The Knowledge and Learning Needs of Nurses Working in and Maternal and Neonatology Unit on Perinatal Mental Illnesses.: A Cross-Sectional Survey

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ABSTRACT

Perinatal period is a critical life period for all women as they are going through different physical, physiological, hormonal, psycho-social and emotional changes. Risk factors and poor support system can complicate pregnancy, child birth and postpartum and can result in mild to severe symptoms of mental illness, the incidence of these mental illnesses are very alarming even though the actual number is not being calculated because of personal, professional and social barriers. To ensure the mental health of both mother and infant the nurses working in maternal and neonatal care units should have adequate knowledge. The current study assessed the knowledge level and learning needs of the nurses by using a descriptive cross-sectional survey method among 54 nurses. And the results showed a remarkable deficient knowledge level among the subjects especially on the postpartum mental illnesses, its identification and screening and the management measures. The administrators and institutions should take necessary action to educate the nurses on speciality care in frequent basis so that an effective and collaborative care can be ensured.

INTRODUCTION

The motherhood is a state, one experiences her maternal roles which is acquired through the transitions like pregnancy, child birth and post-partum. The term has been used interchangeably with the antecedent (the encounters of mother with the child in or out of the womb) and consequences (role changes and adaptation to change).[1]
Perinatal period is a period which starts from the conception till the 6 months of postpartum where the transition from a single independent individual unit to a new irreversible mother child dyadic unit is a critical, progressive and continuous process a transition happening from a women to a mother; [2]
And in this journey the women may undergo wide and wild emotional roller coast from a denial, disagreement, confusion, overwhelming, happiness, doubt, anger, aggression, apathy, sadness, fear of child birth, resistance to change to a new role, difficulty in adaptation and coping. Some women may have additional risk as they are psychosocially vulnerable in this period due to financial instability, poor support system, intimate partner violence, teen/late/unpanned

pregnancy, poor obstetric history of infertility, abortions, history of perinatal or other mental illnesses. The vulnerability in perinatal health is centred around threats, barriers, and reparations, all in constant interactions with each other and responsible for the occurrence of mental illnesses which can develop any time from conception till postpartum with mild-to severe symptoms. [3]

The estimated prevalence of perinatal mental health conditions is alarming; perinatal depression is between 14 -24%, pregnancy related stress (30.9%) and anxiety (23%) Post partum blues (40-85%), general anxiety disorder (GAD), obsessive-compulsive disorder (OCD), Post-traumatic stress disorder (PTSD), and Tokophobia (extreme fear of childbirth) also can occur alone or as a comorbidity to depression. Raza and Raza (2022) stated postpartum psychosis as the severest but rarest postpartum psychiatric condition with an estimated global prevalence of 0.08 to 2.6 per 1000 births.[4–6]

Because of the potential negative impact on maternal and child outcomes and the potential lability of these disorders, the perinatal period is a critical time to identify psychiatric illnesses. Thus, the health professionals especially the nurses play a crucial role in assessing women's mental health needs and to refer identified women promptly for multidisciplinary specialist assessment.[7]

While dealing with a perinatal woman the nurses should know what, why, how of the problems they are undergoing because in a country like India most of the women are delivered in primary health centres, nursing homes or maternity hospitals and from the first point of contact till the postpartum the women rely the most on their health team. But due various social, institutional and administrative barriers, the perinatal mental health concerns are not being identified, diagnosed or treated as they should be.

The evidences report nurses have reported limited knowledge and skills on how to assess emotional changes related to the perinatal period, most of them do not consider they have a role in the perinatal mental health care and found main obstacle to caring for these women as being a lack of continuity of carer. [8,9]

Recent study results showed similar results were Nortey et.al (2024) studied among 211 perinatal care nurses and found nearly half of them (47.4%) depicted inadequate knowledge on perinatal mental health conditions. Downes et.al (2017) explored the extent of practice nurses' (n=185) involvement with women experiencing perinatal mental health problems and found deficits in knowledge and they were not confident to inquire about sensitive topics, violent behaviours etc. poor knowledge levels also reported by Higgins et.al (2018) study were poor in knowledge and skills in addressing all aspects of mental health, including opening a discussion with women on more sensitive issues, deal with a trauma and psychosis and providing psycho-education [8–10].

The role of Nurses working closely with perinatal women is critical in identifying and managing the mental illnesses. Neonatal units are very understudied area on this context, because the neonatal care always demand the presence and involvement of mothers for taking care of newborn in their feeding, kangaroo mother care and other essential care. In perinatal wards the mothers will have different physical and psychological issues in both antenatal and postnatal period. fear of childbirth process, stress, lack of support system, pregnancy complications, and mothers who are involved in newborn care after a vaginal delivery or caesarean section are more exhausted with their own physical condition, pain, disturbed self-care, poor sleep and nutrition, worry about the newborn's condition, long hospital stay etc. so their mental health is very much important as they are very much vulnerable for postpartum mental illnesses.

MATERIALS AND METHODS
Considering the context and literatures the current study aimed at studying the

knowledge needs of nurses working in maternity and neonatology units on perinatal mental illnesses. A descriptive survey was conducted among 54 nurses working in a maternity hospital of North India. Ethical clearance and setting permission were taken. Using convenience sampling and inclusion criteria the nurses were surveyed with a structured knowledge questionnaire after taking their consent.

Socio-demographic profile include 10 items include Age, gender, educational qualification, designation, current working area, total years of clinical experience, total years of experience in Prenatal/ Postnatal/ Labour room/ New-born care units, type of working hospital, experience to deal with Prenatal/ Intra-natal/ Postnatal woman with mental health issues, and experience of training or awareness programmes related to management of perinatal mental illness. A structured knowledge assessment tool was developed and validated was administered among the nurses after reliability check. The 3 dimensions of the Knowledge questionnaire were overview of perinatal psychiatric illness, Screening and identification of Perinatal psychiatric illnesses, and Psychosocial nursing

intervention. All 20 questions were multiple choice questions with 4 multiple choices.

STATISTICAL METHODS
SPSS 22 was used for analysing the computed data. Analysis was done using descriptive statistics such as frequencies and percentages to test the knowledge level and learning needs. The data were assessed for normality using Kolmogorov-Smirnov test.

RESULTS
The subjects (n=54) participated were all females, with more than 72% of them between the age group of 20-30 years. Majority (64.8%) of them had a diploma in nursing and 50 nurses were nursing officers where 4 were senior nursing officers in the unit. 33 nurses were working in antenatal/postnatal wards, and 21 were working in neonatal intensive care unit. Most of the nurses 0-5 years of experience in the current speciality area where 38.8% had less than 1 year and 35.1% had 1 to 5 years of experience in the speciality area. 48.2% had an experience of meeting/ caring a woman with perinatal mental issues and 14.8% have attended a training /awareness program online/offline.

Table 1: Sociodemographic profile

Sl no.	Sample characteristics		Frequency (n=25)	Percentage (%)
1	Age	20-30 years	39	72%
		31-40 years	13	24.3%%
		41and above	2	3.7%
2	Gender	Female	54	100%
3	Educational qualification	GNM	35	64.8%
		B.Sc. Nursing	18	33.3%
		Post graduation and above	1	1.8%
4	Designation	Nursing officer	50	92.5%
		Senior Nursing officer	4	7.4%
5	Current working area	Ante natal and Post Natal wards	33	61.2%
		Neonatal ICU	21	38.8%
6	Total years of experience Nursing service	Less than 1 year	10	18.5%
		1 to 5 years	28	51.8%
		5 to 10 years	12	22.2%
		More than 10 years	4	7.4%
7		Less than 1 year	21	38.8%

	Total years of experience in maternal and New-born care units	1 to 5 years	19	35.1%
		5 to 10 years	6	11.1%
		More than 10 years	4	7.4%
8	Experience of meeting or cared Prenatal/ Intra-natal/ Postnatal woman with mental health issues	Yes	26	48.2%
		No	28	51.8%
9	Attended training or awareness programs related to management of perinatal mental illness	Yes	8	14.8%
		No	46	85.

The data from knowledge questionnaire on management of Perinatal mental illness was analysed using descriptive statistics to find the level of knowledge of the subjects which is presented in terms of frequency and percentage. The different levels of knowledge is as follows 0-5 poor, 6-10 less, 11-15 is satisfactory and 16-20 is high knowledge.

Table 2: Knowledge about management of perinatal psychiatric illnesses among nurses (n=54)

Sl no.	Knowledge about Management of Perinatal mental illness	Range	Mean	S.D.	Standard error
1	Knowledge score	0-7	3.3	1.37	0.140

The mean knowledge level ranged between 0-7 with a mean score of 3.3 ± 1.37. Where only 2 (3.7%) nurses had less knowledge and 52 (96.2%) had poor knowledge where all nurses had found to have inadequate knowledge.

Table 3: Knowledge score -Item analysis for need assessment

SL NO	Knowledge on different domains	Yes	No
	Overview of perinatal psychiatric illness Incidence & prevalence		54 (100%)
	Etiology	4 (7.4%)	50 (92.5%)
	Risk factors	8 (14.8%)	46 (85.2%)
	Symptoms	7 (13 %)	47(87%)
	Consequences	2 (3.7%)	52 (96.3%)
	Myths and misconceptions	1 (1.8%)	53 (98.2%)
2	*Screening and identification of perinatal psychiatric illnesses*	4 (7.4%)	50 (92.5%)
3	*Psychosocial nursing interventions* Nursing management	12 (22.2%)	42 (77.7%)
	Psycho-education	11 (20.4%)	43 (79.6%)
	Newborn care	29 (53.7%)	25 (46.3%)
	Family supportive care	12 (22.3%)	42 (77.7%)

The nurses had very poor knowledge in all 3 domains of knowledge questionnaire. None of them had knowledge about the incidences and prevalences of perinatal mental illnesses and how common theses mental illnesses can occur. Knowledge on aetiology (92.5%), risk factors (85.2%), symptoms (87%), consequences (96.3%), myths and misconceptions (98.2%) were also very less. Only 4 (7.4%) had knowledge about the identification and screening of perinatal mental illnesses. In third domain: knowledge on nursing management measures where deficient in 42 (77.7%) nurses, 79.6% had no knowledge in planning and giving psychoeducation to the women and family, the knowledge about involving the women with perinatal mental illness and their family in newborn care was better compared to other questions. 29 (53.7%) nurses had knowledge about the newborn care and 22.3% had knowledge about how to involve family in perinatal mental health care.

DISCUSSION

The nurses participated were all females, most of them (72%) where between the age group of 20-30 years which was similar to, Detkos et.al studies in 2020(100%), 2024 (99%) had female respondents. In Hiremath et.al (2016) study majority (88%) of the respondents were females, majority (40%) of the respondents belongs to the age group of 25-30 years. Majority of the nurses (64.8%) were having diploma nursing which was similar to Hiremath et. al (2016) where all participants were GNM nurses. [11,12]

Most of the nurses 0-5 years of experience in the current speciality area where 38.8% had less than 1 year and 35.1% had 1 to 5 years of experience in the speciality area, 92% were nursing officers. Kurtcu et. al (2014) the cross-sectional study, there were 46 (42.6%) clinic nurses and 62 (57.4%) community nurses in this study and their average years of clinical experience were 10.00 and 4.50 years respectively. [13]

48.2% of nurses had an experience of meeting/ caring a woman with perinatal mental issues and 14.8% have attended a training /awareness program online/offline. In Detkos et. al (2024) study, 83% of participants had no prior educational preparation for Post Partum mental illness management, as declared in a sociodemographic questionnaire. Similarly, 16.2% of participants conducted postpartum depression screening and 22.8% referred the new mother with a suspected postpartum depression in kang et.al (2019) study. [11,14]

The sociodemographic details were very much similar to a descriptive study conducted in Nepal by Gurung et.al (2019) where, 60.80% of respondents were 19-23 years, mean age was 22.90 and 51.40% had work experience of below 2 years and 45.90% are working in gynae/obstetric ward.[15]

The current study showed remarkable deficient knowledge among nurses working in maternal and neonatal nurses about the perinatal mental illnesses, which was very much similar to the previous literatures. Elshatarat et.al (2018) conducted a descriptive, cross-sectional study among 181 nurses and 143 midwives to identify their knowledge on assessment and management of postpartum depression and found that they had very less knowledge about postpartum depression. Qualitative studies also found deficient knowledge among midwives on perinatal mental illnesses, assessment, referral and on giving health teaching and counselling. [16,17]

But the contradictory results also were found in earlier literatures, where maternal-child health nurses showed better knowledge than other health professionals on identifying and managing perinatal mental illnesses. [18]

Nurses learning needs identified were mainly on perinatal mental illnesses and their screening as they had very poor knowledge about the incidence, aetiology, risk factors, symptoms, consequences and myths and misconceptions about perinatal mental illness. The knowledge regarding screening and identification of perinatal mental illnesses, nursing management, and family support care. The findings were contradictory to Gurung et.al (2019) study where overall knowledge on postpartum knowledge was low among nurses but they had enough knowledge on aetiology, symptoms, management measures of PPD. [15]

Perinatal psychiatry is in its beginning stage in India where the health system needs evidence-based guidelines, vast research backup, infrastructures and educated health professionals who can integrate maternal-neonatal-and mental health care effectively by assessing screening, identifying, manging and educating the women with perinatal mental illnesses without any preoccupations or misconceptions. Nurses are the most appropriate people through whom the awarenesses and change can achieve.

Considering the deficient knowledge and learning needs of nurses found in current study, the researcher recommends nation-wide educational preparation and skill training of nurses working in maternity and community settings. The evidence-based modules, speciality courses and continuous

education should be planned in institutional settings and prepare the nurses to identify, manage and refer such patients timely to avoid psycho-social consequences.

CONCLUSION

The current research was one of the pioneer studies in perinatal psychiatric nursing where the results finger pointing to a need for the integration and preparation of this speciality education to support perinatal mental initiatives of the country. Strong research designs with large sample size and multi-centre studies can improve the generalisation of the results and can add on with the preparation, validation evaluation and implementation of educational interventions.

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