



EVALUATION OF THE IMPACT OF PATIENT COUNSELLING ON MEDICATION ADHERENCE AMONG PATIENTS WITH POSTPARTUM DEPRESSION: A PROSPECTIVE OBSERVATIONAL STUDY

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Abstract:

Postpartum depression (PPD) is a common mental health disorder that affects women after childbirth and may adversely affect maternal health and quality of life. This prospective observational study was conducted to evaluate the impact of patient counseling on medication adherence among postpartum depression patients. A total of 120 patients were enrolled and assessed using the Edinburgh Postnatal Depression Scale (EPDS) and a Medication Adherence Questionnaire. Structured patient counseling was provided regarding disease awareness, medication adherence, and follow-up care. The results showed that moderate depression was the most common category (46.7%), and low medication adherence was observed in 46.7% of patients at baseline. Following counseling, high medication adherence increased from 20.0% to 56.7%, while low adherence decreased from 46.7% to 13.3%. The mean EPDS score significantly reduced from 17.8 ± 4.2 to 10.6 ± 3.8 ($p < 0.001$). The study concludes that patient counseling significantly improves medication adherence and reduces the severity of postpartum depression. Integrating counseling services into routine postpartum care may enhance treatment outcomes and maternal mental well-being.

Keywords: Postpartum Depression, Patient Counseling, Medication Adherence, EPDS, Maternal Mental Health

1. Introduction

A Postpartum depression (PPD) is a significant public health concern and one of the most common psychiatric disorders affecting women during the postpartum period. It is characterized by persistent sadness, low mood, anxiety, irritability, sleep disturbances, fatigue, feelings of guilt, loss of interest in daily activities, and difficulties in mother–infant bonding. Unlike postpartum blues, which are transient and self-limiting, postpartum depression is more severe and may persist for several months if left untreated. PPD generally develops within the first few weeks after childbirth but may occur anytime during the first year postpartum. It affects not only the mother but also the infant, family members, and society as a whole. Early identification and appropriate management are therefore essential to reduce its long-term consequences on maternal and child health. ¹

Globally, postpartum depression affects approximately 10–20% of women following childbirth, although prevalence rates vary considerably across different countries and populations. Higher prevalence rates have been reported in low- and middle-income countries due to socioeconomic challenges, limited access to healthcare services, lack of social support, and cultural factors. Studies conducted in developing countries have reported prevalence rates ranging from 15% to 35%, indicating a substantial burden of postpartum mental health disorders. ^{2,3}

The aetiology of postpartum depression is multifactorial and involves biological, psychological, and social determinants. Rapid hormonal changes following delivery, particularly the decline in estrogenic and progesterone

levels, have been implicated in the development of depressive symptoms. Other contributing factors include a previous history of depression, unplanned pregnancy, obstetric complications, marital conflicts, inadequate family support, financial difficulties, sleep deprivation, and stressful life events. Women experiencing these risk factors are more vulnerable to developing postpartum depression and may require additional monitoring and support during the postpartum period.⁴

Untreated postpartum depression can have serious consequences for both the mother and infant. Affected mothers may experience impaired functioning, reduced self-care, poor adherence to medical treatment, and difficulty establishing emotional bonds with their newborns. Infants of depressed mothers may be at increased risk of poor cognitive, emotional, and behavioural development. Furthermore, postpartum depression negatively impacts family relationships and may contribute to long-term psychological distress. Therefore, early screening and intervention are essential to minimize adverse maternal and neonatal outcomes.⁵

Screening for postpartum depression has become an integral component of maternal healthcare. The Edinburgh Postnatal Depression Scale (EPDS), developed by Cox et al., is one of the most widely used and validated screening instruments for detecting postpartum depressive symptoms. The EPDS consists of ten questions designed to assess emotional well-being over the previous seven days and has demonstrated good sensitivity and specificity in identifying women at risk of postpartum depression. Regular screening using EPDS facilitates early diagnosis and timely initiation of treatment.⁶

Management of postpartum depression involves a multidisciplinary approach that includes psychological interventions, pharmacotherapy, lifestyle modifications, and social support. For women with moderate-to-severe symptoms, antidepressant medications, particularly selective serotonin reuptake inhibitors (SSRIs), are commonly prescribed because of their favourable efficacy and safety profiles. Despite the availability of effective treatment options, medication adherence remains a major challenge among postpartum women. Factors such as forgetfulness, fear of adverse effects, concerns regarding breastfeeding, social stigma associated with psychiatric illness, inadequate awareness of the disease, and lack of family support often contribute to poor adherence. Poor medication adherence can result in treatment failure, symptom persistence, relapse, increased healthcare utilization, and reduced quality of life.⁷

Medication adherence is defined as the extent to which a patient's behaviour corresponds with agreed recommendations from a healthcare provider regarding medication use. Adequate adherence is crucial for achieving therapeutic success in chronic conditions, including depressive disorders. Studies have shown that patients who adhere to prescribed antidepressant therapy experience better symptom control, reduced relapse rates, and improved overall outcomes compared with non-adherent patients. Therefore, strategies aimed at improving adherence are essential components of postpartum depression management.⁸

Patient counselling is recognized as one of the most effective interventions for improving medication adherence and promoting positive treatment outcomes. Counselling provides patients with information regarding the nature of postpartum depression, expected treatment benefits, potential adverse effects, importance of adherence, coping strategies, and the need for regular follow-up. Counselling also addresses misconceptions about antidepressant therapy and empowers patients to actively participate in their treatment. Several studies have demonstrated that educational and counselling interventions significantly improve adherence, treatment satisfaction, and clinical outcomes among patients with depressive disorders.⁹

Pharmacists play an important role in patient counselling and medication management. Through individualized counselling sessions, pharmacists can identify barriers to adherence, provide education regarding medication use, reinforce treatment plans, and offer continuous support throughout therapy. Pharmacist-led interventions have been associated with improved adherence rates, enhanced patient knowledge, and better clinical outcomes in patients receiving antidepressant medications.¹⁰

Family support is another important determinant of treatment adherence and recovery in postpartum depression. Emotional support from spouses and family members can positively influence health-seeking behaviour, medication-taking practices, and psychological well-being. Women receiving adequate family support are more likely to comply with treatment recommendations and demonstrate better recovery outcomes than those with limited social support.¹¹

Although several studies have evaluated postpartum depression and its associated risk factors, there remains limited evidence regarding the impact of patient counselling on medication adherence among postpartum depression patients

in the Indian healthcare setting. Understanding the effectiveness of counselling interventions may help healthcare professionals develop targeted strategies to improve adherence and enhance treatment outcomes. Therefore, the present study was undertaken to evaluate the impact of patient counselling on medication adherence among patients with postpartum depression and to assess its effect on depression severity and overall clinical outcomes.

2. Literature Review

Postpartum depression (PPD) is one of the most common psychiatric disorders affecting women during the postpartum period and is recognized as a major public health concern worldwide. The prevalence of postpartum depression varies across populations, with estimates ranging from 10% to 20% globally and even higher rates reported in developing countries. Several studies have identified biological, psychological, and socioeconomic factors as important contributors to the development of postpartum depression. Women with a history of depression, inadequate social support, financial difficulties, and stressful life events are at increased risk of developing depressive symptoms after childbirth.¹⁻³

The consequences of untreated postpartum depression extend beyond maternal health and significantly affect infant growth, emotional development, and family functioning. Slomian et al. reported that postpartum depression is associated with impaired mother–infant bonding, reduced breastfeeding practices, and adverse cognitive and behavioural outcomes in children.⁵ Similarly, O'Hara and McCabe emphasized that untreated postpartum depression can negatively influence maternal quality of life and increase the risk of recurrent depressive episodes.¹ These findings highlight the importance of early detection and appropriate management of postpartum depression.

Screening plays a crucial role in identifying women at risk of postpartum depression. The Edinburgh Postnatal Depression Scale (EPDS), developed by Cox et al., remains the most widely used screening instrument due to its reliability, validity, and ease of administration.⁶ Numerous studies have demonstrated the effectiveness of EPDS in detecting postpartum depressive symptoms and facilitating timely referral and treatment. Routine screening during postnatal visits has been recommended to improve early diagnosis and clinical outcomes.

Pharmacological therapy, particularly selective serotonin reuptake inhibitors (SSRIs), is considered an effective treatment option for women with moderate-to-severe postpartum depression. However, medication adherence remains a significant challenge in achieving optimal treatment outcomes. Several barriers to adherence have been reported, including forgetfulness, fear of adverse effects, concerns regarding breastfeeding, lack of awareness about the illness, and inadequate family support. Poor adherence to antidepressant therapy has been associated with persistent symptoms, increased relapse rates, and reduced treatment effectiveness.⁷

Patient counselling has emerged as an important strategy for improving medication adherence and enhancing treatment outcomes. Counselling interventions provide education regarding disease management, medication use, expected benefits of therapy, and the importance of follow-up care. Dennis and Hodnett reported that psychosocial and educational interventions significantly reduced depressive symptoms among postpartum women.⁹ Similarly, Shorey et al. demonstrated that psychoeducational programs improved maternal knowledge, treatment compliance, and psychological well-being.¹² Pharmacist-led counselling interventions have also been shown to improve medication adherence and clinical outcomes in patients receiving antidepressant therapy.¹⁰

Family and social support are additional factors influencing treatment adherence and recovery among postpartum women. Jones and Coast reported that women with adequate family support experienced better psychological outcomes and treatment compliance compared with those lacking social support.¹¹ Despite the growing evidence supporting counselling interventions, limited studies have specifically evaluated the impact of patient counselling on medication adherence among postpartum depression patients in India. Therefore, the present study was undertaken to assess the effectiveness of patient counselling in improving medication adherence and reducing depression severity among patients with postpartum depression.

3. Methodology

A prospective observational study was conducted in the General Medicine Department of Government General Hospital, Nellore over a period of six months (December 2025 to May 2026) to evaluate the impact of patient

counseling on medication adherence among patients with postpartum depression. A total of 120 eligible postpartum depression patients were enrolled after obtaining informed consent. Demographic and clinical data were collected using a structured data collection form. Depression severity was assessed using the Edinburgh Postnatal Depression Scale (EPDS), and medication adherence was evaluated using a Medication Adherence Questionnaire. Structured patient counseling was provided regarding disease awareness, medication adherence, lifestyle modifications, and follow-up care. Patients were reassessed during follow-up to evaluate changes in adherence and depression severity. The collected data were analyzed using descriptive and inferential statistical methods, and a p-value <0.05 was considered statistically significant.

4. Results & Analysis

A total of 120 postpartum depression patients were enrolled in the study. The majority of participants belonged to the age group of 26–30 years (40.0%), while women above 35 years constituted the smallest proportion (6.7%). Most participants had secondary-level education (31.7%) and were homemakers (68.3%). The majority of women were within the first three months postpartum (43.3%), indicating that depressive symptoms were more commonly identified during the early postnatal period. Normal vaginal delivery was reported in 60.0% of participants, and 65.0% reported receiving adequate family support. Only 18.3% of women had a previous history of depression.

These findings are comparable with studies by Tebeka et al. and Ayoub et al., which reported a higher prevalence of postpartum depression among women in the early postpartum period and highlighted the influence of psychosocial factors such as family support and previous psychiatric history on maternal mental health outcomes. The predominance of homemakers observed in the present study is also consistent with findings reported in previous postpartum depression research conducted in developing countries.^{2,3}

Table 1. Baseline Characteristics of Study Participants (n=120)

Characteristics	Category	Frequency (n)	Percentage (%)
Age Group (Years)	18–25	28	23.3
	26–30	48	40.0
	31–35	36	30.0
	>35	8	6.7
Educational Status	Illiterate	12	10.0
	Primary Education	20	16.7
	Secondary Education	38	31.7
	Intermediate	26	21.6
	Graduate	16	13.3
	Postgraduate	8	6.7
Occupation	Homemaker	82	68.3
	Employed	24	20.0
	Self-Employed	8	6.7

	Unemployed	6	5.0
Duration Since Delivery	<3 Months	52	43.3
	3–6 Months	40	33.3
	6–12 Months	28	23.4
Type of Delivery	Normal Vaginal Delivery	72	60.0
	Caesarean Section	48	40.0
Family Support Status	Adequate	78	65.0
	Moderate	28	23.3
	Poor	14	11.7
Previous History of Depression	Yes	22	18.3
	No	98	81.7

Table 2. Baseline Depression Severity and Medication Adherence (n=120)

Parameter	Frequency (%)
Mild Depression	38 (31.7)
Moderate Depression	56 (46.7)
Severe Depression	26 (21.6)
High Adherence	24 (20.0)
Moderate Adherence	40 (33.3)
Low Adherence	56 (46.7)

Moderate depression was the most prevalent category (46.7%), while low medication adherence was observed in 46.7% of patients. These findings indicate that poor adherence remains a significant barrier to successful management of postpartum depression. Similar observations have been reported by O'Hara MW and colleagues.¹

Table 3. Reasons for Medication Non-Adherence (n=56)

Reason	Frequency (%)
Forgetfulness	22 (39.3)
Fear of Side Effects	12 (21.4)
Lack of Family Support	8 (14.3)

Financial Constraints	6 (10.7)
Feeling Better and Stopped Medication	6 (10.7)
Others	2 (3.6)

Forgetfulness was identified as the most common reason for non-adherence (39.3%), followed by fear of side effects (21.4%). Similar barriers have been reported in studies evaluating antidepressant adherence among psychiatric patients.¹⁴

Table 4. Comparison of Medication Adherence Before and After Counselling (n=120)

Adherence Level	Before Counselling n (%)	After Counselling n (%)
High	24 (20.0)	68 (56.7)
Moderate	40 (33.3)	36 (30.0)
Low	56 (46.7)	16 (13.3)

p-value < 0.001

A significant improvement in medication adherence was observed following counselling. High adherence increased from 20.0% to 56.7%, while low adherence decreased from 46.7% to 13.3% ($p < 0.001$). These findings support the effectiveness of counselling interventions in improving treatment compliance and are consistent with previous studies by Readdean et al.¹⁰

Table 5. Comparison of EPDS Scores Before and After Counselling (n=120)

Assessment	Mean EPDS Score (Mean \pm SD)
Before Counselling	17.8 \pm 4.2
After Counselling	10.6 \pm 3.8

p-value < 0.001

A significant reduction in depression severity was observed following counselling. The mean EPDS score decreased from 17.8 \pm 4.2 to 10.6 \pm 3.8 ($p < 0.001$), indicating substantial improvement in depressive symptoms. Similar reductions in EPDS scores following educational and psychosocial interventions have been reported by Dennis and Hodnett.⁹

Table 6. Association Between Family Support and Medication Adherence (n=120)

Family Support	High Adherence n (%)	Low Adherence n (%)
Adequate Support	52 (66.7)	6 (7.7)
Moderate Support	12 (42.9)	6 (21.4)
Poor Support	4 (28.6)	4 (28.6)

p-value < 0.05

Patients receiving adequate family support demonstrated significantly higher adherence rates compared with those reporting poor support. This finding highlights the positive influence of social and family support on treatment compliance and recovery from postpartum depression.¹⁵

Overall Findings

The study demonstrated that patient counselling significantly improved medication adherence and reduced depression severity among postpartum depression patients. Low adherence and moderate depression were common at baseline, whereas counselling resulted in a marked increase in adherence and significant improvement in EPDS scores. Family support emerged as an important factor influencing treatment outcomes. These findings emphasize the value of integrating structured counselling and adherence-monitoring programs into routine postpartum care.

5. Conclusion

The present study demonstrated that patient counseling has a significant positive impact on medication adherence among patients with postpartum depression. Structured counseling improved patients' understanding of their condition, enhanced adherence to prescribed medications, and contributed to a significant reduction in depression severity. The findings highlight the importance of integrating patient education and counseling into routine postpartum care to optimize treatment outcomes and promote maternal mental well-being. Continuous follow-up, family support, and adherence-focused interventions may further improve the management of postpartum depression and enhance the quality of life of affected women.

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