

## REVIEW ARTICLE

# Influence of stressful life events in postpartum mothers on the incidence of postpartum depression

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*I Komang Lindayani*<sup>1</sup>, *Ira Nurmalia*<sup>2</sup> and *Nunik Puspitasari*<sup>3</sup>

Doctorate Degree Program in Public Health, Faculty of Public Health, Universitas Airlangga, Surabaya 60115, Indonesia<sup>1</sup>; Department of Health Promotion and Behavioural Science, Faculty of Public Health, Airlangga University, Surabaya 60115, Indonesia<sup>2</sup>; Department of Epidemiology, Population Biostatistics, and Health Promotion, Faculty of Public Health, Airlangga University, Surabaya 60115, Indonesia<sup>3</sup>

\*For Correspondence: Email: *i.komang.lindayani-2022@fkm.unair.ac.id*; Phone: +6282144110520

## Abstract

The main objective of the study was to explore and document the influence of the stressful life events experienced by postpartum mothers on the incidence of postpartum depression. A systematic review of literature was performed to examine prior research. All major databases including Google Scholar, Scopus, and Web of Science were used. The search is limited to publications from 2018-2023. The results illustrate the diversity of stressful events which include the experience of miscarriage, labour complications, or sudden changes in the baby's health condition. Thematic analysis revealed that these events played significant roles in triggering or exacerbating postpartum depression, amplifying the emotional complexity and psychological well-being of postpartum mothers. We conclude that there is a need for approaches for designing psychological interventions that can provide timely and contextualized support to postpartum women who experience stressful life events. (*Afr J Reprod Health 2024; 28 [10s]: 206-213*).

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**Keywords:** Stressful; postpartum; depression

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## Résumé

L'objectif principal de l'étude était d'explorer et de documenter l'influence des événements stressants de la vie vécus par les mères en post-partum sur l'incidence de la dépression post-partum. Une revue systématique de la littérature a été réalisée pour examiner les recherches antérieures. Toutes les principales bases de données, notamment Google Scholar, Scopus et Web of Science, ont été utilisées. La recherche est limitée aux publications de 2018 à 2023. Les résultats illustrent la diversité des événements stressants, notamment l'expérience d'une fausse couche, de complications lors du travail ou de changements soudains dans l'état de santé du bébé. L'analyse thématique a révélé que ces événements ont joué un rôle important dans le déclenchement ou l'exacerbation de la dépression post-partum, amplifiant la complexité émotionnelle et le bien-être psychologique des mères post-partum. Nous concluons qu'il existe un besoin d'approches pour concevoir des interventions psychologiques capables de fournir un soutien opportun et contextualisé aux femmes en post-partum qui vivent des événements de vie stressants. (*Afr J Reprod Health 2024; 28 [10s]: 206-213*).

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**Mots-clés:** Stressant ; post-partum; dépression

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## Introduction

The process of pregnancy and childbirth is a life event that contains very complex emotional and physical dynamics. Stressful life events that cause tension and distress in postpartum mothers can be crucial factors that affect mental wellbeing<sup>1</sup>. as the uncertainty of facing a new role as a mother, often associated with the stressful burden of infant care responsibilities, can trigger significant mental health challenges<sup>2</sup>.

As an increasingly vulnerable period for maternal mental health, the postpartum period

requires special attention. There are significant challenges, new responsibilities, and psychological and emotional changes during this time<sup>3</sup>. The second largest cause of disease burden in the world and one of the most treatable mental illnesses is depression. The diagnosis of depression in women twice as common as in men<sup>4</sup>. Postpartum depression, as a serious manifestation of mental health, involves feelings of anxiety, fatigue, and the inability to enjoy happy moments post-birth<sup>5</sup>. Psychosocial stressors, including financial stress and trauma are associated with stressful life events<sup>6</sup>. As an example, aloe vera compresses have

an impact on breast engorgement in postpartum mothers, according to the study's findings (p-value 0.000)<sup>7</sup>.

The challenge of mental health challenge is further complicated by the emergence of stressful life events that can exacerbate symptoms of postpartum depression, demanding a deeper understanding of the interplay between these two factors. A person with postpartum depression (PPD) has depressive symptoms that appear in the first year after childbirth<sup>8</sup>. A few of these symptoms are low self-esteem, feelings of self-harm or suicide, diminished energy, diminished activity and energy, diminished mood, and loss of pleasure<sup>9</sup>. About 3% of women who have given birth in a hazardous environment will experience mild to severe symptoms of postpartum stress disorder (PTSD)<sup>10</sup>.

Another study reported that 17% of mothers may experience postpartum depression (PND), which can have a devastating impact on maternal and family health if left untreated<sup>11</sup>. Given that certain racial/ethnic groups' experiences and prenatal life stressors are linked to higher rates of social and economic adversity, it is important to consider these experiences when predicting PPD<sup>12</sup>. This negative impact will be healed if pregnant women get full support, as both social support and family connections play key roles in helping postpartum women cope with stress. An expectant mother and a live, bouncing baby are the ideal outcome of a successful pregnancy<sup>13</sup>.

Mental health conditions such as anxiety, post-traumatic stress disorder, and depression can have a significant impact on a woman's and her family's lives<sup>14</sup>. Therefore, understanding the extent to which social support can relieve stress in postpartum mothers is important in developing more holistic intervention strategies. Greater levels of self-efficacy have been demonstrated to have a positive impact on daily activities, mobility, and quality of life in patients with a variety of chronic conditions, including rheumatoid arthritis<sup>15</sup>.

Stressful life events in postpartum mothers can involve various aspects of life, such as issues of changing roles as mothers, economic uncertainty, inadequate social support, or even significant environmental changes<sup>16</sup>. Stress that postpartum women face can be a factor in the development of postpartum depression, according to earlier research. These stresses raise the chance

of mental health disorders in postpartum women by inducing potentially harmful physiological and psychological reactions<sup>17</sup>.

The mother's relationship with her partner and child may occasionally be impacted by the stress she experiences during the postpartum period. However, while there is preliminary evidence of an association between stressful life events and postpartum depression, there remains a lack of understanding regarding the mechanisms underlying this relationship, as well as factors that may moderate or mediate the impact of stress on postpartum depression risk<sup>18</sup>. The specific aim of this review is to analyze the findings of studies about the influences of stressful life event in postpartum mother on incidence of postpartum depression.

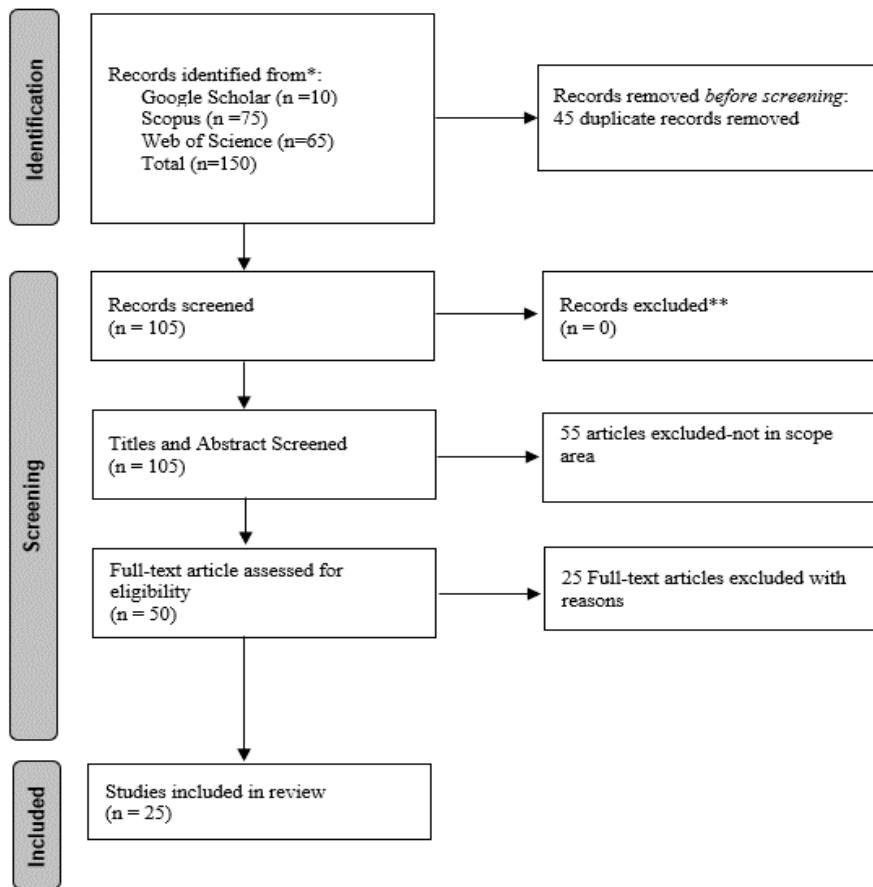
## Methods

This study used a qualitative approach with a literature review method to gain an in-depth understanding the influence of stressful life events in postpartum mothers on the incidence of postpartum depression. The qualitative approach was chosen because it allows researchers to explore the complexity of this phenomenon through participants' perspectives and understand the context and individual experiences. In the literature review method, data collection was done through searching and analysing relevant literature. There were no direct participants, but data collection involved the following PRISMA steps: literature search, selection, data analysis, and data synthesis.

A systematic review of literature was performed to examine prior research. All Major databases including Google Scholar, Scopus, and Web of Science were used. The search is limited to publications from 2018-2023, with a cross-sectional, cohort, or case-control study design, and in English Language. A number of key words and Boolean combination were applied. The search used were: "stressful life event" OR "stressor" AND "postpartum depression" OR "postnatal depression" OR "puerperal depression" OR "afterbirth depression". Article found were assessed for relevance.

## Results

Twenty five article were identified as appropriate and relevant through the f=define search strategy



**Figure 1:** PRISMA flow diagram

and included in the synthesis (Figure.1). The following theme emerged: stressful life event in postpartum period, characteristic and risk factors of postpartum depression, the concept of stress in puerperal mother, and the importance of understanding the impact of stress on postpartum mother.

To explain how particular stressful experiences can affect the mental health of postpartum mothers, a thorough understanding of the relationship between stressful life events and postpartum depression is necessary. This relationship involves a complex dynamic between the influence of the stressful live event, the emotional response, and the impact on maternal mental health. Some aspects that need to be expanded in this understanding involve:

1. Identification of Types of Stressful Life Events in Postpartum Mothers: Stressful life events in postpartum women can vary significantly,

including relationship problems, financial problems, job changes, or even health problems. Identifying these types of stressful life events helps in more targeted risk assessment and prevention.

2. Mediator and Moderator Factors: An understanding of mediator (connecting) and moderator (modifying) factors helps detail how stressful live events can trigger or worsen postpartum depression. These include elements that may mitigate or reroute the effects of stress on mother mental health, such as psychological resilience, social support, and other individual factors.

3. Psychological Processes in Response to Stressful Life Events: Exploring the psychological processes that may occur when postpartum mothers encounter a stressful life event opens the door to understanding how thoughts and emotions are involved in the

response to stress<sup>19</sup>. This includes analysing how the perception of the event may affect stress levels and possibly trigger symptoms of postpartum depression. If it reaches complications, it can turn into suicidal ideation<sup>20</sup>.

4. **Predisposing Factors and Range of Mental Well-being:** The degree of correlation between stressful life events and postpartum depression can be influenced by predisposing factors, including stress levels and past mental health history, as well as an individual's range of mental health.
5. **Long-term Impact and the Need for Stress Resolution:** Determining how stressful life events will affect postpartum women's mental health journey over an extended period of time is an important first step towards understanding how such events may impact it.
6. **Social Support as a Moderator in This Relationship:** Social support plays a key role in helping postpartum mothers cope with the impact of stressful life events. Evaluating the potential moderating or buffering role of social support in the relationship between stressful life events and postpartum depression provides insight into the specifics of prevention initiatives that centre on bolstering social support networks.
7. **Influence of Physical and Social Environment on Responses to Stress:** The physical and social environment can modify the way postpartum women respond to stressful live events. Understanding these environmental factors helps in detailing how changes in the environmental context can affect emotional responses and mental health.

## Discussion

### *Definition and characteristics of postpartum depression*

A thorough understanding of the definition and characteristics of postpartum depression provides a better understanding of its dynamics and impact on postpartum women. An extended period of melancholy, anxiety, and exhaustion following childbirth is known as postpartum depression. This is in contrast to the baby blues, which generally includes feelings of tiredness, irritability or anxiety

that generally subside within a few weeks of giving birth. Postpartum depression persists longer and has a more significant impact on the well-being of the postpartum mother. Characteristics of Postpartum Depression include:

1. **Deep Feelings of Sadness:** Mothers who experience postpartum depression tend to feel deep feelings of sadness that are difficult to explain. These feelings can affect the mother's ability to enjoy happy moments with her baby.
2. **Sleep Disturbances:** Disturbed sleep patterns are often characteristic of postpartum depression. Both difficulty falling asleep and oversleeping can be symptoms, and On the mother's mental health, both may be detrimental.
3. **Appetite Changes:** Changes in appetite, such as significant weight gain or loss, may occur in mothers with postpartum depression. This reflects the impact of depression on the mother's diet and energy.
4. **Anxiety and Tension:** Postpartum mothers with postpartum depression often experience high levels of anxiety and excessive tension<sup>21</sup>. This can make it difficult for moms to relax or feel calm.
5. **Lack of Interest in Activities Usually Enjoyed:** This symptom involves the inability or loss of interest in activities that usually bring happiness or satisfaction to the mother. This can involve lack of interest in self-care, social activities, or hobbies.
6. **Adverse or Obsessive Thoughts:** Postpartum mothers with postpartum depression may experience adverse thoughts towards themselves or their babies. These thoughts can become obsessive and difficult to control.
7. **Decreased Energy and Excessive Fatigue:** Postpartum depression often leads to decreased energy and excessive fatigue, even if the mother has gotten enough sleep. The mother's capacity to look after herself and her child may be impacted by this.

### *Risk factors for postpartum depression*

Risk factors for postpartum depression involve various aspects that increase the likelihood of a mother experiencing this condition. An in-depth understanding of these factors allows healthcare providers to identify and manage risk early, and

design more effective prevention strategies<sup>22</sup>. Here are some risk factors that can affect the likelihood of postpartum depression:

1. **Prior Mental Health History:** A higher risk of postpartum depression exists in mothers with a history of mood or mental health disorders prior to pregnancy.
2. **Limited Social Support:** Postpartum depression risk can be elevated by a deficiency of social support, ranging from friends, family, or a partner.
3. **Stress and Traumatic Life Events:** Excessive stress or traumatic life events, such as financial problems, relationship conflicts, or difficult life events, can be risk factors for postpartum depression<sup>23</sup>.
4. **Hormonal Instability:** The development of postpartum depression may be influenced by notable hormonal changes that occur both during and after childbirth. It is easier to comprehend potential symptoms and focus more targeted preventive efforts when one is aware of these hormonal changes.
5. **Relationship or Marital Conflict:** Relationship or marital conflict may increase the risk of postpartum depression. Factors such as unequal division of tasks, lack of communication, or changes in the couple's relationship dynamics can affect the mother's mental well-being.
6. **Feeling Unprepared to be a Parent:** Mothers who feel unprepared or insecure in their parenting role have a higher risk of postpartum depression. For example, parents who have difficulty regulating emotions and low self-esteem may find it more difficult to deal with their child's expression of negative emotions. This can then result in parenting that causes their children to have lower self-esteem and difficulty controlling their emotions, as well as more internalizing and externalizing problems<sup>24</sup>.
7. **Physical Health Conditions Affecting Daily Functioning:** Physical health conditions that impede daily functioning, such as chronic problems or ongoing physical fatigue, can be risk factors for postpartum depression. Understanding these conditions helps design treatment strategies that integrate physical and mental health aspects.

8. **Lack of Support for Child Care:** There is a link between postpartum depression risk and inadequate support in child care. Providers can offer the right resources and assistance when they are aware of this.

### ***The concept of stress in puerperal mothers***

Understanding the concept of stress in postpartum women opens the door to detailing the complexity of psychosocial stressors that may be faced during the postpartum period. A deeper understanding of the concept of stress in postpartum women allows for the development of more focused and relevant interventions. The following are points that can be expanded upon in understanding the concept of stress in postpartum women:

1. **Identify Specific Sources of Stress:** It is important to understand the specific sources of stress faced by postpartum mothers. Identifying specific sources of stress helps in designing more targeted interventions.
2. **Coping Strategies Used by Postpartum Mothers:** Some mothers may use positive coping strategies, such as social support, exercise, or relaxation, while others may deal with stress in more maladaptive ways. Knowing the coping strategies used provides opportunities to strengthen positive strategies and explore healthier alternatives.
3. **Physiological Response to Stress in Postpartum Mothers:** Stress can have a physiological impact on the body, especially in new mothers. The following factors are also associated with body image satisfaction<sup>25</sup>: positive attitude toward self, positive attitude toward partner, regular exercise, receiving postpartum information, childcare assistance, and college degree.
4. **Contextual Factors that Amplify Stress:** Certain situations or contexts may amplify the level of stress experienced by postpartum women<sup>26</sup>. These can include environmental conditions, inadequate social support, or economic uncertainty.
5. **Impact of Stress on Mental and Physical Wellbeing:** The impact of stress on the well-being of postpartum women may include symptoms of postpartum depression, sleep disturbances, decreased appetite, or even

- physical problems such as headaches or indigestion.
6. Changes in Perception of Stress during the Postpartum Period: Perceptions of stress may change during the postpartum period.
  7. Social Support as an Antidote to Stress: Understanding how social support can act as an antidote to stress helps in directing resources and efforts towards strengthening existing support networks or building new ones.
  8. Cultural Influences on the Concept of Stress in Postpartum Mothers: Culture can influence how stress is identified, expressed and coped with.

The following is an expanded discussion of the research implications of this topic.

1. Development of Specialized Interventions: The results of this study can serve as a basis for developing more specialized interventions aimed at helping postpartum women manage stressful life events and prevent postpartum depression.
  2. Assessment of Mediator and Moderator Factors: The relationship between stressful life events and postpartum depression can be further studied by conducting in-depth research on the mediators and moderators of that relationship.
  3. Longitudinal Studies to Assess Changes in Response to Stress: Looking at changes in perceptions, coping strategies, and long-term impact can provide better insight into the mental health journey of postpartum women.
  4. Influence of Culture and Values in the Research Context: Understanding the role of culture in managing stress in postpartum women helps identify individual and group differences and design more inclusive and sustainable interventions.
  5. Research on the Effects of Stress on Children and its Relationship to Family Wellbeing: This opens up opportunities to explore ways in which interventions can be comprehensive, supporting the mental health of the family as a whole. Relationship between child and mother affects well-being<sup>27</sup>.
  6. Evaluation of the Effectiveness of Social Support as a Preventive Strategy: Further studies could focus on evaluating the effectiveness of social support as a prevention strategy for postpartum depression.
7. Research on the Effect of Stress on Fathers' Role in Family Mental Health: It is important to investigate how stressful life events can affect fatherhood and overall family mental health<sup>28</sup>.

### ***The importance of understanding the impact of stress on postpartum mothers***

This in-depth understanding provides a foundation for the development of more effective interventions and more holistic care. Expansion of the discussion may include several key aspects:

1. Effects on Mental Health: Postpartum depression, anxiety, and other mood disorders are among the conditions that are more likely to occur. Health professionals can detect early signs and administer the right treatment when they have a thorough understanding of the relationship between stress and mental health.
2. Link to Physicality and Physical Wellbeing: The impact of stress is not only limited to mental health, but can also affect the physical well-being of postpartum mothers.
3. Impact on the Quality of Mother-Child Interactions: Mothers who experience high levels of stress may have difficulty forming emotional bonds with their babies or providing responsive care.
4. Risk to Child Development: Stress in postpartum mothers may increase the risk of negative impacts on child development in the long term. Recognizing this relationship allows for the design of interventions that aim not only at maternal health but also at overall child development.
5. The Role of Social Support in Reducing Impact: For women who have recently given birth, social support may operate as a buffer against the negative effects of stress.
6. Long-term Impact on Family Wellbeing: Stress in postpartum mothers not only affects the individual but can also impact the overall well-being of the family.
7. Implications on the role of the mother in the family and society: stress in puerperal mothers can affect their role in the family and society.
8. Emphasis on prevention through pre-pregnancy education: Improving prenatal education is also necessary, as evidenced by the significance of comprehending how stress affects postpartum moms.

## Conclusion

Of the various aspects that have been discussed, several key points can be identified: First, an in-depth understanding of the specific sources of stress in the puerperal mother helps to detail a more focused and contextualized intervention; secondly, the introduction of effective coping strategies and the important role of social support opens up opportunities to establish a supportive environment and build psychological resilience of postpartum mothers. However, it should be recognized that our understanding of stress in puerperal mothers still has limitations. In addition, the study is observational, and causation cannot always be established with certainty.

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## Contribution of authors

I Komang Lindayani: collected and write the paper  
Ira Nurmala: analysed the data and edited the paper  
Nunik Puspitasari: analysed the data and edited the paper.

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