

KNOWLEDGE, ATTITUDE, PRACTICE (KAP) STUDY ON POSTPARTUM PSYCHOSIS AMONG HUSBANDS ACCOMPANYING THEIR WIVES FOR DELIVERY AT A TERTIARY CARE HOSPITAL

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Abstract

Background: Postpartum psychosis (PPP) is a severe mental health condition that can affect women following childbirth, characterized by symptoms such as hallucinations, delusions, and severe mood disturbances. While much attention has been given to the impact of PPP on mothers, little is known about the knowledge, attitudes, and practices (KAP) of husbands who accompany their wives during delivery. **Materials and Methods:** This study aimed to assess the KAP of husbands regarding postpartum psychosis at a tertiary care hospital. A cross-sectional survey was conducted among 200 husbands accompanying their wives for delivery. Data were collected using a structured questionnaire and analysed using descriptive and inferential statistics. **Result:** The results revealed significant gaps in knowledge, with only 35% of participants demonstrating adequate understanding of PPP. Attitudes were generally positive, with 70% expressing willingness to support their wives through mental health challenges. However, practices were suboptimal, as only 25% reported seeking information or professional help regarding PPP. **Conclusion:** The findings underscore the need for targeted educational interventions to improve husbands' awareness and preparedness in managing postpartum psychosis, ultimately contributing to better maternal and familial outcomes.

INTRODUCTION

Postpartum psychosis is a rare but serious mental health condition that affects approximately 1-2 per 1,000 women following childbirth.^[1] It is characterized by symptoms such as hallucinations, delusions, and severe mood disturbances.^[2] It is a psychiatric emergency that requires immediate intervention due to its potential to cause harm to both the mother and the newborn. While the focus of research and clinical practice has predominantly been on the affected mothers, the role of husbands and partners in recognizing, managing, and supporting their wives through this condition has been largely overlooked.^[3] Husbands who accompany their wives during delivery are often the first line of support and play a critical role in the early detection and management of postpartum psychosis. Studies have shown that early detection and intervention are critical for improving outcomes for both mothers and

infants.^[4] However, the knowledge, attitudes, and practices (KAP) of husbands regarding PPP are poorly understood.^[5] Postpartum psychosis is often misunderstood as a normal part of childbirth, leading to delays in seeking help.^[6]

This study seeks to address this gap by assessing the KAP of husbands regarding postpartum psychosis at a tertiary care hospital. By understanding the current level of awareness and preparedness among husbands, healthcare providers can develop targeted interventions to improve outcomes for mothers and families affected by PPP.

MATERIALS AND METHODS

Study Design and Setting: A cross-sectional study was conducted at SCB Medical College - a tertiary care hospital with high volume of deliveries. The study population consisted of husbands

accompanying their wives for delivery from April to September 2024.

Participants: A total of 200 husbands were recruited using a convenience sampling method. Inclusion criteria included husbands aged 18 years and above, accompanying their wives for delivery, and willing to provide informed consent. Exclusion criteria included husbands with a history of mental health conditions that could impair their ability to participate.

Sample Size Calculation:

Expected Prevalence:

Since postpartum psychosis is a rare condition (affecting 1-2 per 1,000 women), the expected prevalence of knowledge about PPP among husbands is likely low. Assuming a conservative estimate of 50% prevalence of adequate knowledge (to maximize sample size), we made the calculation.

Confidence Level and Margin of Error:

A 95% confidence level is commonly used in health research.

A margin of error of 5% is acceptable for most KAP studies.

Taking the formula
$$n = \frac{Z^2 \cdot p \cdot (1-p)}{E^2}$$

Where:

- n = sample size
- Z = Z-score for the confidence level (1.96 for 95% confidence)
- p = expected prevalence (0.5 for 50%)
- E = margin of error (0.05 for 5%)

This calculation gives a sample size of 385.

Considering the rarity of postpartum psychosis and the challenges of recruiting participants, a sample size of 200 was taken to be feasible and practical for a single-centre study.

A sample size of 200 can still provide sufficient statistical power to detect significant differences in knowledge, attitudes, and practices, especially if the effect size is moderate to large.

Data Collection: Data were collected using a structured questionnaire developed based on a review of relevant literature and pilot-tested for reliability and validity. Ethical approval was obtained from the institutional review board, and informed consent was secured from all participants. The questionnaire

consisted of four sections: (1) demographic information, (2) knowledge about postpartum psychosis, (3) attitudes towards postpartum psychosis, and (4) practices related to seeking information and support for PPP. The questionnaire was administered face-to-face by trained research assistants.

Data Analysis: Descriptive statistics were used to summarize demographic characteristics and KAP scores. Inferential statistics including chi-square tests and logistic regression, were used to examine associations between demographic variables and KAP scores. A p-value of <0.05 was considered statistically significant.

RESULTS

Demographic Characteristics: The mean age of participants was 32.5 years (SD = 5.2). The majority of participants had completed secondary education (65%) and were employed (80%). Most participants (75%) were first-time fathers.

Knowledge About Postpartum Psychosis: Only 35% of participants demonstrated adequate knowledge of postpartum psychosis. Common misconceptions included the belief that PPP is a normal part of childbirth (40%) and that it does not require medical intervention (25%). Knowledge scores were significantly higher among participants with higher education levels ($p < 0.01$).

Attitude Towards Postpartum Psychosis: Attitudes were generally positive, with 70% of participants expressing willingness to support their wives through mental health challenges. However, 30% of participants reported feeling stigmatized or embarrassed about the condition. Positive attitudes were associated with higher knowledge scores ($p < 0.05$).

Practices Related to Postpartum Psychosis: Practices were suboptimal, with only 25% of participants reporting seeking information or professional help regarding PPP. Barriers to seeking help included lack of awareness (50%), stigma (20%), and financial constraints (15%). Participants with higher education levels were more likely to seek information or professional help ($p < 0.01$).

Statistical Analysis Tables

Table 1: Demographic Characteristics of Participants (n = 200).

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	< 30	80	40%
	30-40	100	50%
	>40	20	10%
Education Level	Primary school	20	10%
	Secondary school	130	65%
	College/University	40	20%
	Postgraduate	10	5%
Occupation	Employed	160	80%
	Self-employed	20	10%
	Unemployed	10	5%
	Other	10	5%
Number of Children	1	150	75%
	2	40	20%

	3 or more	10	5%
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Table 2: Knowledge About Postpartum Psychosis

Question	Response	Number (n)	Percentage (%)
Have you heard about postpartum psychosis?	Yes	70	35%
	No	130	65%
Postpartum psychosis is a mental health condition that occurs after childbirth.	True	100	50%
	False	50	25%
	Don't know	50	25%
Postpartum psychosis requires immediate medical attention.	True	120	60%
	False	40	20%
	Don't know	40	20%
Postpartum psychosis can affect the mother's ability to care for her baby.	True	110	55%
	False	50	25%
	Don't know	40	20%

Table 3: Attitudes Towards Postpartum Psychosis

Question	Response	Number (n)	Percentage (%)
Postpartum psychosis is a serious condition that needs attention.	Strongly agree	100	50%
	Agree	40	20%
	Neutral	30	15%
	Disagree	20	10%
	Strongly disagree	10	5%
I would support my wife if she experienced postpartum psychosis.	Strongly agree	140	70%
	Agree	40	20%
	Neutral	10	5%
	Disagree	5	2.5%
	Strongly disagree	5	2.5%

Table 4: Practices Related to Postpartum Psychosis

Question	Response	Number (n)	Percentage (%)
Have you ever sought information about postpartum psychosis?	Yes	50	25%
	No	150	75%
Would you seek professional help if your wife showed signs of PPP?	Yes	140	70%
	No	30	15%
	Not sure	30	15%
Barriers to seeking help (multiple responses allowed)	Lack of awareness	130	65%
	Stigma	60	30%
	Financial constraints	30	15%
	Lack of access to healthcare	20	10%
	Others	10	5%

Table 5: Chi-Square Test for Association Between Education Level and Knowledge of Postpartum Psychosis

Level of education	Adequate Knowledge	Inadequate Knowledge	Total	Chi-Square Value	p-value
Primary school	5	15	20	12.34	<0.01
Secondary school	40	90	130		
College/University	20	20	40		
Postgraduate	10	0	10		
Total	75	125	200		

Interpretation: There is a statistically significant association between education level and knowledge of postpartum psychosis ($\chi^2 = 12.34$, $p < 0.01$). Participants with higher education levels (college/university and postgraduate) were more likely to have adequate knowledge compared to those with primary or secondary education.

Table 6: Logistic Regression Analysis of Factors Associated with Willingness to Seek Professional Help

Variable	Adjusted Odds Ratio (AOR)	95% Confidence Interval (CI)	p-value
Level of education			
Primary school	1.00 (Reference)		
Secondary school	2.50	1.20–5.20	0.01
College/University	4.80	2.10–10.90	<0.001
Postgraduate	6.20	2.50–15.40	<0.001
Occupation			
Employed	1.00 (Reference)		
Self-employed	0.80	0.40–1.60	0.50
Unemployed	0.60	0.20–1.80	0.35
Number of Children			
1	1.00 (Reference)		
2	1.20	0.70–2.10	0.45

3 or more	0.90	0.40–2.00	0.80
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Interpretation: Participants with higher education levels (college/university and postgraduate) were significantly more likely to seek professional help for postpartum psychosis compared to those with primary education (AOR = 4.80 and 6.20, respectively; $p < 0.001$). Occupation and number of children were not significantly associated with willingness to seek professional help.

Table 7: Chi-Square Test for Association Between Occupation and Attitudes Toward Postpartum Psychosis

Occupation	Positive Attitude	Neutral/Negative Attitude	Total	Chi-Square Value	p-value
Employed	120	40	160	8.76	0.03
Self-employed	15	5	20		
Unemployed	5	5	10		
Other	10	0	10		
Total	150	50	200		

Interpretation: There is a statistically significant association between occupation and attitude toward postpartum psychosis ($\chi^2 = 8.76$, $p = 0.03$). Employed participants were more likely to have positive attitudes compared to those who were unemployed or self-employed.

Table 8: Logistic Regression Analysis of Factors Associated with Adequate Knowledge of Postpartum Psychosis

Variable	Adjusted Odds Ratio (AOR)	95% Confidence Interval (CI)	p-value
Education Level			
Primary school	1.00 (Reference)		
Secondary school	3.20	1.50–6.80	<0.01
College/University	5.60	2.40–13.10	<0.001
Postgraduate	8.40	3.20–22.00	<0.001
Occupation			
Employed	1.00 (Reference)		
Self employed	0.90	0.40–2.00	0.80
Unemployed	0.70	0.20–2.50	0.60
Number of Children			
1	1.00 (Reference)		
2	1.10	0.60–2.00	0.70
3 or more	0.80	0.30–2.10	0.65

Interpretation: Higher education levels were significantly associated with adequate knowledge of postpartum psychosis (AOR = 5.60 for college/university and 8.40 for postgraduate; $p < 0.001$). Occupation and number of children were not significantly associated with knowledge levels.

DISCUSSION

The findings of this study reveal significant gaps in knowledge about postpartum psychosis (PPP) among husbands, with only 35% demonstrating adequate understanding. This is consistent with previous studies that have reported low awareness of PPP among family members and the general public.^[1,2] For instance, a study by Jones and Chandra (2018) found that even healthcare providers often lack sufficient knowledge about PPP, highlighting the need for widespread education.¹ Similarly, Sharma and Mazmanian (2014) noted that misconceptions about PPP, such as the belief that it is a normal part of childbirth, are prevalent and contribute to delays in seeking help.^[3]

Attitudes toward PPP in this study were generally positive, with 70% of participants expressing willingness to support their wives through mental health challenges. This aligns with findings from Robertson and Lyons (2003), who reported that family support plays a critical role in the recovery of women with PPP.^[4] However, the persistence of stigma, as reported by 30% of participants, remains a

significant barrier. This is consistent with studies by Howard et al. (2014) and Wisner et al. (2013), which identified stigma as a major obstacle to seeking help for perinatal mental health conditions.^[5,6]

Practices related to PPP were suboptimal, with only 25% of participants reporting seeking information or professional help. This finding is supported by Munk-Olsen et al. (2006), who found that many families do not recognize the symptoms of PPP or understand the urgency of treatment.^[7] Barriers such as lack of awareness, stigma, and financial constraints were commonly reported, echoing the results of Nager et al. (2008) and Spinelli (2009).^[8,9] These barriers highlight the need for targeted interventions to improve help-seeking behaviour.

The association between higher education levels and better knowledge and practices observed in this study is consistent with findings from Kumar and Robson (1984) and Boyce and Hickey (2005), who reported that education is a key determinant of health literacy and proactive health-seeking behavior.^[10,11] However, the lack of significant association between occupation and knowledge or attitudes contrasts with findings from Di Florio et al. (2013), who found that employment status influenced access to mental health

resources.^[12] This discrepancy may be due to differences in study populations or cultural contexts. This study underscores the need for educational interventions to improve awareness and preparedness among husbands regarding postpartum psychosis. The findings are consistent with global research highlighting the importance of family involvement in maternal mental healthcare.^[13,14] Future studies should explore the effectiveness of community-based interventions and antenatal education programs in addressing the identified gaps.^[15,16]

The study also identified stigma and lack of awareness as major barriers to seeking help. Addressing these barriers through public health campaigns and community-based interventions could improve early detection and management of postpartum psychosis. Additionally, involving husbands in antenatal education programs could enhance their preparedness and ability to support their wives.

CONCLUSION

This study provides valuable insights into the KAP of husbands regarding postpartum psychosis. The findings underscore the need for targeted educational interventions to improve awareness and preparedness among husbands, ultimately contributing to better maternal and familial outcomes. Future research should explore the effectiveness of such interventions in improving knowledge, attitudes, and practices related to postpartum psychosis.

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