

A Study to Assess Effectiveness of Progressive Muscle Relaxation Technique (PMRT) On Stress of Mother for Hospitalization of Their Child in Selected Hospital at Udaipur

Sonal Labana¹, Anand Kumar Trivedi², Vijay Singh Rawat³, Mustafa Usman Bhai Mansuri⁴

¹Master of science in Nursing (Child Health Nursing) Sai Tirupati University, Udaipur

²HOD Child Health Nursing, Venkateshwar College of Nursing, Udaipur.

³Principal, Venkateshwar College of Nursing, Udaipur

⁴Dean, Venkateshwar College of Nursing, Sai Tirupati University, Udaipur

Corresponding Author: : Sonal Labana, ¹Master of science in Nursing (Child Health Nursing), Sai Tirupati University, Udaipur

Email: Sonallabana16@gmail.com

Abstract

Introduction: Maternal stress starts with the major life events bereavement, depression, or anxiety, classic endocrine response through increase in the glucocorticoid secretion that could underlie abnormal ovarian programming. Stress can also elevate sympathetic neurotransmitters such as nor epinephrine and influence ovarian function. Maternal stress due to severe pain, malnutrition and transport has been implicated as a cause of EED.

Materials & Methods: The research approach adopted for the present study was quantitative experimental research approach. In the present study, Quasi experimental, non-randomized control group design was used for the study. In the present study the population consists of mother's whose child is admitted in hospital at Udaipur, Rajasthan. Mother's whose child is admitted in hospital at Udaipur. Researcher selected 80 mothers. Non probability, convenient sampling technique was used.

Results: The data also revealed that researcher does not find significant with which Age in Year's, Marital Status, Type of Delivery, Gender of the Baby, Days Admitted in NICU.

Conclusions: According to the WHO, approximately 10% of pregnant women and 13% of postpartum women worldwide experience mental health issues, mainly stress. In developing countries like India, the prevalence is higher, affecting 15.6% of pregnant women and 19.8% of postpartum women. This can impact daily functioning and potentially hinder children's growth and development.

Keywords: Assess; Effectiveness; Progressive Muscle Relaxation Technique; Stress

SDES- International Journal of Interdisciplinary Research is a journal of Open access. In this journal, we allow all types of articles to be distributed freely and accessible under the terms of the creative common attribution- non-commercial share. This allows the authors, readers and all scholars and general community to understand, use and to develop non-commercially work, as long as appropriate credit is given and the newly developed work are licensed with similar terms.

How to cite this article: Labana S, Trivedi AK, Rawat VS, Mansuri MUB. A Study to Assess Effectiveness of Progressive Muscle Relaxation Technique (PMRT) On Stress of Mother for Hospitalization of Their Child in Selected Hospital at Udaipur. SDIS-IJIR; 2025; 6-2: 1007-1010

Submitted: 20-April-2025; **Accepted:** 01-May-2025; **Published:** 08-May-2025

Introduction:

Stress is fact of everyday life and is known as either as a reaction or as a stimulus. One can experience stress from environment, body, and thoughts. Even positive life changes such as promotion, mortgage, or birth of a child produce stress. Chronic stress can be down the body's natural defenses, leading to variety of physical symptoms, including the following, Dizziness, body ache sand pains, Headaches, Indigestion oracide flux

symptoms, Increase or decrease of appetite.¹

According to WHO, World wide 10% of pregnant women & 13% of women who had given birth had a mental health problem, primarily stress. Many research study has shown that the problem is higher among developing countries i.e. In India 15.6% during pregnancy and 19.8% after child birth. Research also has shown that due to which it gives impact on mother's activity of daily living. As a result, the children's growth and development may be negatively affected as well.²

A neonate is also called a new-born. The neonatal period is the first four weeks of a child's life.³ It is a time when changes are taking very fast. Many critical things can occur in this time period, Feeding patterns are established, Bonding between parents and infant begin, The risk for infections that may become more serious are higher, Many birth or congenital defects are first noted.⁴

Maternal stress starts with the major life events bereavement, depression, or anxiety, classic endocrine response through increase in the glucocorticoid secretion that could underlie abnormal ovarian programming. Stress can also elevate sympathetic neurotransmitters such as nor epinephrine and influence ovarian function. Maternal stress due to severe pain, malnutrition and transport has been implicated as a cause of EED. Maternal stress will also increase the cortisol levels to extent that they exceed the function of the placental enzyme 11 β -hydroxysteroid dehydrogenase that normally converts cortisol to inactive cortisone and thus protects the fetus from the higher levels of maternal glucocorticoids.

Objectives of the study:

- a) To assess stress level of mother regarding hospitalization of their child
- b) To evaluate the effectiveness of progressive muscle relaxation technique on stress of mother for hospitalization of their child.
- c) To find out the association with pre-test stress score and selected demographical variables of mothers.
- d) To develop & distribute a Pamphlet on nursing intervention to reduce stress level.

Hypothesis:

H₁: There is a significant difference in stress level of mothers whose child is admitted in hospital.

H₂: There is a significant relationship between effect of nursing intervention as PMRT & stress score of mothers whose child is admitted in hospital.

H₃: There is a significant association between pre-test stress score with selected demographic variables.

Assumptions:

- Investigator assumes that there is stress among mothers of hospitalized children.
- Investigator assumes that there are various conventional ways to reduce stress.
- Nursing intervention; Reduce; Stress; Mothers

Materials & Methods

Research Approach: The research approach adopted for the present study was quantitative experimental research approach as the study aimed at development of questioner for assessing the stress of mothers whose child is admitted in hospital at Udaipur.

Research Design: In the present study, Quasi experimental, non-randomized control group design was used for the study.

Population: In the present study the population consists of mother's whose child is admitted in hospital at Udaipur, Rajasthan.

Sample: Mother's whose child is admitted in hospital at Udaipur.

Sample size: Researcher selected 80 mothers.

Sampling technique: Non probability, convenient sampling technique was used.

Analysis and Interpretation

Analysis of Stress Score According to Dimensions in Experimental & Control Group.

N=80

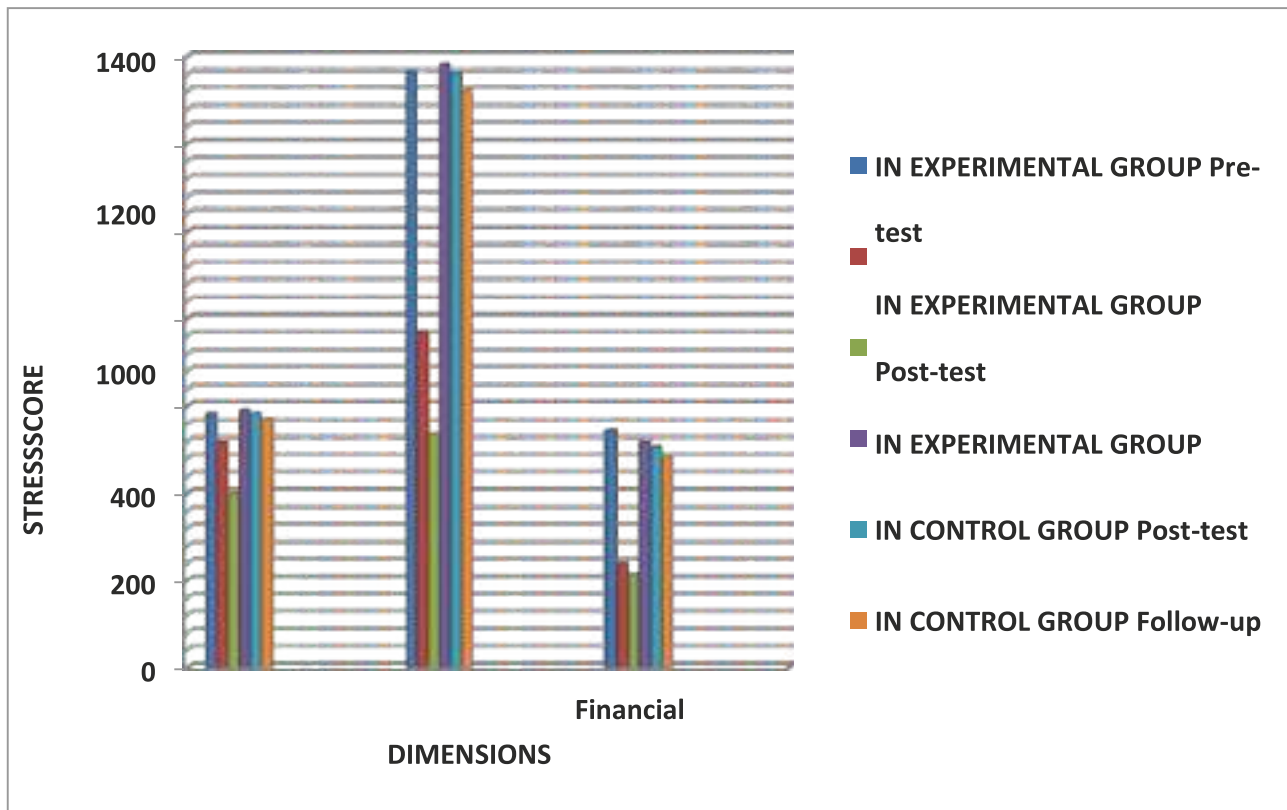


Figure 18: Analysis of Dimensions in Experimental & Control Group.

It Projected that in physiological dimension experimental pre-test is 582, post-test is 517 & follow-up is 397, in control group pre-test is 590, post-test is 582 & follow up is 570. In Psychological dimension experimental pre-test is 1365, post-test is 769 & follow-up is 536, in control group pre-test is 1381, post-test is 1362 & follow-up is 1322. In Financial dimension experimental pre-test is 543, post-test is 238 & follow-up is 215, in control group pre-test is 517, post-test is 507 & follow-up is 482. In social dimension experimental pre-test is 1012, post-test is 443 & follow-up is 339, in control group pre-test is 983, post-test is 976 & follow-up is 938.

Association between Pre-Test Stress Score of Socio-Demographic Variables in Experimental & Control Group.

Association between Pre-Test Stress Score of Socio-Demographic Variables in Experimental & Control Group.

The chi-square test was carried out to determine the association between the pre-test stress and socio-demographic variables such as like Age in year's, Educational Qualification, Occupation, Type of family, Family income per month, Marital Status, Type of community, Type of delivery, Gravida, Gender of the baby, Days admitted in NICU. Out of which Age in year's $\chi^2=8.64$, marital status $\chi^2=0$, Type of delivery $\chi^2=0$, gender of the baby $\chi^2=2.94$, days admitted in NICU $\chi^2=6.36$, were not found to be significant associated with pre-test stress score at 0.05 level and the rest of the socio-demographic variables such as Education Qualification $\chi^2 = 23.02$, Occupation $\chi^2 = 23.02$, Type of Family $\chi^2 = 16.03$, Family Income $\chi^2= 19.52$, Type of Community $\chi^2 = 20.49$, Gravida $\chi^2 = 16.74$, were found to be significantly associated with pre-test stress score at 0.05 level. Hence research hypothesis H3 was accepted. The data also revealed that researcher does not find significant with which Age in Year's, Marital Status, Type of Delivery, Gender of the Baby, Days Admitted in NICU.

Conclusions:

According to WHO, World wide 10% of pregnant women & 13% of women who had given birth had a mental health problem, primarily stress. Many research study has shown that the problem is higher among developing countries i.e. In India 15.6% during pregnancy and 19.8% after child birth. Research also has shown that due to which it gives impact on mother's activity of daily living. As a result, the children's growth and development may be negatively affected as well.

Financial support and sponsorship: Nil

Conflicts of interests: There is no conflict of interest

References:

1. Dashraath P, Jeslyn WJL, Karen LMX, Min LL, Sarah L, Biswas A, et al. Coronavirus disease 2019 (COVID-19) pandemic and pregnancy. *Am J Obstet Gynecol.* 2020;222(6):521–31. 10.1016/j.ajog.2020.03.
2. Fakari FR, Simbar M. Coronavirus pandemic and worries during pregnancy; a letter to editor. *Arch Acad Emerg Med.* 2020;8:e21.
3. Rasmussen SA, Smulian JC, Lednicky JA, Wen TS, Jamieson DJ. Coronavirus disease 2019 (COVID-19) and pregnancy: what obstetricians need to know. *Am J Obstet Gynecol.* 2020;222(5):415–26. 10.1016/j.ajog.2020.02.017
4. Mullins E, Evans D, Viner R, O'Brien P, Morris E. Coronavirus in pregnancy and delivery: rapid review and expert consensus. *medRxiv.* 10.1101/2020.03.06.20032144
5. Wong SF, Chow KM, Leung TN, Ng WF, Ng TK, Shek CC, et al. Pregnancy and perinatal outcomes of women with severe acute respiratory syndrome. *Am J Obstet Gynecol.* 2004;191:292–7. 10.1016/j.ajog.2003.11.019.
6. Wang X, Zhou Z, Zhang J, Zhu F, Tang Y, Shen X. A case of 2019 Novel Coronavirus in a pregnant woman with preterm delivery. *Clin Infect Dis.* 2020;71(15):844–6. 10.1093/cid/ciaa200
7. Duan L, Zhu G. Psychological interventions for people affected by the COVID-19 epidemic. *Lancet Psychiatr.* 2020;7:300–2. 10.1016/S2215-0366(20)30073-0.
8. Lima CKT, De Medeiros Carvalho PM, Lima IDAS, De Oliveira Nunes JVA, Saraiva JS, De Souza RI, et al. The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). *Psychiatry Res.* 2020;287:112915. 10.1016/j.psychres.2020.
9. Dong X-Y, Wang L, Tao Y-X, Suo X-L, Li Y-C, Liu F, et al. Psychometric properties of the anxiety inventory for respiratory disease in patients with COPD in China. *Int J Chron Obstruct Pulmon Dis.* 2017;12:49–58. 10.2147/COPD.S117626