



## MADAGO NURSING JOURNAL

p-ISSN: 274-9271/ e-ISSN: 2746-9263

Vol. 6, No.2, Tahun 2025, page 91-102

DOI: <https://doi.org/10.33860/mnj.v6i2.4248>

Website: <https://jurnal.poltekkespalu.ac.id/index.php/MNJ/index>

Publisher: Poltekkes Kemenkes Palu



# Involvement of Husband in Maternal Care: Impact on Pospartum Blues – A Systematic Review

Nurfatimah<sup>1\*</sup>, Sumiaty<sup>1</sup>, Ita Sulistiani<sup>1</sup>, Ray Wagiu Basrowi<sup>3,4,5</sup>, Prihatini Dini Novitasari<sup>6,7</sup>, Kadar Ramadhan<sup>1,2</sup>

<sup>1</sup>Department of Midwifery, Poltekkes Kemenkes Palu, Central Sulawesi, Indonesia

<sup>2</sup>Pusat Studi Stunting, STBM, dan Kebencanaan Poltekkes Kemenkes Palu, Central Sulawesi, Indonesia

<sup>3</sup>Indonesia Health Development Center, Jakarta, Indonesia

<sup>4</sup>Department of Community Medicine, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia

<sup>5</sup>Indonesia Health Care Community Caucus, Jakarta, Indonesia

<sup>6</sup>Varians Statistik Kesehatan, Banten, Indonesia

<sup>7</sup>Faculty of Public Health, Universitas Sriwijaya, South Sumatera, Indonesia

\*Corresponding Author: [nfatimahhh@gmail.com](mailto:nfatimahhh@gmail.com)

## ARTICLE INFO

### Article History:

**Received:** 2025-10-10

**Accepted:** 2025-10-28

**Published:** 2025-11-30

### Keywords:

Pospartum Blues,  
Spousal Support,  
Maternal Mental Health,  
Paternal Involvement,  
Systematic Review

## ABSTRACT

**Background:** Postpartum blues is a common emotional condition affecting mothers after childbirth, with a global prevalence of approximately 39.0%. This condition arises from an interplay of biological, psychological, and social influences, including hormonal fluctuations and psychosocial stressors such as role transition and sleep deprivation. Consistent emotional and practical support from partners and family members helps buffer these stressors. This systematic review aimed to explore the specific role of husbands in preventing postpartum blues by examining various forms of their involvement during pregnancy, labor, breastfeeding, and postpartum care.

**Methods:** This systematic review aimed to explore the specific role of husbands in preventing postpartum blues by examining various forms of their involvement during pregnancy, labor, breastfeeding, and postpartum care. Following PRISMA guidelines, relevant English-language studies published between 2019 and 2024 were systematically identified from PubMed, ScienceDirect, and Google Scholar.

**Results:** After independent screening of 3,073 initial records by two reviewers and subsequent exclusions, 11 new studies were included for synthesis. The findings highlight that husband involvement in prenatal care significantly reduces the incidence of postpartum blues, and participation in digital mental health interventions enhances emotional support for women experiencing postpartum depression. Perceived husband support consistently correlates with improved emotional well-being and quality of life, extending beyond immediate emotional assistance to impact overall maternal QoL. Other factors like maternal age, education, parity, and broader family support also influence postpartum blues symptoms.

**Conclusion:** This review underscores that active and consistent husband involvement is crucial for mitigating postpartum emotional challenges and improving maternal well-being, advocating for its integration into maternal health programs.



©2024 by the authors. Submitted for possible open-access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>)

## INTRODUCTION

Postpartum blues is an emotional condition often experienced by mothers after childbirth, characterized by feelings of sadness, anxiety, irritability, and mood swings. If not treated properly, this condition has the potential to develop into more serious mental disorders. In Asia, the incidence of postpartum blues is relatively high, ranging between 26% and 85% (Ginting et al., 2024), while in Indonesia, it varies from 50% to 70% (Anggarani et al., 2024; Ginting et al., 2024). A systematic review and meta-analysis found that the global prevalence of maternity blues in postpartum women is approximately 39.0%, with Africa recording the highest prevalence at 49.6% (Rezaie-Keikhaie et al., 2020). Despite its critical impact on individual well-being and broader societal development, mental health awareness is often not prioritized in Indonesia (Basrowi et al., 2024; Wardoyo et al., 2023).

Postpartum blues arise from an interplay of biological, psychological, and social influences. Fluctuations in estrogen and progesterone immediately after delivery can disrupt mood-regulating neurochemical pathways, predisposing mothers to transient depressive symptoms (Wu & Jin, 2025)(Worthen & Beurel, 2022). Psychosocial stressors—including role transition, sleep deprivation, and concerns about parenting competence—further heighten emotional vulnerability (Hidayat, Rachmawati, & Gayatri, 2019; Zaffer, 2025). Consistent emotional and practical support from partners and other family members helps buffer these stressors and has been linked to a lower incidence of postpartum blues (Faziqin & Liberty, 2023; Ruan & Wu, 2024). Nevertheless, the specific type and intensity of husband involvement needed to prevent postpartum blues remain uncertain and deserve further investigation.

Extending this concept further, the active participation and support from the husband play a crucial role in mitigating postpartum emotional challenges. Some studies have shown that husband involvement in prenatal care can reduce the risk of postpartum blues (M Dehshiri, Ghorashi, & Lotfipour, 2023; Maryam et al., 2022). A study in Iran found that mothers who received husband support during pregnancy had lower rates of postpartum blues than those who did not receive husband support (Baghersad, Mokhtari, & Bahadoran, 2019). In addition, husbands' involvement in supporting breastfeeding has also been reported to reduce maternal anxiety and increase the success of exclusive breastfeeding, which indirectly has a positive impact on maternal mental health.

Although the benefits of husband support have been widely reported, there is still a gap in the literature regarding the specific mechanisms that explain how husband involvement can effectively prevent postpartum blues. This review is unique in its systematic approach to exploring the various forms of husband involvement in postpartum blues prevention. This study not only identifies interventions that involve husbands, but also evaluates their effectiveness based on the latest scientific evidence.

By integrating findings from multiple studies, this review is expected to provide more comprehensive insights into optimal strategies for engaging husbands to support the mental health of postpartum women. This review aims to systematically explore the role of husbands in the prevention of postpartum blues by reviewing various forms of involvement during pregnancy, labor, breastfeeding, and postpartum care. The findings of this study are expected to inform evidence-based recommendations for health workers, policy makers, and communities to improve support for postpartum mothers.

## METHODS

### Research Type

This Study employs a systematic Literature Riview (SLR) approach to ensure the reliability and validity of the findings. Below are the methodology:

### Search Strategy

This systematic literature review was conducted in accordance with the guidelines of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Relevant research is

identified by searching the following electronic databases: PubMed, Science Direct and Google Scholar. The search strategy was designed to obtain previously researcher-reviewed articles published in English that discussed the involvement of husbands in maternal care and its impact on the postpartum blues.

#### PICO

Component	Context
<b>P (Population)</b>	Postpartum mothers
<b>I (Intervention / Exposure)</b>	Husband involvement in maternal care
<b>C (Comparison)</b>	Minimal or no husband involvement
<b>O (Outcome)</b>	Incidence or severity of postpartum blues

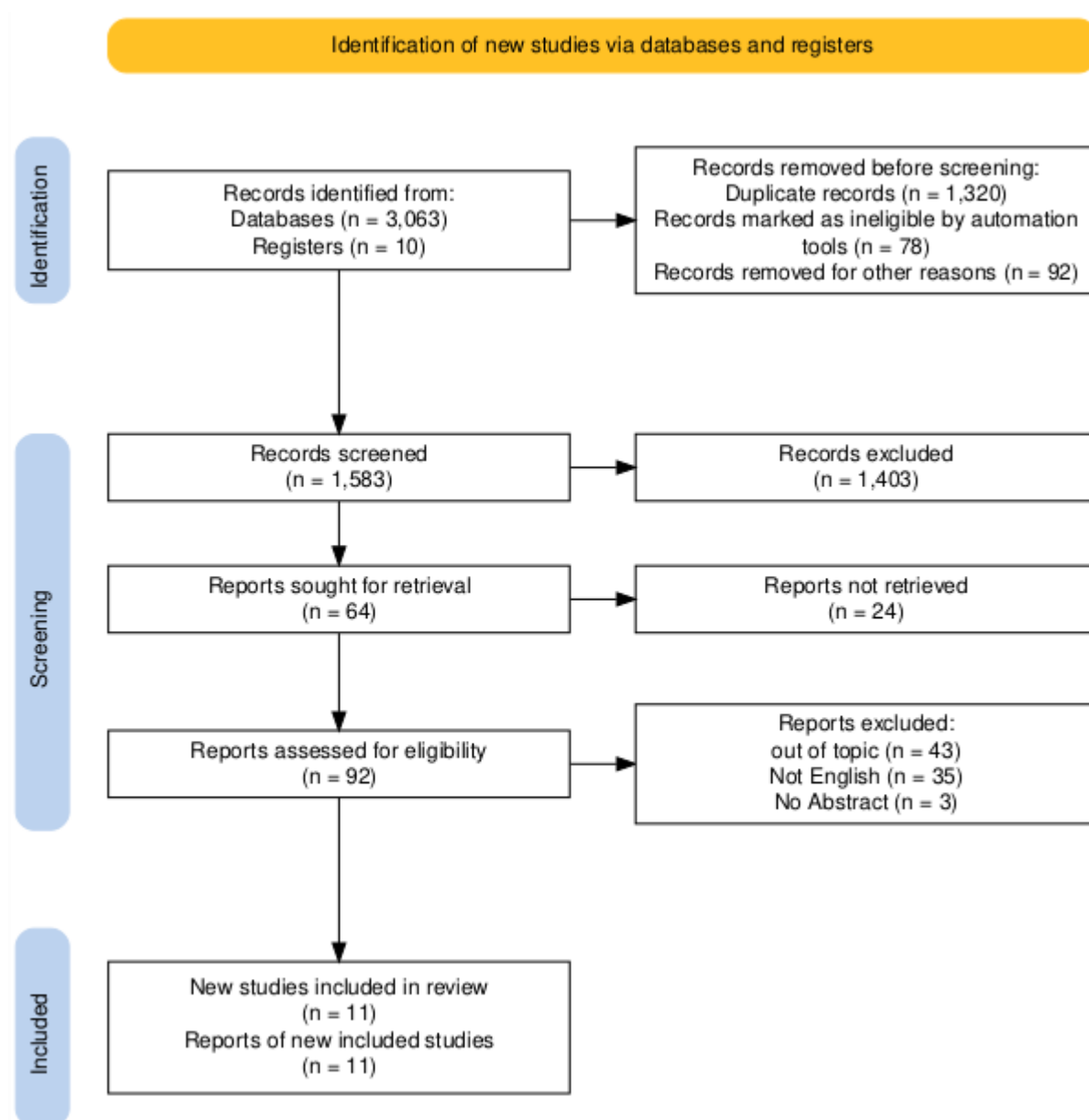
Inclusion Criteria	Exclusion Criteria
1. <i>Original research</i>	1. Editorial studies, opinion pieces, or letters to the editor
2. Analyzing the relationship between husband involvement and postpartum blues	2. Study did not examine postpartum blues as a primary outcome
3. Population: pregnant or postpartum women	3. <i>Studies that only discuss postpartum depression without clearly addressing postpartum blues</i>
4. Intervention: husband support/involvement during pregnancy, labor, breastfeeding, or postpartum period	4. Husband's involvement is not clearly discussed or quantified
5. Outcome: incidence or severity of postpartum blues, or maternal mental health status	5. Not available in full-text or not fully accessible
6. English article	
7. publish on 2019–2024	

#### Search Terms

"husband involvement" OR "paternal support" OR "spousal support" AND "postpartum blues" OR "baby blues" OR "postnatal blues"

#### Screening and Selection Process

The systematic screening and selection process, guided by PRISMA guidelines, began with the identification of 3,073 records from databases and registers. Two reviewers independently screened titles and abstracts to identify potentially relevant articles. After removing 1,320 duplicates, 78 automated exclusions, and 92 other ineligible records, 1,583 unique records proceeded to full screening. This initial screen led to the exclusion of 1,403 records, leaving 64 reports sought for retrieval, though 24 could not be retrieved. Ultimately, 92 reports were assessed for eligibility, from which 43 were excluded as off-topic, 35 were not in English, and 3 lacked abstracts. This rigorous process resulted in 11 new studies being included for the final review and synthesis.



**Figure 1. PRISMA Flow Diagram** (Haddaway, Page, Pritchard, & McGuinness, 2022)

### Inclusion and Exclusion Criteria

**Inclusion Criteria:** Research that evaluates the impact of husband support on postpartum depression, Research that involves intervention or observation of husband involvement during maternal care, Articles that have gone through a peer-reviewed process and are published in reputable journals.

**Exclusion Criteria:** Studies that did not directly assess husband's involvement. Unpeer-reviewed publications, gray literature, and abstracts without full text. An article that focuses only on clinical care for postpartum blues without considering the support of the husband

### Results Documentation

All search results are documented and managed using reference management software (Mendeley). Titles and abstracts are filtered for relevance, followed by a full-text review to ensure compliance with inclusion criteria.

## **RESULTS**

The results section should present the key findings of the study.

**Table 2. Journal summary of husband's role in preventing Postpartum blues**

No	Author(s)	Year	Study Focus	Key Findings	Moderating Factors	Geographic Context
1.	A. Bhardwaj et al (Bhardwaj et al., 2024)	2024	Husband involvement in mental health intervention	Husband involvement in digital interventions enhances emotional support for women experiencing postpartum depression	Gender attitudes, time constraints, family dynamics	Nepal
2.	Dehshiri et al.(M Dehshiri et al., 2023)	2023	Prenatal care involvement	Husband involvement reduced the incidence of postpartum blues from 72.2% to 15.2%	Maternal age and education, mental health history, social support, family and cultural values	Iran
3	Adnan Adil et al (Adil, Shahbaz, Ameer, Ghayas, & Niazi, 2021)	2021	Perceived husband support (PHS) and its impact on postpartum depression (PPD)	PHS significantly negatively affects the need to be approved (NoP) and PPD; NoP positively affects PPD	Family system	Pakistan
4	Vidayati et al.(Vidayati & Zainiyah, 2021) Adil et al.(Adil et al., 2021)	2021	General emotional and practical support	Husband's support significantly reduces postpartum blues	Social support, maternal experience, access to mental health resources, family and peer support	Indonesia
5	Tinuk Esti Handayani et al (Esti Handayani, Joko Santosa, Suparji, & Anastasia Setyasih, 2021)	2021	Factors influencing postpartum blues symptoms	Significant associations between maternal age (p=0.006), type of delivery (p=0.032), parity (p=0.033), education (p=0.006), and family support (p=0.000) with postpartum blues	Family support, educational level	Indonesia
6	Brigita Renata (Renata & Agus, 2021)	2021	Association between husband's support and postpartum blues	Significant association between husband's support and postpartum blues (p=0.042, OR=2.331)	Maternal age, parity	Indonesia
7	Valla et al., (Valla, Helseth, Småstuen, Misvær, & Andenæs, 2022)	2022	Factors affecting quality of life	Maternal quality of life is influenced by social support, mental health, and relationship satisfaction; depressive symptoms	Educational level, marital status, maternal perception of childbirth and mental health	Norway

No	Author(s)	Year	Study Focus	Key Findings	Moderating Factors	Geographic Context
				significantly reduce quality of life		
8	Tola, A., et al (Tola et al., 2021)	2021	Health-related quality of life (HRQoL) among postpartum women	Most postpartum women experience reduced HRQoL; postpartum depression is associated with lower HRQoL; factors like age, education level, and antenatal care significantly influence HRQoL	Age, educational status, antenatal care	Ethiopia
9	Nivine et al (Hanach, Radwan, Bani Issa, Saqan, & de Vries, 2024)	2024	Postpartum experiences and perceived mental health needs of mothers in the UAE	Predominantly negative postpartum experiences reported; emotional distress common in early postpartum; multifaceted breastfeeding challenges; identified need for formal and informal support	Social support, maternal personal experience, access to mental health resources	United Arab Emirates
10	Yu-Jeong Jeong (Jeong, Nho, Kim, & Kim, 2021)	2021	Factors influencing quality of life within six weeks postpartum	Postpartum depression negatively affects QoL ( $\beta = -0.190$ , $p = 0.001$ )	Cultural context, marital support, employment, income level	South Korea
11	Baghersad et al (Baghersad et al., 2019)	2019	Effect of home care on husband support during postpartum	Significant increase in husband support post-home care intervention (from $80.07 \pm 11.6$ to $96.74 \pm 9.11$ , compared to control group score $81.17 \pm 14.43$ , $p = 0.001$ )	Demographic variables, marriage duration, family history	Iran

The findings synthesized from eleven studies conducted across different geographic regions highlight the significant role of husband involvement in mitigating postpartum mental health issues, particularly postpartum depression (PPD) and postpartum blues. A recurring theme across the literature is the protective effect of perceived and actual support from husbands, which is positively associated with improved emotional well-being and quality of life among postpartum women.

The synthesis shows that husband involvement in both prenatal and postnatal care contributes to a notable reduction in depressive symptoms. For instance, Dehshiri et al. (2023) reported a dramatic decline in postpartum blues from 72.2% to 15.2% when husbands were actively engaged in prenatal care. Similarly, Bhardwaj et al. (2024) demonstrated that digital interventions involving husbands led to enhanced emotional support for mothers with PPD in Nepal.

Studies conducted in Indonesia (Vidayati et al. (2021) (Vidayati & Zainiyah, 2021), Handayani et al. (2021) (Esti Handayani et al., 2021), Renata (2021) (Renata & Agus, 2021)) consistently underline that family and spousal support are essential in preventing postpartum blues, with variables such as maternal age, education level, and parity serving as moderating factors. The significance of socio-cultural context and accessibility to mental health services also emerged as critical moderators in multiple studies, such as those by Nivine et al. (2024) (Hanach et al., 2024) in the UAE and Jeong (2021) in Korea (Jeong et al., 2021).

Moreover, research from Pakistan (Adil et al., 2021) and Iran (Baghersad et al., 2019) further corroborates the relationship between perceived husband support (PHS) and reduced depression, emphasizing the systemic role of family dynamics and home-care interventions in enhancing spousal engagement.

Notably, the broader implications of husband involvement extend beyond immediate emotional support. Studies by Valla et al. (2022) and Tola et al. (2021) showed that improved quality of life (QoL) in postpartum women is linked to reduced depressive symptoms and satisfaction in marital relationships, highlighting the intersection of psychological, relational, and social dimensions in maternal health outcomes.

Across geographic contexts—from Asia (Indonesia, Korea, Iran, Pakistan) to Africa (Ethiopia) and Europe (Norway)—the consistent pattern suggests that husband support is a cross-culturally relevant protective factor, although its effectiveness may vary depending on cultural norms, access to health care, and family structures.

## **DISCUSSION**

### **The Role and Impact of Husband Involvement/Support**

A predominant theme emerging from the reviewed literature is the significant role of husband involvement and support in mitigating postpartum emotional challenges. Studies demonstrate that a husband's active participation in various aspects of maternal care can profoundly influence a mother's mental well-being. For instance, Bhardwaj et al. (2024) highlighted that husband involvement in digital mental health interventions enhances emotional support for women experiencing postpartum depression (Bhardwaj et al., 2024). This is further substantiated by Dehshiri et al. (2023), who specifically found that husband involvement in prenatal care remarkably reduced the incidence of postpartum blues from 72.2% to 15.2% (M Dehshiri et al., 2023), underscoring the preventative potential of such engagement.

Beyond clinical interventions and prenatal care, the general emotional and practical support provided by husbands also plays a crucial role. Adnan Adil et al. (2021) revealed that perceived husband support (PHS) significantly and negatively affects both the need to be approved (NoP) and postpartum depression (PPD), suggesting that a supportive spousal relationship can be a protective factor against these issues (Adil et al., 2021). Similarly, Vidayati et al. (2021) and Brigita Renata (2021) independently demonstrated that a husband's support significantly reduces the occurrence of postpartum blues (Renata & Agus, 2021; Vidayati & Zainiyah, 2021). Furthermore, Baghersad et al. (2019) showed that home care interventions can



significantly increase husband support during the postpartum period, indicating that interventions can foster a more supportive environment (Baghersad et al., 2019). These findings collectively emphasize that a husband's active and consistent support, whether through direct involvement in care, emotional backing, or practical assistance, is a critical determinant of a mother's postpartum mental health.

### **Factors Influencing Postpartum Blues/Symptoms**

Beyond the direct influence of husband support, the review also identified other significant factors contributing to the manifestation of postpartum blues symptoms. Tinuk Esti Handayani et al. (2021) conducted a study specifically aimed at identifying these influencing factors. Their research revealed significant associations between various maternal and contextual elements and the presence of postpartum blues (Esti Handayani et al., 2021).

Specifically, Handayani et al. (2021) found that maternal age ( $p=0.006$ ), type of delivery ( $p=0.032$ ), parity ( $p=0.033$ ), education ( $p=0.006$ ), and crucially, family support ( $p=0.000$ ) all exhibited significant associations with postpartum blues (Esti Handayani et al., 2021). This indicates that while spousal support is vital, a broader network of family support, alongside demographic and obstetric factors, plays a considerable role in a mother's emotional well-being during the postpartum period. Understanding these multifaceted factors is essential for developing comprehensive strategies to prevent and manage postpartum blues.

### **Postpartum Quality of Life (QoL)**

The discussion for Postpartum Quality of Life has been clarified to strengthen the link between QoL and spousal support as follows:

The quality of life (QoL) experienced by mothers in the postpartum period is another critical outcome explored in the literature, with several studies investigating the factors that influence it. Valla et al. (2022) found that maternal QoL is significantly influenced by a combination of social support, overall mental health status, and satisfaction with the marital relationship, directly implicating the quality of husband support. Notably, the presence of depressive symptoms was shown to significantly reduce a mother's perceived QoL (Valla et al., 2022). This highlights the interconnectedness of mental health, support systems, and a mother's overall sense of well-being post-delivery.

Further reinforcing these findings, Tola et al. (2021) emphasized that most postpartum women experience a reduced health-related quality of life (HRQoL), directly linking lower HRQoL to postpartum depression. Their study also identified key demographic and care-related factors such as age, educational status, and adequate antenatal care as significant influencers of HRQoL (Tola et al., 2021). Similarly, Yu-Jeong Jeong (2021) confirmed that postpartum depression negatively affects QoL within the first six weeks postpartum, while also pointing to the moderating roles of cultural context, marital support, employment, and income level (Jeong et al., 2021). These studies collectively underscore that postpartum QoL is a complex construct, shaped by both psychological states and the external support and circumstances surrounding the mother.

### **Postpartum Experiences and Mental Health Needs**

Beyond specific mood disorders, some studies within this review shed light on the broader postpartum experiences of mothers and their perceived mental health needs, emphasizing the demand for diverse forms of support. Nivine et al. (2024) explored the postpartum experiences of mothers in the UAE, revealing predominantly negative experiences and common emotional distress in the early postpartum period (Hanach et al., 2024). Their research also highlighted multifaceted breastfeeding challenges as a source of distress, and crucially, identified a significant need for both formal and informal support systems (Hanach et al., 2024).

This broader focus on lived experiences and perceived needs is vital for developing holistic support frameworks. The findings from Nivine et al. (2024) indicate that mothers not only face challenges directly related to their mental health but also grapple with practical issues like breastfeeding, which in turn impact their emotional well-being. The identified need for both formal (e.g., healthcare professionals) and informal (e.g., family, friends, peer groups) support

underscores the importance of a comprehensive approach that addresses the full spectrum of postpartum challenges mothers face (Hanach et al., 2024).

## CONCLUSION

Husband involvement in maternal care is crucial in reducing the incidence of postpartum blues and significantly improving maternal well-being. This systematic review highlights that various forms of husband support—including prenatal care involvement, breastfeeding assistance, emotional and practical support, home care participation, and continuous support during labor—have significant positive impacts on maternal mental health. The reviewed studies consistently demonstrated that when husbands actively engage in these aspects of maternal care, mothers experience lower levels of anxiety, improved emotional stability, and a reduced risk of postpartum depression. These findings underscore the need for integrating husband participation into maternal health programs as a key intervention to enhance maternal and infant outcomes. Encouraging husbands to be more involved through education, structured home care initiatives, and labor support strategies can optimize postpartum recovery and mental well-being. Future research should focus on identifying the most effective approaches to promoting husband involvement in maternal care, ensuring that these interventions are widely implemented in clinical and community settings to comprehensively support postpartum mothers.

**Author's Contribution Statement:** Conceptualization: S., K.R. Methodology: S., K.R. Formal analysis: K.R. Writing—Original draft preparation: S., N., I.S., R.W.B., P.D.N., K.R. Writing—Review and editing: N., I.S., P.D.N., K.R. Funding acquisition: S., N., K.R. Resources: N., I.S., K.R. Supervision: S., N., R.W.B., P.D.N., K.R. All authors have read and agreed to the published version of the manuscript.

**Conflicts of Interest:** The authors confirm no known conflicts of interest regarding this publication.

**Source of Funding Statements:** This work was support by the Budget Implementation List (DIPA) Poltekkes Kemenkes Palu

**Acknowledgments:** We gratefully acknowledge the Varians Statistik Kesehatan and Kaukus Masyarakat Peduli Kesehatan Jiwa for providing the boot camp and mentoring to improve the manuscript writing.

## BIBLIOGRAPHY

- Adil, A., Shahbaz, R., Ameer, S., Ghayas, S., & Niazi, S. (2021). Effect of perceived husband's support on postpartum depression: Mediating role of need for approval. *Journal of the Pakistan Medical Association*, 71(9), 2203–2207.
- Anggarani, N. L. A. S., Dwina Mastryagung, G. A., & Sri Ariani, N. K. (2024). Screening for Postpartum Depression Risk Using Edinburgh Postnatal Depression Scale (EPDS) In Postpartum Mothers. *Care: Jurnal Ilmiah Ilmu Kesehatan*, 12(2), 330–338. <https://doi.org/10.33366/jc.v12i2.4483>
- Baghersad, Z., Mokhtari, F., & Bahadoran, P. (2019). Effect of Home Care on Husband's Support During the Postpartum Period. *Journal of Holistic Nursing and Midwifery*, 29(4), 210–217. <https://doi.org/10.32598/JHNM.29.4.210>
- Basrowi, R. W., Wiguna, T., Samah, K., Djuwita F Moeloek, N., Soetrisno, M., Purwanto, S. A., ... Pelangi, B. (2024). Exploring Mental Health Issues and Priorities in Indonesia Through Qualitative Expert Consensus. *Clinical Practice and Epidemiology in Mental Health : CP & EMH*, 20, e17450179331951. <https://doi.org/10.2174/0117450179331951241022175443>
- Bhardwaj, A., Maharjan, S. M., Magar, A. J., Shrestha, R., Dongol, A., Hagaman, A., ... Kohrt, B. A. (2024). Engaging husbands in a digital mental health intervention to provide tailored

- counseling for women experiencing postpartum depression: A mixed methods study in Nepal. *SSM - Mental Health*, 6, 100340. <https://doi.org/10.1016/j.ssmmh.2024.100340>
- Dehshiri, M, Ghorashi, Z., & Lotfipour, S. M. (2023). Effects of husband involvement in prenatal care on couples' intimacy and postpartum blues in primiparous women: A quasi-experimental study. *International Journal of Community Based Nursing and Midwifery*, 11(3), 179–189.
- Dehshiri, Maryam, Ghorashi, Z., & Lotfipour, S. M. (2022, March). *Effects of Husband Involvement in Prenatal Care on Couples' Intimacy and Postpartum Blues in Primiparous Women*. <https://doi.org/10.21203/rs.3.rs-1308428/v1>
- Esti Handayani, T., Joko Santosa, B., Suparji, S., & Anastasia Setyasih, P. (2021). Determinants of Postpartum Blues for Postpartum Mothers Survey Study at the Madiun City General Hospital. *Open Access Macedonian Journal of Medical Sciences*, 9(G), 288–292. <https://doi.org/10.3889/oamjms.2021.7348>
- Faziqin, L. M., & Liberty, I. A. (2023). Association Between Social Support and Postpartum Depression: A Systematic Review. *Sriwijaya Journal of Medicine*, 6(1), 24–32. <https://doi.org/10.32539/sjm.v6i1.173>
- Ginting, D. S. B., Manik, F. Y., Nurahmadi, F., Nasution, N. A., & Aldeena, M. I. (2024). Perceptron neural network model on predicting postpartum depression in the puerperium. *The 6th International Conference on Computing and Applied Informatics*, 020038. <https://doi.org/10.1063/5.0199482>
- Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis. *Campbell Systematic Reviews*, 18(2), e1230. <https://doi.org/https://doi.org/10.1002/cl2.1230>
- Hanach, N., Radwan, H., Bani Issa, W., Saqan, R., & de Vries, N. (2024). The perceived mental health experiences and needs of postpartum mothers living in the United Arab Emirates: A focus group study. *Midwifery*, 132, 103977. <https://doi.org/10.1016/j.midw.2024.103977>
- Hidayat, M. M., Rachmawati, I. N., & Gayatri, D. (2019). Prenatal distress and increased psychosocial risks in the postpartum period among Indonesian women. *Enfermería Clínica*, 29, 476–481. <https://doi.org/10.1016/j.enfcli.2019.04.071>
- Jeong, Y.-J., Nho, J.-H., Kim, H. Y., & Kim, J. Y. (2021). Factors Influencing Quality of Life in Early Postpartum Women. *International Journal of Environmental Research and Public Health*, 18(6), 2988. <https://doi.org/10.3390/ijerph18062988>
- Renata, B., & Agus, D. (2021). Association of Husband Support and Postpartum Blues in Postpartum Women. *Indonesian Journal of Obstetrics and Gynecology*, 9(3), 140–143. <https://doi.org/10.32771/inajog.v9i3.1467>
- Rezaie-Keikhaie, K., Arbabshastan, M. E., Rafiemanesh, H., Amirshahi, M., Ostadkelayeh, S. M., & Arbabisarjou, A. (2020). Systematic Review and Meta-Analysis of the Prevalence of the Maternity Blues in the Postpartum Period. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 49(2), 127–136. <https://doi.org/10.1016/j.jogn.2020.01.001>
- Ruan, J.-M., & Wu, L.-J. (2024). Postpartum depression and partner support during the period of lactation: Correlation research and its influencing factors. *World Journal of Psychiatry*, 14(1), 119–127. <https://doi.org/10.5498/wjp.v14.i1.119>
- Tola, Y., Ayele, G., Boti, N., Yihune, M., Gethahun, F., & Gebru, Z. (2021). Health-Related Quality-of-Life and Associated Factors Among Post-Partum Women in Arba Minch Town. *International Journal of Women's Health, Volume 13*, 601–611. <https://doi.org/10.2147/IJWH.S295325>
- Valla, L., Helseth, S., Småstuen, M. C., Misvær, N., & Andenæs, R. (2022). Factors associated with maternal overall quality of life six months postpartum: a cross sectional study from The Norwegian Mother, Father and Child Cohort Study. *BMC Pregnancy and Childbirth*, 22(1), 4. <https://doi.org/10.1186/s12884-021-04303-5>
- Vidayati, L. A., & Zainiyah, H. (2021). Determinant Factors that has Associated with Incidence of Postpartum Blues in the one of Primary General and Maternity Clinic in East Java, Indonesia. *Journal of International Dental and Medical Research*, 14(2), 845–848.
- Wardoyo, H., Moeloek, N., Basrowi, R., Ekowati, M., Samah, K., Mustopo, W., ... Pelangi, B. (2023). Mental Health Awareness and Promotion during the First 1000 Days of Life: An Expert

- Consensus. *Healthcare*, 12(1), 44. <https://doi.org/10.3390/healthcare12010044>
- Worthen, R. J., & Beurel, E. (2022). Inflammatory and neurodegenerative pathophysiology implicated in postpartum depression. *Neurobiology of Disease*, 165, 105646. <https://doi.org/10.1016/j.nbd.2022.105646>
- Wu, X., & Jin, R. (2025). Effects of postpartum hormonal changes on the immune system and their role in recovery. *Acta Biochimica Polonica*, 72. <https://doi.org/10.3389/abp.2025.14241>
- Zaffer, R. (2025). How Sleep Deprivation Impacts New Mother's Health: Understanding the Risk and Finding Relief.