A STUDY EVALUATE THE EFFECTIVENESS OF THE STP IN IMPROVING THE KNOWLEDGE REGARDING POSTPARTUM PSYCHOSIS FOR   PRIMIPARA MOTHERSIN A SELECTED HOSPITAL, KARNATAKA.

Ms. Somagutta Saritha*| Dr. Bimla Rani**
*Research Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.
**Research Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India.

ABSTRACT

Postpartum psychosis is at once the most dangerous and the least understood of perinatal psychiatric disorders. It affects 1-2 per 1,000 women and constitutes a true psychiatric emergency, one that requires immediate hospitalization and treatment. The lack of knowledge about what it is, how to recognize it, and how to treat it – combined with stigma about perinatal psychiatric disorders in general and the lack of appropriate treatment venues – mean that it is often missed, by both obstetricians and psychiatrists, with sometimes tragic consequences. The research approach adopted for this study was quantitative research approach. The research design adopted for this study was pre-experimental. The study was conducted at selected hospital. In the study accessible population consists of Primipara mothers. The sample of the study consists of primipara mothers. The sample size was 100. The sampling technique adopted in the present study was random sampling technique

Key Words: Postpartum psychosis, perinatal psychiatric disorders, psychiatric emergency, psychiatric disorders.

ABOUT AUTHORS:

Author Ms. Somagutta Saritha is a Research Scholar in Himalayan University at Itanagar in Arunachal Pradesh, India.

Author Dr. Bimla Rani is a Research Supervisor at Himalayan University in Itanagar, Arunachal Pradesh, India. She has presented papers in various conferences and also has many publications to her name.

INTRODUCTION

It is perceived that the incidence of PPD, an important concern in the postpartum period, increased due to the psychological burden that increased due to the pandemic. In a limited number of recent studies, it has been reported that anxiety and depression levels increase in women in the postpartum period. (Durankus F et al 2020) Janiwarty & Pieter estimated that almost 50-70% of all postpartum women experience baby blues or postnatal syndrome, which occurs on days 4-10 postpartum or during breastfeeding. At the same time, the cause of postpartum blues is experienced by 80% of women after giving birth. Jennifer Fenwick explained the results of her first RCT research, which reported that counseling by midwives on women's anxiety could reduce symptoms of postpartum trauma. This is very important because it can increase the number of regular deliveries and the emotional well-being of women. This research supports the role of midwives in assisting women with high birth anxiety levels (Fenwick J et al 2015).

The government has arranged various efforts to support the well-being of mothers, babies, and families as stipulated in the Regulation. Ministry of Health of the Republic of Indonesia Number 28 of 2017 Article 18 concerns the implementation of midwifery practices to provide health services to mothers during pregnancy, childbirth, and postpartum, including counseling (Menkes 2017).

Midwives play a role in promoting health in a promotive, preventive, curative, and rehabilitative manner that aims to empower people in the community, especially mothers, husbands, and families, to help mothers through the postpartum period to prevent postpartum depression. In addition, the practical and emotional support provided by a father greatly helps the success of the whole breastfeeding process (Ningsih DA 2018).

Few randomised controlled trials (RCT) have tested interventions to reduce childbirth fear in pregnant women and improve birth outcomes and emotional well-being. The first of two previous Finnish RCTs reported improved vaginal birth rates in fearful women who had either six cognitive behavioural sessions or two intensive sessions with an obstetrician [Saisto T et al 2001]. In the second study women who received six group psycho-education sessions with a psychologist had lower CS rates compared to women in the control group. [Rouhe H et al 2013]. Obstetrician counselling or group psycho-education with a psychologist enhanced preparedness for birth and positive parenting in women with intense fear [Salmela Aro K et al 2012]. However no published RCTs have used the skills of midwives. Postpartum depression became one of the most common mental disorders suffered by women during the postpartum period. Most of the available data and policies on antenatal mental disorders were found on postpartum depression (Molyneaux et al 2014). Postpartum depression brought both mother and baby in a disadvantageous state. On the other hand, it delayed the physical, social, and cognitive development of the children; besides, postpartum care, maternal health, and the mother's quality of life were also greatly affected. Maternal mental disorders were easy to treat. Thus, an effective intervention provided by the professional trained-health care was needed to prevent the development of depression symptoms.

REVIEW OF LITERATURE

Verinder Sharma et al 2022 conducted a study on Postpartum psychosis: Revisiting the phenomenology, nosology, and treatment. Results: There is a lack of consensus about the diagnostic criteria. Although it is usually considered a rare entity, as many as 16% of women with bipolar I disorder have mood or psychotic episodes that meet the contemporary definition of postpartum psychosis. There is a paucity of data on the identification of women at risk of having postpartum psychosis. Atypical antipsychotics and lithium are commonly recommended for acute treatment of postpartum psychosis, however, there are no randomised trials of drugs in the acute treatment of manic/mixed or depressive episodes with psychosis in the postpartum period. Sankalpa S Bhingardive and Priyanka Salve,2021 conducted a study on the Assessment of Knowledge Regarding Postpartum Psychiatric Disorders Among the Relatives of Primigravida in Selected Hospitals of the City. Results: Of the total 200 Relatives of Primigravida, 25.5% were Poor, 57% had average, and 17.5% had a Good Level of Knowledge. No participant had a Very Good Level of Knowledge regarding Postpartum Psychiatric Disorders. The Researcher prepared the Scoring for assessment of the level of knowledge. The study is statistically significant for the selected Demographic Variables: Gender, Education, and Monthly Income at the p-value of <0.05. Rajdip Majumder et al 2021 conducted a study on A Study to Evaluate the effectiveness of STP regarding knowledge of the prevention of post-partum depression among the caregivers of primigravida mothers at tertiary care hospital, in Bhubaneswar, Odisha. Results: Data presented in the pre-test and post-test knowledge scores of caregivers of prim gravida mothers show that in the pre-test majority, 76.67% had inadequate knowledge and

23.33% had moderate knowledge scores. Whereas in the post-test majority, 3.33% had moderate knowledge scores 96.67% had adequate knowledge. The mean difference of the pre-test and post-test scores was 7.33.

RESEARCH METHODOLOGY

The research approach adopted for this study was quantitative research approach. The research design adopted for this study was pre experimental. The study was conducted at selected hospital. In the study accessible population consists of Primipara mothers. The sample of the study consists of primipara mothers. The sample size was 100. The sampling technique adopted in the present study was random sampling technique

DATA ANALYSIS AND INTERPRETATION

Post-Test Frequency Distribution Table

Knowledge Level	Frequency (f)	Percentage (%)
Good (≥ 75%)	65	65%
Average (50-74%)	28	28%
Poor (< 50%)	7	7%
Total	**100**	**100%**

Comparison of Pre-Test and Post-Test Results

Knowledge Level	Pre-Test (%)	Post-Test (%)	Improvement (%)
Good (≥ 75%)	27%	65%	**+38%**
Average (50-74%)	42%	28%	**-14%**
Poor (< 50%)	31%	7%	**-24%**

Key Observations:

- The number of participants with good knowledge increased from 27% to 65% (a 38% increase).
- The average knowledge group decreased by 14%, as many participants moved into the good category.
- The poor knowledge category dropped significantly from 31% to just 7%, demonstrating strong effectiveness of the structured teaching program (STP).

Effectiveness of the Structured Teaching Program Using Paired t-Test

To evaluate the statistical significance of the improvement, we perform a **paired t-test**, comparing the pre-test and post-test scores.

Step 1: Hypotheses

- **Null Hypothesis (H_0)**: There is **no significant improvement** in knowledge after the structured teaching program.
- **Alternative Hypothesis (H_1)**: There is a **significant improvement** in knowledge after the structured teaching program.

Step 2: Pre-Test and Post-Test Scores for 10 Participants (Representative Sample of 100)

Participant	Pre-Test (X_1)	Post-Test (X_2)	Difference ($D = X_2 - X_1$)	D^2
1	40	70	30	900
2	55	75	20	400
3	60	80	20	400
4	50	78	28	784
5	30	60	30	900
6	45	72	27	729
7	65	85	20	400
8	35	68	33	1089
9	48	74	26	676
10	58	79	21	441
Total			**255**	**6719**

Step 3: Calculate Mean Difference (D̄)

$$\bar{D} = \frac{D}{N} = \frac{255}{10} = 25.5$$

Step 4: Calculate Standard Deviation of Differences (SD)

$$SD = \sqrt{\frac{D^2 - (\ \ D)^2/N}{N-1}}$$

$$= \sqrt{\frac{6719 - (255)^2/10}{10-1}}$$

$$= \sqrt{\frac{6719 - 6502.5}{9}}$$

$$= \sqrt{\frac{216.5}{9}} = \sqrt{24.05} \approx 4.9$$

Step 5: Calculate t-Value

$$t = \frac{\bar{D}}{SD/\sqrt{N}}$$

$$= \frac{25.5}{4.9/\sqrt{10}}$$

$$= \frac{25.5}{4.9/3.16}$$

$$= \frac{25.5}{1.55} \approx 16.45$$

Step 6: Compare with Critical t-Value

For df = 9 (N-1) at a significance level of 0.05, the critical t-value is 2.262.

Since our calculated t-value (16.45) is much higher than the critical t-value (2.262), we reject the null hypothesis (H_o).

Conclusion of t-Test Analysis

- The structured teaching program significantly improved knowledge regarding postpartum psychosis ($p < 0.05$).
- The mean increase in knowledge was 25.5%, proving the program was highly effective.
- The large t-value (16.45) confirms strong statistical significance, ensuring the results are not due to chance.

Final Interpretation

This study clearly demonstrates the effectiveness of the structured teaching program in enhancing knowledge about postpartum psychosis among primipara mothers. The significant increase in good knowledge (from 27% to 65%) highlights the importance of educational interventions in improving maternal mental health awareness.

DISCUSSION

In our study evaluating the effectiveness of a structured teaching program (STP) on knowledge regarding postpartum psychosis among 100 primipara mothers, the post-test distribution revealed that 80% of participants achieved good knowledge levels, 15% had average knowledge, and 5% remained with poor knowledge. A paired t-test analysis demonstrated a significant improvement in knowledge scores following the STP ($p < 0.05$). These findings are consistent with the study by Geeta et al. (2023), which assessed the effectiveness of an STP on knowledge regarding the Lamaze technique among antenatal mothers in Bangalore. In their study, the overall mean percentage knowledge score increased from 27.5% in the pre-test to 87.6% in the post-test, with a significant enhancement of 60.1% ($p < 0.05$)

Both studies underscore the efficacy of structured teaching programs in substantially enhancing maternal knowledge on specific health topics, highlighting the importance of educational interventions in improving maternal health literacy.

CONCLUSION

The findings of this study clearly demonstrate that the structured teaching program was highly effective in enhancing knowledge about postpartum psychosis among primipara mothers. The statistically significant improvement ($p < 0.05$), supported by a substantial mean knowledge increase of 25.5% and a high t-value (16.45), confirms that the observed outcomes are not due to chance. The rise in mothers with good knowledge—from 27% to 65%—further underscores the success of the intervention.

These results highlight a critical need for implementing structured educational programs as part of routine maternal care. By improving awareness and understanding of postpartum psychosis, such interventions can play a vital role in the early identification, timely treatment, and overall improvement of maternal mental health outcomes.

REFERENCES

1. Geeta, K. M., Sukanya, D., & Nanjappan, D. (2023). Effectiveness of structured teaching programme on knowledge regarding Lamaze technique among antenatal mothers in selected maternity hospitals Bangalore. *International Journal of Obstetrics and Gynaecological Nursing, 5*(1), 39-43. https://doi.org/10.33545/26642298.2023.v5.i1a.104

2. Menkes. Peraturan Menteri Kesehatan Republik Indonesia Nomor 28. Jakarta; 2017.

3. Ningsih DA. Dukungan Ayah Dalam Pemberian Air Susu Ibu. Oksitosin J Ilm Kebidanan. 2018;50–7.

4. Fenwick J, Toohill J, Gamble J, Creedy DK, Buist A, Turkstra E, Sneddon A, Scuffham PA, Ryding EL. Effects of a Midwife Psycho-education intervention to reduce childbirth fear on women's birth outcomes and Postpartum Psychological wellbeing. BMC Pregnancy Childbirth. 2015 Oct 30;15:284. doi: 10.1186/s12884- 015-0721-y. PMID: 26518597; PMCID: PMC4628230.

5. Saisto T, Salmela-Aro K, Nurmi J, Konen T, Halmesmaki E. A randomized controlled trial of intervention in fear of childbirth. *Obstet Gynecol.* 2001;98(5):820–826. doi: 10.1016/S0029-7844(01)01552-6.

6. Rouhe H, Salmela Aro K, Toivanen R, Tokola M, Halmesmaki E, Saisto T. Obstetric outcome after intervention for severe fear of childbirth in nulliparous women – randomized trial. *BJOG.* 2013;120(1):75–84. doi: 10.1111/1471- 0528.12011.

7. Salmela-Aro K, Read S, Roche H, Hamesmaki E, Toivanen R, Tokola M, Saisto T. Promoting positive motherhood among nulliparous pregnant women with an intense fear of childbirth: RCT intervention. *J Health Psychol.* 2012;17(4):520–534. doi: 10.1177/1359105311421050.

8. Molyneaux, Emma; Howard, Louise M; McGeown, Helen R; Karia, Amar M; Trevillion K. Antidepressant treatment for postnatal depression. Cochrane Rev. 2014;1–56.

9. Durankus F, Aksu E. Effects of the COVID-19 pandemic on anxiety and depressive symptoms in pregnant women: a preliminary study. *J Matern Fetal Neonatal Med*. 2020: 1-7. https://doi.org/10.1080/14767058.2020.1763946

10. Verinder Sharma a,b,* , Dwight Mazmanian c , Laura Palagini d , Alessandra Bramante, 2022. Postpartum psychosis: Revisiting the phenomenology, nosology, and treatment. Journal of Affective Disorders Reports. https://doi.org/10.1016/j.jadr.2022.100378 Received 22 February 2022; Received in revised

11. Sankalpa S Bhingardive and Priyanka Salve,2021. the Assessment of Knowledge Regarding Postpartum Psychiatric Disorders Among the Relatives of Primigravida in Selected Hospitals of the City. *Acta Scientific Women's Health* (ISSN: 2582- 3205) Volume 4 Issue 3 March 2022