FACTORS AFFECTING THE RISK OF POSTPARTUM DEPRESSION

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ABSTRAK
Postpartum depression is a common problem that occurs in the perinatal period around 7-13% of postpartum women can have short-term and long-term effects that will affect the mother, baby, and social environment. This study aims to review the evidence related to the factors that influence the risk of postpartum depression. Scoping review uses the framework from Arksey and O'Malley, which performs a focusing review with the PEO framework, conducts literature searching using relevant databases and gray literature, selects relevant studies using inclusion and exclusion criteria, and conducts critical appraisal for assessment. article quality, perform data extraction, analyze and report results, there were 10 articles selected and got Grade A. 10 articles were obtained from research conducted in developing countries, namely 2 articles from Nepal, 1 from Malaysia, 1 from Uganda, 2 articles from Indonesia, 1 from Egypt, 1 from Kosova, 1 Iran, and 1 article from Ethiopia 14 factors influence the risk of postpartum depression, namely age, parity, gender, unplanned/expected pregnancy, family mental health history, social support, history of anxiety/depression, family problems, obstetric complications, parenting stress, type of delivery, financial problems, partner violence. Screening and intervention programs for women who are prone to postpartum depression should be carried out during pregnancy and are recommended to overcome perinatal mental health problems and improve maternal mental health.

Keywords:
Postpartum, Postpartum depression, PPD, Risk Factors, Postpartum, Postpartum

Introduction
Mental health disorders are the primary metric used to assess the global burden of disease. The number of people with mental disorders globally is increasing, more than 300 million people are estimated to suffer from depression, equivalent to 4.4% of the world’s population and depression is the fourth most common disease in the world (WHO, 2017). Approximately 20% of women and 12% of men, at some time in their lives, have experienced depression, namely, prolonged sadness decreased motivation, and lack of energy to carry out daily activities (Mclachlan et al., 2012). Depressive disorders can occur repeatedly that will affect anyone from time to time in their life, especially in
women who go through several periods in their lives, the transition to motherhood involves major challenges in psychological, social, and biological domains. For a woman with, or who is prone to, severe mental illness, this transition may prove very complex and difficult (Jones et al., 2014). The perinatal period is associated with an increased risk of severe mental disorders. The period of pregnancy until the time of delivery is a complex event that affects a mother. Many changes can cause disturbances both from the physical and psychological aspects. These changes can become a depression after giving birth is called postpartum depression or Postpartum Depression (Maharjan et al., 2019).

Postpartum depression is a common problem that occurs in the perinatal period and globally affects about 7-13% of postpartum women. The prevalence of postpartum depression in Arabia is 15.8%, in South Africa 34.7%, in China 11.2%, in Japan at 17%.5, and in Canada 8% show symptoms of depression during the 12 weeks of the postpartum period. Depressive disorders are more at risk in the postpartum period because at this time there will be serious mood disorders caused by a woman's new role, adjusting to these changes can cause psychological difficulties in women (Prayoga et al., 2016; Sadat et al., 2014). Postpartum depression can be defined as non-psychotic depression that occurs during the first 12 months after delivery and in recent studies can occur up to 3 years postpartum. Postpartum depression affects approximately one in 10 new mothers within the first year after delivery and has the potential to negatively impact a new mother's health and ability to care for her baby (Toru et al., 2018). Symptoms of postpartum depression include depressed mood, loss of interest or pleasure in activities, appetite disturbances, sleep disturbances, physical agitation or psychomotor slowing, weakness, feeling useless, difficulty concentrating, and even suicidal ideation. Experienced by anyone (Yang et al., 2022). The risk factors that often occur in PPD are mostly sociocultural and psychological. History of depression, marital problems, lack of social support, stressful life events, and low socioeconomic status were the most frequently reported factors (Cirik et al., 2016). Postpartum depression is a disorder that will affect mortality and morbidity that has an impact on the long and short term for mothers, babies, partners, and the surrounding environment. Untreated postpartum depression can have long-term adverse effects. Postpartum depression will affect the mother to become chronic and will affect the quality of her life. While the impact on children of depressed mothers will have a long-term impact on negative parenting, and breastfeeding problems, and will have an impact on child development disorders such as behavioral, emotional, cognitive, and interpersonal problems in the future (Ema et al., 2015; Monasterolo et al., 2017).

Research methods

A. Scoping Review

Scoping review is a theoretical review that is structured to classify sources of data and information to map evidence related to “factors that influence the risk of postpartum depression” with the framework stages (Arksey and O'Malley 2005) there are 5 stages, namely: 1. Identifying research questions, 2. Identify relevant articles, 3. Selection of articles, 4. Map data, 5. Compile, summarize and report the results.

1. Identify research questions

Researchers will use the Population, Exposure, and Outcome (PEO) framework to identify topics in the literature search. Use of PEO to help manage and solve research
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questions by identifying questions (Bettany-Saltikov 2012).

Results and Discussion
A. Article Selection
After identifying the keywords, it is necessary to determine the relationship by using the Boolean operators OR and AND. All databases, and even Google, use Boolean operators to organize flexible searches. OR » finds records containing any terms, AND » combines two words or phrases, the database will retrieve only records containing both terms (EBSCO health, 2018). After searching for articles with the next keyword, namely rose's selection of articles using a prism flow chart to transparently describe the process carried out. A prism flow chart is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses. (PRISMA, no date; Liberati et al., 2009; Moher et al., 2009; Peters et al., 2015).

![Prism Flow Chart]

Table 1
Data charting

<table>
<thead>
<tr>
<th>NO.</th>
<th>Judul</th>
<th>Penulis/Tahun</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prevalence and Factors Associated with Depressive Symptoms Among Post-Partum Mothers in the Dhanusha District of Nepal</td>
<td>Maharjan et al., 2019</td>
</tr>
<tr>
<td>2.</td>
<td>Prevalence and risk factors for postnatal depression in Sabah, Malaysia: A cohort study</td>
<td>Mohamad Yusuff et al., 2015</td>
</tr>
<tr>
<td>3.</td>
<td>Prevalence of postpartum depression and associated factors among women</td>
<td>Atuhaire et al., 2021</td>
</tr>
<tr>
<td>4.</td>
<td>Postpartum Depression in Indonesian Mothers: Its</td>
<td></td>
</tr>
</tbody>
</table>
Changes and Predicting Factors  
(Nurbaeti et al., 2018)

5. Prevalence and Determinants of Postpartum Depression in Sukoharjo District, Central Java  
(Ria et al., 2018a)

6. Prevalence of postpartum depression regarding mode of delivery: a cross-sectional study  
(Meky et al., 2020)

7. Prevalence of postpartum depression at the clinic for obstetrics and gynecology in Kosovo teaching hospital: Demographic, obstetric, and psychosocial risk factors  
(Zejnullahu et al., 2021)

8. Effect of mode of delivery on postpartum depression in Iranian women  
(Sadat et al., 2014)

9. Identifying the factors associated with depressive symptoms among postpartum mothers in Kathmandu, Nepal  
(Bhusal & Bhandari, 2018)

10. Postpartum depression and associated factors among mothers in Bahir Dar Town, Northwest Ethiopia  
(Abebe et al., 2019)

B. Critical Appraisal

After doing data charting, the next step for the researcher is to do a critical appraisal. Critical appraisal is the process of criticizing or evaluating research evidence whose purpose is to assess the methodological quality of a study in determining the extent to which a study has addressed its design, behavior, and analysis.

The author independently records information from existing data and then collects various findings from the article, in this mapping step the author categorizes the findings of interesting studies that are reviewed and described in this section. After mapping the data, the next step is to analyze the quality of the articles as a whole through the critical appraisal process which is used to assess the quality of the selected articles. The tool chosen to assess the quality of the article is the Joana Briggs checklist from the Joana Briggs Institute.

This article is rated by a checklist or tool. To assess the quality of 10 articles that are in the critical appraisal stage, the author uses grades A, B, and C to distinguish the categories of articles that fall into the GOOD (Grade A), GOOD ENOUGH (Grade B), and LESS GOOD (Grade C) categories. Scoring points are represented by numbers 0-3 with qualifications:

0 : Not applicable / not applicable
1: No
2: Not clear
3: Yes

<table>
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<th>Grade</th>
<th>Categories</th>
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<tbody>
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<td>A</td>
<td>Baik</td>
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<tr>
<td>19-24</td>
<td>B</td>
<td>Cukup Baik</td>
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<tr>
<td>&lt;18</td>
<td>C</td>
<td>Kurang Baik</td>
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</tbody>
</table>

Table 2

JBI Critical Appraisal Cross-Sectional Studies
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<table>
<thead>
<tr>
<th>No</th>
<th>Study</th>
<th>A1</th>
<th>A3</th>
<th>A5</th>
<th>A9</th>
<th>A10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are the criteria for inclusion in the sample clearly defined?</td>
<td>4</td>
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<td>2</td>
<td>Has the subject and place of research been explained in detail?</td>
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<td>3</td>
<td>Are cases measured validly and reliably?</td>
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<tr>
<td>4</td>
<td>What are the objectives, and standard criteria used to measure the condition?</td>
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<tr>
<td>5</td>
<td>Have confounding factors been identified?</td>
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<tr>
<td>6</td>
<td>What are the strategies for controlling confounding factors?</td>
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<tr>
<td>7</td>
<td>Are results measured validly and reliably?</td>
<td>3</td>
<td>4</td>
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<tr>
<td>8</td>
<td>Is the statistical analysis used correctly?</td>
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<td>28</td>
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<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

Information
Y: Yes
N: No
U: Unclear
NA: Not Applicable

A. Results of Data Analysis

1. Characteristics by Country
   From 10 articles, research was conducted in developing countries, namely 2 articles from Nepal, 1 Malaysia, 1 Uganda, 2 articles from Indonesia, 1 Egypt, 1 Kosova, 1 Iran, and 1 article from Ethiopia.

2. Parity
   The article [A1] stated that one of the factors that were significantly associated with postpartum depression was the number of which reported that primiparous mothers had a higher risk of postpartum depression than multiparous mothers. A person's age can affect pregnancy. Pregnant women during Children. Article [A5] also states that postpartum depression is directly but primiparous mothers. This finding is following Kusuma's research (2017).

   Article [A1] states that one of the factors that are significantly associated with postpartum depression is the age of marriage. Article [A5] states that there is a Relationship between maternal age and postpartum depression through parity. The higher the age of the mother, the higher

Discussion
Based on the 10 articles that have been obtained, they are grouped into mapping themes, namely the factors that influence the risk of postpartum depression, and are divided into 14 sub-themes, as follows:

1. Age

the parity. The higher the parity, the lower the postpartum depression, because multiparous mothers are more experienced in parenting than negatively affected by parity. Multiparous mothers are less likely to experience postpartum depression than primiparous mothers. This finding is in agreement with Ibrahim et al. (2012) who reported that primiparous mothers experienced higher postpartum depression than multiparous mothers. This is because multiparous mothers have experienced childbirth before, thereby reducing postpartum depression. For mothers who are giving birth for the first time, they are emotionally vulnerable so the possibility of marital conflict, in the end, becomes a source of stress that leads to depression (Mohamad Yusuff et al., 2015). Inexperienced mothers will have an impact on the care given to the baby. Primiparous women do not have experience in caring for children, causing fear and worry if they make mistakes in caring for babies (Maharjan et al, 2019).

2. Gender
The article [A1] reported that the sex of the baby is one of the factors that are significantly associated with postpartum depression. Article [A4] shows that one of the factors that influence changes in postpartum depression for 3 months is the non-acceptance of the baby’s gender. Acceptance of the baby’s sex was correlated with an increase in PPD, possibly influenced by the parents’ preference for the baby’s gender. For example, a mother may be indifferent to the sex of her baby, but a spouse or family may have a hereditary preference for sons over daughters. If the newborn is a girl, this can affect the mother’s acceptance of the baby’s gender (Escriba et al., 2011).

3. Planned or unexpected pregnancy
Planned or unintended pregnancy is a factor in postpartum depression [A1, A5, A10]. This can be explained because preparation for motherhood is inadequate for pregnancy, childbirth, and breastfeeding, which causes mothers to feel anxious, helpless and have less (or no) ability to cope with all the changes and challenges while caring for their babies (Toru et al., 2018).

Unplanned pregnancy has a significant relationship with social support and possibly the husband’s support that the mother receives. Unwanted pregnancies are followed by socioeconomic factors, such as the increased financial need for newborns, and psychological readiness to become mothers (Maharjan et al., 2019). Unplanned pregnancy is caused by several factors such as multiparity, low education level, not having a partner, to experiencing intimate partner violence (Goossens et al., 2016).

4. Family mental health history
There is a relationship between a family history of depression and the risk of postpartum depression because a family history of psychiatric illness increases the risk of similar conditions in close family members (Fiala et al., 2017). A study explained (Thursday, 2022) that children who are educated by mothers who have mental disorders can get bad parenting for their children. This parenting can increase the risk of stress, depression, and decreased self-confidence, making children afraid of their parents.

5. Social support
Article [A1] stated that the factors that were significantly associated with postpartum depression were ethnicity, age at marriage, number of children, sex of the baby, planned or unplanned pregnancy, health problems of the baby, family history of depression, unhappiness with in-laws, husband's absence during pregnancy. Article [A2] states that one of the factors associated with postpartum depression is antenatal depression, lack of assistance with the care of the baby from the husband, dissatisfaction with the marital relationship, and consistent worries about the baby. Article [A5] states that psychological stress, type of delivery, unwanted pregnancy, family income, parity, and family support are direct risk factors for postpartum depression.

During the postpartum period, women must recover from the stresses of pregnancy, childbirth, and the physiological adaptations after delivery.
To reduce this postpartum stress, mothers are advised to get social support from their husbands/partners, family relations, and friends. Social support can prevent PPD and its side effects, optimize the mother's positive self-image and improve her quality of life (Harandi et al., 2017).

6. Obstetric complications

Complications during pregnancy and delivery were directly related to postpartum depression and were statistically significant [A1, A2, A3, A7, A9, A10]. Complications that were significantly associated with postpartum depression, namely: hypertension, hyperemesis, risk of abortion, risk of preterm delivery, anemia, urinary tract infections, hyperthyroidism, allergies, gestational diabetes, hospitalization, and emergency cesarean section were significantly associated with postpartum depression. The risk of postpartum depression increases with the increasing number of complications (Meky et al., 2020).

7. Parenting stress

An article [A3] stated five factors associated with PPD were perceived low social support, HIV-positive status, rural residence, obstetric complications, and excessive crying of the baby. Article [A4] also reported that predicting one of the factors that influence changes in postpartum depression over 3 months is parenting stress. This is following research from Kim, 2014 which states that if babies cry a lot and women do not receive or have low social support from their husbands/partners, they may lack sleep leading to PPD (Kim et al., 2014). Babies who cry excessively may not be able to breastfeed properly and this causes anxiety in the mother, thereby potentially contributing to the development of PPD (Wubetu et al. 2020). 11. Type of delivery

There is a relationship between the mode of delivery and the risk of postpartum depression [A5, A6, A7, A8] This is to a study that explained that women who gave birth by cesarean were more at risk for postpartum depression than women who gave birth vaginally (Cirik et al., 2016). Mothers who give birth by cesarean section will always remember the process of delivery and have a fear of giving birth, which makes the mother distrust because she has gone
through difficult circumstances (Turkcapar et al., 2015).

Financial problems
Economic factors are a benchmark for a person's welfare, low income is more interpreted as being more susceptible to illness, stress, and postpartum depression. This is because postpartum mothers who have good economic problems will not think about economic problems during the postpartum period but mothers who experience financial problems think more about the addition of a new family (Ria et al., 2018b). Families who receive the birth of a baby with a financial burden can experience increased stress, this stress can interfere with parental behavior, making the transition to enter the role of parenting more difficult (Fiala et al., 2017).

8. Couple Violence
Domestic violence increases the risk of postpartum depressive symptoms [A5, A10]. This is under research (Ankerstjerne et al., 2022) which explains that violence can cause psychological trauma, especially if the act is done in front of other people, neighbors, friends, and relatives. Psychological trauma can affect a person to be less confident and think that he is not worthy to be a mother in caring for his baby and cannot trust other people he can rely on. A study found that postpartum depression symptoms were 2.8 times higher in women who experienced stressful life events compared to mothers who did not experience them (Abebe et al., 2019).

Similarly, findings (Ahmad et al., 2018) Intimate partner violence (IPV) causes physical, psychological, or sexual harm to those in the relationship. These behaviors include acts of physical aggression, forced sexual intercourse, and other forms of sexual coercion as well as various controlling behaviors. A household survey conducted in Peninsular Malaysia revealed that 7.8% of women were emotionally abused, 5.0% were physically abused and 1.7% were sexually abused. The results of the scoping review conducted contained 14 factors that influence the risk of postpartum depression, namely age, parity, gender, unplanned/expected pregnancy, family mental health history, social support, history of anxiety/depression, family problems, obstetric complications, and stress. Parenting, type of delivery, financial problems, and partner violence. The high prevalence of postpartum depression has an impact on women, babies, and their families. Screening and intervention programs for women who are prone to postpartum depression should be carried out during pregnancy and are recommended to overcome perinatal mental health problems and improve maternal mental health. Early identification of high-risk women, as well as risk factor assessment during the antenatal period, early postpartum depression screening, and timely therapeutic approaches, to improve women's social and psychological functioning.

Conclusion
The results of the scoping review conducted contained 14 factors that influence the risk of postpartum depression, namely age, parity, gender, unplanned/expected pregnancy, family mental health history, social support, history of anxiety/depression, family problems, obstetric complications, and stress. Parenting, type of delivery, financial problems, partner violence. The high prevalence of postpartum depression has an impact on women, babies, and their families. Screening and intervention programs for women who are prone to postpartum depression should be carried out during pregnancy and are recommended to overcome perinatal mental health problems and improve maternal mental health. Early identification of high-risk women, as well as risk factor assessment during the antenatal period, early postpartum depression screening and timely therapeutic approaches, to improve women's social and psychological functioning.
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First publication right:
Jurnal Health Sains

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