

Knowledge and Attitudes toward Postpartum Depression among Postpartum Women in Vinh Bao District, Hai Phong city, 2023

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ABSTRACT

Background: Postpartum depression (PPD) is a common mental health problem among mothers, yet knowledge and attitudes toward PPD remain limited in many settings.

Objectives: To assess the knowledge and attitudes of postpartum mothers toward postpartum depression. **Methods:** A cross-sectional descriptive study was conducted among 204 postpartum women in six communes of Vinh Bao district, Hai Phong, Vietnam, from June to December 2023. Data were collected using structured questionnaires. Descriptive statistics were used for data analysis. **Results:** Only 48.5% of mothers had adequate knowledge of postpartum depression, while 51.5% had insufficient knowledge. Although most participants recognized common symptoms such as sadness and loss of interest, misconceptions persisted, particularly regarding symptom duration and the belief that PPD is only associated with suicidal ideation. Knowledge of psychosocial risk factors was relatively good; however, awareness of clinical risk factors, such as a history of depression, remained limited. Regarding attitudes, 61.8% of mothers demonstrated a positive attitude, but a considerable proportion still perceived PPD as a normal condition or believed it could resolve without treatment. **Conclusions:** Postpartum mothers' knowledge of PPD remains inadequate despite generally positive attitudes. Targeted health education interventions are needed to improve knowledge, address misconceptions, and support early recognition and prevention of postpartum depression.

Keywords: postpartum depression; knowledge; attitude; postpartum women; Vietnam

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INTRODUCTION

According to the American Psychiatric Association, postpartum depression (PPD) is a non-psychotic depressive disorder that typically occurs within the first four weeks after childbirth. Symptoms include persistent sadness, fatigue, loss of appetite, sleep disturbances, agitation or apathy, excessive feelings of guilt or shame, impaired concentration, loss of behavioral control, and, in some cases, suicidal ideation¹. Postpartum depression is a

significant public health concern worldwide due to its high prevalence and serious consequences. In Asia², the prevalence of PPD risk during the period 2000–2020 ranged from 7.45% to 56%. In Vietnam, reported rates vary from 8.2% to 48.1%³, while a study conducted in Hai Phong in 2019 reported a prevalence of 14.3%⁴. Variations in prevalence across studies may be attributed to differences in study settings, timing of postpartum assessment, measurement tools, and cutoff values.

Postpartum depression adversely affects maternal health, child development, and family relationships.⁵⁻⁸ It is influenced by multiple individual, familial, and social factors³. While previous interventions have mainly focused on social and community support, modifiable individual factors remain important. Health education has been shown to improve awareness and reduce the risk of postpartum depression⁹⁻¹¹. Maternal knowledge of postpartum depression is essential for early symptom recognition, timely help-seeking, and prevention. Inadequate knowledge may delay diagnosis and treatment, increasing the risk of disease progression. This study assessed maternal knowledge of postpartum depression and associated factors among postpartum women in Vinh Bao district,

METHODS

Hai Phong, in 2023.

Research subjects

The study included postpartum women living in six communes of Vinh Bao district, Hai Phong. Eligible participants were women aged ≥ 18 years, within 6 months postpartum, able to communicate, and willing to participate. Women with severe mental disorders or cognitive impairment were excluded.

Research location

The study was conducted in 6 communes of Vinh Bao district, Hai Phong including: Thanh Luong, Tam Da, Cao Minh, Tien Phong, Trung Lap, Vinh An.

Research time

Research period: From June 2023 to December 2023

Research design

Cross-sectional descriptive study

Sample size

The study sample size was calculated using the formula for estimating a proportion:

$$n = Z_{(1-\alpha/2)}^2 \frac{p(1-p)}{(d)^2}$$

In there: n: sample size

α : confidence level = 0.05 $\rightarrow Z(1 - \alpha/2) = 1.96$

$p = 0.6$, the proportion of postpartum women with adequate knowledge of postpartum depression¹² reported by Ajibade et al. (2022);

d: allowable deviation of ratio = 0.07

The minimum required sample size was 189 participants. After adding 5% to account for potential non-response, the final required sample size was 198. In this study, a total of 204 postpartum women were included.

Sampling method

A multistage sampling approach was used. First, six of the 29 communes in Vinh Bao district were randomly selected. Second, all eligible postpartum women in the selected communes were identified ($n = 218$). As the required sample size was comparable to the eligible population, all were invited to participate. Fourteen mothers declined, yielding a final sample of 204 participants.

Research content, variables and indicators

Study variables included socio-demographic and obstetric characteristics, and knowledge and attitudes toward postpartum depression.

Techniques, instruments, and data collection procedures

The data collection tool through questionnaire includes the following parts

Part I. Demographic and obstetric information: Collect information on mother's age, education level, occupation, birth, pregnancy plan.

*Part II: Assessment of mothers' knowledge about postpartum depression:*The

questionnaire consists of 20 questions developed based on the DSM IV criteria for diagnosing depression, and a review of literature from previous studies.^{1,13,4} Correct answers were scored 1 and incorrect or “don't know” responses 0 (total score: 0–20). Participants scoring ≥ 15 were classified as having satisfactory knowledge. Content validity was confirmed by five experts (I-CVI: 0.8–1.0; S-CVI: 0.97), and a pilot study of 30 women showed good internal consistency (KR-20 = 0.842).

Part III. Postpartum Depression Attitudes and Beliefs Questionnaire:

A 12-item questionnaire was developed based on previous studies^{13,14} to assess attitudes and beliefs regarding postpartum depression. Responses were rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with total scores ranging from 12 to 60. Participants scoring ≥ 45 were classified as having positive

attitudes. Content validity was confirmed by five experts (I-CVI: 0.8–1.0; S-CVI: 0.95), and a pilot study of 30 postpartum women demonstrated good internal consistency (Cronbach's $\alpha = 0.826$).

Data analysis method

- Data from each interview, carefully checked, cleaned, coding, importing and analyzing on SPSS 20.0 software.
- Results were presented as frequencies, percentages.

Ethical issues of research

The study was approved by the Scientific and Ethics Committee of Nam Dinh University of Nursing (No. 1590/GCN-HDDD) and authorized by the participating health centers. Written informed consent was obtained from all participants. Participation was voluntary, participants could withdraw at any time without consequences, and all personal information was kept confidential.

RESULTS

Some general characteristics of the research subjects

Table 1. Some demographics and obstetric characteristics of the study subjects
(n = 204)

Variable	Quantity (n)	Percentage (%)
Age group (years)		
<25	56	27.5
25 – 34	101	49.5
≥ 35	47	23.0
Occupation		
Farmer	15	7.4
Worker	117	57.3
Office staff/employees	17	8.3
Business, trade	21	10.3
Other (Freelancers, housewives, unemployed...)	34	16.7
Education		
Primary school	5	2.5
Secondary school	50	24.6

≤ High school	89	43.3
Higher education (College, university...)	60	29.6
Birth		
First time	57	27.9
Second time	80	39.2
3rd time or more	67	32.9
Plans/intentions for this pregnancy		
Planned	140	68.6
Unplanned	64	31.4

The average age of the study participants was 29.33 ± 6.02 years. The age group from 25 to 34 accounted for the highest proportion (49.5%). The most common occupation among the mothers participating in the study was factory worker, accounting for 57.3% of the total sample. The majority of mothers participating in the study had an education level of high school or higher, accounting for 72.9%. The proportion of first-time mothers was 27.9%; second-time mothers was 39.2%; and third-time or subsequent mothers accounted for 32.9%. Rate of unplanned or unexpected pregnancies were 31.4%.

Mothers' knowledge about postpartum depression

Table 2. Mothers' knowledge about postpartum depression (n = 204)

Items	Correct answer n (%)
1. Feeling down can be a symptom of postpartum depression.	166 (81.4)
2*. Postpartum depression usually does not affect eating and sleeping.	157 (77.0)
3. Loss of interest or enjoyment in activities is a symptom of postpartum depression.	144 (70.6)
4*. Only when women experience suicidal thoughts are they diagnosed with postpartum depression.	127 (62.3)
5. Fatigue is a common symptom of postpartum depression.	118 (57.8)
6. Symptoms of postpartum depression last for at least two weeks.	39 (19.1)
7. People with a history of depression are at increased risk of developing postpartum depression.	120 (58.8)
8*. Postpartum depression is primarily caused by hormonal changes after childbirth.	89 (43.6)
9. Postpartum depression can be caused by stressful life circumstances.	185 (90.7)
10. Postpartum depression can be caused by a lack of social support (for example, lack of support from family...).	166 (81.4)
11*. Postpartum depression does not affect memory and concentration.	146 (71.6)
12*. Women with depression can meet childcare needs just like normal women.	161 (78.9)
13. Seeking support from family can help prevent or manage postpartum depression.	186 (91.2)

14. Physical activity is effective in preventing or managing postpartum depression.	163 (79.9)
15. A balanced diet can help prevent or manage postpartum depression.	158 (77.5)
16. Good sleep helps prevent or manage postpartum depression.	189 (92.6)
17. Treating postpartum depression requires help from a professional (psychiatrist, psychologist, etc.).	170 (83.3)
18. Psychological interventions are effective in treating postpartum depression.	174 (85.3)
19*. Antidepressants can be addictive.	63 (30.9)
20*. Antidepressants can cause brain damage.	58 (28.4)

Note (*: Negative question)

Majority of mothers correctly identified some signs/symptoms such as feeling sad (81.4%) and loss of interest in activities (70.6%). However, there were limitations in recognizing other symptoms such as fatigue (58.7%) and duration of symptoms lasting ≥ 2 weeks (only 19.1%). Notably, 37.7% still believed that only suicidal thoughts constituted postpartum depression.

Mothers' knowledge of the consequences of postpartum depression: The majority of mothers correctly understood that postpartum depression can affect eating, sleep (77.0%) and memory, concentration (71.6%). Most mothers recognized stressful life circumstances (90.7%) and lack of social support (81.4%) as risk factors for postpartum depression, whereas only 58.8% identified a history of depression as a risk factor.

The majority of mothers knew preventive measures for postpartum depression, including seeking help from family (91.2%), getting good sleep (92.6%), and physical activity (79.9%). More than 80% knew that treatment requires a psychologist or psychiatrist (83.3%) and that psychological interventions are effective (85.3%). However, about 70% had misconceptions about antidepressant medication, believing it could be addictive and cause brain damage.

Mothers' attitudes towards postpartum depression

Table 3. Mothers' attitudes towards postpartum depression (n = 204)

Items	I strongly disagree	Disagree	Neutral	Agree	I completely agree
1. I think I might also experience postpartum depression in the future.	6 (2.9)	11 (5.4)	62 (30.4)	112 (54.9)	13 (6.4)
2*. It's normal for women to experience postpartum depression.	16 (7.9)	100 (49.0)	27 (13.2)	54 (26.5)	7 (3.4)
3*. Postpartum depression will resolve on its own without treatment.	27 (13.2)	119 (58.3)	43 (21.1)	12 (5.9)	3 (1.5)
4. If left untreated, postpartum depression can have serious consequences for both the mother	2 (1.0)	14 (6.9)	40 (19.6)	125 (61.2)	23 (11.3)

and the family.					
5*. If I had symptoms of postpartum depression, I wouldn't tell anyone.	55 (27.0)	122 (59.8)	17 (8.3)	8 (3.9)	2 (1.0)
6. I think that a healthy lifestyle helps prevent postpartum depression.	2 (1.0)	13 (6.4)	39 (19.1)	105 (51.5)	45 (22.0)
7*. I'd rather live with postpartum depression than go through the ordeal of psychological/mental health treatment.	83 (40.7)	107 (52.4)	7 (3.4)	4 (2.0)	3 (1.5)
8*. I'm afraid of what my family or friends might think of me if I attend psychological/mental health appointments.	25 (12.2)	134 (65.7)	33 (16.2)	11 (5.4)	1 (0.5)
9*. Although there are clinics for women with postpartum depression, I don't have much faith in them.	22 (10.7)	131 (64.2)	45 (22.1)	4 (2.0)	2 (1.0)
10. Sharing and receiving support from family and friends helps me cope with stress better.	1 (0.5)	8 (3.9)	39 (19.1)	135 (66.2)	21 (10.3)
11* I find it difficult to maintain a healthy diet because I don't have time to prepare meals.	14 (6.9)	122 (59.8)	49 (24.0)	18 (8.8)	1 (0.5)
12. I often feel too tired to exercise.	19 (9.3)	102 (50.0)	61 (29.9)	20 (9.8)	2 (1.0)

Note: * (negative question)

Most postpartum mothers demonstrated a relatively positive attitude toward postpartum depression; however, several misconceptions and potential barriers still exist. Specifically, 29.9% considered postpartum depression to be a normal condition; 8.4% agreed that it could resolve spontaneously without treatment; and 27.5% did not have an appropriate perception of the serious consequences if it is not treated promptly. In addition, 26.5% showed less positive attitudes regarding the role of a healthy lifestyle in preventing postpartum depression; 3.5% agreed with the view that living with depression is preferable to undergoing the challenges of psychological treatment. Furthermore, 25.1% expressed limited trust in clinics for women with postpartum depression, 33.3% reported difficulty maintaining a healthy diet due to lack of time for meal preparation, and 40.7% perceived barriers to engaging in physical exercise. Regarding knowledge about postpartum depression, 48.5% of mothers had adequate knowledge, while 51.5% had insufficient knowledge. Regarding attitudes toward postpartum depression, 61.8% of mothers had a positive (satisfactory) attitude, while 38.2% had a negative (unsatisfactory) attitude (Figure 1).

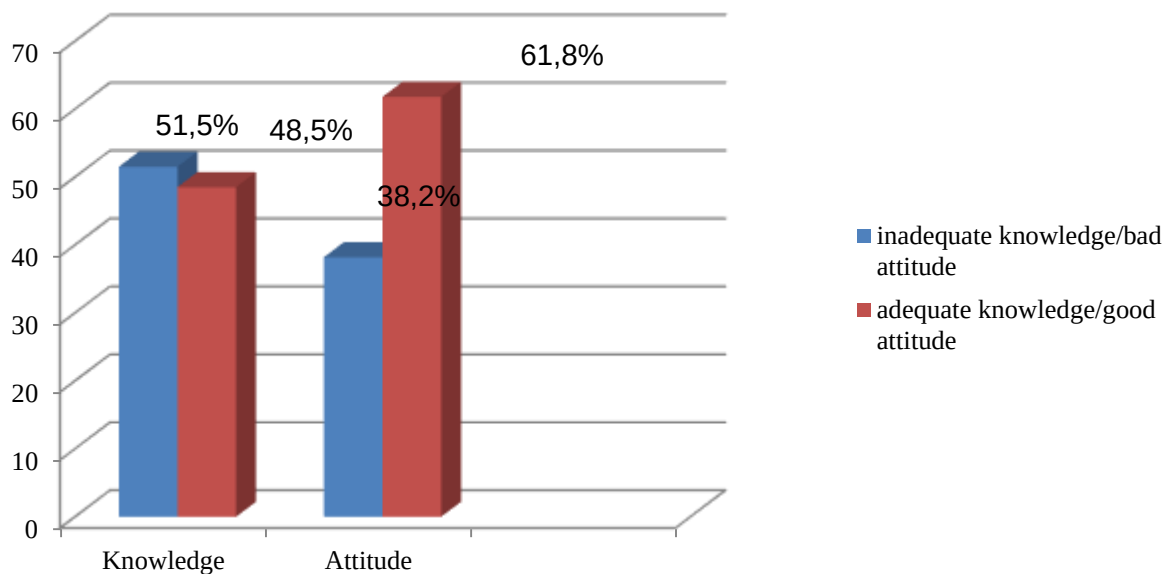


Figure 1. Knowledge, attitudes regarding postpartum depression among mothers (n = 204)

DISCUSSION

The findings of this study indicate that postpartum mothers' knowledge of postpartum depression remains limited, with only 48.5% demonstrating adequate knowledge. Previous studies have reported higher levels of knowledge, ranging from 60.0% to 66.4%^{12,15}. These differences may be related to variations in study populations, educational background, access to health information, and health education programs. Regarding specific knowledge, most mothers recognized common symptoms and risk factors, consistent with a Vietnamese study conducted at Hanoi Obstetrics and Gynecology Hospital¹⁶. However, important gaps remained. Only 58.8% recognized a history of depression as a risk factor, and only 19.1% correctly identified that symptoms may persist for at least two weeks. Misconceptions about antidepressant medications were also common, with only 30.9% and 28.4% of mothers correctly answering questions related to addiction and brain damage, respectively. These findings highlight the need for targeted health education

to address persistent misconceptions about postpartum depression.

Regarding attitudes, 61.8% of mothers demonstrated a positive attitude toward postpartum depression, slightly higher than the 58.5% reported by Leslie (2024) and the 52.4% moderate attitude reported by Ajibade¹². These differences may reflect variations in mental health awareness, cultural beliefs, and access to support services. However, many mothers still held misconceptions, such as considering postpartum depression a normal condition that could resolve without treatment, and underestimated its consequences. These findings suggest that positive attitudes do not necessarily reflect accurate understanding. Consistent with this, Jannah (2022) reported that self-help psychological interventions significantly improved knowledge and attitudes among pregnant women¹⁷.

This study has several strengths, including its community-based sample and the use of a structured questionnaire with acceptable validity and reliability. However, the cross-sectional design precludes causal inference, and the single-district setting may limit the generalizability of the findings. Future studies

should include larger, multi-site samples and further explore factors influencing knowledge and attitudes, including qualitative research to better understand mothers' perceptions.

CONCLUSION

Postpartum mothers' knowledge of postpartum depression remains inadequate despite generally positive attitudes. This discrepancy highlights the need for targeted health education to improve knowledge, address misconceptions, and promote early recognition and prevention of postpartum depression.

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