



## Needs Assessment of Postpartum Mothers and Midwives in Early Detection of Neonatal Jaundice through a Breastfeeding Coping Approach

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### ABSTRACT

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Neonatal jaundice is a common condition in newborns that requires early detection and adequate breastfeeding management. Postpartum mothers often experience physical and psychological changes that may influence breastfeeding practices and their ability to recognize early signs of neonatal jaundice. Objective: This study aimed to explore the needs of postpartum mothers and midwives in newborn care related to early detection of neonatal jaundice through a breastfeeding coping approach. This qualitative study employed in-depth interviews with four postpartum and focus group discussions (FGDs) with twelve midwives. Data were analyzed thematically to identify key needs related to knowledge, attitudes, family support, experience, mentoring, and information needs. Postpartum mothers experienced various emotional responses after childbirth, including happiness, relief, fear, and anxiety, particularly among primiparous mothers. Although mothers had basic knowledge of newborn care, they lacked confidence in practical skills and early recognition of neonatal jaundice. Midwives demonstrated good knowledge of neonatal jaundice, including causes, clinical signs, initial management, and referral criteria. Family support played an important role in improving maternal confidence, breastfeeding success, and early detection of neonatal jaundice. Strengthening maternal education, family involvement, and continuous support from midwives is essential to improve early detection of neonatal jaundice through optimal breastfeeding practices.

### INTRODUCTION

Neonatal jaundice, or neonatal hyperbilirubinemia, is a condition characterized by yellow discoloration of the skin and sclera in newborns due to elevated bilirubin levels. Most cases are physiological and resolve spontaneously; however, delayed detection and inadequate management may lead to serious complications<sup>(1)</sup>. Adequate and effective breastfeeding plays an important role in the prevention and management of neonatal jaundice by enhancing bilirubin excretion<sup>(2)</sup>. The postpartum period is a phase of physical and psychological adaptation that may influence maternal confidence in newborn care and breastfeeding practices<sup>(3)</sup>. Midwives play a strategic role in providing education, monitoring, and early detection of neonatal health problems, including jaundice<sup>(4)</sup>. In addition, family support has been shown to improve breastfeeding success and enhance mothers' ability to recognize health problems in newborns<sup>(5)</sup>.





Beyond maternal knowledge and experience, the ability to detect neonatal jaundice early is also influenced by access to clear and continuous health information. Education provided from the antenatal period through the postpartum period has been shown to increase maternal readiness to recognize early signs of neonatal disorders, including changes in skin and scleral color <sup>(6)</sup>. Mothers who receive repeated and consistent information tend to respond more promptly by taking early action or seeking professional healthcare services when abnormal signs are observed in their infants. A breastfeeding coping approach is an important strategy to support postpartum mothers in dealing with physical and psychological challenges during the adaptation period. Effective breastfeeding coping not only promotes successful breastfeeding but also contributes to the prevention of neonatal jaundice by increasing breastfeeding frequency and effectiveness <sup>(7)</sup>.

Optimal breastfeeding accelerates the passage of meconium, thereby reducing bilirubin reabsorption in the infant's intestine <sup>(8)</sup>. Furthermore, active involvement of midwives in postpartum monitoring plays a crucial role in strengthening the capacity of mothers and families to perform early detection. Midwives serve not only as providers of clinical care but also as facilitators and companions who help mothers build confidence in newborn care. Collaboration among midwives, mothers, and families is key to preventing delays in the management of neonatal jaundice, which may otherwise result in serious complications <sup>(9)</sup>.

However, previous studies have primarily focused on the clinical aspects and risk factors of neonatal jaundice, with limited attention given to the integrated needs of postpartum mothers and midwives, particularly in relation to breastfeeding coping approaches and early detection practices. In addition, the perspectives of both mothers and healthcare providers are rarely explored simultaneously within a qualitative framework. To address this gap, this study explores key aspects including knowledge, attitudes, experiences, family support, professional assistance, and information needs of postpartum mothers and midwives regarding neonatal jaundice. Understanding these aspects is essential to provide a comprehensive view of the factors influencing early detection and to support optimal breastfeeding practices as a preventive strategy.

Therefore, this study aims to explore the needs of postpartum mothers and midwives in newborn care related to the early detection of neonatal jaundice through a breastfeeding coping approach. Ethical approval was obtained from the appropriate institutional review board, and informed consent was secured from all participants prior to data collection.

## METHOD

This study employed a qualitative research design with a phenomenological approach to explore the lived experiences of postpartum mothers and midwives in newborn care. The study involved four postpartum mothers and twelve midwives, selected using a total sampling technique. The research was conducted in primary healthcare centers in Wonosobo Regency, Central Java, from October to December 2025.

Four postpartum mothers within 1–7 days after delivery were recruited as the main informants, while midwives served as triangulation informants. Data were collected through in-depth interviews with postpartum mothers and focus group discussions (FGDs) with twelve midwives using a semi-structured interview guide. The guide explored key topics including knowledge and perceptions of neonatal jaundice, breastfeeding practices, early detection experiences, family support, professional support, and information needs. Data validity was ensured through source triangulation <sup>(10)</sup>.

Data were analyzed thematically through stages of data reduction, data display, and conclusion drawing to identify patterns and core themes related to early detection of neonatal jaundice. Data credibility was ensured through triangulation of sources and methods. Ethical approval was obtained from the Health Research Ethics Committee, Faculty of Medicine, Universitas Negeri Semarang (No. 165/KEPK/FK/KLE/2025), and informed consent was obtained from all participants prior to data collection.



## RESULTS AND DISCUSSION

This study describes the needs of postpartum mothers and midwives in the early detection of neonatal jaundice through a breastfeeding coping approach. Data were obtained from in-depth interviews with postpartum mothers and focus group discussions (FGDs) with midwives. The postpartum mothers were within 1–7 days after delivery. In terms of parity, some participants were first-time mothers, while others had their second child. Meanwhile, the midwives also demonstrated diverse characteristics in terms of age and education, with most working at primary healthcare centers (Puskesmas) in Wonosobo Regency. Thematic analysis revealed several interrelated main themes, as summarized in Table 1.

Table 1. Themes and subthemes of interview findings

Main Theme	Subtheme	Summary of Findings
<b>Emotional experiences of postpartum mothers</b>	Feelings of happiness and relief	Feelings of happiness and relief
	Fear and anxiety	Anxiety was more prominent among primiparous mothers related to infant health
<b>Knowledge of newborn care</b>	Basic knowledge	Mothers understood breastfeeding frequency and signs of adequate feeding
	Limited practical skills	Mothers lacked confidence in recognizing early signs of neonatal jaundice
<b>Breastfeeding practices</b>	Breastfeeding frequency	Most mothers breastfed approximately every two hours
	Breastfeeding challenges	Breast pain, fatigue, and sleep deprivation
<b>Family support</b>	Emotional and practical support	Family members assisted with newborn care and maternal psychological support
<b>Role of midwives</b>	Education and monitoring	Midwives provided education, early detection, and referral

### Emotional Experiences of Postpartum Mothers

Postpartum mothers experienced a range of emotions, including happiness, relief, fear, and anxiety. Anxiety was more pronounced among primiparous mothers due to limited experience in newborn care. Primary concerns were related to the infant's health condition, particularly the possibility of neonatal jaundice <sup>(1)</sup>. These psychological conditions influence maternal readiness to provide newborn care and the ability to recognize early signs of jaundice. This finding supports the notion that psychological factors play an important role in shaping health-related behaviors <sup>(3)</sup>.

### Maternal Knowledge and Experience in Newborn Care

Most postpartum mothers had a basic understanding of newborn care, including breastfeeding frequency and indicators of sufficient milk intake. However, this knowledge was not matched by adequate practical skills, especially in identifying early signs of neonatal jaundice, such as changes in skin and eye color. This gap was particularly noticeable among first-time mothers, who tended to rely more heavily on family support. These results align with earlier research showing that having knowledge does not always lead to effective caregiving practices. For example, Rinjani et al., (2024) <sup>(12)</sup> highlighted that postpartum care demands not only theoretical knowledge but also practical skills that are developed through ongoing support and guidance. Similarly, research by Fajria et al., (2023)





<sup>(13)</sup> on breastfeeding self-efficacy found that mothers often struggle to apply their knowledge without adequate confidence and encouragement.

Furthermore, the greater reliance on family support by first-time mothers in this study is consistent with findings by Timiyatun dan Oktavianto (2021) <sup>(5)</sup>, who emphasized the important role families play in boosting maternal confidence and breastfeeding success. In addition, healthcare professionals—particularly midwives—are essential in closing the gap between knowledge and practice by providing education, monitoring, and facilitating early detection of neonatal health issues <sup>(4)</sup>. Compared to previous studies, these findings reinforce the idea that knowledge alone is insufficient without continuous guidance, practical experience, and a supportive environment. Therefore, combining education with hands-on training and strengthening both family and professional support systems is crucial to empower mothers in effectively recognizing early signs of neonatal jaundice.

### **Breastfeeding Practices and Infant Condition**

The majority of mothers reported breastfeeding their infants approximately every two hours and were able to recognize signs of infant satiety, such as spontaneous release of the nipple. Despite this, mothers encountered various challenges during breastfeeding, including breast pain, fatigue, and sleep deprivation, particularly during nighttime feeding. These challenges may negatively affect the effectiveness of breastfeeding <sup>(13)</sup>. Adequate and effective breastfeeding is crucial in preventing and managing neonatal jaundice, as it facilitates bilirubin excretion through feces. Therefore, strengthening breastfeeding coping strategies among postpartum mothers is essential to support early detection and prevention of neonatal jaundice.

### **Role of Family Support in Newborn Care**

Family support, particularly from husbands and parents, greatly assists postpartum mothers during the adaptation period. Emotional support and practical assistance in newborn care can reduce maternal anxiety and increase confidence in breastfeeding and monitoring the infant's condition <sup>(14)</sup>. Family members also contribute to observing changes in the infant's skin color as an early sign of jaundice.

### **Role of Midwives in Early Detection of Neonatal Jaundice**

FGD findings indicated that midwives possessed good knowledge of neonatal jaundice, including differentiation between physiological and pathological jaundice. Early detection was conducted through observation of skin and scleral color and the application of Kramer's criteria. Initial management included increasing breastfeeding frequency, maintaining infant warmth, close monitoring, and referral when necessary. Midwives also acted as educators by providing simple and easily understood information to mothers and families <sup>(15)</sup>. This role is consistent with the scope of midwifery care for neonates.

Table 2. Examples of informant quotations

Theme	Informant	Quotation
Emotional experiences	Mother P1	"I felt happy after giving birth, but I was also afraid something might happen to my baby, especially if the baby looked yellow."
Breastfeeding practices	Mother P2	"I breastfed every two hours, but at night I often felt very tired and lacked sleep."
Role of midwives	Midwife B2	"We assess jaundice by observing the baby's skin and eyes, then match it with Kramer's zones."



## CONCLUSION

Postpartum mothers and midwives share interconnected needs when it comes to detecting neonatal jaundice early. Mothers benefit from enhanced education, ongoing guidance, and strong family support to build confidence in caring for their newborns and maintaining effective breastfeeding practices. Midwives play a key role in providing education that is clear, practical, and continuously reinforced. Implementing a family-centered breastfeeding coping approach has been shown to support timely recognition of jaundice in newborns.

From a practical standpoint, these results indicate that maternal and neonatal health initiatives should include structured educational programs combined with hands-on training, especially for first-time mothers, to strengthen their ability to identify early signs of jaundice. In midwifery practice, this can involve regular home visits or follow-up sessions that actively involve family members, ensuring mothers receive continuous guidance and support. Furthermore, establishing community support groups or peer counseling programs can help reinforce maternal confidence and encourage adherence to recommended breastfeeding practices, ultimately improving neonatal health outcomes.

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## REFERENCES

1. Saifuddin AB, Rachimhadhi T, Wiknjosastro GH. Ilmu kebidanan. 4th ed. Jakarta: PT Bina Pustaka Sarwono Prawirohardjo; 2016. Available from: <https://lib.unika.ac.id/index.php?p=fstream-pdf&fid=200&bid=48183>
2. Wardani EC, Aprilina HD, Elsanti D, Ekawati E. Pola menyusui dan permulaan laktasi dengan kejadian hiperbilirubinemia. *J Persat Perawat Nas Indones (JPPNI)*. 2025;10(2):129. doi:10.32419/jppni.v10i2.679
3. Yapika S. Management of ineffective self-adjustment in breastfeeding among physiological postnatal mothers on days 3–7 at TPMB Bd Hj Irma Kusuma Dewi, S.St., SH in Makassar City [thesis]. 2023.
4. Ernestin MF. Asuhan kebidanan neonatus bayi & balita. Jakarta: PT Bukuloka Literasi Bangsa; 2025. Available from: <https://books.google.co.id/books?id=fvyieqaaqbaj>
5. Timiyatun E, Oktavianto E. Dukungan keluarga berkorelasi dengan breastfeeding self-efficacy pada ibu menyusui. 2021;9:1–15.
6. Prawirohardjo S. Ilmu kebidanan. 4th ed. Jakarta: PT Bina Pustaka Sarwono Prawirohardjo; 2016.
7. Sari YM, Eliyawati E, Kurniawati Y, Ludvia I, A'yun DQ, Pratiev GY, et al. Pendampingan pada ibu menyusui dengan pemberian edukasi tentang hypnobreastfeeding. *J Altifani Penelit Pengabdian Kpd Masy*. 2023;3(4):538–44. doi:10.59395/altifani.v3i4.456
8. Fairus M, Fibrila F, Riyanto R. Efek kombinasi inisiasi menyusui dini dan I Love You massage terhadap breastfeeding jaundice pada bayi baru lahir. *J Kesehat Metro Sai Wawai*. 2022;15(1):37–44. doi:10.26630/jkmsaw.v15i1.3279
9. Sari NP, Badri U, Violeta A. Perencanaan kemitraan antara bidan dan perempuan pada asuhan kebidanan bayi baru lahir. *J Andalas Medica*. 2023;6(1). Available from: <https://jurnal.aksarabumiandalas.org/index.php/jam/article/view/12>
10. Husnulloil M, Jailani MS. Teknik pemeriksaan keabsahan data dalam riset ilmiah. *J Genta Mulia*. 2024;15(2):70–8.





11. Nurseha, Kusumastuti, Farida SN, Mardianingsih S, Marlinawati IT. Buku ajar psikologi kehamilan, persalinan, dan nifas. Jakarta Barat: PT Nuansa Fajar Cemerlang; 2024.
12. Rinjani M, Wahyuni I, Xanda AN, Oktavia LD, Estiyani A, Safitri O. Asuhan kebidanan pada masa nifas dan menyusui berdasarkan evidence-based teori dalam praktik kebidanan profesional. Jakarta Selatan: Salemba Medika; 2024.
13. Fajria L, Khairina I, Annisa Z. Breastfeeding self-efficacy & permasalahan ASI eksklusif. Jawa Barat: Penerbit Adab; 2023.
14. Setyorini D, Mardiyarningsih E. Pencegahan depresi postpartum dan intervensi menyusui meningkatkan kualitas hidup ibu dan bayi. Jakarta Barat: Nuansa Fajar Cemerlang; 2025.
15. Rahmawati E, Ratnawati L, Kaban FB, Noviasari D, Rizki AMF, Yuniarti F, et al. Bayi baru lahir asuhan holistik sejak detik pertama. Jakarta Barat: PT Bukuloka Literasi Bangsa; 2025.