

Original Research Article

Knowledge and Attitudes toward Maternal Postpartum Depression among Husbands of Expectant Mothers: A Hospital-Based Cross-Sectional Study

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ABSTRACT

Background: Postpartum depression is a common condition with serious consequences for mothers and infants, and the knowledge and attitudes of husbands influence early recognition and help-seeking. Evidence from Kerala is limited.

Objectives: To assess knowledge and attitudes regarding maternal postpartum depression among husbands of expectant mothers and to examine their association with sociodemographic variables.

Methods: A hospital-based cross-sectional study was conducted among husbands of expectant mothers attending the Obstetrics and Gynecology outpatient department of Travancore Medical College Hospital, Kollam, Kerala. Participants were recruited consecutively and interviewed face to face using an adapted questionnaire with 30 knowledge items and 15 attitude statements. Associations were tested with the Pearson chi-square test or Fisher's exact test; $P < 0.05$ was considered significant.

Results: Among 135 husbands, 113 (83.7%) had heard of postpartum depression, yet only 54 (40.0%) had good knowledge and 81 (60.0%) had poor knowledge. A positive attitude was observed in 125 (92.6%) and a negative attitude in 10 (7.4%). Urban residence was associated with good knowledge (50.0% versus 31.5%; $P = 0.029$). Positive attitude was associated with educational status ($P < 0.001$), monthly family income ($P = 0.019$) and number of living children ($P = 0.001$). Common misconceptions included beliefs that most affected mothers are violent and that every mother experiences the condition.

Conclusion: Attitudes of husbands were largely favourable, but knowledge was inadequate and misconceptions persisted. Antenatal clinics offer an opportunity to educate husbands, particularly those from rural areas and with lower education and income.

Keywords: Postpartum Depression, Knowledge, Attitude, Husbands, Expectant Fathers, Kerala.

INTRODUCTION

Postpartum depression (PPD) is a major public health concern affecting mothers globally and has grave consequences for maternal and newborn health.^[1] Worldwide prevalence has ranged from 3% in Singapore to 38% in Chile, with pooled estimates of approximately 17–20% of women experiencing depressive symptoms after childbirth.^[2] Systematic reviews and meta-analyses from India report a prevalence of 19% to 23.5%, reflecting a high

burden among postpartum women.^[3] Studies from South India and Kerala have identified poor marital relationships, inadequate family support, economic stress and lack of awareness as important contributing factors.^[4] Family support, especially from the husband, is of great preventive importance.^[5] However, misconceptions and limited knowledge among family members can delay diagnosis and treatment,^[6] and in Kerala, despite improving maternal health indicators, mental health

stigma and poor information on maternal depression persist.^[7]

Husbands are responsible for providing emotional, social and psychological support to mothers and are well placed to recognize emotional and behavioural changes during pregnancy and the postpartum phase.^[4] Modifiable partner factors are associated with perinatal depression and anxiety.^[8] Adequate knowledge and positive attitudes among husbands and family members help early detection of depressive symptoms, timely help-seeking and reduced stigma.^[7] Most existing literature focuses on prevalence and risk factors among women, with less emphasis on the role of husbands, and evidence on husbands' knowledge and attitudes from Kerala is limited. Recent cross-sectional studies of expectant husbands have been reported from Saudi Arabia^[9] and rural Sri Lanka,^[10] but comparable data from Kerala are lacking.

This study therefore aimed to assess knowledge and attitudes regarding maternal PPD among husbands of expectant mothers attending the Obstetrics and Gynecology outpatient department of Travancore Medical College Hospital, Kollam, and to examine their relationship with selected sociodemographic variables. The findings may inform family-centred educational interventions and strengthen early screening and support for PPD.

MATERIALS AND METHODS

A hospital-based cross-sectional study was conducted in the Department of Obstetrics and Gynecology, Travancore Medical College Hospital, Kollam, Kerala. The institution is a tertiary care teaching hospital affiliated with the Kerala University of Health Sciences and caters to patients from Kollam district and adjoining areas of southern Kerala. Data were collected between July and August 2026.

Selection and Description of Participants

The study population comprised husbands of expectant mothers attending the Obstetrics and Gynecology outpatient department. All husbands of expectant mothers attending the department who consented were eligible. Husbands who were seriously ill were excluded. Expectant mothers without a legally recognized husband, whose husband was living abroad, or who were in a separated or disrupted marital relationship were also excluded, as the husband could not be interviewed or was unlikely to be involved in support.

Sample Size and Sampling

The sample size was calculated using the formula $n = 4pq/d^2$, for estimating a proportion. Based on a previous study in which 45.4% of husbands had a high level of knowledge regarding PPD [9], with $p = 45.4\%$, $q = 54.6\%$ and an absolute precision (d) of 10% at the 95% confidence level, the minimum sample size was 99. After allowing for a 10% non-response rate, the required sample size was 109. All consecutive participants satisfying the inclusion criteria were recruited.

Study Instrument

Data were collected using an adapted version of the questionnaire developed by Jayamanna and Abeysena,^[10] with permission from the corresponding author. The questionnaire was originally developed from a literature review and expert input and had undergone face and content validity assessment; it was adapted to the objectives and local context of this study. It had three sections.

Section A recorded sociodemographic and obstetric characteristics: age, religion, educational status, occupation, monthly family income, type of family, place of residence, number of living children, gestational age of the current pregnancy, previous awareness of PPD, sources of information, and history of PPD among friends or relatives.

Section B assessed attitudes toward maternal PPD using 15 statements on a 5-point Likert scale from strongly agree (5) to strongly disagree (1). Negatively worded statements were reverse scored. Total scores ranged from 15 to 75, with higher scores indicating a more positive attitude. Participants were classified as having a negative (score <45) or positive attitude (score >45).

Section C assessed knowledge using 30 items in three domains: general knowledge (8 items), symptoms (12 items) and predisposing factors (10 items). Each correct response scored 1, and incorrect and "Don't know" responses scored 0, giving a total score of 0–30, with higher scores indicating better knowledge. Participants were classified as having poor (score <15) or good knowledge (score >15).

Study Procedure

After approval from the Institutional Review Board, the Institutional Ethics Committee and the Medical Superintendent, eligible participants were recruited consecutively. The purpose and nature of the study were explained

and written informed consent was obtained. The questionnaire was administered in the local language through face-to-face interviews to ensure understanding and completeness of responses. Participation was voluntary, and confidentiality, anonymity and privacy were maintained. After each interview, participants were given brief educational information on the signs and symptoms of PPD, risk factors, available support services and the role of husbands, so that responses were not influenced.

Ethical Considerations

The study was approved by the Institutional Review Board and Institutional Ethics Committee of Travancore Medical College [IEC No: 303/26, dated 22/06/2026]. The procedures followed the ethical standards of the responsible institutional committee and the ICMR National Ethical Guidelines for Biomedical and Health Research Involving Human Participants. Written informed consent was obtained, participants bore no financial burden, no personal identifiers are reported, and participants could withdraw at any time.

Statistical Analysis

Data were entered into Microsoft Excel and analysed. Sociodemographic variables, item responses and knowledge and attitude levels were summarized as frequencies and percentages. Associations of knowledge level (poor versus good) and attitude level (negative versus positive) with sociodemographic variables were examined using the Pearson chi-square test. Fisher's exact test was also computed for 2 × 2 comparisons where more than 20% of cells had expected counts below 5. A two-sided P value less than 0.05 was considered statistically significant, and exact P values are reported.

RESULTS

Participant Characteristics

A total of 135 husbands of expectant mothers were included, exceeding the minimum required sample of 109 (Tables 1 and 2). Fifty-seven (42.2%) were aged 20–30 years, 70 (51.9%) were aged 30–40 years and 8 (5.9%) were aged 40–50 years. Fifty-seven (42.2%) were Hindu, 52 (38.5%) Muslim and 26 (19.3%) Christian. Seventy-five (55.6%) were graduates, 25 (18.5%) held a diploma, 23 (17.0%) were postgraduates, 7 (5.2%) had completed high school and 5 (3.7%) higher secondary education. Sixty-three (46.7%) were private employees and 25 (18.5%) were in

business. Fifty-one (37.8%) reported a monthly family income of ₹20,001–50,000, and 31 (23.0%) reported more than ₹1,00,000.

Ninety-three (68.9%) belonged to nuclear families, and 73 (54.1%) lived in rural areas. Sixty-nine (51.1%) had no living children. Their wives were in the first (30.4%), second (31.9%) or third trimester (37.8%) of pregnancy. The majority (113; 83.7%) had heard about PPD, while 22 (16.3%) had not. Digital media was the most common source of information (58; 43.0%), followed by healthcare professionals (38; 28.1%). Seventy-four (54.8%) did not know a friend or relative who had experienced PPD.

Knowledge Regarding Maternal Postpartum Depression

Overall, 81 participants (60.0%) had poor knowledge and 54 (40.0%) had good knowledge (Tables 3 and 4, Figure 1). The best-answered items concerned predisposing factors: 104 (77.0%) correctly agreed that good family support reduces the risk of PPD, 103 (76.3%) that sharing childcare and household responsibilities reduces the risk, and 99 (73.3%) that intolerable workloads increase it. Most participants also rejected indigenous or spiritual therapy as better than medical treatment (91; 67.4%) and lifelong medication for every mother (80; 59.3%). Among symptoms, 89 (65.9%) recognized altered eating habits and 87 (64.4%) disturbed sleep.

Knowledge gaps were substantial. Only 25 participants (18.5%) correctly rejected the statement that most mothers with PPD are violent, and 61 (45.2%) endorsed it. Only 40 (29.6%) recognized that affected mothers may have physical symptoms unresponsive to treatment, 47 (34.8%) correctly rejected that caesarean delivery reduces risk, and 48 (35.6%) rejected that omitting vitamin supplements causes PPD. The proportion answering "Don't know" ranged from 16.3% to 45.9% across items, and was highest for the timing and duration of PPD and for twin pregnancy.

Attitude toward Maternal Postpartum Depression

Overall, 125 participants (92.6%) had a positive attitude and 10 (7.4%) had a negative attitude (Table 5, Figure 2). Most disagreed that PPD can be caused by supernatural forces (106; 78.5%), that mothers should consult spiritual healers (102; 75.6%) or first seek blessings at a religious place (86; 63.7%), and that sadness after childbirth is merely attention-seeking (84;

62.2%). Ninety-six (71.1%) agreed that early recognition and treatment improve outcomes. Some unfavourable views remained: 52 (38.5%) agreed that PPD is a normal condition every mother experiences, 40 (29.6%) agreed that mothers who think of harming their baby are unsuitable for motherhood, 30 (22.2%) considered PPD a sign of weakness, and 23 (17.0%) agreed that mothers should bear its effects if they choose to become pregnant.

Association with Sociodemographic Variables

Results of the chi-square tests are shown in Table 6. Place of residence was significantly associated with knowledge level ($\chi^2 = 4.777$, $df = 1$, $P = 0.029$); 31 of 62 urban participants (50.0%) had good knowledge compared with 23 of 73 rural participants (31.5%). No other variable was significantly associated with knowledge, including educational status ($P = 0.165$), monthly family income ($P = 0.571$) and having heard about PPD ($P = 0.183$; Fisher's exact $P = 0.237$).

Attitude was significantly associated with educational status ($\chi^2 = 27.858$, $df = 4$, P

< 0.001): all 23 postgraduates (100.0%) and 72 of 75 graduates (96.0%) had a positive attitude, compared with 2 of 5 participants (40.0%) with higher secondary education. Monthly family income was also associated with attitude ($\chi^2 = 9.930$, $df = 3$, $P = 0.019$); all 31 participants earning more than ₹1,00,000 (100.0%) had a positive attitude, compared with 12 of 16 (75.0%) earning less than ₹20,000. Number of living children was associated with attitude ($\chi^2 = 16.536$, $df = 3$, $P = 0.001$), with the lowest proportion of positive attitude among the three participants with three living children (1 of 3; 33.3%). Having heard about PPD was associated with attitude on the Pearson test ($\chi^2 = 4.449$, $df = 1$, $P = 0.035$), but not on Fisher's exact test ($P = 0.058$), as more than 20% of cells had expected counts below 5. Place of residence was not associated with attitude (Pearson $P = 0.294$; Fisher's exact $P = 0.342$). Age, religion, occupation, type of family, gestational age, source of information and knowing someone with PPD were not significantly associated with attitude.

Variable	Category	n	%
Age (years)	20–30	57	42.2
	30–40	70	51.9
	40–50	8	5.9
Religion	Christian	26	19.3
	Hindu	57	42.2
	Muslim	52	38.5
Educational status	High school	7	5.2
	Higher secondary	5	3.7
	Diploma	25	18.5
	Graduate	75	55.6
	Postgraduate	23	17.0
Occupation	Business	25	18.5
	Daily wage worker	8	5.9
	Government employee	17	12.6
	Private employee	63	46.7
	Self-employed	13	9.6
	Unemployed	5	3.7
	Others	4	3.0
Monthly family income	< ₹20,000	16	11.9
	₹20,001–50,000	51	37.8
	₹50,001–1,00,000	37	27.4
	> ₹1,00,000	31	23.0

Table 1. Sociodemographic characteristics of the participants (N = 135)

n = number of participants

Variable	Category	n	%
Type of family	Nuclear	93	68.9
	Joint	34	25.2

	Three generation	8	5.9
Place of residence	Rural	73	54.1
	Urban	62	45.9
Living children (excluding current pregnancy)	0	69	51.1
	1	45	33.3
	2	18	13.3
	3	3	2.2
Gestational age of current pregnancy	First trimester	41	30.4
	Second trimester	43	31.9
	Third trimester	51	37.8
Heard about postpartum depression	Yes	113	83.7
	No	22	16.3
Source of information about postpartum depression	Digital media	58	43.0
	Healthcare professionals	38	28.1
	Mass media	16	11.9
	Interpersonal sources	14	10.4
	Family/friends	9	6.7
Knows a friend/relative who had postpartum depression	Yes	36	26.7
	No	74	54.8
	Don't know	25	18.5

Table 2. Family, obstetric and awareness-related characteristics of the participants (N = 135)

n = number of participants. Percentages are based on all 135 participants

Knowledge Item	Correct Answer	Correct n (%)	Incorrect n (%)	Don't know n (%)
A. General knowledge regarding postpartum depression				
PPD does not occur in women with healthy pregnancies	No	54 (40.0)	33 (24.4)	48 (35.6)
PPD can occur anytime within one year after delivery	Yes	55 (40.7)	20 (14.8)	60 (44.4)
PPD frequently occurs within the first three months after delivery†	Yes	71 (52.6)	10 (7.4)	53 (39.3)
PPD usually lasts for more than two weeks†	Yes	57 (42.2)	13 (9.6)	62 (45.9)
PPD does not have an effective treatment	No	53 (39.3)	23 (17.0)	59 (43.7)
Most mothers with PPD must be hospitalized for treatment	No	51 (37.8)	35 (25.9)	49 (36.3)
Every mother receiving medication for PPD must continue treatment throughout her lifetime	No	80 (59.3)	12 (8.9)	43 (31.9)
Abnormal behaviour after delivery is better managed with indigenous/spiritual therapy than medical treatment	No	91 (67.4)	14 (10.4)	30 (22.2)
B. Symptoms of postpartum depression				
Mothers with PPD have a persistently sad mood	Yes	66 (48.9)	34 (25.2)	35 (25.9)
PPD can affect a mother's sleeping pattern	Yes	87 (64.4)	12 (8.9)	36 (26.7)
PPD can cause altered eating habits	Yes	89 (65.9)	7 (5.2)	39 (28.9)
Mothers with PPD feel energetic more than usual	No	62 (45.9)	34 (25.2)	39 (28.9)
Mothers with PPD may complain of physical symptoms that do not respond to treatment†	Yes	40 (29.6)	39 (28.9)	55 (40.7)
Mothers with PPD may withdraw from their loved ones	Yes	71 (52.6)	23 (17.0)	41 (30.4)
PPD can make mothers worry excessively about their baby	Yes	80 (59.3)	29 (21.5)	26 (19.3)
Mothers with PPD may have thoughts of harming their baby	Yes	80 (59.3)	14 (10.4)	41 (30.4)
Mothers with PPD pay good attention to their personal hygiene	No	50 (37.0)	29 (21.5)	56 (41.5)

Mothers with PPD can have thoughts of self-harm	Yes	68 (50.4)	18 (13.3)	49 (36.3)
Most mothers with PPD are violent	No	25 (18.5)	61 (45.2)	49 (36.3)
Irritability towards the spouse can be a symptom of PPD	Yes	77 (57.0)	16 (11.9)	42 (31.1)

Table 3. Item-wise responses on general knowledge and symptoms of postpartum depression (N = 135)

PPD = postpartum depression. † One to three participants had missing responses on this item. "Correct" is the response matching the correct answer; "Incorrect" is the opposite response.

Knowledge Item	Correct Answer	Correct n (%)	Incorrect n (%)	Don't know n (%)
C. Predisposing factors for postpartum depression				
Not taking vitamin supplements during pregnancy causes PPD	No	48 (35.6)	29 (21.5)	58 (43.0)
Hormonal imbalance after delivery is a cause of PPD	Yes	73 (54.1)	23 (17.0)	39 (28.9)
Intolerable workloads increase the risk of PPD	Yes	99 (73.3)	8 (5.9)	28 (20.7)
Good family support reduces the risk of PPD	Yes	104 (77.0)	6 (4.4)	25 (18.5)
Delivery by caesarean section reduces the risk of PPD	No	47 (34.8)	40 (29.6)	48 (35.6)
Tragic or stressful life events increase the risk of PPD	Yes	87 (64.4)	26 (19.3)	22 (16.3)
Pre-pregnancy mental illness increases the risk of PPD	Yes	92 (68.1)	9 (6.7)	34 (25.2)
Sharing childcare and household responsibilities reduces the risk of PPD	Yes	103 (76.3)	10 (7.4)	22 (16.3)
Exclusive breastfeeding increases the risk of PPD	No	52 (38.5)	33 (24.4)	50 (37.0)
The probability of developing PPD is lower in twin pregnancies	No	61 (45.2)	12 (8.9)	62 (45.9)

Table 4. Item-wise responses on predisposing factors for postpartum depression (N = 135)

PPD = postpartum depression. Overall knowledge level: poor knowledge, 81 (60.0%); good knowledge, 54 (40.0%)

Attitude Statement	SA n (%)	A n (%)	N n (%)	D n (%)	SD n (%)
Sadness after childbirth is merely attention-seeking behaviour	27 (20.0)	12 (8.9)	12 (8.9)	50 (37.0)	34 (25.2)
Mothers with abnormal behaviour after delivery should first seek blessings at a religious place	4 (3.0)	13 (9.6)	32 (23.7)	34 (25.2)	52 (38.5)
Mothers with abnormal behaviour after delivery should consult spiritual healers	3 (2.2)	9 (6.7)	21 (15.6)	47 (34.8)	55 (40.7)
Postpartum depression did not exist in previous generations	9 (6.7)	9 (6.7)	18 (13.3)	51 (37.8)	48 (35.6)
Postpartum depression is a normal condition that every mother experiences after childbirth	13 (9.6)	39 (28.9)	39 (28.9)	26 (19.3)	18 (13.3)
Postpartum depression is a sign of weakness	10 (7.4)	20 (14.8)	28 (20.7)	52 (38.5)	25 (18.5)
Postpartum depression can be caused by supernatural forces	4 (3.0)	1 (0.7)	24 (17.8)	44 (32.6)	62 (45.9)
Postpartum depression occurs because women are unprepared for motherhood	5 (3.7)	21 (15.6)	25 (18.5)	55 (40.7)	29 (21.5)
Women develop postpartum depression because they have unrealistic expectations	5 (3.7)	15 (11.1)	38 (28.1)	49 (36.3)	28 (20.7)
It is better not to tell others if a mother develops postpartum depression	5 (3.7)	14 (10.4)	31 (23.0)	52 (38.5)	33 (24.4)
Postpartum depression does not require treatment because it resolves on its own	8 (5.9)	12 (8.9)	23 (17.0)	54 (40.0)	38 (28.1)

Mothers should bear the effects of postpartum depression if they choose to become pregnant	7 (5.2)	16 (11.9)	33 (24.4)	41 (30.4)	38 (28.1)
Mothers with postpartum depression will remain depressed throughout life	4 (3.0)	5 (3.7)	18 (13.3)	51 (37.8)	57 (42.2)
Mothers who think about harming their baby are unsuitable for motherhood	14 (10.4)	26 (19.3)	28 (20.7)	37 (27.4)	30 (22.2)
Early recognition and treatment of postpartum depression can improve outcomes	49 (36.3)	47 (34.8)	15 (11.1)	8 (5.9)	16 (11.9)

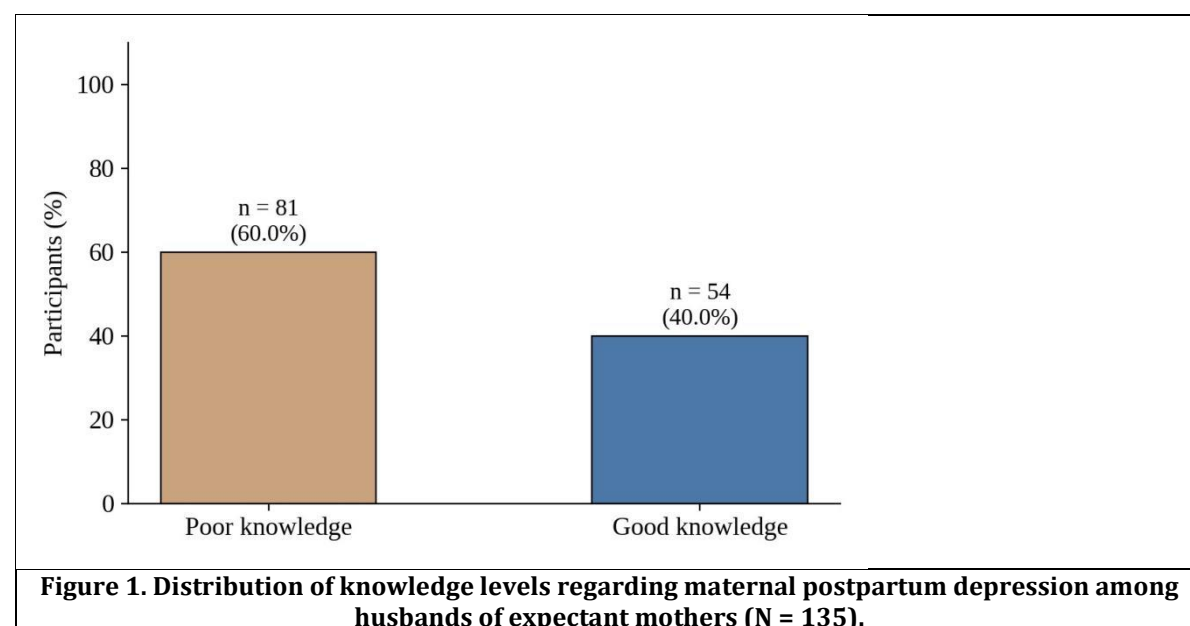
Table 5. Item-wise responses and overall attitude toward maternal postpartum depression (N = 135)

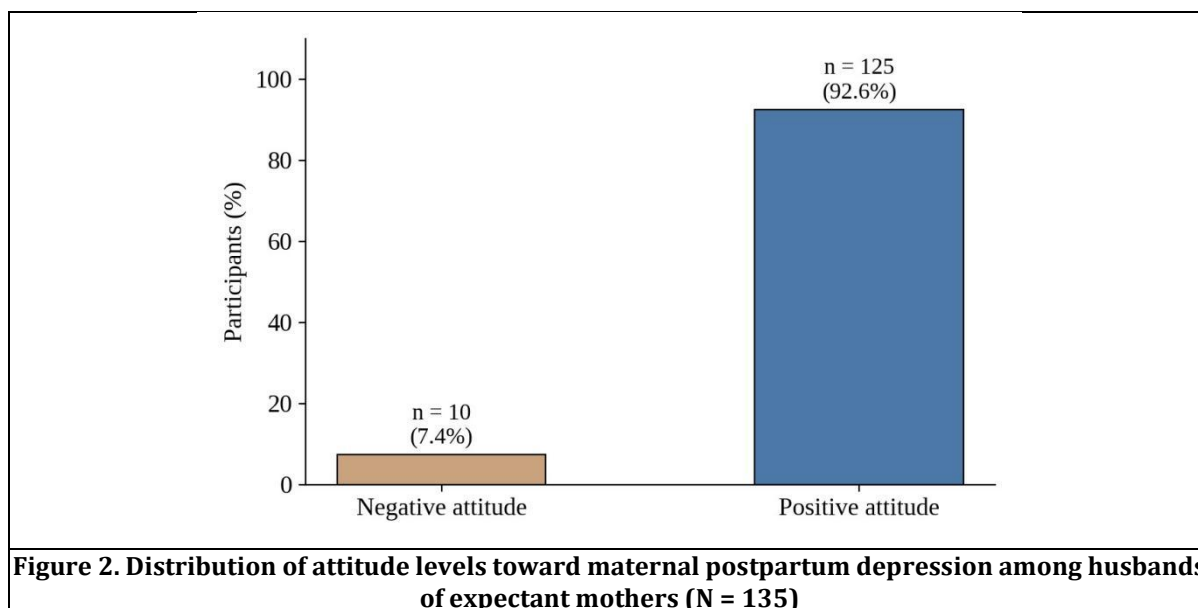
SA = strongly agree; A = agree; N = neutral; D = disagree; SD = strongly disagree. Overall attitude level: negative attitude, 10 (7.4%); positive attitude, 125 (92.6%)

Variable	Knowledge level			Attitude level		
	χ^2	df	P	χ^2	df	P
Age	0.127	2	0.938	0.322	2	0.851
Religion	0.188	2	0.910	4.257	2	0.119
Educational status	6.500	4	0.165	27.858	4	< 0.001*
Occupation	7.682	6	0.262	8.483	6	0.205
Monthly family income	2.005	3	0.571	9.930	3	0.019*
Type of family	3.573	2	0.168	1.485	2	0.476
Place of residence	4.777	1	0.029*	1.103	1	0.294
Number of living children	0.276	3	0.965	16.536	3	0.001*
Heard about postpartum depression	1.774	1	0.183	4.449	1	0.035*
Gestational age	3.829	2	0.147	2.021	2	0.364
Source of information	2.144	4	0.709	4.700	4	0.320
Knows a friend/relative with postpartum depression	1.907	2	0.385	0.246	2	0.884

Table 6. Association of knowledge and attitude levels with sociodemographic variables (Pearson chi-square test)

χ^2 = Pearson chi-square value; df = degrees of freedom. *Statistically significant ($P < 0.05$). Fisher's exact P values: heard about postpartum depression, 0.237 (knowledge) and 0.058 (attitude); place of residence and attitude, 0.342.





DISCUSSION

Summary of Key Findings

In this hospital-based study of 135 husbands of expectant mothers, attitudes toward maternal PPD were largely favourable (92.6%), but only 40.0% had good knowledge, despite 83.7% having heard of the condition. Hence awareness of the term did not translate into adequate understanding. Urban residence was associated with knowledge, whereas education, income and number of living children were associated with attitude.

Comparison with Existing Evidence

The proportion with good knowledge (40.0%) lies between that reported among husbands in Saudi Arabia (45.4% with high knowledge)^[9] and in rural Sri Lanka (33.6% with good knowledge).^[10] The proportion with a positive attitude (92.6%) was higher than in Saudi Arabia (66.1%) and in Sri Lanka (83.4%).^[9,10] Differences in instruments, cut-offs and settings limit direct comparison, and the high proportion here may partly reflect interviewer-administered data collection and social desirability. In the Sri Lankan study, higher education and previous awareness of PPD were associated with good knowledge;^[10] in our study neither was significantly associated with knowledge, although cell sizes were small. Knowledge and attitudes of family members toward PPD have also been examined elsewhere;^[11] this study adds husband-specific data from Kerala.

The specific gaps identified are informative. Participants recognized the protective value of family support and shared responsibilities, which is consistent with

evidence from Saudi Arabia, Indonesia, northern India and Kerala that inadequate spousal support or involvement is linked to PPD and that husband involvement and supportive presence are protective.^[12–16] In contrast, the belief that most mothers with PPD are violent, the weak recognition of physical symptoms, and the belief that every mother experiences PPD may fuel stigma and delay help-seeking. Qualitative work in Kerala has shown that stigma, fear of social judgement and poor family understanding delay the use of mental health services, while supportive husbands facilitate early help-seeking.^[4] The view that PPD is “normal” may reflect confusion with transient postpartum mood changes, but this was not examined here.

The association of attitude with education and income, but not knowledge, suggests that attitudes are shaped by broader social factors, whereas knowledge depends on exposure to specific information. The urban–rural difference in knowledge may reflect differences in access to information and health services. These interpretations are speculative because of the cross-sectional design and sparse cells.

Strengths

Strengths include consecutive recruitment, an adapted questionnaire based on a previously validated tool, interviewer administration in the local language that resulted in very few missing responses, and item-wise analysis that pinpoints specific misconceptions. The study addresses an under-researched group in Kerala.

What this Study Adds and Implications for Care

This study provides Kerala-specific evidence that husbands of expectant mothers hold favourable attitudes but limited knowledge of PPD. Digital media was the main source of information (43.0%), exceeding healthcare professionals (28.1%), suggesting that antenatal visits are an underused opportunity for structured education of husbands. Educational content could target the misconceptions identified, such as violence, the nature of physical symptoms and the myths on caesarean delivery, vitamin supplements and breastfeeding, and give priority to rural husbands and those with lower education and income. Providers in a Delhi hospital have perceived that the presence of a birth companion supports maternal well-being and helps reduce PPD,^[17] supporting the involvement of husbands in antenatal and delivery care.

Limitations and Controversies

This was a single-centre, hospital-based study with a modest sample, and findings may not be generalizable to the community or other regions. Participants were husbands of women who had not yet delivered, so knowledge and attitudes were not tested against actual supportive behaviour. Interviewer administration may have introduced social desirability bias, and the very high proportion with positive attitudes may partly reflect this. Dichotomizing scores reduces information, and the choice of cut-offs influences the proportions. Associations were examined with bivariate chi-square tests without adjustment for confounding or multiple comparisons; several comparisons involved small cells (for example, three participants with three living children and five with higher secondary education), so the significant findings, especially those for number of children and education, should be interpreted cautiously. The relationship between knowledge and attitude scores and multivariable analyses were not assessed. The discordance between favourable attitudes and limited knowledge also raises the question of whether the attitude scale captures genuine acceptance or socially acceptable responses.

Future Research Directions

Multicentre and community-based studies with larger samples and multivariable analysis are needed. A follow-up of the same husbands about six weeks after delivery could examine

whether knowledge and attitudes during pregnancy translate into supportive behaviour and maternal outcomes. Validated tools such as those developed for paternal depression awareness and postpartum depression literacy^[18,19] could improve comparability, and interventional studies could test whether antenatal education of husbands improves knowledge and maternal mental health.

CONCLUSION

Husbands of expectant mothers in this setting held largely favourable attitudes toward maternal postpartum depression, but only two in five had good knowledge, and misconceptions about violence, physical symptoms and causes persisted. Urban residence was associated with better knowledge, and higher education and income with more positive attitudes. Structured, family-centred education at antenatal clinics, directed at rural husbands and those with lower education and income, may improve early recognition and support for postpartum depression.

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