

ASSESSMENT OF NURSES KNOWLEDGE REGARDING POST PARTUM DEPRESSIONS AT GENERAL HOSPITAL LAHORE

Iram Naz¹, Bisma Abbas², Mehwish Awan³, Amina Bibi⁴, Humna Imran⁵,
Rukhsana Shoukat⁶, Ali Hamza⁷, Razia Parveen⁸

⁷Senior Nursing Instructor Aligarh College of Nursing and Allied Health Sciences Lahore)

⁸Principal Aligarh College of Nursing and Allied Health Sciences Lahore)

¹ashahidwaqarto2626gee@gmail.com, ²bismaabbas307@gmail.com, ³med.mehwish05@gmail.com,
⁴anmnanwar307@gmail.com, ⁵Humna8772@gmail.com, ⁶rukhsanashoukat38@gmail.com,
⁷alihamzarajpoot55@gmail.com, ⁸razoap123@gmail.com

DOI: <https://doi.org/10.5281/zenodo.21066650>

Keywords

Nurses, Post-partum
Depression, Diagnose, Risk
Factors, Treatment,
Consequences about PPD,
Pakistan Hospital.

Article History

Received: 24 April 2026

Accepted: 06 June 2026

Published: 21 June 2026

Copyright @Author

Corresponding Author: *

Iram Naz

Abstract

Objective: To assess the level of knowledge among nurses regarding postpartum depression.

Study Design: A descriptive cross-sectional study was conducted.

Place and Duration of Study: The study was carried out at General Hospital Lahore from June 2025 to February 2026.

Methodology: A total of 120 nurses was selected using convenience sampling. Data was collected through a structured questionnaire that included demographic information and questions about nurse's knowledge about post-partum depression. Responses were recorded using a five-point yes or no option. Participants who could read completed the questionnaire themselves, while researchers assisted those who needed help. The data collected were analyzed using SPSS version 25. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize the findings.

Results: Most nurses (97.5%) were female, with a low percentage of male participants (2.5%). Most participants fell within the age range of 26-30 years (57.5%), followed by 31-35 years (30.0%). Educational level is another important factor in this research, as almost 60 percent of the participants had attained a Post RN educational degree, with the remaining 35.0% holding a diploma, and just 9.2% holding a BSN degree with moderate knowledge.

Conclusion: Most nurses' knowledge about PPD is well but their awareness toward PPD was mainly negative. This shows a gap between their knowledge and their attitude toward PPD.

INTRODUCTION

Postpartum Depression (PPD) refers to an excessively depressed state of mind that usually begins within the first four weeks after childbirth; however, it may also commence at any time during the first twelve months after giving birth, according to clinical practice and scientific

evidence. It particularly impacts the mental and psychological wellbeing of a mother during the first year of her delivery experience. It is caused by a number of inter-related causes including, but not limited to, hormonal imbalances, lack of social support, psychological stress, interpersonal problems, poor personality features, and

ineffective coping mechanisms. Postpartum Psychological Vulnerability is increased because of the rapid social and psychological changes a mother experiences during and immediately after delivery.

Whereas most women experience mild forms of baby blues that resolve themselves between one to two weeks, postpartum depression is severe, persistent, and debilitating. These include persistent sadness, irritability, crying, lack of emotions, inability to bond with the baby, overeating or not eating, problems sleeping, feeling guilty, feeling unnecessary, lack of interest in life and withdrawing from society. In some instances, there might be thoughts of harming oneself or the baby, which requires immediate attention. Treatment involves therapy or psychotherapy, supportive social environment or family environment, and use of antidepressants. It is extremely important to diagnose and treat postpartum depression early enough to ensure that both the mother and child benefit.

At Worldwide, postpartum depression (PPD) is a significant mental health problem, affecting between 8% and 26% of the women after giving birth. Postpartum depression is widely regarded as a serious public health problem because of its effect on mothers, newborns, and the family unit as a whole. As stated in the research, stress experienced during pregnancy may cause increased vulnerability to PPD whereas continued emotional and physical support throughout labor can reduce the likelihood of PPD. As cited in the research conducted by Ghazanfar pour et al. (2025), generally, depression affects around 264 million people across the world and thus is a leading cause of disability. In addition, about 80% of new mothers experience some kind of emotional distress after giving birth and global prevalence of postpartum depression is thought to be between 7% and 15% (Wang, Zhang et al., 2025). Additionally, some sources indicate that almost 1 out of 8 women experience PPD. Nevertheless, certain regional studies have recorded even higher PPD rates, up to 48% during pregnancy and 37% after childbirth (Munsele, Bowa et al., 2025). Even with these alarming statistics, prenatal depression screening

practices remain inadequate across most maternal health care systems worldwide.

According to several studies conducted in Pakistan, the incidence rate of postpartum depression (PPD) is significantly higher when compared with the global figures. These figures lie in the range of 28% and 63% depending upon the type of study carried out, the diagnostic criteria used for diagnosis, and demographic differences among populations studied. This rate is much higher than the global average of 17.7%, with very high incidences being seen in developing nations. According to the figures presented by the provinces, there are large differences in rates. Punjab province has witnessed a 34.5% incidence rate of postpartum depression among women in Rawalpindi through a cross-sectional study (Kayani et al., 2025). In the urban area of Karachi (province Sindh), some researchers have found its rate to be between 28% and 36%, especially among South Asian women from poor economic backgrounds. The communities in rural areas of Pakistan are equally at risk with regard to developing postpartum depression. It has been attributed to their economic pressures, lack of availability of health care services and imbalances in their social support networks. These alarming rates point toward the growing necessity of culturally sensitive programs in the country.

This research is significant in many respects, as the knowledge of the nurses concerning postpartum depression is revealed. As known, the disease in question has great risks of affecting both emotional and physical state of a woman after giving birth. Nurses are usually among the first medical workers who interact with postpartum patients; thus, the issue under consideration plays an important role, as the professionals are able to detect certain symptoms including mood swings, difficulties in socialization, or problems of bonding with the baby. To examine the degree of knowledge that nurses have about the problem in question is very important from this point of view. On the other hand, there are many health institutions where the psychological aspect of pregnancy is often overlooked, focusing on purely medical aspects of

caring about pregnant and newborn mothers instead. The study will contribute to addressing this problem, revealing the current situation, and finding ways of how to cope with the problem in question. This way, it will be possible to improve the situation for both patients and children.

OBJECTIVES

General Objective:

To assess the level of knowledge among nurses regarding postpartum depression.

Specific Objectives:

1. To evaluate understanding of the signs and symptoms of postpartum depression among the nurses.
2. To assess knowledge of nurses about the causes and risk factors associated with postpartum depression.
3. To determine awareness of screening and management strategies for postpartum depression in the nurses.

MATERIALS AND METHODS

Study Design

This study will be a descriptive cross-sectional study conducted to assess the knowledge and awareness of nurses regarding postpartum depression

Setting

This research will be conducted at General Hospital, Lahore, in the department of Obstetrics and Gynecology. Duration of the whole research period will be nine months, starting from June 2025 to February 2026.

Sample Size

Sample size will be determined by applying Slovin’s formula at 95 percent confidence level and 5 percent margin of error. With a population size of, the sample size will be:

Slovin’s Formula

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- n = sample size
- N = total population

- e = margin of error (in decimal form)
- N = 172
- e = 0.05 (for 95% confidence)

$$n = \frac{172}{1 + 172(0.05)^2}$$

$$n = \frac{172}{1 + 172(0.0025)}$$

$$n = \frac{172}{1 + 0.43}$$

$$n = \frac{172}{1.43}$$

$$n = 120.28$$

Final sample size = 120 participants (approximately)

Sampling Technique

The sample for the study will be obtained through convenience sampling. Participants will only be included if they are nurses from the Obstetrics and Gynecology unit that work directly with mothers.

Sample Selection

Inclusion criteria:

- Registered nurses working in the Obstetrics and Gynecology department.
- Nurses with at least six months of clinical experience in maternal or obstetric care.
- Nurses holding a diploma or bachelor’s degree in nursing.

Exclusion criteria:

- Nursing students, interns, or midwifery trainees.
- Nurses who are on long leave or unavailable during data collection.

Methodology

Data Collection Procedure

The data collection process will involve the research team obtaining information during the work shift of the nurses working in the Obstetrics and Gynecology department of General Hospital Lahore. Participation in the study is based on certain eligibility criteria. Participants will be

briefed about the aims, purpose, and significance of the research.

Informed consent will be signed by the participants before conducting the study. They will be assured of anonymity, confidentiality, and freedom from coercion. Participation is voluntary, and withdrawal from the study is allowed at any stage without jeopardizing the professional life of participants.

A structured yes/no questionnaire will be used to evaluate nurses' level of knowledge and awareness regarding postpartum depression in relation to its definition, causes, symptoms, risk factors, treatment, and nursing responsibilities. Nurses will fill out the questionnaire individually. Assistance in case of doubt will be provided by researchers without any influence on respondents' answers. The completed questionnaires will be gathered, validated, and keyed into a computer database.

Variables

Some key variables that could be considered in this study are:

❖ Dependent Variable

- Postpartum depression.

❖ Independent Variable

Nurses' Knowledge

Data Collection Tool

1. A yes/no questionnaire based on "Effect of Targeted Health Education Program on Nurses' Awareness About Postpartum Depression" by Hussein et al. (2024), with slight modification for cultural settings, will be used.

2. The survey comprises two parts:

Demographic Data: Age, education level, years of experience, work area, and previous sources of information or training about postpartum depression.

3. **Knowledge and Awareness Items:** 20–25 statements regarding postpartum depression, answered as "Yes" or "No."

Scoring:

- Good Awareness: 75–100% correct answers
- Moderate Awareness: 50–74% correct answers
- Poor Awareness: below 50% correct answers

The tool's **validity and reliability** have been established in the original study.

Data Analysis

Data would be validated for its completeness before being entered into SPSS version 25. Demographic data along with levels of awareness would be described using descriptive statistics such as frequency, percentage, mean, and standard deviation. A paired sample t-test would be conducted to compare the pre- and post-test scores.

RESULTS

Demographic Analysis:

In relation to demographic information, most nurses (97.5%) were female, with a low percentage of male participants (2.5%). Most participants fell within the age range of 26-30 years (57.5%), followed by 31-35 years (30.0%). Educational level is another important factor in this research, as almost 60 percent of the participants had attained a Post RN educational degree, with the remaining 35.0% holding a diploma, and just 9.2% holding a BSN degree. Professional experience was another important demographic variable, with a large percentage (57.5%) having between four to six years of professional experience, and another 24.2% having between one to three years of professional experience. Some participants (17.5%) had more than six years of experience, while a negligible number (0.8%) had less than one year of professional experience. Finally, concerning training, the majority (76.5%) had not been previously exposed to any training regarding postpartum depression, while a small portion (23.5%) had undergone training in this regard.

Table01:1.1

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	3	2.5
	Female	117	97.5

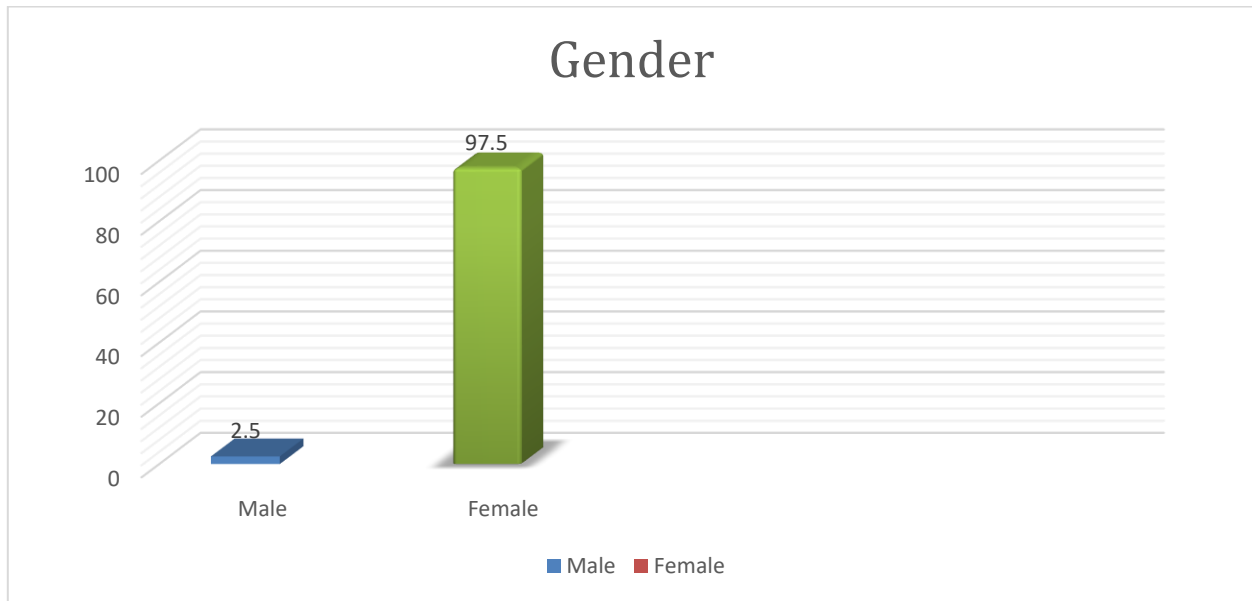


Table: 1:1.2

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	26–30	69	57.5
	31–35	36	30.0
	>35	15	12.5

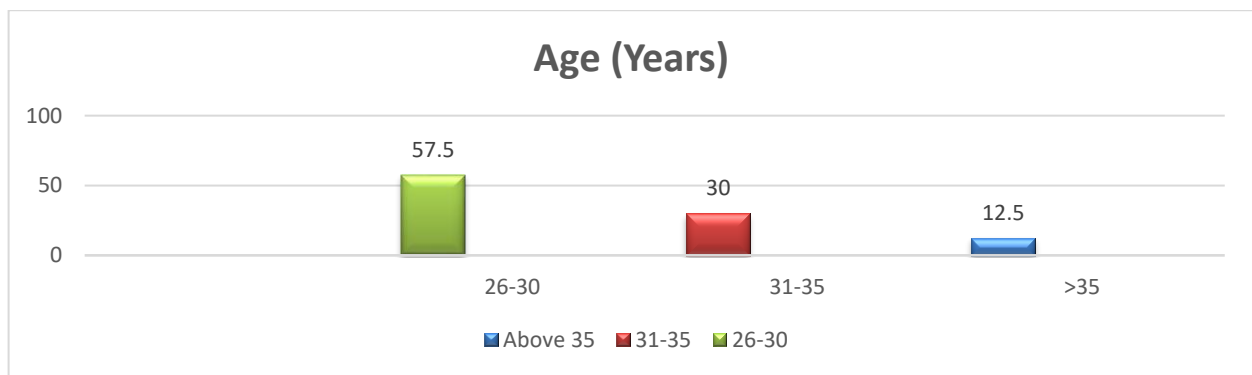


Table 1:1.3

Variable	Category	Frequency (n)	Percentage (%)
Qualification	Diploma	42	35.0
	BSN	11	9.2
	Post RN	67	55.8

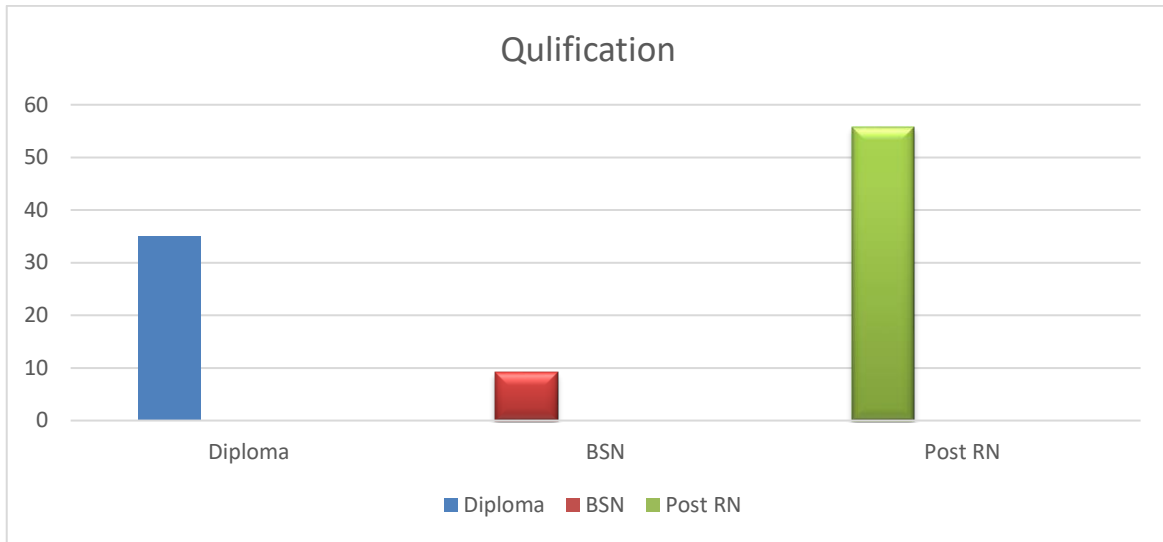


Table: 1:1.4

Variable	Category	Frequency (n)	Percentage (%)
Years of Experience	<1 year	1	0.8
	1-3 years	29	24.2
	4-6 years	69	57.5
	>6 years	21	17.5

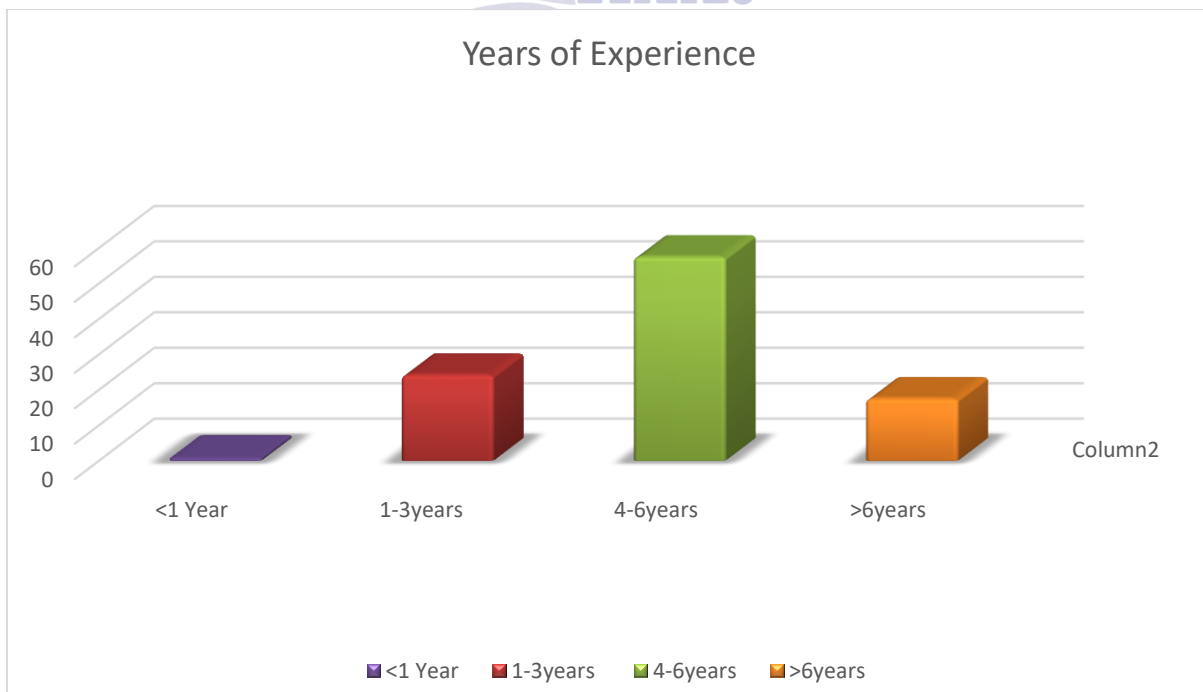
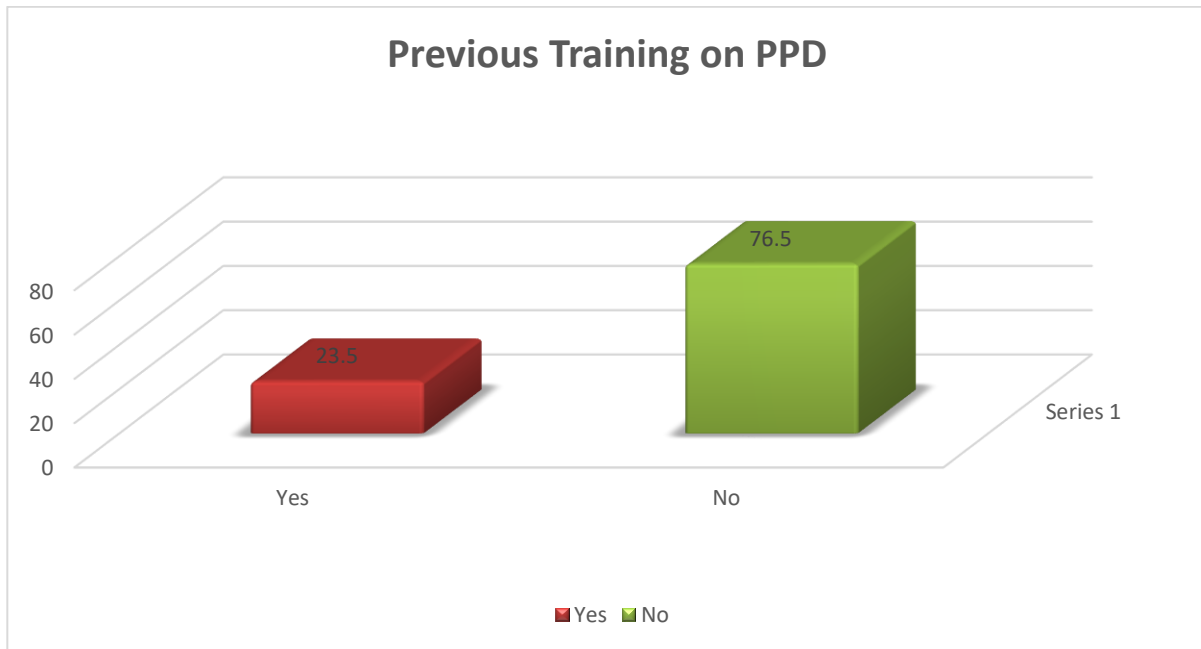


Table: 1:1.5

Variable	Category	Frequency (n)	Percentage (%)
Previous Training on PPD	Yes	28	23.5
	No	91	76.5



Descriptive Analysis

Nurse’s Knowledge regarding postpartum depression symptoms and diagnosis:

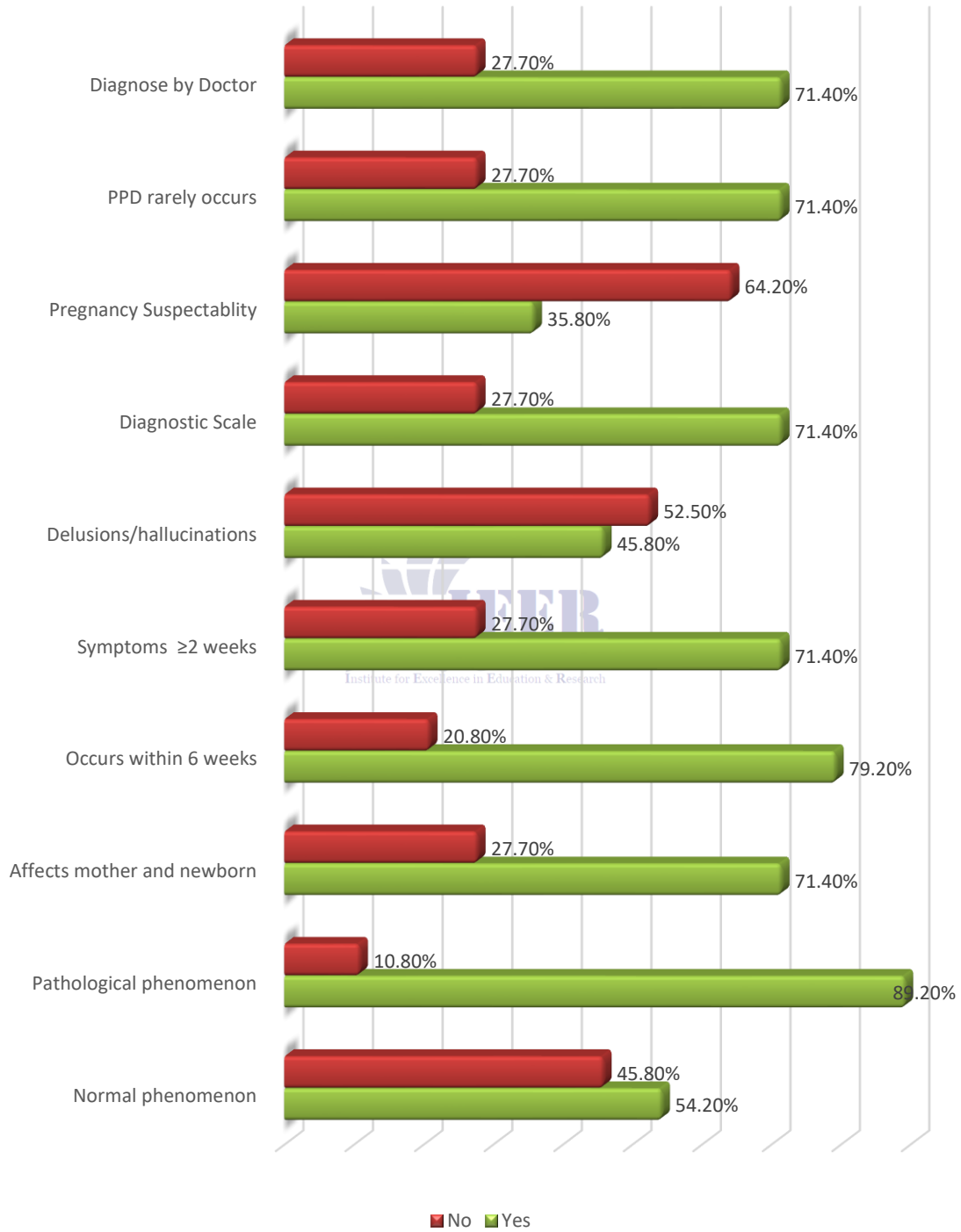
From the results shown in Table 4.2, it can be concluded that nurses' knowledge concerning the signs and diagnosis of postpartum depression was at an average good level. The majority correctly stated that postpartum depression is a pathology (89.2%) and that it occurs six weeks following

delivery (79.2%). Further, the majority knew that symptoms of PPD last two weeks or more for diagnosis (71.4%), as well as the fact that PPD affects both mother and baby, and that there are screening tools. However, gaps in knowledge existed, particularly concerning the increased risk during pregnancy, which only 35.8% knew. Also, only 45.8% of the respondents knew that among signs of PPD are delusions and hallucinations.

Table 2

Statement	Yes n (%)	No n (%)	Mean	SD
PPD is a normal phenomenon	65 (54.2%)	55 (45.8%)	0.54	0.50
PPD is a pathological phenomenon	107 (89.2%)	13 (10.8%)	0.89	0.31
PPD affects both mother and newborn	85 (71.4%)	33 (27.7%)	0.81	1.04
PPD occurs within 6 weeks of childbirth	95 (79.2%)	25 (20.8%)	0.79	0.41
Symptoms continue for ≥2 weeks until diagnosis	85 (71.4%)	33 (27.7%)	0.81	1.04
Symptoms may include delusions/hallucinations	55 (45.8%)	63 (52.5%)	0.64	1.44
There is a scale to diagnose PPD	85 (71.4%)	33 (27.7%)	0.81	1.04
Women are more susceptible during pregnancy	43 (35.8%)	77 (64.2%)	0.36	0.48
PPD rarely occurs	85 (71.4%)	33 (27.7%)	0.81	1.04
Doctors from different specialties can diagnose PPD	85 (71.4%)	33 (27.7%)	0.81	1.04

Nurse's Knowledge regarding PPD Symptoms and Daignose



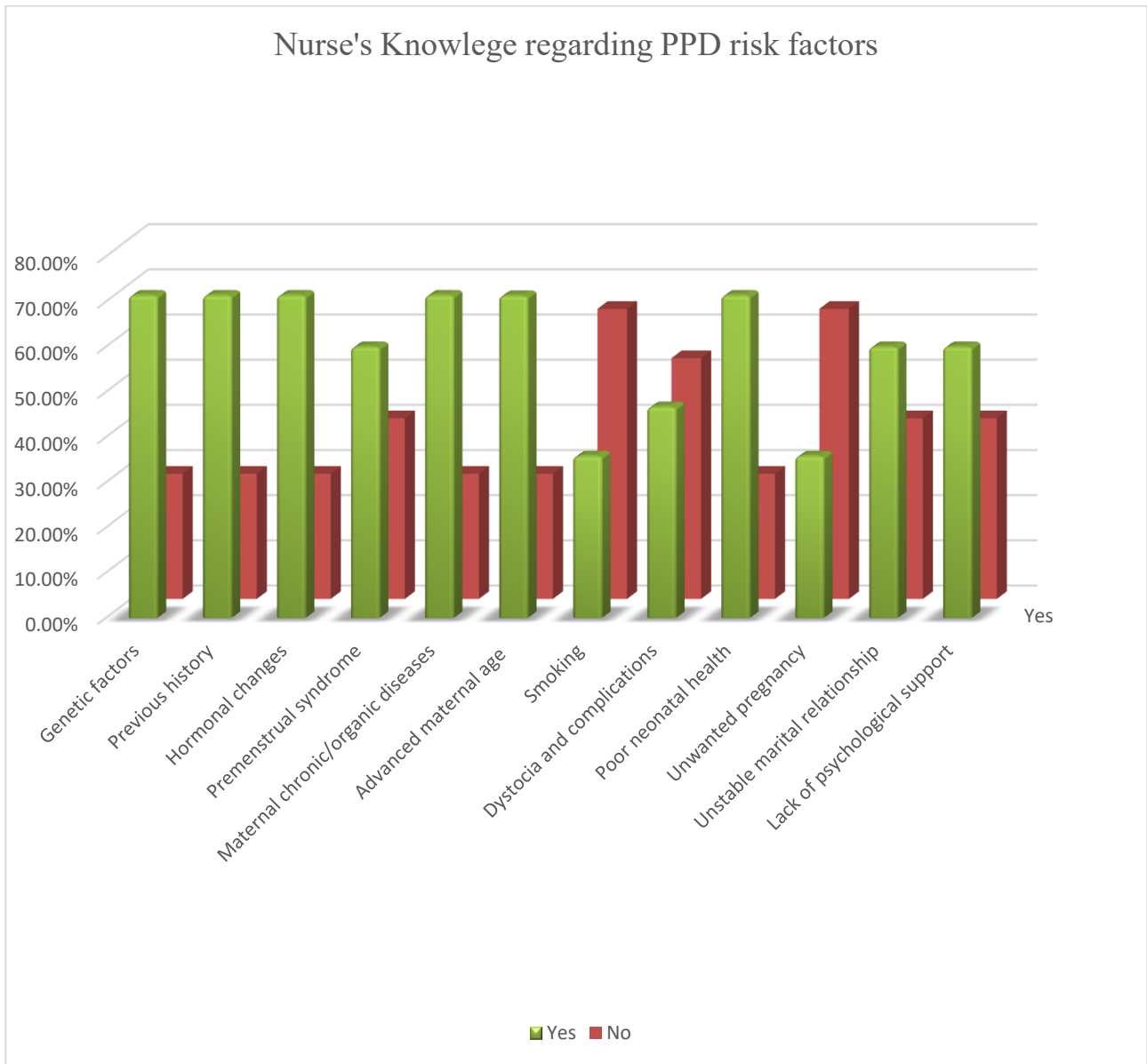
Nurse’s Knowledge about PPD risk factors

From the results presented in Table 3, it is evident that nurses had adequate knowledge concerning the risk factors of PPD, although there was some variability in the extent of knowledge across various categories. The majority of the participants had an excellent understanding of genetic predisposition to illness (71.4%), past history of depression (71.4%), hormonal alterations postpartum (71.4%), maternal illness (71.4%), old age (71.4%), and poor baby health (71.4%). They exhibited

moderate knowledge on premenstrual disorder (60.0%), unstable marriage (60.0%), lack of mental support (60.0%), dystocia and associated problems (46.7%), and inadequate financial status (46.7%). However, their knowledge was inadequate in relation to smoking (35.8%) and unplanned pregnancy (35.8%). From the above findings, one can deduce that nurses had adequate knowledge concerning biological and psychological risk factors of postpartum depression but lacked knowledge on lifestyle and obstetric risk factors of PPD.

Table 3

Statement	Yes n (%)	No n (%)	Mean	SD
Genetic factors are linked to PPD	85 (71.4%)	33 (27.7%)	0.81	1.04
Previous history of depression increases risk	85 (71.4%)	33 (27.7%)	0.81	1.04
Hormonal changes after birth increase risk	85 (71.4%)	33 (27.7%)	0.81	1.04
Premenstrual syndrome increases risk	72 (60.0%)	48 (40.0%)	0.60	0.49
Maternal chronic/organic diseases are risk factors	85 (71.4%)	33 (27.7%)	0.81	1.04
Advanced maternal age is linked to PPD	85 (71.4%)	33 (27.7%)	0.81	1.04
Smoking is linked to PPD	43 (35.8%)	77 (64.2%)	0.36	0.48
Dystocia and complications increase risk	56 (46.7%)	64 (53.3%)	0.47	0.50
Poor neonatal health increases risk	85 (71.4%)	33 (27.7%)	0.81	1.04
Unwanted pregnancy increases risk	43 (35.8%)	77 (64.2%)	0.36	0.48
Unstable marital relationship is a risk factor	72 (60.0%)	48 (40.0%)	0.60	0.49
Lack of psychological support increases risk	72 (60.0%)	48 (40.0%)	0.60	0.49
Poor financial condition increases risk	56 (46.7%)	64 (53.3%)	0.47	0.50



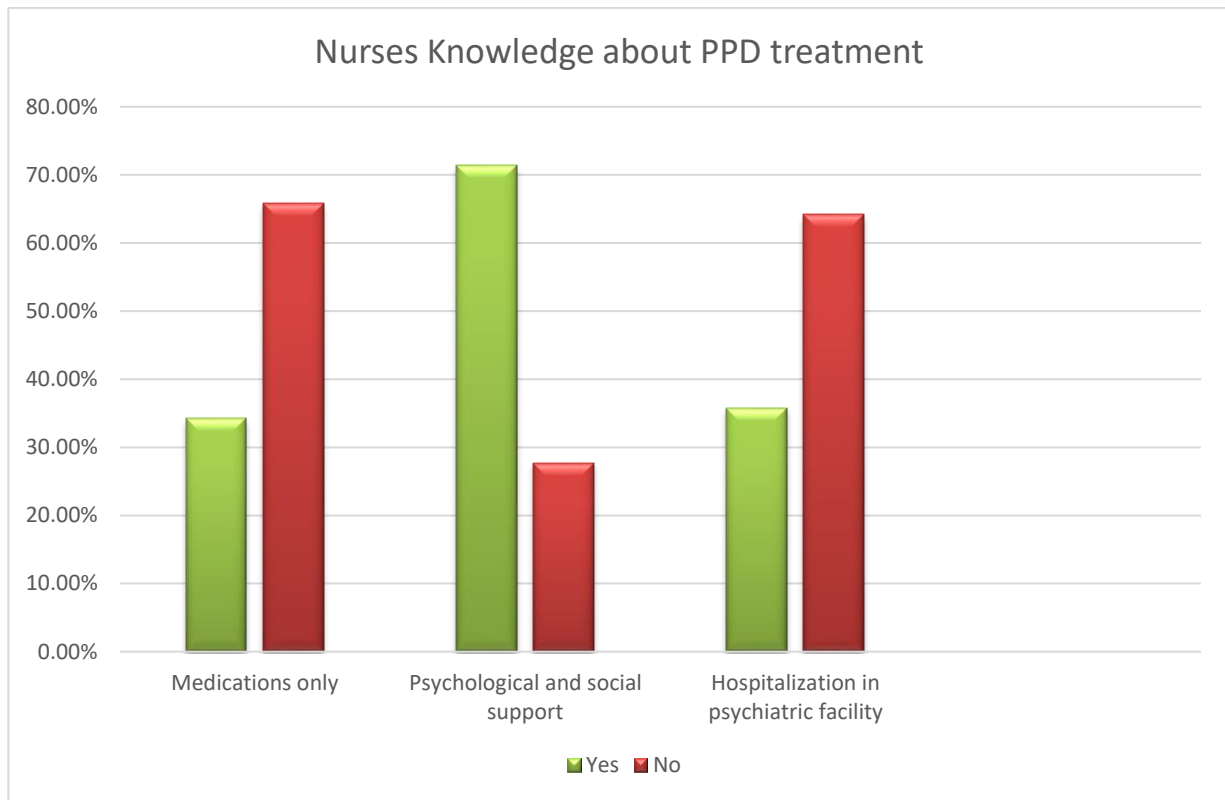
Nurse’s knowledge about PPD treatment

As can be seen from Table 4, nurses had a relatively low level of knowledge about how to manage patients diagnosed with postpartum depression. Specifically, the majority of nurses (65.8%) were able to state that postpartum depression is not managed with only medication. In addition, the majority of nurses (71.4%) were

aware that treatment for postpartum depression involves psychosocial approaches. On the other hand, nurses did not have adequate knowledge on how to deal with severe cases of postpartum depression since only 35.8% of the respondents answered correctly that patients with severe symptoms of postpartum depression need to be hospitalized in a psychiatric facility.

Table 4

Statement	Yes n (%)	No n (%)	Mean	SD
PPD is treated by medications only	41 (34.2%)	79 (65.8%)	0.34	0.48
PPD requires psychological and social support	85 (71.4%)	33 (27.7%)	0.81	1.04
PPD sometimes requires hospitalization in psychiatric facility	43 (35.8%)	77 (64.2%)	0.36	0.48



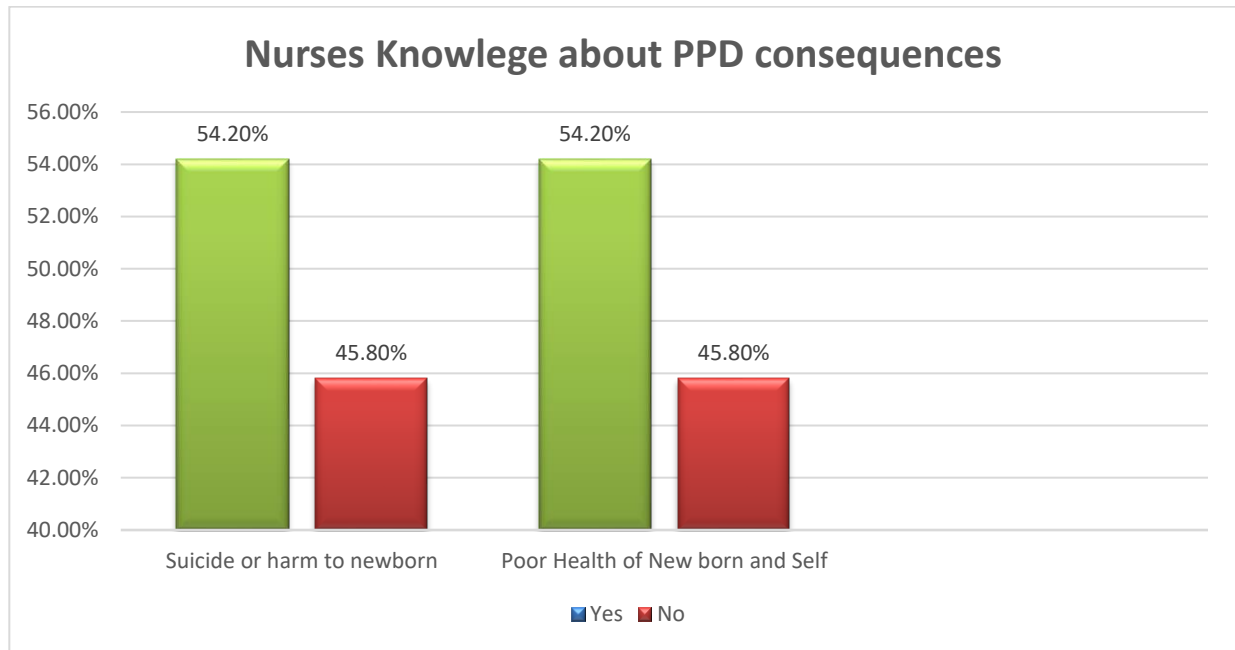
Knowledge about PPD consequences

From the data presented in Table 5, it is clear that nurses have a moderate understanding of the consequences associated with PPD. While slightly more than half of the participants (54.2%) knew that PPD may hinder mothers from taking good care of their infants and themselves, the remaining 45.8% were unaware of this important consequence. Additionally, 54.2% of the nurses

surveyed understood that PPD could result in drastic effects like suicide or even injury to the infant, while the other 45.8% did not have knowledge of this important information. From the above results, it can be seen that although a relatively large number of nurses understand the potential dangers of PPD, there are others who do not have this important information.

Table 5

Statement	Yes n (%)	No n (%)	Mean	SD
PPD affects mother’s ability to care for newborn and self	65 (54.2%)	55 (45.8%)	0.54	0.50
PPD may lead to suicide or harm to newborn	65 (54.2%)	55 (45.8%)	0.54	0.50



Discussion

According to study mentioned in Alsabi et al. (2022), the present study highlights the importance of awareness and knowledge for the early detection and supervision of postpartum depression (PPD). Both studies emphasize improving mental health outcomes through better understanding of PPD. However, the referenced study focused on social support networks in Malaysia during COVID-19, while the current study specifically examines knowledge of nurses and readiness regarding PPD at Lahore General Hospital, Pakistan. In the same manner to Chouchane et al. (2025), the present study focuses on acquaintance of nurses, attitudes regarding postpartum depression (PPD) and highlights the value of early detection and proper management of PPD. Both the studies assure the need to improve awareness in nurses and readiness for PPD care. However, the study by Chouchane et al. was conducted among maternity nurses in Tunisia, whereas the current study examines nurses' knowledge regarding PPD at Lahore General Hospital in Pakistan. In accordance with Hassan et al. (2025), present study examines behaviors of nurses their awareness regarding postpartum depression (PPD)

and stresses the importance of pre identification and management of the condition. Both studies focus on the roles of nurses in maternal mental healthcare and the need for betterment and preparedness in dealing with PPD. As discussed in Ibrahim and Sabry (2024), the current study deals with awareness in the nurses knowledge and attitudes related to postpartum depression (PPD) and describes the importance of improving knowledge for better maternal mental healthcare. Both studies emphasize that proper understanding of PPD which can support early diagnosis and effectiveness to control the disease. In contrast, Ibrahim and Sabry examined the impact of an educational intervention program among nurses in family healthcare centers in Egypt, whereas the present study mainly assesses nurses' existing knowledge regarding PPD at Lahore General Hospital in Pakistan.

This study explored the knowledge of nurses on postpartum depression (PPD) with regard to its symptoms, risk factors, management, and complications in a tertiary care hospital in Lahore. The overall results suggest that the nurses possessed moderate knowledge about PPD with variations among different domains. This findings are similar to those mentioned in the

literature. In this study, the majority of the nurses knew that postpartum depression was a medical disorder and happens within six weeks after delivery. Health professionals have adequate knowledge about postpartum depression as a medical problem but are inadequate in diagnosing it (Ahmed et al., 2022). In regard to recognition of symptoms, the knowledge of nurses was satisfactory with regard to general characteristics like duration of the symptoms and diagnostic knowledge; however, there were weaknesses in terms of identifying severe cases of mental health problems like delusions and hallucinations. This is especially problematic considering that early recognition of severe symptoms is vital for the prevention of problems (Sharma and Verma., 2021).

According to a study, nurses have greater knowledge concerning medical risk factors associated with PPD but poor insight into the social-behavioral risk factors. The reason for this might be that not enough attention is paid to psychological issues in nursing curricula (Khalid et al. (2020). Another findings resulted were that nurses often underestimate the complexity of PPD treatment, particularly in severe psychiatric conditions requiring multidisciplinary care and they may focus only pharmacological treatment also some nurses report that hospital admission may trigger more psychotic symptoms and it is not suitable to treat postpartum depression to hospitalize patients with PPD (Brown et al., 2019).

In this particular research, awareness of consequences including reduced capacity of mothers and chances of suicide or neonatal injury was average. While over half of the respondents showed awareness, there were still some individuals who did not have an idea about this aspect. This is in line with the information from the WHO (2021) that failure to realize the risks associated with PPD in healthcare professionals would lead to delayed interventions and higher risks. Overall, the results indicate that while nurses have some knowledge on PPD, major deficiencies exist concerning severity, risk factors, and treatment.

CONCLUSION

These results have shown that there is medium knowledge in relation to postpartum depression (PPD) among the nurses in the chosen facility, with somewhat higher knowledge levels on aspects such as the definition of postpartum depression, general symptoms, and several risk factors associated with PPD. Nonetheless, significant shortcomings were found when it comes to knowledge on more advanced subjects, especially in relation to psychiatric symptoms such as delusions, hallucinations, and suicide risks, all of which need to be known for proper diagnosis and prompt referral. There are also shortcomings in terms of recognizing specific risk factors associated with postpartum depression, especially those related to lifestyle and obstetric problems.

In addition, even though most nurses were aware of the significance of psychosocial care in the management of PPD, there seemed to be an inadequate awareness of more complete approaches to PPD management, which would include the use of pharmacotherapy and hospitalization in more extreme circumstances. In addition, it is evident from the research results that some nurses had not been adequately aware of severe consequences of the disorder, such as impairment in mothers' functioning as well as possible danger for mothers' or infants' health. Overall, it may be concluded that despite the nurses' basic knowledge, there is a significant need for further education to increase their professional competence in the management of the condition.

REFERENCES

- Alsabi, R.N.S., Zaimi, A.F., Sivalingam, T., Ishak, N.N., Alimuddin, A.S., Dasrilayah, R.A., & Basri, N.I. (2022). "Improving knowledge, attitudes and beliefs: a cross-sectional study of postpartum depression awareness among social support networks during COVID-19 pandemic in Malaysia." *BMC Women's Health*, 22(1), Article no. 221.

- Chouchane, M., et al. (2025). "Knowledge and attitudes of maternity nurses regarding postpartum depression."
- Gurung, S., Shah, S. & Lamichhane, K. (2019). "Knowledge among nurses regarding postpartum depression in a tertiary hospital setting of Nepal." *Journal of Psychiatrists' Association of Nepal*, 8(1), pp. 61-65.
- Hassan, F., et al. (2025). "Attitudes of nurse-midwives towards postpartum depression in delivery and postnatal wards: A descriptive correlational study." *BMC Nursing*.
- Ibrahim, H.S., & Sabry, H.A. (2024). "Knowledge and Attitude towards Postpartum Depression among Nurses Working at Family Health Care Centers in Giza Governorate: The Effect of an Educational Intervention Program." *Egyptian Journal of Hospital Medicine*, 96(1), pp. 2445-2451.
- Islam, M.F. et al. (2025). "Burden of postpartum depression and its sociodemographic and obstetric correlates among parturients in Bangladesh: A cross-sectional study." *PLOS Mental Health*.
- Kayani, H.W., et al. (2025). "Prevalence of Postpartum Depression among Pakistani Women and Their Culture-Based Barriers." *Contemporary Journal of Social Science Review*,
- Kakar, Z., et al. (2025). "Effects Of Antenatal Nursing Interventions Based On World Health Organization Module on Fear of Childbirth, Psychological Well-Being and Pregnancy Outcomes in Primipara Women." *Journal Of Neonatal Surgery*, 14(26s).
- Kang, P., et al. (2019). "Nurses' Knowledge, Beliefs and Practices Regarding the Screening and Treatment of Postpartum Depression in Maternal and Child Health Clinics: A Cross-Sectional Survey." *Malaysian Family Physician: The Official Journal Of The Academy Of Family Physicians Of Malaysia*, 14(1): 18.
- Li, X., et al. (2024). "Knowledge, Attitudes And Support Needs Of OB/GYN Nurses And Midwives Regarding Postpartum Depression In Hubei, China." *Journal Of Clinical Nursing*.
- Mohamed et al. A.H., Abobaker R.M., Ibrahim M.I.T., AlHseinat M.M., Ali H.M., Razek R.A.A., Albougami A., Berdida D.J.E. & Elrefaey S.R.I. (2025). "Effect of nursing intervention based on Ratu's model for preventing postpartum blues and depression among primiparous women: A treatment-control design." *Women's Health*, 21, p.17455057251323155.
- Park, S., Malik, A., Zaidi, A., Atif, N., Rahman, A. & Surkan, P.J. (2025). "An intervention to address prenatal anxiety improves
- Qureshi, M., et al. (2025). "Prevalence and Risk Factors of Postpartum Depression Among Women in Punjab, Pakistan." *Pakistan Journal of Medical Sciences*.
- Riaz, N., Mahmood, H., Khan, J., Habib, M.F., Saeed, I. & Minhas, A. (2023). "Association of Postpartum Depression with Social Support: A Cross-Sectional Study in a Hospital Setting of Rawalpindi Islamabad, Pakistan." *Pakistan Journal of Health Sciences*, 4(06), pp. 50-55.
- Shehzad, F., Zafar, B., Ahmed, M., Arif, N., Raja, Q. A., & Butt, N. A. (2023). Pain Management of Patients under General Anaesthesia Nalbuphine Alone or Nalbuphine with Ketorolac. *Pakistan Armed Forces Medical Journal*, 73, S9.

- Sapkota, A. & Kc, R. (2025). "Public Health Nursing Interventions in Managing Postpartum Depression." *Journal of Public Health Nursing*.
- Shafi, N., Shahid, N., Arshad, M., Iqbal, M.S., Mustafa, G., Ul-Rahman, A. & Raza, M.A. (2025). "Assessment of Prenatal Depression Among Pregnant Nurses in Punjab, Pakistan: A Cross-Sectional Study." *Midwifery*, p. 1.
- "Song, X., et al. (2025). "The relationship between health education and postpartum depression: exploring associations in clinical data." *Frontiers in Psychiatry*, 16: 1627853.
- Zaib un Nisa, A., Abdul Rashid, S. & Shaheen, T. (2022). "Knowledge, attitudes and practice of nurses towards the screening and treatment of postpartum depression in a tertiary health facility in Pakistan." *Indo American Journal of Pharmaceutical Sciences*, 09(09), pp. 267-272.
- Zaidi, A., et al. (2025). "Influences of culture on maternal mental well-being during pregnancy and the postpartum period."

