS) were included in the study, and mothers with a history of substance dependence, psychotic disorders, or any other major psychiatric disorders, and epilepsy were excluded from the study. Probability sampling was used. Data were collected after ethical clearance and informed consent. Following to the pre-test, which includes a collection of demographic data, the antenatal mothers in the experimental group received the Benson relaxation therapy. And post-test was conducted among both groups on the fifteenth day. Results: The mean age group of the antenatal mothers were in age group of 26-33 years. 46.7% of samples have a secondary level of education. The majority (53.3%) are self-employed. Sixty percent of the mothers are primigravida. Fifty-seven percent are residing in a rural area and belong to joint family. There is a significant difference between the post-test score of the experimental and control group at the $p=0.001$ level. The Benson relaxation therapy is effective in reducing prenatal anxiety among antenatal mothers. Conclusions was Benson relaxation therapy is a simple, effective and mind-body relaxation technique to relieve anxiety among pregnant women.

Conclusion

The study was done to effectiveness of Benson's stress reduction therapy on reducing stress test among Primigravida mothers who attending OPD at selected hospital, Vadodara, Gujarat. In experimental group mean pre-test score was 25.27 ± 5.12 , while the post-test mean decreased to 14.07 ± 6.03 , a paired t-test showed a calculated t-value of 8.91 grater than table value $t=2.0$ at $p \leq 0.01$. In control group mean pre-test score was 25.57 ± 4.09 , while the post-test mean same as pre-test score was 24.80 ± 5.03 , a paired t-test showed a calculated t-value of 0.61 less than table value $t=2.0$ at $p \leq 0.0$.

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Conflict of Interest : The authors declare no conflict of interest related to this research study.

Ethical consideration

Ethical approval was obtained from the Parul Institute Ethics Committee (PIEC), Vadodara, Gujarat. All participants were informed about the study objectives, and informed consent was obtained prior to data collection.

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