



Incidences of Postpartum Depression in Adolescent Mothers: Scoping Review

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ABSTRACT

Background: Adolescent pregnancy is a pregnancy that occurs at the age of adolescents or less than 20 years. Postpartum depression is a condition of severe depression that occurs within 4-6 weeks after giving birth. **Objective:** To explore the scientific evidence of obstetrics related to the incidence of postpartum depression in adolescent mothers. **Design:** scoping review using the PRISMA-ScR checklist Method: The authors use the Arksey and O' Malley framework. The article search used three databases namely PubMed, Proquest, and Science Direct covering from January 2012 to 2022. An assessment tool was used. Review selection and characterization were carried out using critical appraisal using the Joanna Briggs Institute (JBI) study tool. **Results:** Out of 809 potentially relevant articles, 7 articles were included. The research articles came from 5 different countries, and the methods were RCT, cross-sectional, and qualitative. The results are presented in three themes: the prevalence of postpartum depression in adolescent mothers, risk factors for postpartum depression in adolescent mothers, and the implementation of health services and obstacles in dealing with postpartum depression in adolescent mothers. **Conclusion:** Based on 7 articles reviewed, it was found that 32% of adolescent mothers have the possibility of postpartum depression that requires immediate action on early assessment, detection, and intervention. Factors that contribute to the development of postpartum depression in adolescent mothers include high social support, marital problems, pressure from parents, and economic problems. Continuing midwifery care, appropriate strategies, and preventive measures including regular screening for adolescent mothers and mental service providers are needed to reduce the risk of postpartum depression in adolescent mothers.



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ABSTRAK

Latar Belakang: Kehamilan remaja merupakan kehamilan yang terjadi pada usia remaja kurang dari 20 tahun. Depresi postpartum adalah suatu kondisi depresi berat yang terjadi dalam 4-6 minggu setelah melahirkan. **Tujuan:** Menggali bukti ilmiah kebidanan terkait kejadian depresi postpartum pada ibu remaja. **Desain:** *scoping review* menggunakan ceklist PRISMA-ScR **Metode:** Penulis menggunakan kerangka Arksey dan O' Malley. Pencarian artikel menggunakan tiga database PubMed, Proquest, Science Direct yang mencakup dari Januari 2012 sampai 2022. Alat penilaian digunakan. Seleksi review dan karakterisasi dilakukan dengan penilaian critical appraisal menggunakan studi *Joanna Briggs Institute (JBI) tool*. **Hasil:** Dari 809 artikel yang berpotensi relevan, 7 artikel dimasukkan. Artikel penelitian tersebut berasal dari 5 Negara yang berbeda, dan metode RCT, *Cross sectional* dan kualitatif. Hasilnya disajikan dalam tiga tema : Prevalensi depresi postpartum pada ibu remaja, faktor resiko depresi postpartum pada ibu remaja dan pelaksanaan layanan kesehatan dan hambatan dalam

menangani depresi *postpartum* pada ibu remaja. Kesimpulan: Berdasarkan 7 artikel yang dilakukan review, ditemukan bahwa bahwa 32% ibu remaja memiliki kemungkinan depresi *postpartum* yang memerlukan tindakan segera pada penilaian awal, deteksi dan intervensi. Faktor-faktor yang berkontribusi terhadap perkembangan depresi *postpartum* pada ibu remaja termasuk dukungan sosial yang tinggi, masalah perkawinan, tekanan dari orang tua dan masalah ekonomi. Asuhan kebidanan berkesinambungan, strategi dan tindakan pencegahan yang tepat termasuk skrining secara berkala untuk ibu remaja dan penyedia layanan mental diperlukan untuk mengurangi resiko depresi *postpartum* pada ibu remaja.

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INTRODUCTION

In 2020 it was estimated that depression was in the fourth rank in the world (Nugraheni, 2017). Postpartum depression is a more serious problem than the postpartum blues because it occurs very quickly. Postpartum blues is at the lowest level, while postpartum psychosis was the most severe depression. Women who experience symptoms of the postpartum blues can progress to postpartum depression or even psychosis (Aryal et al., 2018). The incidence of postpartum depression is influenced by several factors such as age, parity, economic status, and social support (Santos et al., 2021). Risk factors for postpartum depression include poor marital relations, low socioeconomic status, prenatal depression, childhood illnesses, obesity, unwanted pregnancies, and mental disorders during pregnancy. Maternal psychosocial conditions can trigger postpartum depression (Fatmawati & Gartika, 2021).

Asia has various incidences of postpartum depression from 25% to 85%. In Indonesia, the incidence of postpartum depression is 50-70% (Da Silva Tanganhito et al., 2020). The increase occurs in some lower-middle-income countries. The incidence of postpartum depression there is 1.9%-82.1%. Meanwhile, the incidence in upper-middle-income countries is 5.2%-74%. Postpartum depression in adolescent mothers is as much as 15% - 55.6% (Alam et al., 2021) (Fatmawati & Gartika, 2021) (Nugraheni, 2017). The results of the 2012 United Nations International Children's Emergency Fund (UNICEF) research in Indonesia found that the incidence of 15 years old adolescents' marriages was around 11%, while those who married at 18 years old were around 35%. Early marriage is most common in Africa and Southeast Asia. Indonesia is ranked second in ASEAN in terms of young marriage. In 2018, out of a total of 627 million Indonesians, 11.2 percent of women were married at the age of 20-24 years old. While the marriage of women who were less than 17 years old was 4.8 percent. According to the Central Statistics Agency (2019), adolescent marriages under the age of 16 were around 1.8 percent and the percentage of adolescent marriages under the age of 15 was 0.6 percent. Collectively, one in nine girls under the age of 18 marry young. The highest number of child marriages aged 17 and under was found in South Kalimantan, at 27.82 percent.

Adolescent pregnancy will bring up some serious psychological conditions because of their psychosocial unpreparedness to carry out the roles and responsibilities as parents to be (Ransing et al., 2020). Adolescent pregnancy not only has reproductive health problems but also causes and consequences of shifts in socio-cultural practices around family care and social exclusion of girls (Abbaspoor et al., 2016). In 2020 the number of adolescent deliveries in the

Special Region of Yogyakarta (DIY) was still high. Most of the adolescents who gave birth were unwanted pregnancies. DIY Health Profile data in 2020 showed that there was an increase in cases of unwanted pregnancy and childbirth in adolescence.

Scoping review is needed because the authors want to know how the development of scientific evidence in midwifery is related to adolescent pregnancy and postpartum depression. The research question in this scoping review is How is the latest scientific evidence related to postpartum depression in adolescent mothers?

The purpose of this scoping review is to explore the latest obstetric scientific evidence related to the prevalence of teenage pregnancy on the incidence of postpartum depression, and risk factors for postpartum depression in adolescent pregnancy. It is so found out the barriers that affect adolescents in getting access to services for symptoms of postpartum depression experienced.

METHOD

This study focuses on the incidence of postpartum depression in adolescents. Analysis of research articles using scoping reviews aims to map evidence-based and identify gaps or differences between scientific studies. The steps for conducting a scoping review refer to the steps of Arksey and O'Malley (2005) including identifying research questions, identifying relevant articles, selecting articles, charting data, combining data, summarizing, and presenting results.

Identifying Research Statements

The PEO (Population, Exposure, and Outcome) framework was used in this scoping review to help search articles, determine inclusion and exclusion criteria, and identify suitable articles. The review question in this scoping review is "What is the latest obstetric scientific evidence regarding the incidence of postpartum depression in adolescent mothers?".

Table 1.
PEO Framework

<i>Framework</i>	Keyword
<i>Population</i>	Adolescent
<i>Exposure</i>	Pregnancy
<i>Outcomes</i>	Postpartum Depression

Identifying relevant articles

Search strategies were discussed among the authors regarding the steps of information sources, search strategies, and selection of scientific evidence. In recent times, the number of studies on adolescent pregnancy and postpartum depression has increased so that the authors limit inclusion to 10 years. The inclusion criteria for articles included: primary articles related to adolescent pregnancy and postpartum depression, articles published in 2012-2022, articles in English, articles focused on reviewing adolescent pregnancy and postpartum depression, original articles, and articles from all countries. The exclusion criteria for articles contained Guidelines and Standard Operating Procedures (SOP), Paper opinions, reviews, commentaries, non-English research articles, and research articles that did not focus on postpartum depression and adolescent pregnancy outcomes.

The articles were searched using several search strategies, such as using keywords, using medical subject headings (MeSH), using truncation, using Boolean operators (OR, AND, and NOT) and paying attention to the use of keywords in British English and American English. This scoping review uses three databases, namely Pubmed, Proquest, and Science Direct. The use of keywords in searching for appropriate research articles is necessary to avoid errors in searching the database and in the reference

list. The keywords used in the search for articles in this study are as follows:

Table 2.
Keywords

Population	Exposure	Outcomes
Adolescent* OR Teen* OR Youth AND	Adolescent pregnant* Young Mother* AND	Postpartum depression* OR postnatal depression*

Selecting Articles

Selection of research articles was carried out by examining article duplication, screening title and abstract, and then reading the complete research article to assess its suitability of the research article with to conduct a scoping review (Arksey & O’Malley, 2005). The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) flow charts and the PRISMA-ScR Checklist are used to provide an overview of the scientific article search protocol, to write review reports, to provide information on the steps of research that have been carried out, and to assess quality to improve the quality of scientific article writing.

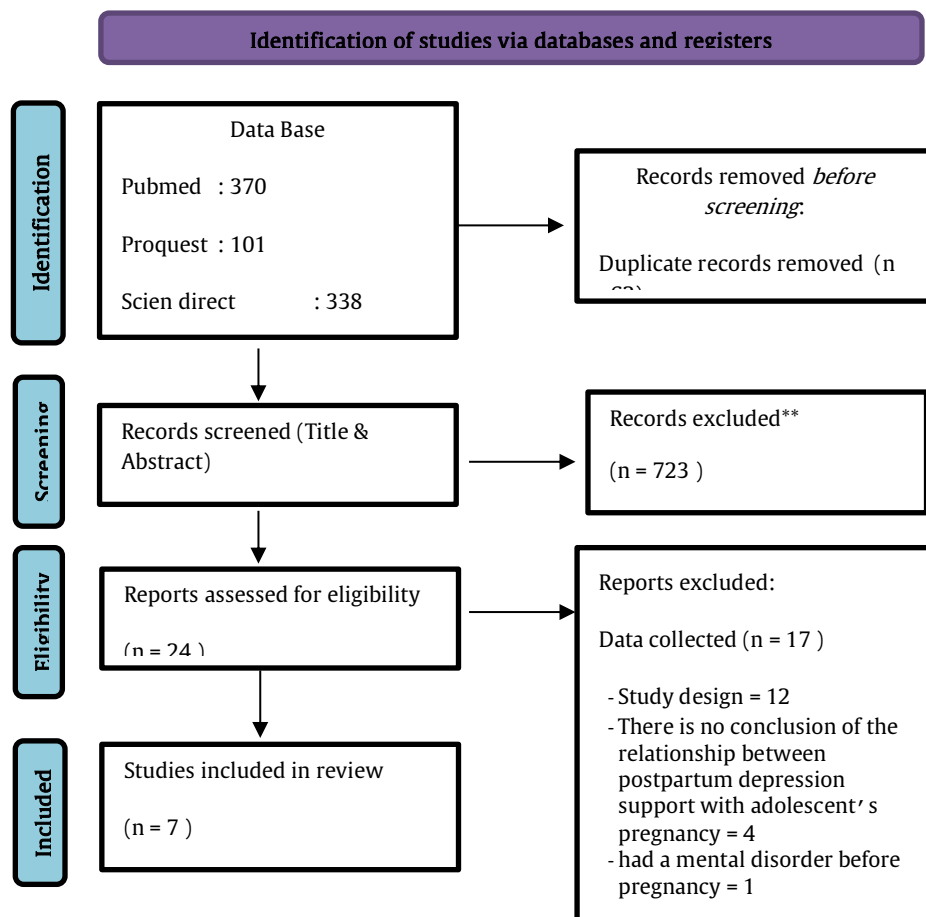


Figure 1. PRISMA Flow Chart

Based on the search results using keywords in the database and search engine, 809 articles were obtained. All articles were included in Mendeley and 62 articles were omitted through article duplication checks. Furthermore, the researchers screened the titles and abstracts of 747 research

articles manually. 723 articles were excluded because they did not meet the inclusion and exclusion criteria. A total of 24 articles were screened. 17 out of 24 articles were excluded because the research data collection was carried

out before 2016. Article extraction and article quality assessment were carried out on 7 eligible articles.

Data Charting

Synthesis of research article data was carried out using data charting adopted from the Joanna Briggs Institute

including data on article authors, article titles, year, country, research objectives, type of research, data collection methods, participants/sample size, and research results(Lockwood et al., 2020). Data charting was done through discussion with the second author.

Table 3.
Data Charting

No	Author(s)/ Year/ Title	Country	Aim	Research Type, Participants/ Sample Size, Data Collection Method	Result
A1	The Relationship between Parental Stress and Postpartum Depression among Adolescent Mothers Enrolled in a Randomized Controlled Prevention Trial Venkatesh et.al, in 2014 (Venkatesh et al., 2014)	United States of America	Analyzing parental stress and depression simultaneously and evaluating postpartum depression among primiparous adolescent mothers. This study was included in the randomized controlled prevention trial of REACH (Relaxation, Encouragement, Appreciation, Communication, Helpfulness)	Research Type: Randomized Controlled Trial. Participants in this study were 106 adolescent mothers consisting of 54 included in the REACH program and 52 in the control group. Instruments: PSI (Parenting Stress Index) questionnaire to measure the stress level of parents and to determine major depressive disorder and previous history of depression. The researchers used the KID-SCID. KID-SCID is a semi-structured interview method that examines DSM-IV axis I disorders	19% of adolescent mothers met the criteria for postpartum depression up to 6 months postpartum. Participants with higher levels of parental stress had a significantly increased risk of developing postpartum depression, which was true for all three parental stress subscales, namely parental stress impairment, dysfunctional parent-child interaction, and child distress. The point is that these results are robust for parental stress before the development of postpartum depression.
A2	Randomized Controlled Trial to Prevent Postpartum Depression in Adolescent Mothers Zlotnick et al. in 2016 (Zlotnick et al., 2016)	United States of America	Developing a PPD prevention intervention tailored to the specific needs of a racially and ethnically diverse group of pregnant adolescents and trying the intervention compared to a control program under clinical trial conditions to determine effect sizes for larger clinical trials. The study targets were designed to evaluate 100 randomized participants and to assess the feasibility of study recruitment and retention procedures for pregnant adolescents.	Research Type: Randomized Controlled Trial. Participants were recruited between February 2007 and August 2008 through an urban prenatal clinic that treated women of all ages and diverse backgrounds. 106 participants were randomized to either the REACH program (n=54) or the control program (n=52). Instruments: EPDS and DSM-IV (KID-SCID)	At least one-third of women report the onset of postpartum depression between 2 to that adolescent tried to 6 months. 32% of adolescents had scores indicating depression at 4 months postpartum. In addition, most researchers classify depression that occurs in the first 6 months after delivery as postpartum depression. This is the onset of a depressive episode during pregnancy, even if the episode extends to the postpartum period, it is not included as a case of postpartum depression because the onset is not completely postpartum. To account for the variability in gestational age at birth among participants, we used delivery as a clear and consistent marker to measure the onset of the condition (postpartum depression).
A3	Reducing the Risk for Postpartum Depression in Adolescent Mothers Phipps et al, in 2020 (Phipps et al., 2020)	South Africa	Estimating the effect of interpersonal therapy-based interventions in reducing the risk of postpartum depression in adolescents.	Research Type: Randomized Controlled Trial. The sample became 250. The intervention group was 129 and the control group was 121 adolescent mothers. Instrument: CDRS-R (children's depression rating scale)	Local community resources available for pregnant and child-rearing adolescents during the study period increased. The number of programs available to support adolescent pregnancy and child-rearing increased in the state of Rhode Island during the study period.
A4	Teenage Mothers in Yaoundé, Cameroon—Risk	Cameroon	Determining the prevalence of perinatal depressive	Research Design: cross-sectional with 1,307 women as the sample.	Local community resources available for pregnant and child-rearing adolescents

	Factors and Prevalence of Perinatal Depression Symptoms Nicolet et al, in 2021(Nicolet et al., 2021)		symptoms in adolescent mothers in the Yaounde area.	Instrument: Edinburgh Postnatal Depression Scale (EPDS)	during the study period increased. The number of programs available to support adolescent pregnancy and child-rearing increased in the state of Rhode Island during the study period.
A5	Effects of Social Support, Parenting Stress and Self-Efficacy on Postpartum Depression among Adolescent Mothers in Jordan. Mohammad, Sabbah, in 2021 (Mohammad, Sabbah, Aldalaykeh, ALBashtawy, Z Abuobead, et al., 2021)	Arabia	Analyzing the effects of social support, parenting stress, and maternal self-efficacy on postpartum depression among adolescent mothers in Jordan.	200 women less than 20 years old, six to eight weeks postpartum, and who could speak and read Arabic were interviewed at the participating health clinics. Instruments: Edinburgh Postnatal Depression Scale (EPDS), Maternity Social Support Scale (MSSS), Perceived Stress Scale (PSS), and Perceived Self-Efficacy Scale (PSES).	28.5% of adolescent mothers in Jordan reported that postpartum depression was lower than the prevalence of postpartum depression in women of childbearing age (25%).
A6	Factors of Postpartum Depression among teen Mothers in Rwanda Niyonsenga, in 2021(Niyonsenga & Mutabaruka, 2021)	Rwanda	Identifying postpartum depression factors in adolescent mothers who are beneficiaries of the DREAM program (Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe)	Research Design: cross-sectional design with a sample of 120 adolescent mothers with inclusion criteria covered 4 weeks to 11 months after giving birth, single, 15 to 19 years old, and having children who are still alive. Instrument: Edinburgh Postnatal Depression Scale (EPDS), and Parenting Stress Index/Short Form (PSI). This study only uses two subscales, namely testing parental pressure and dysfunctional parent-child interactions. Each item is rated on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The cutoff scores were 33 for PD and 26 for PCDI.	Depressive symptoms were significantly correlated with parental distress, weight/shape disorders, dysfunctional parent-child interactions, economic income, and chronological age.
A7	Adolescent Mothers: A Qualitative Study on Barriers and Facilitators to Mental Health in a Low-Resource Setting in Cape Town, South Africa Field et al, in 2020 (Field et al., 2020)	South Afrika	Knowing the experience of using mental health services (mental health literacy, screening, rejection of referrals, expectations, and counseling experiences) for adolescent mothers with postpartum depression.	Research Design: Qualitative. The sample was 12 informants (15-19 years old adolescents with a history of adolescent pregnancies). Instrument: interview questionnaire and screening results from CMD	Adolescents experience considerable stigma around teen pregnancy and mental illness that hinders the use of mental health services. Other barriers include fear of lack of confidentiality as well as logistical and environmental barriers. Uptake of services is facilitated by support from other adults and flexible appointment times. Face-to-face individual counseling is their format of choice for mental health interventions.

Assessing Articles Quality using Critical Appraisal Tool

The authors used the tools of the Joanna Briggs Institute to assess articles. They used the assessment method by dividing 4 categories: A (85- 100) Very Good, B (70-84) Good, C (55-69) Fair, D (< 55) Less. Based on the assessment of 7

articles, there were 3 randomized control trial articles with 13 questions, Cross-Sectional Study articles (n=3) with 11 questions, and 1 qualitative article with 10 questions. The highest rating is found in qualitative articles because these articles explain the research methodology, research flow, and the presentation of research results in detail.

RESULT

Characteristics of Articles

Characteristics of articles based on the country can be seen in Figure 1 below:

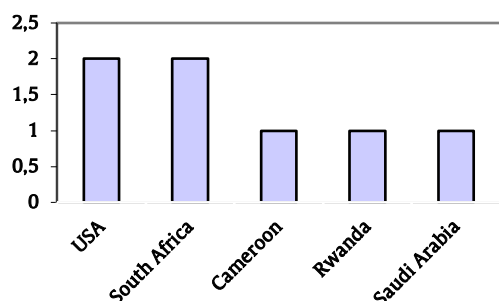


Figure 2. Characteristics of the articles based on the country

The research articles used in this scoping review came from several developed and developing countries. Articles included in developing countries in Africa are South Africa, Cameroon, and Rwanda. Articles included in developed countries are Arabia and the United States. Based on a search of 3 databases, research articles on adolescent pregnancy with postpartum depression were mostly conducted in rural areas.

The characteristics of the article based on the research design used can be seen in Figure 2 below:

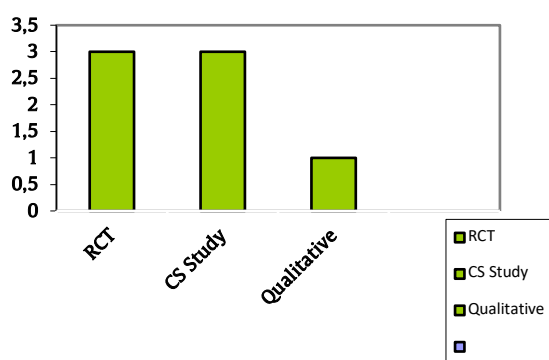


Figure 3. Characteristics of the articles based on the research design

The lowest article ratings are found in articles 1 and 6. Article 1 used the RCT research method. In the article, the limitations of the study were that the researcher did not explain the differences in the intervention between groups. Article 6 used a cross-sectional study research method. There was no explanation regarding strategies for dealing with confounding factors, namely adolescent mothers with a history of sexual violence which will result in a bias in research results related to the most contributing factors in postpartum depression in adolescent mothers.

Analyzing Theme

Based on the analysis of the article theme which was carried out after data analysis through data extraction and assessment of the research article quality, the research article theme that had been selected was based on the article included the author, year and title, country, purpose, method, and participants were identified. The identification results are in table 1. Articles are numbered from A1 to A7. There were 3 themes, namely: prevalence of adolescent mothers with postpartum depression (A1, A2, A3, A4, A5), risk factors for postpartum depression (A1, A2, A3, A4, A5, A6), and implementation of health services and obstacles in dealing with postpartum depression in adolescent mothers (A1, A2, A3, A7).

DISCUSSION

Prevalency of postpartum depression in adolescent mothers (n=5)

The prevalence of adolescent mothers experiencing postpartum depression found in the articles in this scoping review varied widely. It was from 19% to 32% of adolescent mothers with postpartum depression in the United States, South Africa, and Arabia (A1, A2, A5). On average, adolescent mothers who experience postpartum depression are 13-20 years old (A1, A2, A4, A5). In the REACH project (Relaxation, Encouragement, Appreciation, Communication, Helpfulness) it was found that the prevalence of adolescent mothers with primiparas was more prone to postpartum depression than adolescent mothers with multiparas (A1) (A4). However, in Jordan, it was reported that postpartum depression in adolescent mothers was lower than postpartum depression in women of childbearing age (25%). It was found that the prevalence of perinatal depression in the female population in developed countries is lower (A2) (A4). The vulnerable time for determining postpartum depression by diagnosing/screening postpartum depression also varied from 2 to 6 months postpartum. However, the peak onset of depression in adolescent mothers occurred about 4 months after delivery (A1, A2, A3).

The prevalence of postpartum depression that varies in pregnant women found in the review showed that the incidence of postpartum depression has a very diverse spectrum and risk factors. This is in line with Osok's research (2018) which stated that the incidence of postpartum depression was most common in adolescent mothers aged 14-19 years old compared to adult mothers with a prevalence rate of 13%. The incidence of postpartum depression varies worldwide. This was shown by Bowen's (2009) research in Motzfeldt's (2013) study which found that postpartum depression in Canada was very high (29%). In developing countries such as Qatar, postpartum depression was reported at 18% to 36%. The prevalence of postpartum depression in Asian countries ranged from 3.5% - 63.3% (Motzfeldt et al., 2013) (Burgut et al., 2013). Factors causing postpartum depression include a history of previous depression, social support, and marital relationships. Based on several factors that have been mentioned, unwanted pregnancy and the absence of support from partners, family, and the environment are one of the most influential causes of postpartum depression in adolescent mothers. This is in line with Dinwiddie's research (2018). Low maternal self-efficacy is known to reduce the ability of adolescent mothers

to cope with their new roles and responsibilities and contribute to negative perceptions and low self-confidence so that mothers feel they are unable to carry out new responsibilities and drastically change themselves (Brock et al., 2017).

Risk factors for postpartum depression in adolescent mothers (n=6)

Adolescent mothers face many changes and psychosocial challenges from the environment that can increase the risk of depression. The causes of postpartum depression in adolescent mothers found in the articles in this scoping review include unwanted pregnancies, adolescent mothers with marital conflict, lack of support from family and the environment, domestic violence, pressure from parents and economic problems (A1, A2, A3, A5, A6). Factors uniquely associated with adolescent postpartum depression are unwanted pregnancy, lack of family and environmental support, pressure from parents and economic problems (A1, A3, A4, A5, A6). The article found unexpected results that adolescent mothers refused or ignored support from the environment because they felt ashamed to open up to society (A5, A7).

The finding of this review is the lack of sexual and reproductive health education for adolescents. Parents tend to be authoritarian and one-way, so there is no communication between adolescent mothers and their parents. Financial stress is a chronic reality in life and contributes to mental health problems. Several articles found that financial problems were also associated with the development of postpartum depression in adolescent mothers (A2, A4, A6).

Another important finding from this review is that it was found in several articles that adolescents tried to abort their pregnancy (A2, A5). The symptoms found in mothers with postpartum depression include disturbances in mood changes quickly, excessive anxiety, sadness for no apparent reason, emotionally unstable, always feeling guilty, excessive crying, loss of concentration, difficulty sleeping, or sleeping too much, lonely and hating her baby (A1, A4, A7).

Another risk factor for postpartum depression in adolescent mothers was explained in Tzilos' research (2016) which stated that substance use and a history of trauma before and after pregnancy would increase the likelihood of postpartum depression (Tzilos et al., 2012). Other research stated that the population of Australian adolescent mothers and sexual abuse were major contributors to postpartum depression (Gilson & Lancaster, 2008). In contrast to research related to demographic risk factors for postpartum depression in adolescent mothers, it was found that fertile status did not have a significant relationship with symptoms of postpartum depression in adolescent mothers (Phipps et al., 2013; Reid & Meadows-Oliver, 2007). Some of the interventions studied by Zlotnick (2016) focused on risk factors related to depression in adolescent mothers or child care for adolescent mothers, screening, and follow-up interventions succeeded in reducing the impact of postpartum depression on adolescent mothers (Zlotnick et al., 2016). The results of several studies explained that early screening related to adolescent pregnancy and mental health counseling methods could reduce symptoms in adolescent mothers with postpartum depression, improved the quality of life in infant care, and emotional control of adolescent mothers (Hodgkinson et al., 2014; Kimbui et al., 2018; Osok et al., 2018). The results of Soep's research (2009) related to the effect of psychoeducational interventions in overcoming

postpartum depression showed a significant decrease in postpartum depression after the psychoeducation intervention. This is in line with Wheller (2007) that psychological treatment carried out by doctors, midwives, and nurses in the form of psychoeducation for maternity mothers could reduce the occurrence of postpartum depression (SOEP, 2009).

Implementation of health services and obstacles in dealing with postpartum depression in adolescent mothers (n=4)

The health services program for adolescent mothers with postpartum depression found in the articles in this scoping review is very diverse, such as a short-term home visit program and depression screening through the First Connections program, a long-term, comprehensive, evidence-based home visit program developed in Rhode Island. This activity aims to reduce postpartum depression symptoms and improve the health of adolescent mothers with postpartum depression so this program is carried out for 3 years. This increases public awareness about health services, especially the identification of adolescent mothers who need mental care (A6) (A7) (A2).

The interventions above are included in the REACH project (Relaxation, Encouragement, Appreciation, Communication, Helpfulness) so that the project has several interventions at different times. It aims to reduce the risk of postpartum depression by maximizing the process of developing extensive and iterative care targeting adolescent mothers. Other interventions carried out by this project include presenting facilitators to intervene with adolescent mothers in managing mental conflict, stress management, developing support systems, healthy relationships, and psychosocial resources for adolescent mothers who are assisted by facilitators with therapeutic strategies (eg, roleplay, communication analysis). The implementation of this project is carried out once a week for five consecutive weeks. The ongoing project from the previous one was an individual booster session for interviews about the toughest obstacles or problems being experienced by the teenage mother with postpartum depression (A2, A7).

Adolescent mothers with postpartum depression also experience barriers. In the experience of mental health examinations, adolescent mothers feel embarrassed if their problems are known to others, lack confidence in keeping secrets, and worry about being judged for their personal problems. Adolescent mothers feel a considerable stigma surrounding adolescent pregnancy and mental illness, which hinders the use of health services. Other barriers include fear of lack of confidentiality as well as logistical and environmental barriers (A7) (A2).

Social support is needed by postpartum mothers to adjust to their new roles. If the mother gets little support, the incidence of postpartum depression will be higher (Shorey et al., 2015) (Mustaffa et al., 2014). Corigan's research (2015) concluded that an increase in social support scores was associated with a lower incidence of postpartum depression and low support would increase the incidence of postpartum depression in adolescent mothers (Yağmur & Ulukoca, 2010). Negative social stigma against adolescent mothers, especially mothers who have problems in their marriages will greatly impact the psychology of adolescent mothers because they do not get protection or defense from the environment as expected (Field et al., 2020; Mohammad, Sabbah, Aldalaykeh, ALBashtawy, Z. Abuobead, et al., 2021; Motegi et al., 2020). Another factor is the lack of providers and basic care in adolescent pregnancy, which creates greater

pressure, especially moral, and interpersonal support and stigmatization by the community or health workers when adolescent mothers seek mental health care.

Challenges from the socio-cultural realm affect the psychological condition of adolescent mothers. The existence of social stigma will be a bad experience for them. Several research articles explained that with the existence of social stigma, adolescent mothers felt confused and afraid of every action that would be carried out. They would always feel wrong in making decisions, even some of them decided to run away from their responsibilities (Atuhaire & Cumber, 2018; Kola et al., 2020; Recto & Champion, 2018). Several programs to strengthen sexual and reproductive health education, mental health counseling, family concept counseling, and pre-marital counseling in the community will reduce the impact of social stigma (Kola et al., 2020; Recto & Champion, 2018). Pressure from parents is one of the main roles in causing postpartum depression in adolescent mothers. Due to the wishes of authoritarian parents, children feel pressured and do not get protection. Parents who do not understand how to deal with mental health problems, especially postpartum depression experienced by children will worsen the psychological condition of adolescent mothers (Agnafors et al., 2019; Osok et al., 2018; Sakina et al., 2021)

Limitation of The Study

The limitation of this study is that data collection is not done directly because it analyzes other research articles. Another limitation is obtained from articles that are limited to the last 5 years.

CONCLUSIONS AND SUGGESTIONS

Based on 7 articles reviewed, it was found that 32% of adolescent mothers have a possibility of postpartum depression that requires immediate action on early assessment, detection, and intervention. Factors that contribute to the development of postpartum depression in adolescent mothers include high social support, marital problems, pressure from parents, and economic problems. Continuing midwifery care, strategies, and appropriate preventive measures including regular screening for adolescent mothers and mental service providers are needed to reduce the risk of postpartum depression in adolescent mothers.

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ETHICAL CONSIDERATIONS

This review is not ethical.

Funding statement

The authors did not receive funding and or grants from other organizations in carrying out this review and did not receive any funding in the preparation of the manuscript and during conducting this review.

Conflict of Interest Statement

There is no conflict of interest in this review

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