RADINKA JOURNAL OF HEALTH SCIENCE

ISSN: 3025-7751

https://www.rjupublisher.com/ojs/index.php/RJHS

Assessing the Awareness of Risk Factors Associated with Puerperal Psychosis among Pregnant Women attending Antenatal Unit at Abubakar Tafawa Balewa University Teaching Hospital Bauchi

Muhammad Maryam MUSA[a*], Muhammad MAIMUNA[a], Umar Muhammad SALISU[b], Muhammad Fatima DAMBAM[c]

[a]*College of Nursing Science, Department of Nursing, Abubakar Tafawa Balewa University Teaching Hospital Bauchi, Nigeria*
[b]*Department of Sustainable of Environmental Studies, Abubakar Tafawa Balewa University, Bauchi, Nigeria*
[c]*Department of Business Management, Faculty of Management and Information Sciences, Abubakar Tafawa Balewa University, Bauchi Nigeria*

[*]Corresponding author: maryammmusa1995@gmail.com

Abstract

Postpartum psychosis (PPP) is a severe mental health disorder that occurs acutely after childbirth, characterized by delusions, hallucinations, and significant mood disturbances. This descriptive study aimed to assess the level of awareness regarding PPP among pregnant women attending the Antenatal Care (ANC) unit of the Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH) in Bauchi, Nigeria. Using a sample of 129 respondents selected via simple random sampling, the study revealed that although a majority (71.32%) had heard of PPP, a substantial knowledge gap persists. Only 56.53% of respondents could accurately define the condition, and misconceptions regarding its etiology and clinical manifestations remained common. Conversely, most participants successfully identified key risk factors, including sleep deprivation, a family history of bipolar disorder, and impaired mother-infant bonding. Prevention strategies, such as structured educational programs, postnatal screening for high-risk individuals, and robust family support systems, received strong endorsement. The study concludes that integrating mental health literacy and routine screening into ANC services is essential to improving maternal and infant health outcomes in Northern Nigeria.

Keywords**:** Postpartum psychosis, maternal mental health, antenatal care (anc), Bauchi, Nigeria, awareness gap, risk factors, pregnancy, mental health screening

Acknowledgments: The authors wish to express their sincere gratitude to the management and staff of the Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH), particularly those in the Antenatal Care (ANC) unit, for their immense support and for providing the necessary facilities to conduct this study

For citation:

Musa, M. M., Maimuna, M., Salisu, U. M., Dambam, M. F. (2026). Assessing the Awareness of Risk Factors Associated with Puerperal Psychosis among Pregnant Women attending Antenatal Unit at Abubakar Tafawa Balewa University Teaching Hospital Bauchi. *Radinka Journal of Health Science*, 3(1), 543-553.

Introduction

Postpartum psychosis (also known as puerperal psychosis) is a term that covers a group of mental illness with a sudden onset of psychotic symptoms following childbirth. The clinical onset is rapid, with the symptoms presenting as early as the first 2 to 3 days postpartum and the majority of episodes developing within the first 2 weeks after delivery. The most severe symptoms last from 2 to 12 weeks and recovery takes 6 months to a year (Açikel, 2021). Globally, mental health disorders pose a significant public health challenge, particularly among women of reproductive age. Among these, postpartum psychosis (PPP), also known as puerperal psychosis, is a rare but severe psychiatric condition that affects 1–2 per 1,000 women after childbirth (Yang & Liu, 2025). This condition can have far-reaching consequences on a woman's mental health, family dynamics, and infant care. Manifestations of postpartum psychosis include delusions, hallucinations, mood swings, and cognitive disturbances. These symptoms can escalate rapidly, posing risks of self-harm, infanticide, or harm to other family members, it is estimated annually in the United States and are complicated by some form of postpartum mood disorders (Cheng et al., 2025). Despite its rarity, PPP demands immediate medical intervention due to its life-threatening potential. Early recognition, coupled with targeted awareness, is crucial in mitigating the devastating outcomes associated with this psychiatric emergency.

In high-income countries, studies have extensively documented the burden of postpartum psychosis, offering insights into its epidemiology and management. For instance, research from the United States reveals that about 20% of postpartum psychiatric hospitalizations are attributed to PPP (Wieczorek et al., 2023). While effective treatments such as mood stabilizers, antipsychotic medications, and electroconvulsive therapy (ECT) are available, a significant barrier to managing the condition is delayed diagnosis due to stigma and a lack of awareness among women and healthcare providers (Spinelli, 2021). Moreover, the risk of recurrence in subsequent pregnancies is alarmingly high, with 50–80% of affected women experiencing relapses (Zhou et al., 2025). These statistics underscore the urgent need for comprehensive education and preventive measures to address the global burden of PPP. In Africa, the burden of postpartum psychosis is exacerbated by socioeconomic and cultural factors. Mental health disorders are often misunderstood, and traditional beliefs may lead to the stigmatization of affected individuals. According to (Khamidullina et al., 2025), the prevalence of postpartum mental health disorders, including psychosis, is significantly higher in low- and middle-income countries (16–20%) compared to high-income settings. Factors such as poverty, lack of social support, and limited access to mental health services contribute to the high burden of PPP in Africa. Research from South Africa made a representative sample of nearly 750,000 first-time mothers, utilizing data from the South African hospital discharge registry.

The findings revealed that 892 women were hospitalized for psychosis within 90 days postpartum, corresponding to a rate of 1.2 cases per 1,000 births. Notably, approximately half of these hospitalizations were due to psychiatric illnesses, including psychosis. Furthermore, the study demonstrated that maternal age significantly influenced the risk of developing psychosis. Women over 35 years old were twice as likely to develop psychosis compared to those aged 19 or younger (Abenova et al., 2022). According to (Ojomo et al., 2025), factors such as low socioeconomic status, marital conflict, and lack of spousal support significantly increase the risk of PPP among Nigerian women. Despite the existence of psychiatric facilities in tertiary hospitals, awareness about maternal mental health remains low among the general population and healthcare workers. Many women with PPP are misdiagnosed or go untreated, leading to severe complications, including impaired mother-infant bonding and family breakdown. A national survey on maternal mental health revealed that up

to 12.5% of psychiatric hospital admissions of women in Nigeria occur during the postpartum period (Kaur et al., 2025). These statistics call for urgent action to improve awareness, early detection, and treatment of postpartum psychosis in Nigeria. Bauchi State, like many northern Nigerian regions, faces unique challenges, including limited access to specialized healthcare, a high burden of poverty, and cultural norms that may hinder mental health discussions (Baron et al., 2016). Furthermore, maternal mental health is often overlooked in antenatal and postnatal care programs, despite its critical role in maternal and child health outcomes. Women in rural and semi-urban communities often lack knowledge about postpartum mental health disorders, attributing symptoms to spiritual causes or "normal" postpartum experiences. This lack of awareness delays interventions, leaving affected women and their families to cope with severe consequences, including maternal and infant morbidity.

Due to the detrimental effects of puerperal psychosis, knowledge of the risk factors, early identification of the signs and symptoms, and prompt treatment are very important. In some cases, early detection can prevent a major episode. It is therefore essential that pregnant women are aware and possess adequate knowledge and understanding of this serious disorder in order to promote their health following childbirth. This study, therefore, focuses on the assessment of knowledge of causes/risk, signs and symptoms, effects, and treatment/prevention of puerperal psychosis among pregnant women attending an antenatal clinic in Abubakar Tafawa Balewa University Teaching Hospital Bauchi.

Methodology

Study design

The research study used is descriptive survey design. This design is a systematic and un-bias investigation which is concerned with the collection of data for the purpose of describing and interpreting existing condition the way they are.

Research setting

The area of the study is Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH) Bauchi. It is located in the Dan Iya ward of Bauchi metropolis from the north western part of the town, from Wunti market. The hospital provides a wide range of medical services, including: medical, surgical, diagnostic, out-patient, rehabilitative and support services to a catchment of definite population. It has a functional Accident and Emergency Unit that provides 24-hour emergency services all year round. The multi-disciplinary approach to service, making it the best point of call for a number of subjects including; pediatrics, general medicine and surgery, obstetrics and gynecology, laboratory services, radiology, HIV/STI services, Intensive Care Unit, ophthalmology, dietetics, physiotherapy, psychiatry, and many more.

Target population

The target population for this study comprises all pregnant women attending Antenatal Care Unit in Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH) Bauchi during the period of study. The estimated population size obtained during the period of the study is 194 pregnant women per visit in a week based on the hospital record (2024).

Sampling technique

The sampling technique used is simple random sampling technique it will be used to ensure equal opportunity to respondents involved in the study that is pregnant women attending Antenatal Care Unit at ATBUTH Bauchi during the period of study. The simple random sampling technique is a type of probability sampling technique in which each member of the subset has an equal opportunity of being chosen. It's meant to be an unbiased representation of a group.

Instruments for data collection

An adapted close ended questionnaire was used, the questionnaire contain four sections.
Section A: Socio-demographic data Contains data/profile of respondents
Section B: Contains questions on knowledge and understanding of postpartum psychosis
Section C: Contains questions on Risk factors associated with postpartum psychosis
Section D: Contains questions on Preventive measures of postpartum psychosis.

Validity of the instrument

The questionnaire was subjected for face and content validity by the supervisor and the members of research committee in order to determine whether or not, the instrument can elicit the required information.

Reliability of the instrument

In this study reliability was established using test re-test method, the instrument was reliable after repeated administration to the sample.

Methods of data collection

An adapted questionnaire was distributed to the pregnant women attending Antenatal Care Unit at ATBUTH Bauchi during the period of study, to respond to the mentioned questions in the questionnaire. The respondents were given time to provide the required information, the questionnaire was collected back through the same means.

Methods of data analysis

Data was collected and analyzed using a descriptive statistical method and illustrated by tables and expressed in percentages.

Results

The socio-demographic profile of the 129 respondents is summarized in Table 1. The data reveals a predominantly young population, with the majority of participants aged between 15–20 years (43.41%) and 21–25 years (33.33%), while only 7.75% were aged 31 and above. In terms of religious affiliation, 70.54% identified as Muslim and 29.46% as Christian. Educational attainment varied, although most respondents had completed secondary (57.36%) or tertiary education (27.91%); notably, 6.20% had only primary schooling, and 8.53% reported no formal education. The ethnic distribution was characterized by a Hausa majority (56.59%), followed by Fulani (26.36%) and Yoruba (9.30%), with other ethnicities constituting 7.75% of the sample. Regarding marital status, 70.54% of respondents were married, 17.83% were divorced, 6.98% were single, and 4.65% were in other categories. Occupationally, business ownership was the most common pursuit (35.66%), followed by various other occupations (27.13%), farming (22.48%), and civil service (14.73%).

Table 1. Socio demographic data

Variables	Frequency	Percentage (%)
Age		
15-20yrs	56	43.41%
21-25yrs	43	33.33%
26-30yrs	20	15.50%
31- Above	10	7.75%
Religion		
Christianity	38	29.46%

Islam	91	70.54%
Others	0	0%
Educational Background		
Primary	8	6.20%
Secondary	74	57.36%
Tertiary	36	27.91%
Others	11	8.53%
Tribe		
Hausa	73	56.59%
Fulani	34	26.36%
Yoruba	12	9.30%
Others	10	7.75%
Marital Status		
Single	9	6.98%
Married	91	70.54%
Divorced	23	17.83%
Others	6	4.65%
Occupation		
Farmer	29	22.48%
Civil servant	19	14.73%
Business owner	46	35.66%
Others	35	27.13%

Table 2. Knowledge and understanding of puerperal psychosis

Variables	**Frequency**	**Percentage (%)**
Have you ever heard of postpartum psychosis?		
Yes	92	71.32%
No	37	28.68%
Total	129	100%
If yes, describe postpartum psychosis best from your understanding:		
Mental illness caused by fever and diarrhea during childbirth	15	16.30%
Mental condition that affects women in labor	25	27.17%
Severe mental disorder where thought and emotions are impaired after childbirth	52	56.53%
Total	92	100%
Do you know when postpartum psychosis occurs during pregnancy?		

Yes	88	68.22%
No	41	31.78%
Total	129	100%
If yes, when does postpartum psychosis occur?		
Conception to birth	10	11.36%
Birth to 24 hours	40	45.45%
Birth to 6 weeks postpartum	30	34.09%
6-12 weeks postpartum	8	9.10%
Total	88	100%
Do you know any signs or symptoms of postpartum psychosis?		
Yes	90	69.77%
No	39	30.23%
Total	129	100%
If yes, what are the prominent signs/symptoms of postpartum psychosis?		
Anxiety, Hallucinations, Panic, Depression, Self-harm and Suicidal ideation	65	72.22%
Fever, Malaise and Headache	15	16.67%
Vaginal bleeding, loss of appetite	10	11.11%
Total	90	100%
Do you know postpartum psychosis can be managed medically?		
Yes	94	72.87%
No	35	27.13%
Total	129	100%
If yes, how best can post postpartum psychosis be managed?		
Hospital, drugs and counselling	80	85.11%
Home, charms and food	2	2.13%
Traditional medicine, herbal & water	8	8.51%
Market, fruit and vegetable	4	4.25%
Total	94	100%

From Table 2, 71.32% of the respondents have heard about postpartum psychosis, while 28.68% have not. Among those who have heard of it, 56.53% correctly described it as a severe mental disorder occurring after childbirth. 68.22% knew when postpartum psychosis occurs, with the majority (45.45%) believing it occurs within 24 hours of birth. Most respondents (69.77%) were aware of the symptoms, and 72.22% identified the correct major symptoms like hallucinations and suicidal ideation. In terms of management, 72.87% knew it could be treated medically, and the majority (85.11%) preferred hospital treatment combined with drugs and counselling, 8.51% agreed to traditional medicine, while (4.25%) agreed to market, fruits and vegetables and only (2.13%) agreed to home, charm and food.

Table 3. Risk factors associated with puerperal psychosis

Variable	Frequency	Mean	Remark
Sleep deprivation during peuperium is one of the triggers of postpartum psychosis			Accepted
(a) Strongly agree	55		
(b) Agree	45	4.06	
(c) Neutral	15		
(d) Disagree	10		
(e) Strongly Disagree	4		
Total	**129**		
One of the implications of puerperal psychosis is impaired bonding between mother and child			Accepted
(a) Strongly agree	60	4.06	
(b) Agree	40		
(c) Neutral	15		
(d) Disagree	10		
(e) Strongly Disagree	4		
Total	**129**		
Family History of bipolar disorder or related psychotic disorder is an associated risk factor of puerperal psychosis			Accepted
(a) Strongly agree	50		
(b) Agree	50	3.9	
(c) Neutral	14		
(d) Disagree	10		
(e) Strongly Disagree	5		
Total	**129**		
Taking antenatal medications during pregnancy is one of the major causes of puerperal psychosis			Rejected
(a) Strongly agree	20		
(b) Agree	30	2.7	
(c) Neutral	25		
(d) Disagree	35		
(e) Strongly Disagree	19		
Total	129		
Taking proteins like egg during pregnancy predisposes you to risk of postpartum psychosis			Rejected
(a) Strongly agree	5	2.4	
(b) Agree	20		
(c) Neutral	40		
(d) Disagree	30		
(e) Strongly Disagree	34		
Total	**129**		

Table 3 shows that, majority of the respondents agreed to the statements on puerperal psychosis that says, sleep deprivation during peuperium is a trigger to puerperal psychosis. Puerperal psychosis causes impaired bonding between mother and child, family history of bipolar disorder is a risk factor, with the mean of 4.06, 4.06 and 3.9 respectively. However, least disagreed to the statements that says taking antenatal medications and proteins like eggs during pregnancy can cause postpartum psychosis, with the mean of 2.7 and 2.4 respectively.

Table 4. Preventive measures for postpartum psychosis

Variables	**Frequency**	**Percentage (%)**
Enhancement of educational and awareness programmes on postpartum psychosis can serve as a prevention to postpartum psychosis		
(a) Yes	110	85.27%
(b) No	19	14.73%
Total	129	100%
Postnatal Screening of Women at High risk can also prevent the occurrence of postpartum psychosis		
(a) Yes	107	82.95%
(b) No	22	17.05%
Total	129	100%
Frequent ANC visit and support from family members prevent the occurrence of postpartum psychosis		
(a) Yes	112	86.82%
(b) No	17	13.18%
Total	129	100%
Educating expectant mothers and families about the symptoms of puerperal psychosis like confusion, hallucination and mood swings can also prevent the occurrence of puerperal psychosis		
(a) Yes	109	84.40%
(b) No	20	15.50%
Total	129	100%
Ensuring adequate sleep and rest can prevent the occurrence of postpartum psychosis		
(a) Yes	108	83.72%
(b) No	21	16.28%
Total	129	100%

Table 4, shows that majority of respondents (85.27%) believe that enhancement of educational and awareness programs on postpartum psychosis can serve as a prevention to puerperal psychosis. Similarly, 82.95% agreed that postnatal screening of women at high risk is an effective preventive strategy. Frequent ANC visit and family support were recognized by 86.82% as preventive measures, while 84.50% agreed that educating expectant mothers and their families about the symptoms can also play a vital role in prevention. Lastly, 83.72% of respondents affirmed that ensuring adequate sleep and rest can also help prevent postpartum psychosis.

Discussion

Research question 1: what level of knowledge and understanding of puerperal psychosis do pregnant women attending ANC unit at Abubakar Tafawa Balewa University Teaching Hospital Bauchi have?.The research findings of this study discovered that more than 3/4 of the respondent don't have good knowledge and understanding of puerperal psychosis, this was supported by studies conducted by (Akinyemi & Ibrahim, 2024); (Islam & Masud, 2018); (Waqas & Rahman, 2023); Where he employed a cross-sectional survey design which surveyed 255 pregnant women attending ANC at Obafemi Awolowo University Teaching Hospital in Nigeria, found that only 20% of respondent demonstrated a good understanding of the causes and risk factors associated with puerperal psychosis.

Research Question 2: what are the risk factors associated with puerperal psychosis among pregnant women attending ANC unit at Abubakar Tafawa Balewa University Teaching Hospital Bauchi? The study identifies several risk factors contributing to puerperal psychosis among the pregnant women attending ANC at ATBUTH including family history of bipolar disorder, family history of related psychotic disorder, and sleep deprivation during puerperium, impaired bonding between mother and child. These findings are consistent with a systematic review by (Rowland & Marwaha, 2018); (Bergink et al., 2016); (Fico et al., 2022); (Whei et al., 2025), Which outline key risk factors including history of bipolar disorder demographic factors like young maternal age, particularly among those aged 15-19, as well as prim parity(first time mothers) and psychosocial stressors in which he said that conflictual relationship or lack of communication can heighten the feeling of anxiety and depression among new mothers and that further complicates motherhood and lead to puerperal psychosis.

Research Question 3: in what ways can postpartum psychosis be prevented among pregnant women attending ANC unit at Abubakar Tafawa Balewa University Teaching Hospital Bauchi?. According to the findings me most of the women said that enhancement of educational programs on postpartum psychosis can serve as a prevention, majority said postnatal screening, frequent antenatal visit and educating expectant mothers and families about symptoms of postpartum psychosis can prevent the occurrence this finding is supported by the study conducted by (Norazman & Lee, 2024); (Nguyen & Pengpid, 2025; Kotla et al., 2024), Which says effective prevention of postpartum psychosis should focus on early identification and intervention strategies which include screening programs, educational intervention and support systems.

Conclusion

This study explored the knowledge, risk factors, and preventive measures related to puerperal (postpartum) psychosis among pregnant women attending the antenatal clinic at Abubakar Tafawa Balewa University Teaching Hospital, Bauchi. The findings revealed that a significant proportion of the respondents lack adequate knowledge and understanding of puerperal psychosis. Additionally, several risk factors such as sleep deprivation, family history of psychotic disorders, and impaired bonding between mother and child were identified as key contributors. Despite the low level of awareness, the study highlighted that many of the respondents recognized the importance of preventive strategies, including antenatal education, postnatal screening, and family support. These insights underscore the need for enhanced maternal mental health education and structured support systems within antenatal care services. Ultimately, addressing puerperal psychosis requires a multifaceted approach that combines awareness creation, early detection, family involvement, and professional medical intervention. Strengthening these aspects in maternal healthcare services is essential for safeguarding the mental well-being of mothers and ensuring healthy outcomes for both mothers and their infants.

Conflicts of Interest

The authors declare no conflict of interest.

Funding

This research received no external funding.

Author contribution

Muhammad Maryam Musa: Conceptualization, methodology, validation: **Muhammad Maimuna Umar**.; formal analysis, investigation; resources, data curation: **Umar Muhammad Salisu**.; writing-original draft preparation: **Muhammad Fatima Dambam**; writing-review and editing, visualization. All authors have read and agreed to the published version of the manuscript.

Declaration of generative AI in scientific writing

During the preparation of this manuscript, the author(s) employed Gemini to enhance linguistic clarity, refine the structural outline, and synthesize technical literature. Following the use of this technology, the author(s) critically reviewed and revised the generated content and assume(s) full accountability for the accuracy and integrity of the final publication

References

Abenova, M., Myssayev, A., Kanya, L., Turliuc, M. N., & Jamedinova, U. (2022). Prevalence of postpartum depression and its associated factors within a year after birth in Semey, Kazakhstan: A cross sectional study. *Clinical Epidemiology and Global Health*, *16*, 101103. https://doi.org/10.1016/j.cegh.2022.101103

Açikel, S. B. (2021). Atomoxetine-Associated Possible Abnormal Uterine Bleeding in an Adolescent: A Case Report. *Journal of Clinical Psychopharmacology*, *41*(3), 339–340. https://doi.org/10.1097/JCP.0000000000001389

Akinyemi, A. O., & Ibrahim, E. A. (2024). Prevalence and predictors of men's involvement in pregnancy care in Modakeke, Southwest Nigeria. *Frontiers in Global Women's Health*, *5*, 1337094. https://doi.org/10.3389/fgwh.2024.1337094

Baron, E. C., Hanlon, C., Mall, S., Honikman, S., Breuer, E., Kathree, T., Luitel, N. P., Nakku, J., Lund, C., Medhin, G., Patel, V., Petersen, I., Shrivastava, S., & Tomlinson, M. (2016). Maternal mental health in primary care in five low- and middle-income countries: A situational analysis. *BMC Health Services Research*, *16*(1), 53. https://doi.org/10.1186/s12913-016-1291-z

Bergink, V., Larsen, J. T., Hillegers, M. H. J., Dahl, S. K., Stevens, H., Mortensen, P. B., Petersen, L., & Munk-Olsen, T. (2016). Childhood adverse life events and parental psychopathology as risk factors for bipolar disorder. *Translational Psychiatry*, *6*(10), e929–e929. https://doi.org/10.1038/tp.2016.201

Cheng, Y., Zhao, Y., Xu, Z., Wang, S., Zhu, J., Yang, Q., Zou, Y., Li, T., Liu, H., Ye, H., Shi, J., Wang, K., Song, C., & Wang, P. (2025). Global, regional, and national burden of mental disorders among women of reproductive age, 1990–2021: A systematic analysis of the global burden of disease study 2021. *BMC Public Health*, *25*(1), 1943. https://doi.org/10.1186/s12889-025-23134-z

Fico, G., Oliva, V., De Prisco, M., Giménez-Palomo, A., Sagué-Vilavella, M., Gomes-da-Costa, S., Garriga, M., Solé, E., Valentí, M., Fanelli, G., Serretti, A., Fornaro, M., Carvalho, A. F., Vieta, E., & Murru, A. (2022). The U-shaped relationship between parental age and the risk of

bipolar disorder in the offspring: A systematic review and meta-analysis. *European Neuropsychopharmacology*, *60*, 55–75. https://doi.org/10.1016/j.euroneuro.2022.05.004

Islam, M. M., & Masud, M. S. (2018). Determinants of frequency and contents of antenatal care visits in Bangladesh: Assessing the extent of compliance with the WHO recommendations. *PLOS ONE*, *13*(9), e0204752. https://doi.org/10.1371/journal.pone.0204752

Kaur, H., Jitesh, J., Dhiman, A., Gupta, J., & Dhiman, R. (2025). Prevalence and risk factors of postpartum psychiatric illness in Sub-Himalaya hilly region: A community-based cross-sectional study. *Journal of Family Medicine and Primary Care*, *14*(8), 3497–3504. https://doi.org/10.4103/jfmpc.jfmpc_2078_24

Khamidullina, Z., Marat, A., Muratbekova, S., Mustapayeva, N. M., Chingayeva, G. N., Shepetov, A. M., Ibatova, S. S., Terzic, M., & Aimagambetova, G. (2025). Postpartum Depression Epidemiology, Risk Factors, Diagnosis, and Management: An Appraisal of the Current Knowledge and Future Perspectives. *Journal of Clinical Medicine*, *14*(7), 2418. https://doi.org/10.3390/jcm14072418

Kotla, R., Patil, P. S., & Ahluwalia, I. (2024). Postpartum Psychosis as a Precursor to Schizophrenia: A Comprehensive Review. *Cureus*. https://doi.org/10.7759/cureus.68451

Nguyen, N. T., & Pengpid, S. (2025). Proactive approaches to preventing postpartum depression in non-depressive pregnant women: A comprehensive scoping review. *Frontiers in Global Women's Health*, *6*, 1497740. https://doi.org/10.3389/fgwh.2025.1497740

Norazman, C. W., & Lee, L. K. (2024). The influence of social support in the prevention and treatment of postpartum depression: An intervention-based narrative review. *Women's Health*, *20*, 17455057241275587. https://doi.org/10.1177/17455057241275587

Ojomo, O., Atibioke, O., Alesinloye-King, O., Erlandsson, K., Ängeby, K., & Envall, N. (2025). A scoping study of postpartum mental health problems and associated factors: Opportunities for research and practice. *Discover Mental Health*, *5*(1), 136. https://doi.org/10.1007/s44192-025-00278-3

Rowland, T. A., & Marwaha, S. (2018). Epidemiology and risk factors for bipolar disorder. *Therapeutic Advances in Psychopharmacology*, *8*(9), 251–269. https://doi.org/10.1177/2045125318769235

Waqas, A., & Rahman, A. (2023). Innovations in scaling up interventions in low- and middle-income countries: Parent-focused interventions in the perinatal period and promotion of child development. In *Shaping the Future of Child and Adolescent Mental Health* (pp. 255–282). Elsevier. https://doi.org/10.1016/B978-0-323-91709-4.00010-X

Whei, S. J., Deva, S., Vijayakumar, V., Khan, S. S., Awad, S. A., Asfeen, U., Maniar, R. H., & Shrestha, B. (2025). Management of Postpartum Anxiety and Depression: A Narrative Review. *Mental Health Science*, *3*(2), e70012. https://doi.org/10.1002/mhs2.70012

Wieczorek, K., Targonskaya, A., & Maslowski, K. (2023). Reproductive Hormones and Female Mental Wellbeing. *Women*, *3*(3), 432–444. https://doi.org/10.3390/women3030033

Yang, X., & Liu, Z. (2025). Global Burden and Trends of Depression Among Women of Childbearing Age, 1990–2021. *Public Health in Practice*, 100688. https://doi.org/10.1016/j.puhip.2025.100688

Zhou, W., Hei, B., Liu, Z., Liu, Y., Ding, Z., & Li, M. (2025). Global temporal trends in depression incidence among women of childbearing age: A 30-year analysis and projections to 2030. *Social Science & Medicine*, *372*, 118005. https://doi.org/10.1016/j.socscimed.2025.118005