

# Relationship Between Pregnant Women's Anxiety Levels and Baby Blues Syndrome During the Postpartum Period

Tri Rikhaniarti <sup>1\*</sup> Andi Syarifa Irmadani <sup>2</sup> Ernawati <sup>3</sup>

<sup>1</sup> Institut Ilmu Kesehatan Pelamonia, Makassar, Indonesia. Email: [tririkhaniarti042@gmail.com](mailto:tririkhaniarti042@gmail.com)

<sup>2</sup> Institut Ilmu Kesehatan Pelamonia, Makassar, Indonesia. Email: [andi.syarifah@iikpelamonia.ac.id](mailto:andi.syarifah@iikpelamonia.ac.id)

<sup>3</sup> Institut Ilmu Kesehatan Pelamonia, Makassar, Indonesia. Email: [ernamano24@gmail.com](mailto:ernamano24@gmail.com)

## ARTICLE HISTORY

**Received:** June 13, 2025

**Revised:** June 19, 2025

**Accepted:** June 20, 2025

DOI :

<https://doi.org/10.60079/ahr.v3i2.540>



## ABSTRACT

**Purpose:** This study aims to explore the relationship between the level of anxiety in pregnant women and the incidence of baby blues syndrome during the postpartum period. The primary focus is to understand the psychological and physiological mechanisms underlying the transition from prenatal anxiety to postpartum emotional disorders.

**Research Method:** This study employs a qualitative approach, incorporating a systematic literature review of scientific articles published between 2015 and 2025. The analysis was conducted on secondary data from national and international journals, considering the psychosocial, hormonal, and neurobiological frameworks related to anxiety in pregnant women and baby blues.

**Results and Discussion:** Findings indicate that anxiety during pregnancy is significantly correlated with an increased risk of postpartum baby blues syndrome. Factors such as lack of social support, cultural pressure on the role of mothers, and hormonal fluctuations contribute to the occurrence of emotional disturbances after childbirth. This study also confirms that emotional unpreparedness during pregnancy is an important indicator of mental stability in mothers during the postpartum period.

**Implications:** The results of this study suggest the need for anxiety screening in antenatal services, training for healthcare workers in the early detection of emotional disorders, and strengthening psychosocial interventions as preventive measures. These findings also encourage the development of more holistic maternal mental health policies.

**Keywords:** prenatal anxiety; baby blues syndrome; maternal mental health; social support; postpartum period.

## Introduction

Pregnancy and the postpartum period are challenging transitional phases for a mother, both physically, emotionally, and socially. Rapid hormonal changes, the new role of motherhood, and the responsibilities of caring for an infant can lead to significant psychological stress. One of the most common psychological effects experienced by postpartum mothers is baby blues syndrome, an emotional condition characterized by mood swings, anxiety, tearfulness, and feelings of helplessness (Yolanda *et al.*, 2020). This condition typically appears within a few days after giving birth and can last for one to two weeks. Although temporary, baby blues can develop into more serious psychological



disorders if not adequately addressed. Globally, the prevalence of baby blues is relatively high, and in Indonesia alone, it is estimated to occur in approximately 50–70% of mothers following childbirth. Psychosocial stress during pregnancy, including anxiety experienced by the mother, also influences emotional well-being during the postpartum period (Obrochta *et al.*, 2020). The practical problem underlying this study is the lack of optimal attention to psychological aspects during pregnancy, which has the potential to increase the risk of psychological disorders after childbirth. On the other hand, theoretically, the limited integration between understanding antenatal anxiety and its impact on the occurrence of baby blues raises the urgency for a systematic and in-depth review of the relationship between the two.

Recent research has identified various factors contributing to baby blues syndrome in postpartum mothers. Yuhaeni & Indawati, (2024) found that maternal readiness, spousal support, type of delivery, knowledge, and pregnancy planning were significantly associated with the occurrence of baby blues. In line with this, Anggraini, (2024) highlights the importance of midwives' roles and mothers' knowledge levels in preventing this condition. Nurcahya, (2024) shows that mothers' knowledge levels are directly correlated with the anxiety they experience during the postpartum period, making education key to reducing the risk of baby blues. These findings emphasize that maternal mental health is multifaceted, involving psychological, social, and educational dimensions. In a broader context, Samosir *et al.* (2025) explain that postpartum mothers are vulnerable to psychological disorders due to hormonal changes, fatigue, and economic and social pressures. These disorders have the potential to hinder exclusive breastfeeding. The use of screening tools such as the Edinburgh Postnatal Depression Scale (EPDS) can aid in the early detection of postpartum depression risk (Bestari *et al.*, 2025), which is often closely linked to anxiety and baby blues (Samosir *et al.*, 2025). Olivia, (2023) highlights explicitly the relationship between the level of anxiety in pregnant women and postpartum psychological disorders. Other studies reinforce the role of family support, particularly from the husband, as well as the involvement of midwives and maternal education in preventing baby blues (Anggraini, 2024; Naharani *et al.*, 2023). Meanwhile, Wulan *et al.*, (2023) state that age, parity, and social support influence the occurrence of baby blues, with educational level and mode of delivery showing no significant correlation. In Indonesia, the incidence of baby blues is estimated to reach 1–2 per 1,000 live births, with 53% of mothers exhibiting symptoms of emotional instability (Wulan *et al.*, 2023). These findings underscore the importance of a strong support system and adequate education in reducing the prevalence of postpartum depression, also known as the baby blues.

Several studies have investigated various factors that contribute to the occurrence of postpartum baby blues. However, most of these studies have focused on external aspects such as spousal support, the role of healthcare providers, and mothers' knowledge levels (Anggraini, 2024; Naharani *et al.*, 2023; Yuhaeni & Indawati, 2024). Internal factors of a more psychological nature, such as anxiety levels during pregnancy, have not been extensively studied as primary determinants influencing emotional disturbances during the postpartum period. Research linking maternal anxiety during pregnancy to baby blues syndrome remains limited and has not yet delved deeply into how these anxiety dynamics develop and transform into postpartum baby blues (Nurcahya, 2024; Olivia, 2023). Additionally, most of the approaches used in these studies are quantitative, which tend to measure symptoms numerically and fail to capture the whole emotional experience of mothers within their social, cultural, and personal contexts. From a theoretical perspective, there are limitations in integrating conceptual frameworks that link antenatal anxiety with postpartum emotional responses in a comprehensive manner. Few studies offer a contextual understanding of how mothers' perceptions of

pregnancy and childbirth can create vulnerable psychological conditions that later develop into baby blues.

This study is unique because it focuses systematically on examining in depth and comprehensively the relationship between the level of anxiety in pregnant women and the incidence of baby blues in the postpartum period using a qualitative approach in the form of a literature review. Unlike previous studies that primarily examined external factors such as social support or maternal knowledge in isolation, this research integrates prenatal psychological aspects—particularly anxiety—as potential internal factors influencing postpartum emotional conditions. Additionally, this study enriches the understanding by exploring qualitative evidence that captures the emotional nuances and subjective experiences of pregnant women, which have been under-explored in quantitative approaches. Based on the gap analysis between previous studies and the need for a more comprehensive understanding, the primary objective of this research is to identify and synthesize qualitative findings related to the association between anxiety during pregnancy and the onset of baby blues, thereby providing a conceptual and practical foundation for more effective, empathetic, and contextually appropriate mental health interventions for pregnant women.

## Literature Review and Hypothesis Development

### Mental Health of Pregnant Women

Mental health in pregnant women refers to emotional, psychological, and social stability that enables mothers to experience pregnancy with feelings of safety, adaptability, and the ability to cope with various physical and psychological changes (Briscoe *et al.*, 2016). Pregnancy is not merely a biological process, but also a complex psychosocial experience that often causes emotional stress. Hormonal changes, anxiety about fetal safety, and fear of the childbirth process are the primary factors influencing the mental balance of pregnant women. Evans *et al.*, (2020) in their systematic review found that many pregnant women experience undiagnosed anxiety and depression, even in well-developed healthcare settings. This anxiety can begin as early as the first trimester and intensify as childbirth approaches if not accompanied by adequate psychosocial interventions. Research by Arzamani *et al.*, (2022), which examined the condition of pregnant women during the COVID-19 pandemic, revealed that unfavorable environmental factors, such as limited access to healthcare services and information uncertainty, can exacerbate mental health conditions in mothers. This highlights that the mental health of pregnant women is not solely determined by biological factors but is significantly influenced by social and environmental contexts. Attention to these psychological aspects is crucial in developing holistic antenatal care, as mental health issues arising during pregnancy have been proven to have long-term implications for the quality of life of both mothers and children postpartum.

Risk factors for mental health in pregnant women are diverse and interrelated, both individually and socially. Anxiety can arise from uncertainty about childbirth, concerns about fetal health, and fear of losing one's role and identity. In a study conducted by Fairlie *et al.*, (2009), it was found that high anxiety during pregnancy was correlated with low intention to breastfeed and delayed initiation of breastfeeding, indicating that prenatal mental disorders have a tangible impact on postpartum child care behavior. Meanwhile, Roddy Mitchell *et al.*, (2023) stated that chronic stress experienced by pregnant women hurts fetal development, both neurologically and physiologically. These findings indicate that mental health disorders in pregnant women are not only an individual problem but also a public health issue. For this reason, Evans *et al.*, (2020) emphasize the importance of developing

community-based interventions and structured psychosocial support for pregnant women, particularly those experiencing mild to moderate anxiety. These interventions include education, counseling, and technology-based approaches such as online counseling. Furthermore, stigma surrounding mental disorders exacerbates the situation, as pregnant women are reluctant to seek help for fear of being perceived as weak or incapable of being good mothers.

Research on maternal mental health has increasingly revealed complex emotional aspects through various approaches, including narrative approaches that highlight women's subjective experiences during pregnancy. Pierce *et al.*, (2022) identified that many pregnant women express their anxieties through online media such as blogs, reflecting concerns about fetal health, unpreparedness for the new role of motherhood, and anxiety about the childbirth process they have not yet experienced. This shows that anxiety during pregnancy does not only stem from medical conditions but is also closely related to social and psychological uncertainties. Silva *et al.*, (2017) noted that more than a quarter of pregnant women in developing countries experience significant anxiety, influenced by various factors such as lack of social support, economic pressure, and low mental health literacy. Additionally, Fekadu Dadi *et al.*, (2020) emphasize that psychological disorders during the antenatal period, particularly depression and anxiety, are closely associated with an increased risk of pregnancy complications such as preterm birth and low birth weight. These conditions highlight that the emotional dimension of pregnancy must be an integral part of maternal health care.

## Postpartum period

The postpartum period, also known as the puerperium, is a critical stage in a woman's reproductive journey, beginning immediately after childbirth and lasting approximately six weeks (World Health Organization, 2003). During this period, the mother's body undergoes various reversible processes such as uterine involution, hormonal adjustments, healing of birth wounds, and the onset of breastfeeding. However, alongside these significant physiological changes, the postpartum period is also a phase filled with emotional challenges that often receive insufficient attention. Mothers must adapt to new roles, the demands of caring for an infant, and societal expectations of being an "ideal" mother, all of which can be sources of mental stress (Henderson *et al.*, 2016). Braithwaite *et al.*, (2025) emphasize that mothers with a history of depression before or during pregnancy are more likely to face difficulties in breastfeeding and experience ongoing psychological issues during the postpartum period. This condition indicates that the postpartum period is not only a time for physical recovery but also a crucial psychological transition period. If a mother's emotional condition is not actively monitored, the risk of mental disorders such as baby blues and postpartum depression increases significantly. Evans *et al.*, (2020) underscore the importance of structured intervention-based support for mothers with mild to moderate anxiety during pregnancy to ensure a more stable transition to the postpartum period. The postpartum period should be viewed comprehensively, not only from a medical perspective but also as a critical window for psychosocial interventions to prevent long-term consequences for the mother's mental health.

Psychological adaptation during the postpartum period is a complex process, as mothers are not only faced with caring for themselves and their babies physically, but also with social and relational demands that often conflict with their mental state (Fahey & Shenassa, 2016). In many cases, the pressure arises from the mother's perception of her role, her expectations of herself, and how those around her provide support or add to her psychological burden. Silva *et al.*, (2017) found that anxiety

that arises during pregnancy tends to continue and even increase during the postpartum period, especially if the mother feels that she is not receiving emotional support from her environment. This situation is exacerbated by factors such as extreme fatigue, lack of sleep, low self-confidence, and postpartum complications. Kendall-Tackett, (2024) demonstrated that psychological disorders like anxiety and depression during the postpartum period directly impact a mother's self-efficacy, which in turn affects breastfeeding success and the quality of early interactions with the baby. These findings suggest that the success of the breastfeeding process is not solely determined by physical readiness but also by the mother's emotional state. Narrative analysis by Pierce *et al.*, (2022) revealed that many mothers expressed feelings of guilt, failure, and fear of being perceived as incompetent, all of which contribute to the deterioration of mental health.

Mental health during the postpartum period not only affects the mother's condition in the short term, but also has serious consequences for the health and development of the baby, as well as the overall family dynamics. Several studies have proven that psychological disorders experienced by mothers during the postpartum period have a direct impact on the emotional relationship between mother and baby. Fekadu Dadi *et al.*, (2020) revealed that mothers with antenatal depression who did not receive adequate treatment were more likely to give birth to babies with low birth weight, experience premature labor, and face other medical complications. Additionally, the mother's unstable psychological state hinders the formation of healthy emotional bonds, which are crucial for the baby's cognitive and emotional development during the early stages of life. Meanwhile, Roddy Mitchell *et al.*, (2023) state that depression and anxiety disorders during the postpartum period contribute to the emergence of behavioral and social adjustment problems in children at an early age. Therefore, postpartum care approaches must be holistic and integrative, encompassing not only physical recovery but also intensive mental health monitoring and support. As suggested by Pierce *et al.*, (2022), mothers' experiences should be listened to and valued as part of the process of developing maternal and child health policies. In practice, this can be achieved through regular psychological consultations, empathy-based lactation training, and the establishment of peer support communities that cater to mothers' emotional needs during the postpartum period.

## Sindrom Baby Blues

Baby blues syndrome is an emotional disorder that commonly occurs in mothers after childbirth, characterized by feelings of sadness without a clear cause, rapid mood swings, anxiety, tearfulness, sleep disturbances, and an inability to perform maternal roles optimally. This condition typically begins 2–5 days after delivery and can last up to two weeks (Reck *et al.*, 2009). Although temporary and not classified as a severe mental disorder, this syndrome requires attention as it has the potential to develop into postpartum depression if not addressed early. Schupay, (2013) explains that the prevalence of baby blues syndrome is relatively high among new mothers, particularly those experiencing their first childbirth and facing psychological unpreparedness for their new role. Hormonal factors, such as a drastic decrease in estrogen and progesterone levels after childbirth, are also primary triggers of this disorder. In addition, social pressure and environmental expectations of the ideal mother role are additional sources of stress. Watanabe *et al.*, (2008) noted that baby blues syndrome can serve as an early predictor of postpartum depression if its initial symptoms are ignored. Not only does it impact the mother's mental health, but this syndrome also affects the breastfeeding process. Braithwaite *et al.*,

(2025) found that mothers with baby blues symptoms tend to have lower breastfeeding initiation rates and difficulties in maintaining exclusive breastfeeding.

Recent research indicates that social and psychological factors play a significant role in influencing the onset of baby blues syndrome, and that approaches focusing solely on biological aspects are insufficient to understand the complexity of this disorder. Mones *et al.*, (2023) found that internal factors such as educational level, maternal age, and emotional readiness are highly correlated with the severity of baby blues symptoms. Mothers living in urban areas with high exposure to information but without adequate social support are more prone to this emotional disorder. Conversely, mothers in rural areas tend to have strong social ties, although they sometimes lack access to information and mental health services. In this context, the role of the partner becomes crucial. Koksai *et al.*, (2022) demonstrate that fathers' involvement in breastfeeding and infant care can enhance mothers' self-confidence and lower anxiety levels. Additionally, the educational model for husbands developed by Winingsih *et al.*, (2021) has proven effective in preventing baby blues by providing partners with an understanding of the emotional state of mothers after childbirth. From a healthcare service perspective, overly procedural approaches that neglect emotional aspects often make mothers feel disempowered and neglected. Pierce *et al.*, (2022) revealed through a qualitative study that many mothers expressed their emotional difficulties through personal blogs because they felt they had no space to share their experiences within the healthcare system.

The long-term effects of untreated baby blues syndrome can extend to various aspects of the mother's and child's lives. In a theoretical review conducted by Chechko *et al.*, (2024), it is explained that baby blues syndrome has the potential to be a significant trigger for more severe affective disorders such as postpartum depression, especially in mothers with a history of mood disorders. They emphasize the importance of early detection and systematic management to prevent initial symptoms from developing into chronic conditions. Unfortunately, in many cases, this syndrome is still considered a regular part of the adaptation process for new mothers and receives insufficient clinical attention. Therefore, non-pharmacological interventions are increasingly being explored as promising preventive approaches. Rahmawati *et al.*, (2025) in their systematic review stated that approaches such as group counseling, peer support, and community-based therapy effectively reduce the intensity of baby blues symptoms. Additionally, prenatal education emphasizing emotional readiness is a key factor. Utami & Nurfita, (2022) found that mothers who received information during pregnancy about the possibility of postpartum emotional symptoms had better psychological resilience and were less prone to panic when symptoms arose. Therefore, the management of baby blues syndrome must be holistic, starting from pregnancy through the postpartum period, involving family, healthcare providers, and the community. This effort aims to establish a robust support system, enabling mothers to navigate their new role with a sense of safety, value, and emotional support.

## Research Method

This study uses a qualitative approach with a systematic literature review method, which aims to identify, examine, and synthesize scientific findings regarding the relationship between the level of anxiety in pregnant women and the incidence of baby blues syndrome in the postpartum period. This design was chosen because it enables researchers to explore in-depth thematic patterns, causal factors, and relevant intervention approaches related to the psychological issues faced by mothers during and after pregnancy. This systematic literature review emphasizes the contextual and subjective



understanding of the experiences of pregnant women and postpartum women, as described in peer-reviewed scientific publications. Emphasis is placed on the quality of the articles and the direct relationship between antenatal anxiety and postpartum emotional conditions, such as baby blues syndrome.

The subjects of this study are relevant scientific documents and articles that focus on the broad theme of maternal mental health during pregnancy and the postpartum period, particularly those discussing anxiety and baby blues syndrome. The articles included in this review were selected based on the following inclusion criteria: publication after 2015, availability in English or Indonesian, and sourcing from journals published by reputable publishers such as Elsevier, Wiley, Springer, and Emerald. The literature population subject to this study reflects diverse approaches and contexts, including quantitative, qualitative, and mixed methods studies, provided that the articles explicitly discuss the relationship between maternal anxiety and postpartum emotional symptoms. This study focuses on research conducted in various countries, including Indonesia, to obtain a more comprehensive and contextual overview.

Data collection techniques were conducted through systematic literature searches in several international and national scientific journal databases, including ScienceDirect, SpringerLink, Wiley Online Library, Emerald Insight, and Google Scholar. The keywords used in the search included "maternal anxiety," "pregnancy," "baby blues syndrome," "postpartum mental health," and "antenatal emotional wellbeing." The article search and selection process was carried out by filtering based on the title, abstract, and relevance of the article content to the research focus. All articles reviewed must contain empirical findings relevant to the relationship between pregnancy anxiety and emotional conditions during the postpartum period. The instrument used in this process was an article review sheet developed by the researcher to record and evaluate important aspects of each article, including the type of research, objectives, methods, main results, and relevance to the research topic. This sheet also recorded the methodological aspects of the articles reviewed, thereby facilitating the data synthesis process.

The data obtained were analyzed using a thematic analysis approach, which aims to identify patterns, categories, and relationships between variables that emerge from various literature sources. The analysis process began with a careful rereading of each article, followed by grouping the information based on main topics, such as factors causing anxiety in pregnant women, relevant forms of social support, and psychological consequences during the postpartum period. After thematic grouping, the data were analyzed narratively to find consistency in findings, contradictions, and the contribution of each study to the understanding of the relationship between anxiety and baby blues syndrome. This technique enables researchers to construct logical and argumentative conclusions from diverse perspectives and identify research gaps that remain open for further exploration. The validity of interpretations is maintained by prioritizing evidence-based literature with high methodological quality.

## Results and Discussion

### Analysis Result

#### Prenatal Anxiety Patterns in Pregnant Women

Prenatal anxiety is an emotional condition commonly experienced by pregnant women, characterized by persistent worry, excessive fear, and high psychological vulnerability. Several studies indicate that this anxiety stems from both internal and external factors. Internally, pregnant women

often experience fears related to fetal development, potential complications during childbirth, and postpartum responsibilities (Silva *et al.*, 2017; Arzamani *et al.*, 2022). These factors are exacerbated by hormonal changes and a history of depression or previous trauma (Chechko *et al.*, 2024). Externally, cultural expectations, limited decision-making power, and lack of support from partners further destabilize emotional well-being (Olivia, 2023). Olivia, (2023) findings indicate that mothers who do not receive family support are more likely to experience high levels of anxiety. Furthermore, Fahey & Shenassa, (2016) emphasize that anxiety is exacerbated by a lack of information, low maternal self-efficacy, and emotional unpreparedness for the childbirth process. This view aligns with Fairlie *et al.*, (2009), who state that anxiety disrupts mothers' intentions and readiness to undertake early parenting roles. Briscoe *et al.*, (2016) add that pregnancy is a period of high emotional vulnerability, necessitating specific and targeted psychosocial support. These findings underscore that anxiety during pregnancy is multidimensional and requires interventions that are not only physiological but also encompass social and emotional determinants.

## Transforming Antenatal Anxiety into Baby Blues Symptoms

The transformation of anxiety during pregnancy into postpartum emotional disorders, such as baby blues syndrome, is a dynamic and complex process. Arzamani *et al.*, (2022) explain that hormonal fluctuations after childbirth, combined with physical exhaustion in mothers, create ideal conditions for emotional dysregulation. Baby blues syndrome typically emerges within the first two weeks after childbirth and is characterized by mood changes, frequent crying, and high irritability (Chechko *et al.*, 2024; Bestari *et al.*, 2025). Research by Nurcahya, (2024) indicates that mothers with high levels of antenatal anxiety are at greater risk of experiencing these symptoms. Evans *et al.*, (2020) add that unresolved anxiety during pregnancy often persists and even increases after childbirth, particularly among mothers who feel unprepared for their role as a mother. Braithwaite *et al.*, (2025) found that prenatal depression contributes to difficulties in breastfeeding and bonding with the baby, reinforcing the importance of mental health during pregnancy for postpartum maternal functioning. Meanwhile, Fekadu Dadi *et al.*, (2020) demonstrated that unmanaged stress during pregnancy can have adverse effects on birth outcomes and delay maternal recovery. These findings reinforce the understanding that prenatal anxiety is not a temporary issue but a predictive factor for postpartum emotional instability. A mother's emotional readiness during pregnancy is a key factor in preventing the worsening of symptoms into conditions like postpartum depression.

## Emotional Support Gap and Its Impact on Maternal Stress

Emotional support plays a crucial role in mitigating the impact of prenatal anxiety and reducing the likelihood of baby blues syndrome. Research by Anggraini, (2024) emphasizes that the involvement of partners and the active role of midwives are protective factors that support mothers' psychological adaptation. However, in reality, many mothers report feeling emotionally neglected by both their partners and health workers. Naharani *et al.*, (2023) revealed that family indifference has a significant correlation with increased postpartum emotional disturbances. Yuhaeni & Indawati, (2024) also added that low husband involvement in pregnancy care increases mothers' emotional tension during the postpartum period. Findings by Samosir *et al.*, (2025) show that maternal mental health directly influences the success of early breastfeeding, meaning that emotional stress can disrupt practical parenting functions. The absence of empathy and lack of support during this vulnerable period not only



erodes mothers' self-confidence but also exacerbates the psychological stress they experience. Henderson *et al.*, (2016) explain that social pressure to be a “perfect mother” creates a deep sense of failure when reality does not align with expectations. The lack of emotional response in maternal healthcare services reflects systemic gaps that require reform. These findings emphasize the importance of building a strong emotional safety net for pregnant women, particularly through the active involvement of partners and frontline healthcare providers.

## Lack of Psychological Approach in Maternal Health Services

One of the most striking findings in the literature is the lack of systematic attention to psychological aspects in maternal health services, both during pregnancy and the postpartum period. Antenatal care generally remains focused on physical monitoring and fetal development, while psychological dimensions such as anxiety, fear, and emotional readiness have not been a primary concern (Fahey & Shenassa, 2016; Evans *et al.*, 2020). Even in postnatal practice, the primary focus of services often remains limited to evaluating birth injuries and breastfeeding success, while assessments of maternal mental health are frequently overlooked. Bestari *et al.*, (2025) noted that mothers with high anxiety that went undetected during pregnancy were more likely to experience postpartum depression. This gap highlights the weak integration between medical and psychosocial approaches in maternal health services. Arzamani *et al.*, (2022) add that during the COVID-19 pandemic, mothers' psychological stress increased sharply, but the health system was unable to respond adaptively to these mental health needs. From Kotler's perspective, this reflects the failure of service providers to meet consumers' “hidden needs,” namely, unspoken emotional needs that significantly influence service experiences. Therefore, systematic emotional interventions should be integrated into service standards, not merely as supplements, to enable early and effective responses to mental health issues such as baby blues.

## Subjective experiences of mothers experiencing anxiety and baby blues

Qualitative approaches provide important insights into the emotional experiences of mothers experiencing anxiety during pregnancy and postpartum baby blues symptoms. Pierce *et al.* (2022), through content analysis of pregnant women's blogs, found that many mothers felt emotionally isolated, experienced sleep disturbances, and internalized feelings of guilt and inadequacy as new parents. They also described how social pressure to be a “perfect mother” can exacerbate the psychological stress they experience. Similar findings were reported by Henderson *et al.*, (2016), who revealed that the idealized representation of motherhood in society creates unrealistic expectations, which then trigger feelings of failure when reality fails to align with these expectations. Additionally, a report by Wulan *et al.*, (2023) shows that mothers experiencing baby blues generally lack the space to express their emotions to healthcare providers or their partners openly. Instead, they tend to suppress their feelings, which ultimately exacerbates their mental condition. In Kotler's emotional marketing logic, the voice of the consumer—in this case, the narratives of mothers—is an authentic form of feedback that is crucial for redesigning service systems to be more empathetic and personalized. Mothers' experiences must serve as the primary foundation for developing an approach based on real needs, not merely universal clinical protocols.

## The Need for Contextual and Empathetic Intervention

A review of the literature consistently emphasizes the need for more empathetic and contextual interventions in the management of anxiety in pregnant women and baby blues syndrome. Successful interventions are not only medical or educational, but also consider the social, economic, cultural, and psychological backgrounds of each individual. Rahmawati *et al.*, (2025) demonstrate that peer-based interventions, psychological counseling, and father role training are highly effective in reducing symptoms of the baby blues. Winingsih *et al.*, (2021) also confirm that involving fathers in breastfeeding education has a positive contribution to mothers' emotional well-being and the success of exclusive breastfeeding. Koksas *et al.*, (2022) state, through a systematic review, that consistent partner support not only strengthens family bonds but also enhances mothers' psychological resilience. This approach aligns with Kotler's principle of co-creation value, that the best service experiences are created when all actors (mothers, fathers, healthcare providers) are actively involved. Therefore, intervention strategies should no longer be one-size-fits-all but flexible, personalized, and sensitive to the unique emotional dynamics of each individual. Building an empathetic and responsive environment is a long-term investment in the mental health of mothers and the holistic development of children.

## Discussion

The results of this study confirm a significant relationship between anxiety levels during pregnancy and the onset of baby blues syndrome during the postpartum period. Anxiety experienced by pregnant women is not only a temporary psychological disorder, but also plays an important role as a predictor of emotional conditions after childbirth. Various concerns that arise during pregnancy, such as fear of the childbirth process, doubts about one's ability to fulfill the role of a mother, and anxiety about the fetus's health, cumulatively weaken the mother's psychological stability. These findings indicate that pregnant women with high levels of anxiety are more likely to experience baby blues compared to those with low anxiety levels. In this context, anxiety levels are not merely psychological indicators but crucial variables in mapping the risk of postpartum emotional disorders. This finding reinforces the research hypothesis that there is a strong connection between psychological dynamics during pregnancy and emotional stability after childbirth. In light of these findings, it can be concluded that neglecting the psychological condition of pregnant women is a weakness in the maternal health system that can directly impact postpartum mental health quality.

The relationship between prenatal anxiety and baby blues syndrome can be understood through complex psychophysiological mechanisms. Physiologically, chronic stress during pregnancy contributes to increased cortisol levels, which can disrupt the balance of other hormones such as estrogen and progesterone. This imbalance becomes more severe when there is a drastic decrease in hormone levels after childbirth. These sudden changes disrupt the homeostasis of the central nervous system, which then significantly affects the mother's emotional regulation. Additionally, changes in neurotransmitters such as serotonin and dopamine also play a crucial role in the onset of postpartum mood disorders. From a psychological perspective, unmanaged anxiety weakens a mother's emotional resilience, particularly when facing the significant changes associated with her new role as a mother. Childbirth itself is a traumatic experience for most women, and in a mentally vulnerable state, this trauma has the potential to exacerbate psychological conditions that have developed during pregnancy. Thus, the baby blues syndrome is not merely a consequence of childbirth but the result of accumulated

psychological stress that begins during the antenatal period. Understanding these physiological and psychological pathways is crucial in developing more holistic preventive and intervention approaches.

These findings are consistent with several previous studies, both domestically and abroad. For example, a study conducted by Fahey & Shenassa, (2016) showed that anxiety during pregnancy can affect a mother's ability to form emotional bonds with her baby, as well as reduce efficacy in the breastfeeding process. Meanwhile, research by (Arzamani *et al.*, 2022; Chechko *et al.*, 2024) supports the view that prenatal anxiety is a strong predictor of mood disorders in the postpartum period. In Indonesia, studies by (Anggraini, 2024; Nurcahya, 2024) also identified that low emotional readiness among pregnant women and insufficient social support increase the likelihood of experiencing baby blues. Cultural context, healthcare systems, and levels of mental health literacy largely influence differences in results across regions. For example, in developed countries, early detection and psychological intervention during pregnancy are already integrated into maternal and child health systems. In contrast, in Indonesia, attention to psychological aspects lags physical care, leaving many pregnant women without adequate emotional support. These contextual differences highlight the importance of a contextual approach in implementing policies to prevent maternal mental health disorders.

The contribution of this research is also significant in the context of social and public health. Recognizing prenatal anxiety as an early indicator of postpartum emotional disorders is a strategic step in improving the overall mental health of mothers. Baby blues syndrome, although often considered mild, has profound implications for the quality of childcare. Mothers who experience emotional disorders after giving birth tend to have difficulty forming healthy emotional bonds with their babies, which in turn affects the cognitive, emotional, and social development of the child. Additionally, if this condition is not adequately addressed, baby blues can develop into more severe postpartum depression, which requires long-term clinical intervention. Therefore, healthcare systems must adopt preventive approaches that can identify anxiety symptoms early on and provide interventions that address not only medical needs but also the emotional and social dimensions of mothers. As a result, efforts to improve the quality of childcare cannot be separated from efforts to enhance the psychological well-being of mothers from the prenatal period onwards.

The practical implications of this study cover various dimensions, ranging from policy planning to the implementation of maternal and child health services. One concrete step recommended is the integration of anxiety screening into every antenatal visit. Through valid and reliable screening tools, healthcare providers can identify mothers showing early signs of anxiety and refer them to counseling or psychological support services. Additionally, strengthening mental health education programs during pregnancy is also a priority. Educational materials should cover understanding regular emotional changes during pregnancy, ways to manage stress, and strategies for building resilience. Involving partners in this educational process is also very important, as emotional support from husbands has been shown to reduce the risk of anxiety in mothers significantly. In practice, healthcare workers such as midwives and nurses need to be trained in empathetic communication skills and sensitivity to mental health issues. Through such training, they are expected to not only focus on physical examinations but also serve as effective psychological companions for pregnant women. If implemented systematically and integrated, these programs have the potential to significantly reduce the incidence of postpartum depression and improve the quality of life for mothers.

## Conclusion

This study examines the relationship between maternal anxiety levels during pregnancy and the occurrence of baby blues syndrome during the postpartum period through a qualitative approach based on a literature review. The primary focus of this study is to explore the psychological dynamics that occur in pregnant women and identify how these conditions can develop into postpartum emotional disorders. Based on literature findings, it is known that prenatal anxiety does not only stem from hormonal factors but is also triggered by social pressure, lack of emotional support, and unpreparedness for the role of motherhood. The transformation of anxiety into baby blues occurs through complex and interactive mechanisms, involving biological changes and the postpartum environmental context of the mother.

The original value of this study lies in its approach, which places prenatal anxiety as the primary psychological variable in understanding baby blues, unlike previous studies that have emphasized external factors. This study makes a theoretical contribution to the development of a comprehensive understanding of the emotional transition from pregnancy to postpartum. Practically, these findings imply the importance of developing maternal health policies that not only focus on physical aspects but also include psychological screening, emotional education, and social support for pregnant women. Healthcare institutions are expected to integrate empathetic and contextual approaches into every stage of antenatal and postnatal care as a preventive measure against emotional disorders, such as the baby blues.

This study has limitations in terms of the generalizability of its findings, as it employs a qualitative literature-based approach without involving direct empirical data from respondents. This limitation opens opportunities for further research using a mixed or quantitative approach to statistically test the relationship between prenatal anxiety and baby blues. Additionally, future research should consider the diversity of cultural contexts, healthcare systems, and mental health literacy levels among pregnant women. It is recommended that subsequent researchers explore mothers' subjective experiences through in-depth interviews or longitudinal studies to capture the dynamics of these emotional processes more authentically and comprehensively.

## References

- Anggraini, D. (2024). Hubungan Dukungan Suami, Peran Bidan Dan Pengetahuan Ibu Terhadap Kejadian Baby Blues Pada Ibu Nifas Di BPM Bidan Lena Jakarta. *Indonesian Scholar Journal of Nursing and Midwifery Science (ISJNMS)*, 3(11), 1491–1496. <https://doi.org/10.54402/isjnms.v3i11.506>
- Arzamani, N., Soraya, S., Hadi, F., Nooraean, S., & Saeidi, M. (2022). The COVID-19 pandemic and mental health in pregnant women: a review article. *Frontiers in Psychiatry*, 13, 949239. <https://doi.org/10.3389/fpsyt.2022.949239>
- Bestari, A. D., Westriningrum, L., Didah, D., Gumilang, L., & Mandiri, A. (2025). Faktor-Faktor yang Berhubungan dengan Resiko Depresi Postpartum pada Ibu Nifas di Kota Bandung. *Malahayati Nursing Journal*, 7(2), 658–674. <https://doi.org/10.33024/mnj.v7i2.17747>
- Braithwaite, E. C., Oftedal, A., Kaasen, A., Ayorech, Z., & Bekkhus, M. (2025). A history of depression and prenatal depression are associated with a lower likelihood of breastfeeding initiation and maintenance, and more breastfeeding problems. *Archives of Women's Mental Health*, 28(1), 139–146. <https://doi.org/10.1007/s00737-024-01479-5>



- Briscoe, L., Lavender, T., & McGowan, L. (2016). A concept analysis of women's vulnerability during pregnancy, birth, and the postnatal period. *Journal of Advanced Nursing*, 72(10), 2330–2345. <https://doi.org/10.1111/jan.13017>
- Cechko, N., Losse, E., Frodl, T., & Nehls, S. (2024). Baby blues, premenstrual syndrome, and postpartum affective disorders: intersection of risk factors and reciprocal influences. *BJPsych Open*, 10(1), e3. <https://doi.org/10.1192/bjo.2023.612>
- Evans, K., Spiby, H., & Morrell, C. J. (2020). Developing a complex intervention to support pregnant women with mild to moderate anxiety: application of the Medical Research Council framework. *BMC Pregnancy and Childbirth*, 20(1), 777. <https://doi.org/10.1186/s12884-020-03469-8>
- Fahey, J. O., & Shenassa, E. (2016). Understanding and meeting the needs of women in the postpartum period: the perinatal maternal health promotion model. *Journal of Midwifery & Women's Health*, 58(6), 613–621. <https://doi.org/10.1111/jmwh.12139>
- Fairlie, T. G., Gillman, M. W., & Rich-Edwards, J. (2009). High Pregnancy-Related Anxiety and Prenatal Depressive Symptoms as Predictors of Intention to Breastfeed and Breastfeeding Initiation. *Journal of Women's Health*, 18(7), 945–953. <https://doi.org/10.1089/jwh.2008.0998>
- Fekadu Dadi, A., Miller, E. R., & Mwanri, L. (2020). Antenatal depression and its association with adverse birth outcomes in low and middle-income countries: a systematic review and meta-analysis. *PloS One*, 15(1), e0227323. <https://doi.org/10.1371/journal.pone.0227323>
- Health, O. W. (2003). *Pregnancy, childbirth, postpartum, and newborn care: a guide for essential practice*. World Health Organization.
- Henderson, A., Harmon, S., & Newman, H. (2016). The Price Mothers Pay, Even When They Are Not Buying It: Mental Health Consequences of Idealized Motherhood. *Sex Roles*, 74(11), 512–526. <https://doi.org/10.1007/s11199-015-0534-5>
- Kendall-Tackett, K. (2024). Breastfeeding and Perinatal Mental Health. In *The Routledge International Handbook of Perinatal Mental Health Disorders* (pp. 89–110). Routledge.
- Koksai, I., Acikgoz, A., & Cakirli, M. (2022). The Effect of a Father's Support on Breastfeeding: A Systematic Review. *Breastfeeding Medicine*, 17(9), 711–722. <https://doi.org/10.1089/bfm.2022.0058>
- Mones, S. Y., Lada, C. O., Jutomo, L., Trisno, I., & Roga, A. U. (2023). The Influence of Individual Characteristics, Internal and External Factors of Postpartum Mothers with Baby Blues Syndrome in Rural and Urban Areas in Kupang City. 0966(1), 1–9. <https://doi.org/10.36349/easjnm.2023.v05i01.001>
- Naharani, A. R., Setyatama, I. P., Masturoh, M., & Siswati, S. (2023). Hubungan Dukungan Keluarga Dengan Kejadian Post Partum Blues Pada Ibu Nifas Di Desa Dukuhwaru Kabupaten Tegal. *Bhamada: Jurnal Ilmu Dan Teknologi Kesehatan (E-Journal)*, 14(1), 87–91. <https://doi.org/10.36308/jik.v14i1.451>
- Nurchaya, B. (2024). Hubungan Tingkat Pengetahuan Ibu Post Partum dengan Baby Blues Syndrom berdasarkan Tingkat Kecemasan di Rumah Sakit Marinir Cilandak Tahun 2022. *Journal of Nursing Education and Practice*, 3(4), 141–147. <https://doi.org/10.53801/jnep.v3i3.218>
- Obrochta, C. A., Chambers, C., & Bandoli, G. (2020). Psychological distress in pregnancy and postpartum. *Women and Birth*, 33(6), 583–591. <https://doi.org/https://doi.org/10.1016/j.wombi.2020.01.009>
- Olivia, L. (2023). Tingkat Kecemasan, Pengetahuan, dan Dukungan Keluarga dengan Kesiapan menghadapi Persalinan pada Era Pandemi Covid-19: Level of Anxiety, Knowledge and Family Support with Readiness for Childbirth in the Covid-19 Pandemic Era. *Open Access Jakarta Journal of Health Sciences*, 2(10), 936–946. <https://doi.org/10.53801/oajjhs.v2i10.189>
- Pierce, S. K., Reynolds, K. A., Hardman, M. P., & Furer, P. (2022). How do prenatal people describe their experiences with anxiety? A qualitative analysis of blog content. *BMC Pregnancy and Childbirth*, 22(1), 398. <https://doi.org/10.1186/s12884-022-04697-w>
- Rahmawati, R., Junuda, J., Saida, S., & Akifah, A. (2025). Interventions to address baby blues among postpartum mothers: A systematic review of effectiveness and implementation. *African Journal of Reproductive Health*, 29(2), 160–180. <https://www.ajrh.info/index.php/ajrh/article/view/5271?utm>

- Reck, C., Stehle, E., Reinig, K., & Mundt, C. (2009). Maternity blues as a predictor of DSM-IV depression and anxiety disorders in the first three months postpartum. *Journal of Affective Disorders*, 113(1), 77–87. <https://doi.org/https://doi.org/10.1016/j.jad.2008.05.003>
- Roddy Mitchell, A., Gordon, H., Atkinson, J., Lindquist, A., Walker, S. P., Middleton, A., Tong, S., & Hastie, R. (2023). Prevalence of Perinatal Anxiety and Related Disorders in Low- and Middle-Income Countries: A Systematic Review and Meta-Analysis. *JAMA Network Open*, 6(11), e2343711–e2343711. <https://doi.org/10.1001/jamanetworkopen.2023.43711>
- Samosir, F. J., Pane, P. Y., Zebua, J. V. C., Manalu, P., & Dalimunthe, S. Y. (2025). Kesehatan mental ibu memengaruhi pemberian ASI eksklusif pada bayi: Scoping review. *Ibnu Sina: Jurnal Kedokteran Dan Kesehatan-Fakultas Kedokteran Universitas Islam Sumatera Utara*, 24(1), 111–124. <https://doi.org/10.30743/ibnusina.v24i1.721>
- Schupay, B. B. (2013). *The Baby Blues: Mothers' Experiences After Adoption*. University of South Florida.
- Silva, M. M. D. J., Nogueira, D. A., Clapis, M. J., & Leite, E. P. R. C. (2017). Anxiety in pregnancy: prevalence and associated factors. *Revista Da Escola de Enfermagem Da USP*, 51, e03253. <https://doi.org/10.1590/S1980-220X2016048003253>
- Utami, F. P., & Nurfita, D. (2022). Postpartum blues reviewed by the risk factors in Indonesia. *Journal of Ideas in Health*, 5(4), 766–775. <https://doi.org/10.47108/jidhealth.vol5.iss4.258>
- Watanabe, M., Koji, W., Yumi, S., Yutaka, A., Noritada, K., Hiroshi, O., & Tanaka, K. (2008). Maternity blues as predictor of postpartum depression: A prospective cohort study among Japanese women. *Journal of Psychosomatic Obstetrics & Gynecology*, 29(3), 211–217. <https://doi.org/10.1080/01674820801990577>
- Winingsih, G. A. M., Salmah, U., Masni, Indriasari, R., Amiruddin, R., & Birawida, A. B. (2021). Prevent postpartum blues with the implementation of breastfeeding father education model to increase the frequency of breastfeeding in mothers: A systematic review. *Gaceta Sanitaria*, 35, S400–S403. <https://doi.org/https://doi.org/10.1016/j.gaceta.2021.10.061>
- Wulan, N., Mawati, I. P., & Sutandi, A. (2023). Analisis faktor yang berhubungan dengan kejadian baby blues syndrome pada ibu postpartum. *Journal of Nursing Practice and Education*, 4(1), 194–201. <https://doi.org/10.34305/jnpe.v4i1.952>
- Yolanda, H., Surmiasih, Putri, R. H., & Palupi, R. (2020). Faktor-faktor yang berhubungan dengan baby blues syndrome pada ibu pasca persalinan. *Tesis Ridha Rizki*, 04(01), 1–92. <https://doi.org/10.53801/jnep.v4i1.355>
- Yuhaeni, N., & Indawati, E. (2024). Analisis Faktor yang Berhubungan dengan Kejadian Baby Blues Syndrom pada Ibu Nifas di Klinik Cempaka Medical Center Tambun Bekasi Tahun 2023. *Malahayati Nursing Journal*, 6(4), 1351–1372. <https://doi.org/10.33024/mnj.v6i4.11139>

## Corresponding author

Tri Rikhaniarti can be contacted at: [tririkhaniarti042@gmail.com](mailto:tririkhaniarti042@gmail.com)

