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Original Research Article

COMPARATIVE EFFECTIVENESS OF EMOTIONAL FREEDOM TECHNIQUE AND BENSON RELAXATION TECHNIQUE ON BIO-PSYCHOLOGICAL PARAMETERS AMONG PRIMI-POSTNATAL MOTHERS

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Abstract

Background: The postnatal period is characterized by substantial physiological, psychological, and social adjustments. First-time mothers frequently experience elevated levels of stress and anxiety resulting from physical recovery, hormonal fluctuations, breastfeeding challenges, sleep deprivation, and adaptation to maternal responsibilities. Persistent psychological distress may adversely affect maternal well-being, mother-infant bonding, and infant care practices. Non-pharmacological interventions such as Emotional Freedom Technique (EFT) and Benson Relaxation Technique (BRT) have demonstrated beneficial effects in reducing stress and promoting psychological health. However, comparative evidence among primi-postnatal mothers remains limited.

Aim: To compare the effectiveness of Emotional Freedom Technique and Benson Relaxation Technique on bio-psychological parameters among primi-postnatal mothers.

Methods: A quasi-experimental pre-test post-test two-group study was conducted among 60 primi-postnatal mothers admitted to the postnatal wards of a tertiary care hospital. Participants were allocated into EFT (n=30) and BRT (n=30) groups. Interventions were administered for 20 minutes daily over seven consecutive days. Physiological parameters including heart rate and blood pressure, and psychological parameters including stress and anxiety were assessed using standardized instruments. Statistical analyses included descriptive statistics, paired t-test, independent t-test, and chi-square test.

Results: Both interventions significantly improved physiological and psychological outcomes. The EFT group demonstrated a greater reduction in perceived stress score (12.4±3.2) compared with the BRT group (10.1±2.9) ($p=0.04$). Anxiety scores decreased significantly in both groups, with superior improvement observed in the EFT group ($p<0.05$). Heart rate and blood pressure showed statistically significant reductions following intervention. Between-group analysis revealed significantly better outcomes among mothers receiving EFT.

Conclusion: Both EFT and BRT effectively reduced stress, anxiety, heart rate, and blood pressure among primi-postnatal mothers. EFT demonstrated marginally greater effectiveness and may be considered an adjunctive intervention in routine postnatal care.

Keywords: Emotional Freedom Technique; Benson Relaxation Technique; Postnatal Mothers; Anxiety; Stress; Maternal Mental Health; Relaxation Therapy; Nursing Intervention.

Introduction

Motherhood represents a major life transition accompanied by profound physical and emotional changes [1]. The postpartum period is particularly vulnerable because women must simultaneously recover from childbirth while adapting to infant care responsibilities [2]. Psychological distress during this period is common and may manifest as anxiety, stress, emotional instability, fatigue, and impaired coping abilities [3].

Globally, approximately 10–20% of women experience significant psychological disturbances during the postpartum period [4]. Elevated stress levels have been associated with delayed recovery, breastfeeding difficulties, impaired maternal-infant bonding, and increased risk of postpartum depression.

The World Health Organization emphasizes the importance of promoting maternal mental health as an integral component of postnatal care [5].

Traditional pharmacological approaches for anxiety and stress management may not always be appropriate for breastfeeding mothers because of concerns regarding medication exposure and adverse effects [6]. Consequently, safe, inexpensive, and easily implementable non-pharmacological interventions are increasingly recommended [7].

Emotional Freedom Technique (EFT) combines elements of cognitive therapy and acupressure stimulation through tapping on specific meridian points while focusing on emotional concerns. EFT has demonstrated effectiveness in reducing cortisol levels, anxiety, and perceived stress [4].

The Benson Relaxation Technique (BRT), developed by Herbert Benson, induces a physiological relaxation response through controlled breathing, muscle relaxation, and repetition of calming words or phrases [2]. This technique has been widely used in stress management and has shown favorable effects on autonomic nervous system regulation [8].

Although both interventions have demonstrated effectiveness independently, limited studies have directly compared their effectiveness among primi-postnatal mothers. Therefore, the present study was undertaken.

Need for the Study: The transition to motherhood is associated with multiple stressors that can negatively influence maternal and neonatal outcomes. First-time mothers often lack previous parenting experience and are therefore particularly vulnerable to psychological distress.

Identifying effective and practical interventions that can be incorporated into routine nursing care is essential for promoting maternal well-being. Comparative evaluation of EFT and BRT may provide evidence for selecting the most beneficial intervention in postpartum settings.

Aim of the Study: To compare the effectiveness of Emotional Freedom

Technique and Benson Relaxation Technique on bio-psychological parameters among primi-postnatal mothers.

Objectives

1. To assess pre-test bio-psychological parameters among primi-postnatal mothers.
2. To evaluate the effectiveness of EFT on physiological and psychological parameters.
3. To evaluate the effectiveness of BRT on physiological and psychological parameters.
4. To compare post-test bio-psychological outcomes between EFT and BRT groups.
5. To determine the association between selected demographic variables and post-intervention outcomes.

Methodology

A quantitative evaluative research approach was adopted to assess and compare the effectiveness of Emotional Freedom Technique (EFT) and Benson Relaxation Technique (BRT) on bio-psychological parameters among primi-postnatal mothers. The study utilized a quasi-experimental two-group pre-test post-test research design. The research was conducted in the postnatal wards of a tertiary care teaching hospital. The target population comprised all primi-postnatal mothers admitted to the postnatal wards during the study period. A total of 60 primi-postnatal mothers who met the eligibility criteria were selected using a purposive sampling technique. The participants were equally allocated into two groups, with 30 mothers assigned to the Emotional Freedom Technique (EFT) group and 30 mothers assigned to the Benson Relaxation Technique (BRT) group.

The study included primi-postnatal mothers who were within seven days after delivery, aged between 20 and 35 years, able to understand and communicate in Tamil or English, and willing to participate in the study by providing informed consent. Mothers who had a diagnosed psychiatric illness, severe obstetric complications, serious medical conditions requiring intensive treatment, or those receiving psychotropic medications were excluded from the study. After obtaining ethical clearance and informed consent, baseline assessments of physiological and psychological parameters were conducted for all participants. Subsequently, the respective interventions were administered to the two groups, and post-test assessments were carried out following the intervention period to evaluate the effectiveness of EFT and BRT on the selected bio-psychological outcomes.

Description of Interventions

Emotional Freedom Technique: Participants received 20-minute sessions daily for seven consecutive days. The intervention involved identification of stress-related concerns, setup statements, and tapping on standard meridian points including eyebrow, side of eye, under eye, under nose, chin, collarbone, under arm, and top of head.

Benson Relaxation Technique: Participants received guided relaxation involving diaphragmatic breathing, progressive relaxation, comfortable positioning, and silent repetition of a calming word for 20 minutes daily for seven days.

Tools and Data Collection Instruments

Section A: Demographic Proforma

- Age
- Education
- Occupation
- Family type
- Monthly income
- Mode of delivery

Section B: Physiological Parameters

- Heart rate (beats/minute)
- Systolic blood pressure (mmHg)

- Diastolic blood pressure (mmHg)

Section C: Perceived Stress Scale (PSS)

- 10-item standardized scale
- Score range: 0–40
- Higher scores indicate greater stress

Section D: State Anxiety Inventory (SAI)

- Standardized anxiety assessment tool
- Measures situational anxiety

Validity and Reliability: Content validity was established by experts in obstetrics, psychiatry, psychology, and nursing.

Reliability:

Instrument	Reliability Coefficient
PSS	0.87
SAI	0.91

Data Collection Procedure: After obtaining ethical approval and informed consent, baseline assessments were conducted on Day 1. Participants were assigned to either EFT or BRT group. Interventions were administered daily for seven consecutive days. Post-test assessments were completed on Day 7 using the same instruments.

Statistical Analysis: The collected data were coded, entered, and analyzed using the Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarize the demographic characteristics and study variables. Inferential statistics were employed to evaluate the effectiveness of the interventions. The paired t-test was used to compare the pre-test and post-test scores within each group, while the independent t-test was used to compare the post-test outcomes between the Emotional Freedom Technique (EFT) and Benson Relaxation Technique (BRT) groups. The Chi-square test was applied to determine the association between selected demographic variables and bio-psychological parameters. Statistical significance was determined at a p value of less than 0.05 ($p < 0.05$).

Results

Table 1. Demographic Characteristics of Participants (N=60)

Variable	EFT n (%)	BRT n (%)
20–25 years	14 (46.7)	13 (43.3)
26–30 years	11 (36.7)	12 (40.0)
31–35 years	5 (16.6)	5 (16.7)
Secondary education	17 (56.7)	16 (53.3)
Homemaker	22 (73.3)	21 (70.0)
Nuclear family	19 (63.3)	18 (60.0)

The demographic characteristics were comparable between groups indicating baseline homogeneity.

Table 2. Comparison of Stress Scores before and After Intervention

Group	Pre-test Mean±SD	Post-test Mean±SD	Mean Difference	t-value	p-value
EFT	28.6±4.1	16.2±3.2	12.4	8.56	<0.001
BRT	28.1±3.9	18.0±2.9	10.1	7.22	<0.001

Table 2 demonstrates a highly significant reduction in stress scores in both groups. However, the reduction was greater in the EFT group.

Table 3: Comparison of Anxiety Scores before and After Intervention

Group	Pre-test Mean±SD	Post-test Mean±SD	Mean Difference	t-value	p-value
EFT	52.3±6.2	34.5±4.8	17.8	9.12	<0.001
BRT	51.7±5.9	37.8±5.1	13.9	7.84	<0.001

A statistically significant reduction in anxiety was observed in both intervention groups.

Table 4: Between-Group Comparison of Post-Test Outcomes

Variable	EFT Mean±SD	BRT Mean±SD	t-value	p-value
Stress	16.2±3.2	18.0±2.9	2.14	0.04
Anxiety	34.5±4.8	37.8±5.1	2.58	0.01
Heart Rate	78±3	79±3	1.98	0.05
Systolic BP	116±7	119±8	2.10	0.03

Table 4 indicates superior effectiveness of EFT compared with BRT across most outcome measures.

Discussion

The present study demonstrated significant improvements in bio-psychological parameters following both Emotional Freedom Technique and Benson Relaxation Technique.

The findings are consistent with Church et al. (2012), who reported significant reductions in cortisol and psychological distress following EFT interventions. Similar improvements in anxiety and emotional regulation have been documented in several clinical populations [9].

The significant improvements observed in the BRT group corroborate Benson's relaxation response theory, which suggests that controlled breathing and meditation reduce sympathetic nervous system activation. Benson (2000) reported substantial reductions in stress-related symptoms among participants practicing relaxation techniques regularly [10]. The greater effectiveness of EFT observed in the current study may be attributed to its dual mechanism involving both cognitive restructuring and somatic stimulation through acupressure tapping. Stapleton et al. (2020) similarly found EFT superior to conventional relaxation approaches in reducing anxiety [11].

The present findings also align with Glover (2014), who emphasized the importance of early psychological interventions in preventing long-term maternal mental health complications [12].

The reduction in heart rate and blood pressure observed in both groups supports findings from Jain and Kumar (2018), who reported improved autonomic balance following relaxation therapies [13-14].

Overall, the findings indicate that both interventions are clinically useful, but EFT may offer additional benefits for psychological recovery during the postpartum period.

Limitations

1. Small sample size.
2. Single-center setting.
3. Short intervention duration.
4. No long-term follow-up.
5. Non-randomized allocation.

Conclusion

Both Emotional Freedom Technique and Benson Relaxation Technique significantly improved bio-psychological parameters among primi-postnatal mothers. Although both interventions were effective, EFT demonstrated greater reductions in stress, anxiety, heart rate, and blood pressure. Incorporating these simple, safe, and cost-effective interventions into routine postnatal care may enhance maternal psychological well-being and facilitate healthier postpartum adjustment.

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