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Review Article

Psychological Health of Postpartum Women during the COVID-19 Pandemic

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Abstract: *Background:* During the COVID-19 pandemic, concerns over exposure to the virus are getting higher. Quarantine regulations and social distancing policies can worsen depression and reduce access to healthcare and social support. Therefore, it is important to prevent or reduce the occurrence of psychological disorders in postpartum women, especially during the COVID-19 pandemic. *Objectives:* This scoping review aims to review the psychological condition of postpartum women during the covid-19 pandemic. *Method:* This scoping review used the Arksey & O'Malley. *Results:* The study obtained 4 articles and they all had grade a based on the CAPS method using a quantitative cross-sectional design. The themes were categorized into two, namely, postpartum women's psychological problems and the prevalence of postpartum depression during the COVID-19 pandemic.
Keywords: Psychology, postpartum, COVID-19 pandemic.

INTRODUCTION

Postpartum (puerperium) is the period of adjustment after the delivery of the placenta during which the mother's reproductive system returns to its normal pre-pregnant state. The period generally starts from 2 (two) hours after the birth of the placenta until 6 weeks (42 days) (Ani & Saleh, 2021).

During the postpartum period, women are vulnerable to depression, which is characterized by mood swings, disappointment, and sleep disturbances. Previous studies have identified biological, psychological, socioeconomic, and cultural factors associated with the development of postpartum depression. The COVID-19 pandemic has caused restrictions on all routines so that a person will be more passive to carry out activities outside the house and it can disturb or worsen the mental health of postpartum women (Liang *et al.,* 2020).

During the COVID-19 pandemic, concerns about exposure to the virus are even higher. Quarantine and social distancing regulations can worsen depression and reduce access to healthcare and social support. Therefore, it is important to prevent or reduce postpartum depression, especially during the COVID-19 pandemic. The support can be in the form of information, motivating behavior, or something that can make pregnant women feel loved and cared for (Irwan, 2018). Both physical and mental support can come from other people like parents, husbands, children, or relatives (Ayuni, 2020).

Previous studies have compared women who gave birth during the COVID-19 pandemic with women who gave birth at the same health facilities before the COVID-19 pandemic based on the Edinburgh Postnatal Depression Scale (EPDS) (Pariente *et al.,* 2020). Women who gave birth during the pandemic experienced higher levels of stress during childbirth and provided poorer ratings of the quality of care received. Besides, the percentage of postpartum depression was higher in women who gave birth during the pandemic (Mariño-Narvaez *et al.,* 2020).

METHOD

This scoping review method used the Arksey & O'Malley framework which consists of 5 stages, namely identifying scoping review questions, identifying relevant articles, article selection, data charting, and compiling, summarizing, and reporting results. Search articles used the PubMed, Clinicalkey Student, and Wiley Online Library databases. Selection of articles used the Prism Flow Chart to describe the

flow of article search and perform Critical Appraisal to assess the quality of articles.

Stage 1: Identifying Scoping Review Questions

"How is the experience of postpartum women during the COVID-19 pandemic?" The framework used PEOs (Population, Exposure, Outcomes/Themes).

Table 1: Framework Populations, Exposure, Outcome (PEO)

P (Population)	E (Exposure)	O (Outcomes) / (T) Themes
Postpartum women	COVID-19 pandemic	Psychology

Based on the framework, the research question was obtained, namely "How is the psychological health of postpartum women during the COVID-19 pandemic?"

Stage 2: Identifying Relevant Articles

Article search used a strategy that was developed using some databases and sources to search for grey literature.

The databases used in this research were PubMed, Science Direct, and Wiley Online Library. The identification of relevant literature according to the inclusion and exclusion criteria.

1. **Inclusion Criteria**
   a. Articles published from 2019-2020
   b. Articles published in English or Indonesian
   c. Articles that discuss the psychological health of postpartum women during the COVID-19 pandemic

2. **Exclusion riteria**
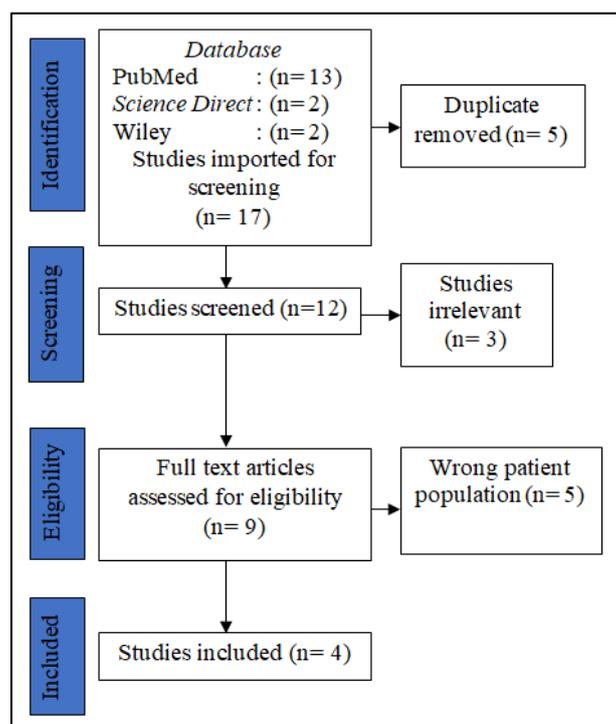   a. Opinion articles
   b. Review articles
   c. Commentary
   d. Book review

3. **Stage 3: Article Selection**

The initial stage in the article selection was conducting a literature search from 3 databases, namely PubMed, Clinikalkey Student, and Wiley Online Library by entering the selected keywords. Then, 53 articles were found that were considered to be able to help answer scoping review questions, with the following details:
   1. PubMed: 3 out of 31 articles
   2. Science Direct: 2 out of 23 articles
   3. Wiley Online Library: 2 out of 66 articles

A total of 17 articles were selected and 5 of them were duplicate articles and the remaining was 12 articles. Then, articles were eliminated based on the title and abstract with the result that 3 articles were excluded because they were not relevant and the remaining 9 articles were relevant. Then a full text-reading of the article was carried out, with the result that 5 articles were excluded due to errors in the population. Thus, the scoping review used 4 articles.

Stage 4: Data Charting

Table 2: Data Charting

| No.	Title	Results
A1	(Guvenc *et al.,* 2020) Anxiety, depression, and knowledge level in postpartum women during the COVID-19 pandemic	The prevalence of depression was 34.0%. The mean anxiety and COVID-19 knowledge scores were 42.69 ± 9.93 and 9.69 ± 1.94 respectively. There was a statistically significant difference between the anxiety scores and depression status ($p < 0.001$) of the postpartum women. There was a statistically significant difference between fear of contracting COVID-19 for themselves ($p = 0.01$) and infants ($p = 0.01$) and postpartum depression (PPD).
A2	(Ostacoli *et al.,* 2020) Psychosocial factors associated with postpartum psychological distress during the Covid-19 pandemic: a cross-sectional study	The results showed that the prevalence of postpartum stress and post-traumatic stress symptoms among women who gave birth during the Covid-19 pandemic was higher than that reported in previous studies before the pandemic.
A3	(Liang *et al.,* 2020) Prevalence and factors associated with postpartum depression during the COVID- 19 pandemic among women in Guangzhou, China	The prevalence of PPD in women 6-12 weeks postpartum was 30.0%. The contributing factors covered immigrant women, persistent fever, poor social support, concerns about contracting COVID-19, and certain precautions.
A4	(Stojanov *et al.,* 2020) The risk for nonpsychotic postpartum mood and anxiety disorders during the COVID-19 pandemic	The results showed that 14% of postpartum women had a risk of NPMAD during the third week of the pandemic and the level of mental disorders in postpartum women increased during the COVID-19 pandemic.

RESULTS

1) Distribution of Article Characteristics

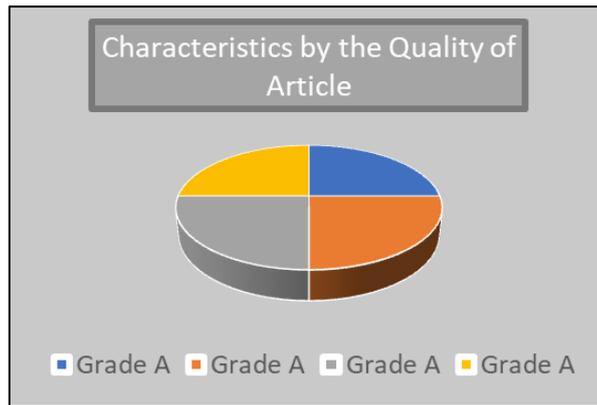Distribution of the characteristics of the articles that have been extracted and then selected by categorizing as are as follows: Author, Year, Method, Country, Grade.

Based on the results of critical appraisal, the 4 articles used quantitative studies. The characteristics of the articles are illustrated in the following diagram.
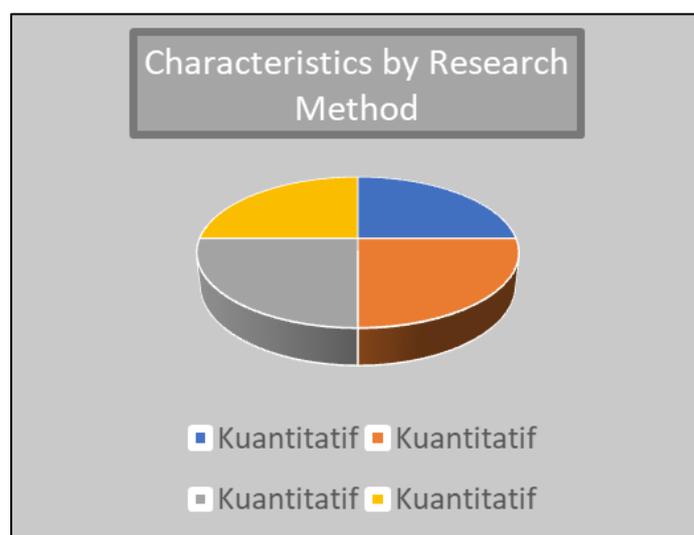

Based on the quality of the research, the articles that have passed the Critical Appraisal were then grouped based on the quality of the articles. From the results of the critical appraisal, the 4 articles were included in the category (Grade) A.

Characteristics by the Quality of Article

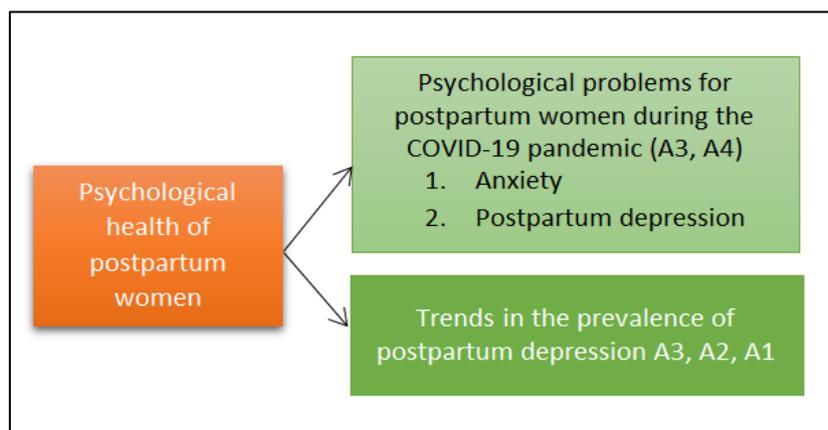■ Grade A ■ Grade A ■ Grade A ■ Grade A

The characteristics of the research based on the location of research were divided into 4 countries

spread across some parts of the world. The list of the country can be seen in the following diagram.

Characteristics by Country

■ Turki ■ Italy ■ China ■ Serbia
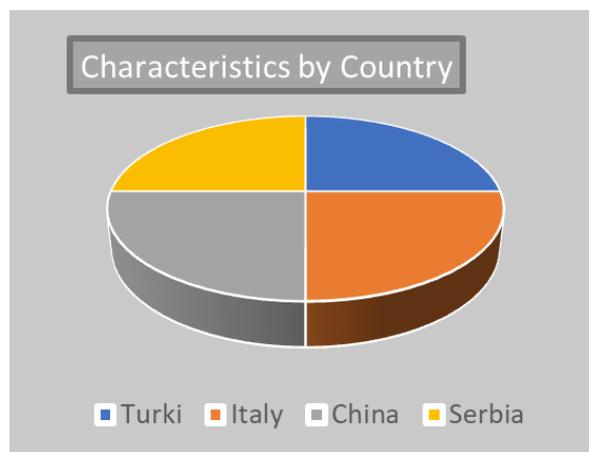
2) Mapping the Theme
The data extracted from this scoping review article were organized into some themes. The themes of this review covered:

Psychological health of postpartum women

Psychological problems for postpartum women during the COVID-19 pandemic (A3, A4)
1. Anxiety
2. Postpartum depression

Trends in the prevalence of postpartum depression A3, A2, A1

The study mapped 3 themes, namely factor affecting postpartum depression and the prevalence of postpartum depression.

DISCUSSION
1. Problems Faced by Postpartum Women during the COVID-19 Pandemic (A3, A4)
a) Anxiety

The COVID-19 pandemic has caused many restrictions on almost all public services, both in terms of access and quality, including restrictions on maternal and neonatal health services. Therefore, these conditions can create psychological problems for pregnant women and postpartum women which can cause anxiety (Yuliani & Aini, 2020). A previous study reported that symptoms of depression and anxiety in

pregnant women during the COVID-19 pandemic were higher than before including the tendency to hurt themselves (Samsudin, 2020).

The results also showed that 87% of postpartum women experienced anxiety with the majority in the mild- moderate category. This illustrates that the majority of postpartum women in the Baturraden District experienced anxiety during the COVID-19 pandemic (Yuliani & Aini, 2020).

b) Postpartum Depression

One of the factors affecting postpartum depression during the COVID-19 pandemic was in women with 6-12 weeks postpartum (30.0%). The multivariate logistic regression model identified important factors including immigrant women, persistent fever, poor social support, and concerns about contracting COVID-19 (Liang *et al.,* 2020). Occupational status can affect postpartum depression. There was a statistically significant difference between women's occupation and depression status in which the depression level of women who do not work is lower than that who works.

A previous study (Stojanov *et al.,* 2020) showed that higher EPDS can be seen in the absence of social support (p < 0.01). During pandemics and emergencies, 97 (89.8%) respondents were not offered assistance in the form of first aid kits, while 11 (10.2%) respondents were offered assistance by family members. In 106 (98.1%) cases, women did not receive any support, and 2 (1.9%) had family support; 19 8 (17.6%) women feel it is important for them to get support and access to health services during pandemics to get health protection information for them and their families.

2. Trends in the Prevalence of Postpartum Depression (A3, A2)

The prevalence of PPD during the pandemic was quite high, namely 30.0%, which is comparable to levels observed in previous studies (Liang *et al.,* 2020). The level of women's anxiety is at a moderate level according to STAI. However, women with a high risk of PPD had higher levels of anxiety, and as their anxiety levels increased, their risk of PPD increased too. Studies showed that anxiety experienced during the pandemic was an important risk factor in the development of PPD (Guvenc *et al.,* 2020).

The prevalence of postpartum depression can be assessed from the level of postpartum depression and Post- traumatic stress symptoms (PTSS) and relational attachment style, which cover the Edinburgh Postnatal Depression Scale (EPDS), a 10-item, four-point Likert scale questionnaire that assesses pregnancy and postpartum depression. Total scores ranged from 0 to 30, with higher scores indicating severe depression. Scores between 11 and 13 were considered optimal for screening and detection of depression symptoms. Impact of Events Scale-Revised (IES-R), a 22-item questionnaire consisting of three subscales (8 items for intrusion, 8 for avoidance, and 6 for hyperarousal). The scale assessed the subjective distress caused by the traumatic event. For this study, women were asked to refer to their last birth in responding to the questionnaire. A score of 33 is the best limit for identifying moderate PTSS, while a score of 24 indicates mild PTSS.

CONCLUSION

The COVID-19 pandemic has affected the psychological condition of postpartum women. The prevalence of postpartum depression and anxiety during the COVID-19 pandemic increase compared to before the pandemic due to some factors. The covid-19 pandemic affects the experience felt by mothers undergoing the postpartum period with the emergence of psychological responses in the form of anxiety, depression, and fear. Therefore, health workers need to pay more attention to the health of postpartum women both mentally and physically. The social support and the correct information obtained help postpartum women in overcoming their anxiety.

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