

## To study knowledge and attitude regarding post- partum depression before and after a structured teaching program intervention among registered staff nurses

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### ABSTRACT

**Background & Aim:** Untreated postpartum depression (PPD) can result in serious consequences on health of mother, baby and entire family. Despite its far-reaching consequences, PPD still goes unnoticed. Nurses can play an important role in its early detection and facilitating management of PPD. Current study aimed to check the effect of structured teaching program upon baseline knowledge and attitude regarding PPD. **Materials and method:** It was an experimental study using pre and post-test design, conducted at a tertiary teaching hospital. Total 31 qualified, registered staff nurses working in obstetric setting were enrolled for a structured teaching program after obtaining ethics committee approval and informed consent. A knowledge and attitude questionnaires was developed comprising of 40 items focusing on knowledge about epidemiology & etiology, clinical features, management & prognosis, and attitude about barriers to screen PPD & role of nurses in PPD identification and management. The mean knowledge & attitude score was compared pre ad post-test using SPSS. **Results:** Mean knowledge score on epidemiology & aetiology domain and clinical features domain significantly improved in post-test assessment. Majority of nurses perceived barriers of lack of manpower, privacy at work place, and lack of time while screening for PPD. All nurses agreed that they can initiate a vital role in identifying the early signs & symptoms of PPD as they are the first line of contact with patients. **Conclusion:** This study revealed that nurses' knowledge and opinion regarding PPD can be effectively improved with teaching interventions.

**Keywords:** Postpartum depression, structured teaching program, registered nurses, knowledge, attitude.

**D**uring the postpartum period (from the day of delivery till 1 year postpartum), up to 85% of women experience some type of mood disturbance. For most of the women, symptoms are transient and relatively mild (i.e., postpartum blues); however, 10-15% of women experience

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a more disabling and persistent form of mood disturbance diagnosed as postpartum depression (PPD).<sup>[1]</sup> Postpartum depression can be characterized by all the symptoms of classic depression, including physical, emotional, cognitive, and behavioural changes; i.e., sadness, anhedonia, hopelessness, lack of confidence, self-blame, ideas of guilt and worthlessness, difficulties in thinking and making decisions, low energy, fatigue, apathy, loss of appetite and weight, disturbed sleep, anxiety, restlessness, and suicidal thoughts.

Untreated postpartum depression can result in poor antenatal care, self- harm, poor obstetric outcomes, neglect to the infant, poor mother-infant bonding, poor emotional development of the child in future and increased future chances of chronic, recurring mood disorder in mother. Despite its far-reaching consequences, it is still missed and remains untreated, which not only hampers the infant care but raises the cost to society over the long-term.<sup>[1]</sup>

Prompt recognition and treatment of postpartum depression are essential for both maternal and infant wellbeing. Nurses are majorly the first contact person for pregnant women and can play an important role in its detection and early management to reduce depressive symptoms in these women. Public health nurses are equipped with care paths addressing specific health needs of depressed women in the primary care setting.<sup>[2]</sup>

In resource scarce country like India, where, there is a dearth of speciality mental health professionals in general, all reproductive health-care workers including frontline nurses need to be aware of perinatal psychiatric problems to deliver appropriate services to patients. Nurse can play an important role in identifying the depressive symptoms and can initiate treatment with the help of other health care professionals. Hence, there is a need to increase awareness among nurses regarding epidemiology, clinical features, screening, management and the role of nurses in screening and prompt referral for PPD in patients.

The current study aimed at assessing the existing knowledge and attitude of staff nurses regarding postnatal depression along with perceived barriers to diagnose PPD in their routine nursing practice. The study also aimed to assess the effectiveness of structured teaching programme (STP) on staff nurses by comparing their pre-test and post-test knowledge.

### ***Material and Method***

A structured knowledge and attitude questionnaire was developed which consisted 3 parts:

Part A: Comprised of items assessing demographic variable like age, sex, education, qualification & total years of experience of nurses.

Part B: Consisted of 30 knowledge items on PPD divided into 3 domains covering knowledge of epidemiology & etiology (10 items), clinical features (10 items), and management & prognosis (10 items).

Part C: Consisted of 10 attitude- based items assessing perceived barriers to screen PPD & Nurse's role in care for PPD (5 items each).

Each correct answer received 1 score. The total knowledge score was 30. The initial draft of structured questionnaire was given to experts from the field along with the outline of the structured teaching program. The suggestions received were accepted and incorporated into the final draft of questionnaire.

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## METHODOLOGY

It was a cross-sectional, experimental study where pre and post-test design was used. The study was conducted in department of Obstetrics and Gynaecology at tertiary teaching hospital at Navi Mumbai. Non-probability purposive convenient sampling technique was used and the estimated sample size was 31 nurses. Staff nurses who were qualified in diploma nursing and working in obstetric setting, willing to participate in the study were included in the study after obtaining ethics committee approval and informed consent from the participants. Lecture cum discussion method was selected as an appropriate method of intervention in teaching staff Nurses. The knowledge scores were collected pre and post teaching intervention. The data analysis was done using descriptive and inferential statistics (Paired t test, McNemar Test, NPAr Test) using SPSS software.

## RESULTS

Total 31 female registered staff nurses working in obstetrics and Gynaecology setup were enrolled for the training program. The socio-demographic profile observed mean age of the nurses to be 29.23 years with range of 21 to 57 years (SD=8.906). Majority of them had completed their General Nurses Midwife (GNM) course (64.5%), belonged to Hindu religion (83.9%) and were married (N=20, 64.5%). The mean experience of working as staff nurse was 7.25 years (SD= 7.993), ranging from minimum 1 year to maximum of 27 years. (Table 1) All nurses reported having seen patients with postpartum depression during their work as staff nurse however more than half of them (58.1%) denied having had formal training regarding the same.

**Table 1: Socio-demographic profile of nurses:**

Sociodemographic Parameter		Frequency	Percentage
Age Mean		29 Yrs (SD=8.90)	
Education	ANM	08	25.80%
	GNM	20	64.51%
	BSC	03	9.67%
Religion	Hindu	26	83.9%
	Christian	04	12.9%
	Sikh	01	3.2%
Marital Status	Married	20	64.5%
	Unmarried	11	35.5%
Average working experience		7 Years (SD= 7.99)	

Table 2 describes the summary of outcome of knowledge score on etiology and epidemiology, clinical feature and management, prognosis with regards to postnatal depression before and after administration of standard teaching program, i.e. pre and post-test scores.

**Table 2: Effect of STP on knowledge scores:**

Knowledge Domain	Pre-Test Score Mean	Post Test Score Mean	p Value by Paired Test
Etiology & Epidemiology	6.94	7.87	0.004*
Clinical features & Diagnosis	3.17	4.27	0.016*
Management & Prognosis	5.42	5.68	0.255

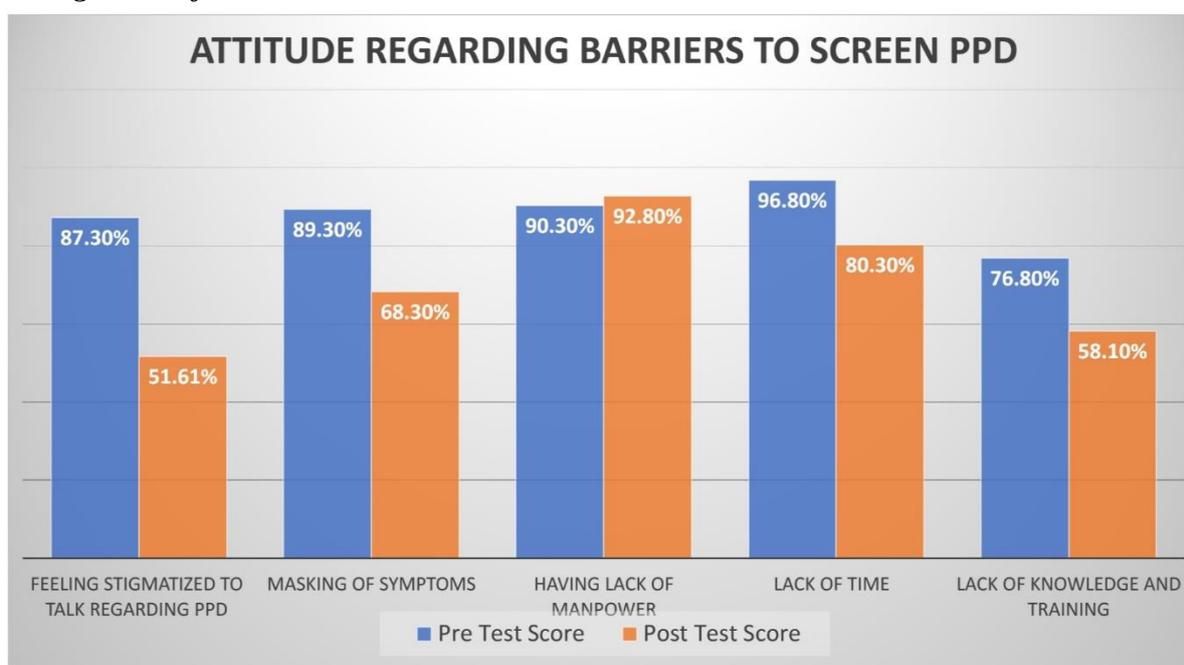
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On knowledge questionnaire, the mean pre-test score for etiology and epidemiology was 6.9 with SD 1.237 and mean score post-test was 7.87 with SD 1.839. this improvement in knowledge regarding etiology and epidemiology of postnatal depression was statistically significant ( $p=0.004$ ).

The knowledge score for Clinical features also significantly improved after the standard teaching program with mean score pre-test of 3.17 (SD= 1.763) and mean post- test score of 4.27 (SD= 1.911) and p value of 0.016.

The nurses had improved mean knowledge score on management and prognosis domain with mean pre-test score of 5.42 (SD 1.259) and post-test mean score of 5.68 (SD 1.351). However, this change in the mean score with standard teaching program on management and prognosis was not statistically significant.

**Graph 1: Change in Attitude of nurses towards perceived barriers in identification and management of PPD**



In pre-test assessment, the majority of the nurses agreed upon barrier questions like having lack of time, lack of manpower, being unsure of symptoms due to masking with routine post-natal symptoms, feeling stigmatized to talk regarding PPD and lack of knowledge and training were comparable.

The agreements on perceived barriers observed changes after training session where nurses reported better understanding through training of symptoms, felt less stigmatized to ask for the symptoms and felt that the screening can be performed in-spite of time constraints. (Graph 1)

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**Table 3: Influence of STP on perceived role of nurses in identification and management of PPD**

<b>Attitude towards Nurses’ role in recognition of PPD</b>	<b>Pre-test agreement (frequency)</b>	<b>Post-test agreement (frequency)</b>
Nurses can initiate a vital role in identifying the early signs & symptoms of Post-Partum Depression as they are the first line of contact with patients	23 (74.20%)	30 (96.77%)
A disturbed mother can be reassured by nurses and be provided with support as part of psychosocial support.	22 (70.96%)	31 (100%)
Nurses can address spouses and other significant relatives to help them understand the illness and to enhance their involvement in care of mother- infant dyad.	18 (58.06%)	26 (83.87%)
Mother-infant bonding needs to be highlighted as a part of complete recovery from Post-Partum Depression.	24 (77.41%)	30 (96.77%)
Special training in identification and management of Post-Partum Depression can be beneficial.	19 (61.29%)	31 (100%)

On the domain assessing nurse’ understanding of their role in managing post-partum depression, nurses reported improvement in agreement upon items like ‘nurses can initiate a vital role in identifying the early signs & symptoms of Post-Partum Depression as they are the first line of contact with patients’, ‘A disturbed mother can be reassured by nurses and be provided with support as part of psychosocial support’, ‘Mother-infant bonding needs to be highlighted as a part of complete recovery from Post-Partum Depression’ and ‘special training in identification and management of Post-Partum Depression can be beneficial’. (Table 3)

## **DISCUSSION**

PPD is a silent suffering for a new mother where a huge time can get lapsed before it comes to notice of others or land up in a severe complication. Some women may never get help and just wait until the symptoms fade with time. Because of prevailing stigma many of the women may choose to suffer alone, are unable to tell their friends, spouse or health-care provider what is happening with them.<sup>[3]</sup>

Considering the fact that the PPD is a prevalent mental health problem encountered during postpartum period and conducting routine screening for PPD is the responsibility of reproductive health care workers including nurses. The current study highlights that the nurses had observed and handled cases of PPD routinely in their practice however have never received training regarding the same The findings with regard to pre-test knowledge on postnatal depression revealed that the knowledge of nurses regarding postnatal depression was inadequate which emphasizes the need for teaching program to improve their knowledge regarding postnatal depression.

Our study observed significant improvement in scores of knowledge about etiology, clinical features by administration of a teaching program regarding PPD. Similar Indian study observed that the mean knowledge score regarding etiology, clinical feature, diagnosis and management increased post- test and author concluded that there is a statistically significant improvement in the knowledge among the staff nurses who underwent structured teaching program in postnatal depression.<sup>[4]</sup>

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There are many studies being conducted to assess the existing knowledge of nurses and midwives regarding PPD and further to understand the scope of interventions to improve such knowledge. Study conducted by Jones CJ et al on eight hundred and fifteen members of the Australian College of Midwives reported poor knowledge regarding the risk factors, prevalence, incidence, onset of PPD and regarding treatment options associated with postpartum depression. The knowledge regarding the use of antidepressant medications and use of screening tool was observed to be poor. Author emphasized need for continuing professional education to improve midwives' knowledge and competency in the assessment and care of women suffering from depression.<sup>[5,6]</sup>

In our study, majority of the nurses had improved agreement on items describing the nurse's role in screening, identification and referral of new mothers with depression. An Australian study conducted on Midwives reports that Midwives accept it is their role to assess the mental health status of women but many feel ill-equipped to do so and express a strong desire for further knowledge and skills across a range of perinatal mental health topics.<sup>[7]</sup>

More than half of the nurses reported that they had inadequate training regarding PPD. In concordance to our findings, another study observed that during their professional education about 1/3 of nurses and midwives and 2/3 of them during their post graduate trainings could not receive sufficient knowledge on PPD. However, it is very important that all nurses and midwives, who are most likely to meet frequently with the new mother, acquire adequate skills and knowledge on PPD; particularly in preventing and early diagnosing the problem and guide the woman for appropriate treatment once the problem is detected.<sup>[8,9]</sup>

Study by Rush P et al revealed that nurses and midwives assume PPD as an important health problem. Also, they recognize that their role related to postpartum depression are important. Because nurses and midwives are in a unique position to identify mother in PPD risk and to help them, these results could be interpreted as positive.<sup>[10]</sup>

According to Ministry of Health of Turkey, Postpartum Care Method Guide, nurses and midwives are expected to be involved in postnatal psychosocial assessment of childbearing women for PPD during postnatal visits using Edinburg Postnatal Depression Scale.<sup>[11]</sup> This highlights an essential step in management of PPD by involving the health care workers in screening, identification and management of PPD. Every case of PPD identified and managed can have a great positive impact on overall health and wellbeing of mother and child in future and can prevent the silent sufferings of many mothers.

Structured teaching program can address to the deficiencies in the training of nurses and can be conducted by experts to improve knowledge regarding the health problems which in turn can improve their attitude and skills in clinical care. Studies related to effectiveness of structured teaching programme shows similar results and highlights the importance of STP in improving the knowledge regarding many disorders.<sup>[12-17]</sup>

## **CONCLUSION & IMPLICATIONS**

The knowledge regarding PPD among the staff nurses improved significantly after undergoing the structured teaching program training. There is a need for conducting regular educational programs for upgrading the existing knowledge of registered nurses regarding PPD to improve nursing skills and services in perinatal care. Nurses thus equipped with updated knowledge of PPD, can play a vital role in early identification by screening, initial

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management and referral for expert management which in-turn can help restore the 'Motherhood' in the suffering mothers.

## REFERENCES

1. Bewley C. Postnatal depression. *Nursing Standards* (1999) Nov; 13(16): 49-56.
2. Buist A, Bilszta J, Milgrom J, Barnett B, Hayes B, Austin MP. Health professional's knowledge and awareness of perinatal depression: results of a national survey. *Women's Birth*. 2006 Mar; 19(1):11-6.
3. Tezel A, Gözümlü S. Comparison of effects of nursing care to problem solving training on levels of depressive symptoms in post partum women. *Patient Education Couns*. 2006 Oct; 63(1-2):64-73.
4. Zauderer C. Postpartum Depression: How Childbirth Educators Can Help Break the Silence. *The Journal of Perinatal Education*; 18(2): 23–31, doi: 10.1624/105812409X426305
5. Hiremath P, Mohite VR, Salimath G, et al. A study to assess the effectiveness of the structured teaching program on knowledge of postnatal depression among staff nurses in selected hospital at Tumkur. *J. Evolution Med. Dent. Sci*. 2016; 5(62):4337-4341, DOI: 10.14260/jemds/2016/990
6. Jones CJ, Creedy DK, Gamble JA. Australian midwives' knowledge of antenatal and postpartum depression: A National survey. *Journal of Midwifery and Women Health* 2011; 56: 353-361.
7. Işık SN, Bilgili N. Postnatal depression: midwives and nurses knowledge and practices. *Erciyes Tıp Dergisi* 2010;32(4):265-274.
8. Hauck YL, Kelly G, Dragovic M, Butt J, Whittaker P, Badcock JC. Australian midwives knowledge, attitude and perceived learning needs around perinatal mental health. *Midwifery*. 2015 Jan;31(1):247-55. doi: 10.1016/j.midw.2014.09.002. Epub 2014 Sep 16.
9. Lintner NC, Gray BA. Childbearing & depression: What nurses need to know. *AWHONN Lifelines* 2006; 10: 50-57.
10. Longsdon MC, Wisner K, Billings DM, Shanahan B. Raising the awareness of primary care providers about postpartum depression. *Issues in Mental Health Nursing* 2006; 27: 59-73.
11. Rush P. The experience of maternal and child health nurses responding to women with postpartum depression. *Matern Child Health J* 2012; 16: 322-327.
12. KURTÇU A, GÖLBAŞI Z. Postpartum Depression: Knowledge and Opinions of Nurses and Midwives Employed in Primary Health Care Center. *F.Ü.Sağ.Bil.Tıp Derg*. 2014; 28 (3): 93 – 99
13. Desai S, Hiremath P, Naregal P. A study to assess the effectiveness of planned teaching programme on knowledge regarding epilepsy management in school children among primary school teachers working in selected primary schools at Malur, Kolar, Karnataka. *International Journal of Health Sciences and Research* 2015;5(8):417-423.
14. Chopade UA, Kadam S, Hiremath P. A Study to assess the effectiveness of planned teaching programme (PTP) on knowledge regarding needle stick, sharp injuries and their prevention among 1st year B. Sc. nursing students at KINS, Karad. *International Journal of Health Sciences and Research* 2015;5(8):401-406.
15. Chopade U, Mohite VR, Salunkhe A, et al. A study to assess the effectiveness of self-instructional module on the knowledge of prevention of nosocomial infection among 2nd year RGNM students of Krishna institute of nursing sciences at Karad. *International Journal of Innovative and Research* 2016;5(5):59-63.

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16. Naregal PM, Mohite VR, Hiremath P, et al. Effectiveness of planned teaching programme on knowledge regarding prevention of child abuse and neglect among primary school teachers. *Online Journal of Health Allied Sciences* 2015;14(4):11.
17. Naregal PM, Mohite VR, Hiremath P, et al. Effectiveness of SIM (Self Instructional Module) on knowledge regarding prevention of nosocomial infection in NICU among nursing students. *IJHSR* 2015;5(4):190-196.
18. Hiremath P, Mohite VR, Naregal P, et al. A study to assess the effectiveness of planned teaching programme on knowledge and management of epilepsy among epileptics attending outpatient department in Krishna hospital Karad. *IJHSR* 2014;4(10):172-176.

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***Conflict of Interest***

The author declared no conflict of interests.

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