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Effectiveness of Emotional Freedom Technique on Post-Partum Blues, Parenting Stress and Postnatal Outcome Among Post Caesarean Section Mothers in Selected Hospitals At Coimbatore

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ABSTRACT
The current study objective was to assess the effectiveness of emotional freedom technique on post-partum blues, parenting stress and postnatal outcomes among post cesarean section mothers. Pre experimental one group pre-test post-test design was adopted for the study. purposive sampling technique was used in this study. Sample included in the study were post cesarean section mothers. The subject will be assessed for post-partum blues by using Likert AM I Blue? Assessment scale and parental stress will be measured by adopting parental stress scale and postnatal outcome will be assessed with the biological parameters. The study result indicate the area wise comparison of mean, SD and mean % of pre test score shows that, The mean score (48.4±1.97) which is 81% of total score on the area of postpartum blue. The mean score (56.4±2.24) which is 63% of total score was on the areas of Parenting stress and mean score (7.1±0.50) which is 36% of total score was on the areas of Post natal outcomes. The area wise post test scores shows that the highest mean percentage (76%) was observed for Post natal outcomes. More or less similar lowest mean score (17.4±1.81, 29.1±1.05) was found on postpartum blue and parenting stress, which is 29% and 32 % of total score. It shows that the highest difference in mean percentage was found on the postnatal outcomes (76%) followed by the difference found on the postpartum blue (29%) and parenting stress (32%). There is significant association between the post test score with the demographic variables of type of marriage(□2=5.33) and employment status(□2=5.56) of the mother. It seems that emotional freedom technique on postpartum blue, parenting stress and postnatal outcomes was found highly effective among post caesarean section mothers

Keywords: Postpartum Blues, Parenting Stress, Post-parental Outcome, Emotional Freedom Technique.

INTRODUCTION

Puerperium (post-partum) is a period of great vulnerability for the woman, associated with intense physical and emotional involvement. During this period the reproductive organs and maternal physiology return

toward the pre-pregnant state. One of the important changes during this period is Postpartum blues.
Postpartum blues, also known as baby blues and maternity blues, is a very common but self-limited condition that begins shortly after childbirth and can present with a variety of symptoms such as mood swings, irritability, and tearfulness. Most new moms will get postpartum blues, there are hormonal changes that can cause anxiety, crying and restlessness. Mothers may experience negative mood symptoms mixed with intense periods of joy. Up to 85% of new mothers are affected by postpartum blues, with symptoms starting within a few days after childbirth.
Studies have also proposed that elevated monoamine oxidase levels or decreased serotoninergic activity in the immediate postpartum period are also significant risk factors or etiological characteristics that could predispose a woman to the development of postpartum blues (Sacher J,Wilson, etal, 2010, Doornbos B, Fekkes D, etal, 2008).
Postpartum depression has been associated with parenting stress, impacting attachment and child development. The first months postpartum can be challenging for parents, leading to elevated symptoms of parenting stress, depression, and anxiety. In turn, distressed parents are at higher risk for providing suboptimal quality of care giving.
Since parental distress and parental caregiving quality after birth can affect infant development (Murray L, Fearon P, etal, 2015) detecting in an early stage is of vital importance for both parent's as well as children's health and development.
One of the psychotherapeutic techniques, whose numbers have increased rapidly in recent years, is "Emotional Freedom Techniques (EFT)". It combines cognitive therapy, acceptance and stability therapy, and acupuncture point stimulation, and is based on manual stimulation of acupuncture points specific to Shiatsu or other acupressure massage forms, rather than using acupuncture needles. Manual pressure on acupuncture sites has been found to be as effective as acupuncture needling technique. It is an initiative that can be applied by individuals and midwives easily after receiving the necessary education all over the world.
In the literature, scientific studies evaluating the effectiveness of EFT on depression are included, but only one study has been reached in which EFT is applied during pregnancy, and this study is related to stress and endurance. In addition, with this study, an important step will be taken to include an easy-to-apply, inexpensive therapeutic method such as pregnancy and postpartum depression treatments, and evidence will be sought to ensure that all professionals dealing with women's health, especially midwifery, use this technique (Neslihan Ozcan, 2020).
EFFECTIVENESS OF EMOTIONAL FREEDOM TECHNIQUE ON POST-PARTUM BLUES, PARENTING STRESS AND POSTNATAL OUTCOME AMONG POST CAESAREAN SECTION MOTHERS IN SELECTED HOSPITALS AT COIMBATORE

OBJECTIVES

1. To assess the level of post-partum blues, parenting stress and postnatal outcome before and after emotional freedom technique among post caesarean section mother
2. To find out the association between the posttest score of post-partum blues and parenting stress and postnatal outcome with their selected background variables among post caesarean section mothers.

HYPOTHESES

1. H_1 There is significant difference in the level of post-partum blues, parenting stress and postnatal

outcome before and after emotional freedom technique among post caesarean section mothers

2. H2 There is a significant association between the posttest levels of post-partum blues , parenting stress and postnatal outcome with their selected background variables among post caesarean section mothers.

REVIEW OF LITERATURE

Devi T. Uma and Safreena I (2021) A study was Conducted among 30 postnatal mothers to assess the effect of Emotional Freedom Technique on level of Postpartum blues using Edinburgh postnatal depression scale. Found a majority 66.7% of the mothers came to mild level of Postpartum blues after EFT. There is a significant change in the postpartum blue between pertest and post-test among experimental group which is statistically proved by that 't' value of 5.72 (Df=14, table value=2.14 at 0.05 level of significance)

Natalie Robbins, (2024) One group pre and posttest quasi experimental study was conducted to assess the effect of EFT for postpartum depression, perceived stress and anxiety . Eleven mothers who screened positive for PPD and anxiety symptoms all selected. A total of 8 1-hour group EFT sessions were offered to participants over a period of 4 weeks. Measurement tool include destress scale & Edinburgh postnatal depression scale where used.There was a statistically significant decrease in depression ($p = 0.03$), anxiety ($p < 0.001$) and perceived stress ($p < 0.001$) score 1 month after the EFT is a adjunctive intervention for managing depression, anxiety and stress in postpartum period

Temitope Omoladun Okunola (2021) A cross-sectional study involving 292 parturient on third day of the delivery between April 2019 and August 2019. Postnatal blues was assessed with Kennerly and Gath Blues questionnaire and a mean score of greater than 7 was taken as cut-off. They also completed Edinburg Postnatal Depression Scale (EPDS) questionnaires. Socio-demographic characteristics were also obtained. The study conclude the prevalence of postnatal blues was 45.5%. Postnatal blues was associated with birth of a female baby (50%), preterm delivery & puerperal complications (66.7%) and average annual family income (58.3%). Postnatal blues is real and prevalent among Nigerian women. Healthcare providers should endeavor to be vigilant in order to diagnose postnatal blues promptly and do the necessary follow up.

Nithya S (2021) The study was done on 60 parents aged 20 -55, out of which 30 were males and 30 were females through purposive sampling method. Parental stress scale (Berry J.O. and Jones W.H. ,1995) to measuring stress were used to collect data. The data were analyzed by Mean, standard deviation, independent sample T-test. Result proves it, there is no significant difference in the level of parental stress among parents across their parenting role (gender)

Ibrahim Hussen, Misganaw Worku (2022) A cross-sectional study undertaken among women who underwent cesarean deliveries at Hawassa university. Information gathered with structural questionnaire and checklist.In this study a significant number of participants reported moderate to severe post-operative pain. The study Conclusion that there is a significant number of parturient in this study reported moderate to severe post-cesarean pain within 24 hrs. The duration of the procedure (95%), the type of anesthesia used (95%), and the type of analgesics administered (95%) were all found to be significantly associated with postoperative pain after cesarean section.

MATERIALS & METHOD

The pre-experimental one group pretest posttest design was used to assess the effectiveness of emotional

freedom technique on postpartum blues, parental stress and postnatal outcome for post cesarean section mother. The independent variable in this study was emotional freedom technique and the dependent variable was mother with postpartum blue and parental stress. The samples were taken from the selected hospitals in Coimbatore. The population for the present study were the post cesarean section mothers with postpartum blue and parental stress. Purposive sampling technique was used to select the sample. Samples include post cesarean section primi mother in the age group of 20-35 years with postpartum blue and parental stress, mothers with physiological complications are excluded in this study. Data was collected for the period of 6 weeks. Emotional freedom technique is given for the duration of 30 min once in a day, 3 sessions a week. There are 4 sections of tools that are used. Section A - Demographic Variables, Section B – Likert Am I Blue? Assessment Scale, Section C – Parental Stress Scale, Section D- Biological Parameters The reliability of the tool was assessed by using test re-test method and the value was found to be reliable ($r^1 = 0.86$)

DATA COLLECTION PROCEDURE

Before collecting the data, consent was obtained from the hospital administrator and sample. The data was collected by the researcher from the post cesarean section mothers. Emotional Freedom Technique was given for the duration of 30 min once in a day 3 sessions in a week for 6 weeks. Pre-test and Post-test was done with Likert Am I Blue? Assessment Scale, Parental Stress Scale and Biological Parameters.

RESULT AND DISCUSSION

Table 1. Frequency and Percentage distrubation of post caesarean section mothers according to their demographic variables.

(N = 10)

S.No	Demographic variables	Post cesarean section mothers	
		Frequency (N)	Percentage (%)
1.	**Age in Years**		
	a. 21 - 25 Years	**5**	**50**
	b. 25.1 - 30 Years	**2**	**20**
	c. 30.1 – 35 years	**3**	**30**
2.	**Educational status**		
	a. Schooling & Below	**3**	**30**
	b. Undergraduate	**5**	**50**
	c. Postgraduate and above	**2**	**20**
3.	**Type of marriage**		
	a. Consanguineous marriage	**5**	**50**
	b. Non consanguineous marriage	**5**	**50**
4.	**Type of family**		
	a. Nuclear family	**6**	**60**
	b. Joint family	**2**	**20**
	c. Extended family	**2**	**20**
5.	**Family History of Post-partum Blue**		

	a. Present	**6**	**60**
	b. Absent	**4**	**40**
6.	**Complications during pregnancy**		
	a. Present	**4**	**40**
	b. Absent	**6**	**60**
7.	**Previous history of abortion**		
	a. Present	**3**	**30**
	b. Absent	**7**	**70**
8.	**Support System Available or Not?**		
	a. Present	**6**	**60**
	b. Absent	**4**	**40**
9.	**Mode of caesarean section**		
	a. Elective	**6**	**60**
	b. Emergency	**4**	**40**
10.	**Marital Disharmony?**		
	a. Present	**1**	**10**
	b. Absent	**9**	**90**
11.	**Employment status of the mother**		
	a. Home maker	**4**	**40**
	b. Self-employee	**3**	**30**
	c. Private employee	**2**	**20**
	d. Government employee	**1**	**10**

Table 1 depicts the frequency and percentage distribution of the demographic variables such as age, education, type of marriage, type of family, Family History of Post-partum Blue, complication during pregnancy, Previous history of abortion, Support System Available or Not, Mode of caesarean section , Marital Disharmony and Employment status of the mother

Table 2. Frequency and percentage distribution of pre and post test scores of post-partum blue among post caesarean section mothers.

(N= 10)

Level of postpartum blue among post caesarean section mother	**Pre test score**		**Post test score**	
	Frequency (N)	**Percentage (%)**	**Frequency (N)**	**Percentage (%)**
Mild	-	-	7	70
Moderate	1	10	3	30
Severe	9	90	-	-

Table 2 depicts the frequency and percentage distribution of pre and post test scores on post partum blue among post caesarean section mother in experimental arm I depicts that, in pre test most (90%) of them were severe postpartum blue and only 10% of them were moderate postpartum blue, whereas in post test

most (70%) of them were mild postpartum blue and 25% of them were moderate postpartum blue. It seems that emotional freedom technique on postpartum blue was effective among post caesarean section mother

Table 3. Frequency and percentage distribution of pre and post test scores of parenting stress among post caesarean section mothers.

(N= 10)

Level of parenting stress	Pre test score		Post test score	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
Low stress	-	-	7	70
Moderate stress	8	80	3	30
High stress	2	20	-	-

Table 3 depicts the frequency and percentage distribution of pre and post test scores on parenting stress among post caesarean section mother in experimental arm I depicts that, in pre test most (80%) of them were moderate stress and only 20% of them were high stress, whereas in post test most (70%) of them were low stress and 30% of them were moderate stress. It seems that emotional freedom technique on parenting stress was effective among post caesarean section mother

Table 4. Frequency and percentage distribution of pre and post test scores of postnatal outcomes among post caesarean section mothers.

(N= 10)

Level of postnatal outcomes	Pre test score		Post test score	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
Poor	4	40	-	-
Fair	6	60	3	30
Good	-	-	7	70

Table 4 depicts the frequency and percentage distribution of pre and post test scores on postnatal outcomes among post caesarean section mother in experimental arm I depicts that, in pretest most (60%) of them were fair postnatal outcomes and only 40% of them were poor postnatal outcomes, whereas in posttest most (70%) of them were good postnatal outcomes and 30% of them were fair post-natal outcomes. It seems that emotional freedom technique on postnatal outcomes was effective among post caesarean section mother

Table 5.Area wise comparison of mean, SD, and mean percentage of pre and posttest post-partum blues, parenting stress and postnatal outcome scores

S. No	Areas	Max. scores	Pretest score			Post test score			Diff. in Mean (%)
			Mean	SD	Mean (%)	Mean	SD	Mean (%)	

1.	Post partum blue	60	48.4	1.97	81	17.4	1.81	29	52
2.	Parenting stress	90	56.4	2.24	63	29.1	1.05	32	31
3.	Post natal outcomes	20	7.1	0.50	36	15.1	0.82	76	40

Table 5 shows the area wise comparison of mean, SD and mean % of pre test score shows that, The mean score (48.4±1.97) which is 81% of total score on the area of postpartum blue. The mean score (56.4±2.24) which is 63% of total score was on the areas of Parenting stress and mean score (7.1±0.50) which is 36% of total score was on the areas of Post natal outcomes.

However, the area wise post test scores shows that the highest mean percentage (76%) was observed for Post natal outcomes. More or less similar lowest mean score (17.4±1.81, 29.1±1.05) was found on postpartum blue and parenting stress, which is 29% and 32 % of total score.

It shows that the highest difference in mean percentage was found on the postnatal outcomes (76%) followed by the difference found on the postpartum blue (29%) and parenting stress (32%). It seems that emotional freedom technique on postpartum blue, parenting stress and postnatal outcomes was found highly effective among post caesarean section mothers

Table 6. Chi Square value of Association between post test scores and demographic variables of the post caesarean section mothers

Sl. No.	**Variables**	**DF**	χ^2	**Level of Significant**
1	Age (in year)	2	0.96	Not Significant
2	Educational status	1	1.01	Not Significant
3	Type of marriage	2	5.33	Significant
4	Type of family	1	0.54	Not Significant
5	Family History of Post-partum Blue	1	0.67	Not Significant
6	Complication during pregnancy	1	0.28	Not Significant
7	Previous history of abortion	1	0.59	Not Significant
8	Support System Available or Not	2	0.3	Not Significant
9	Mode of caesarean section	1	0.11	Not Significant
10	Marital Disharmony	1	0.50	Not Significant
11	Employment status of the mother	2	5.56	Significant

χ^2 Value with $P < 0.05$

Table 6 depicts the association between post test score and demographic variables of post caesarean section mothers reveals that there is no significant association between Postpartum blue, parenting stress and postnatal outcomes scores when compared to the age, education, type of family, Family History of Post-partum Blue, complication during pregnancy, Previous history of abortion, Support System Available or Not, Mode of caesarean section and marital disharmony, so reject the research hypothesis in these variables. Whereas there is a significant association with the type of marriage and employment status of the mother, so reject the research hypothesis in these aspects of demographic variables. Hence it can be

concluded that there is a significant association between the post test score with the demographic variables of type of marriage and employment status of the mother.

CONCLUSION

Based on the findings of the study, the following conclusion were drawn. The emotional freedom technique is highly significant to reduce the level of postpartum blue, parental stress and improvement in the postnatal outcome among post cesarean section mothers.

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