

## Review Article

# Stress-related psychosocial intervention among pregnant woman with history of miscarriage: A scoping review

Putri Karisa\* , Ema Arum Rukmasari, Muhamad Gustaf Al Fajar 

## ABSTRACT

**Introduction:** Miscarriage is a traumatic experience for the mother and can lead to stress due to lack of family and social support. This event can be harmful to the woman as it can lead to pregnancy trauma and more severe psychological disorders such as depression and suicide. Providing psychosocial support to women experiencing miscarriage can be a positive supportive care option. This article aimed to identify psychosocial interventions to reduce stress levels in pregnant women with a history of miscarriage.

**Methods:** A scoping review was conducted using PubMed, Google Scholar, Science Direct, and SAGE Journal databases. Keywords used include psychosocial intervention, stress level, and pregnancy. Articles were selected based on the criteria of publication year 2017-2022, English language, randomized controlled trial research design and research results according to the topic.

**Results:** The results obtained six articles that met the criteria. Psychosocial interventions to reduce stress levels in pregnant women with a history of miscarriage can be done through mindfulness therapy, supportive care, family support, brief supportive psychotherapy, cognitive narrative intervention, and happiness counselling programs.

**Conclusion:** Psychosocial-based interventions can be used as supportive therapy to improve the psychological well-being of women with a history of miscarriage.

**Keywords:** miscarriage; pregnancy; psychosocial intervention; stress level

## INTRODUCTION

Pregnancy is seen as a situation that elicits positive emotional reactions and expectations regarding the presence of a baby in a family (Randhawa et al., 2021). The process of pregnancy not only involves the physical condition of women, but also involves their emotional condition (Mughal et al., 2022). Thus during pregnancy, pregnant women will adapt to their psychology. Recent studies have revealed that women's psychological well-being affects the condition of pregnant women (Broberg et al., 2022). San Lazaro Campillo et al. (2017) stated that 25% of women experience emotional distress during the pregnancy period.

Given the importance of psychological well-being in pregnant women, it is necessary to know interventions that can reduce stress in pregnancy (Lee-Carbon et al., 2022). Stress that occurs in pregnant women is mostly felt when they are in the first trimester. The first trimester is a period of pregnancy that must be considered during pregnancy because most pregnant women feel surprised by a number of changes

that occur to them (Stepowicz et al., 2020). During this period, some pregnant women are in the stage of depression due to the great emotional pressure that makes pregnant women very prone to stress in early pregnancy (Biaggi et al., 2016). This can increase the risk of miscarriage during the first trimester.

Miscarriage is one of the most common complications in early pregnancy (San Lazaro Campillo et al., 2017). The sense of loss is quite large when pregnant women realize that the fetus they are carrying does not develop and even disappears from their womb, becoming a very big blow for pregnant women. In addition, the feeling of loss accompanied by the social burden due to the miscarriage makes pregnant women isolate themselves from society (Daugirdaitė et al., 2015). The experience of miscarriage has an impact on women's psychological and mental health and well-being, which is associated with increased levels of distress, anxiety and depression (Kolte et al., 2015). If left untreated, psychological symptoms can persist for years (Cuenca, 2022). Even the experience of miscarriage, will be detrimental in subsequent pregnancies due to the trauma of the previous miscarriage (Nynas et al., 2015).

The event of miscarriage in women is a significant cause of psychological trauma for the sufferer (Iwanowicz-Palus et al., 2021). Yet few studies have evaluated the outcomes of psychosocial treatments for pregnant women who have experienced miscarriage. In fact, psychosocial support and interventions are treatments that have a positive impact on women with a history of miscarriage. Therefore, this study aimed to identify psychosocial interventions to reduce stress in pregnant women with a history of miscarriage.

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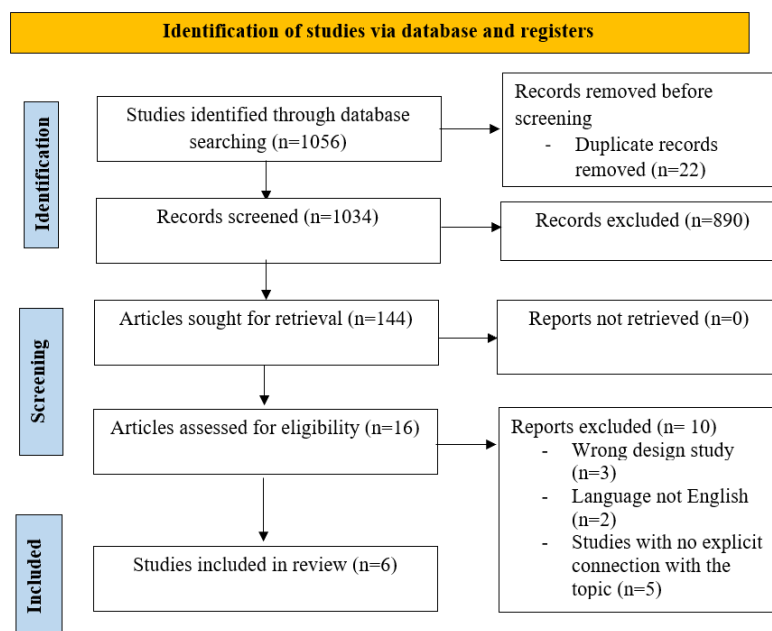
\*Correspondence: Putri Karisa (putri19006@mail.unpad.ac.id)  
Department of Maternity Nursing, Faculty of Nursing, Universitas Padjadjaran, Sumedang, Indonesia

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Volume 10 (2): 76-80  
<http://dx.doi.org/10.20473/pnmj.v10i2.47564>

e-ISSN: 2355-1577 | p-ISSN: 2656-4629

### Article History

Received: August 08, 2023 | Revised: May 17, 2024 | Accepted: August 06, 2024 |  
Published: September 01, 2024



**Figure 1.** PRISMA Flowchart

## METHODS

This research employed a scoping review approach to analyze the literature. The literature used was taken from the PubMed, ScienceDirect, Google Scholar and CINAHL databases. Using Boolean operators, the researcher have conducted a search with the keywords: “Psychosocial intervention” AND “stress level” AND “pregnancy” AND “miscarriage.” The inclusion criteria in the study were English language articles, publication year range 2017-2022, articles with randomized controlled trial (RCT) and clinical trial research designs and articles that reviewed psychological interventions in overcoming stress in pregnant women with a history of miscarriage. The collected articles will be processed manually and entered into a table for descriptive analysis

## RESULTS

Table 1 summarizes the findings from the reviewed studies on psychosocial interventions aimed at reducing stress levels among pregnant women with a history of miscarriage. The table presents a detailed overview of each study’s design, sample characteristics, intervention types, measurement methods, timeframe, and outcomes.

## DISCUSSION

The experience of miscarriage is closely associated with psychological distress, as evidenced by increased stress, depression, and anxiety (Jensen et al., 2021). Women who experience a miscarriage are prone to despair, guilt, depression, self-blame, and self-doubt (Barat et al., 2020). Therefore, various interventions have been designed to reduce stress in women who have experienced miscarriage. Identifying useful interventions to reduce stress levels is an important first step in addressing psychological problems in women, including families. This review identified seven interventions that have the potential to address stress in women who have experienced miscarriage.

Meditation and mindfulness practices have been widely used in the health world to treat various psychological

problems including stress due to miscarriage (Beattie et al., 2017). Jensen et al. (2021) revealed that meditation and mindfulness therapy conducted for seven weeks with a duration of 10-20 minutes per day resulted in a significant reduction in stress in the intervention and control groups. Koert et al. (2019) suggested that meditation and mindfulness may be more effective in reducing stress than communication and stress management techniques. This happens because couples, especially women who have experienced miscarriage, are more comfortable communicating specifically about their condition with themselves and their partners than with family and friends (Wahbeh et al., 2014). Mindfulness and meditation serve as effective self-help psychological interventions by enabling individuals to recognize and manage their problems, thereby helping them understand and control emotional distress on a personal level (Karyotaki et al., 2018). These practices involve breathing exercises, body scanning, conscious movement, and heightened attention to sensory experiences, along with education on the origins of meditation. Participants are also encouraged to keep a diary to foster gratitude, positive focus, and mindfulness in their daily lives. Standard supportive care is also provided with ultrasound scans, blood tests, planning the next pregnancy programme, and pre-pregnancy advice (Flink-Bochacki et al., 2018).

Providing supportive care with Swanson care can be considered to reduce stress in women who experience miscarriage (Palas Karaca & Oskay, 2021). This intervention follows a five-step care model that includes understanding, being present, meeting needs, empowering individuals, and respecting beliefs. Swanson care is an approach that can be used to reduce symptoms of grief, stress, and depression due to miscarriage through a health education and counselling approach (Adolfsson & Larsson, 2010; Chang et al., 2021). The Swanson care approach helps women navigate the grieving process after a loss more effectively. This nursing approach focuses on creating a supportive environment, fostering open communication, offering information about the miscarriage process, providing counseling, and supplying a guidebook to assist with coping. This intervention also

**Table 1.** Summary of Findings

Author (year)	Study Design	Sample(s)	Intervention	Measurement	Time-frame	Outcome
Jensen et al. (2021)	RCT	76 patients	Meditation and mindfulness therapy program combined with group sessions	Perceived Stress Scale (PSS) and Major Depression Inventory (MDI)	7 weeks	A 7-week program incorporating daily meditation and mindfulness therapy along with group sessions can significantly reduce stress compared to a standard supportive care program.
Palas and Oskay (2019)	Quasi-experimental study	104 patients	Supportive Care based on Swanson's Care	Depression Anxiety Stress Scale (DASS)	6 weeks	SCG effectively reduces or eliminates stress levels following pregnancy loss.
Sun et al. (2017)	RCT	124 patients	Family support program	Family Adaptation Partnership Growth Affection and Resolve Index, Edinburgh Postnatal Depression Scale, and Impact of Event Scale- Revised	8 months	A family support program effectively reduces depression and stress symptoms in pregnant women with a history of miscarriage
Barat et al. (2020)	RCT	79 patients	Brief supportive psychotherapy	Hospital Anxiety and Depression Scale, Perinatal Grief Scale	4 months	Brief supportive psychotherapy is effective in reducing active grief, hopelessness, and stress levels.
Rocha et al. (2017)	RCT	67 patients	Cognitive Narrative Therapy	Zung Anxiety Scale, and Perinatal Grief Scale	6 months	Back Depression Inventory can effectively reduce the level of depression and anxiety
Elsharkawy et al. (2021)	RCT	60 patients	The happiness counseling program	Depression, Anxiety, and Stress Scale (DASS-21)	1 month	Happiness counseling can help alleviate depression, anxiety, and stress in pregnant women who have experienced recurrent miscarriages.

helps women talk about their feelings emotionally and gives women time to grieve, which has a positive effect on reducing symptoms of grief (San Lazaro Campillo et al., 2017).

The emergence of stress in someone who has experienced a miscarriage is also caused by a lack of social support, including family support (Sun et al., 2018). It is crucial to enhance the support provided to mothers who have experienced a miscarriage by their immediate families and social networks. This support can include perinatal palliative care, options for delivery after a fetal death diagnosis, pain management, opportunities to view and hold the deceased baby, culturally sensitive care, counseling, psychotherapy, and other supportive approaches (Endo et al., 2015). The study by Sun et al. (2018) found that offering social support by enhancing emotional communication, educating family members on providing support and listening skills, and assisting each family in developing a detailed support plan tailored to the psychological needs, personality traits, and treatment progress of pregnant women significantly reduced depression and stress levels in women who had experienced a miscarriage. In addition, the provision of psychotherapy can also be considered as it has been shown to have a positive effect on preventing psychiatric morbidity after miscarriage and improving psychological well-being after miscarriage (Barat et al., 2020).

Psychotherapy can also be provided by applying cognitive narrative psychotherapy. The study of Rocha et al. (2018) demonstrated that cognitive narrative psychotherapy effectively reduced anxiety and depression, resulting in significant improvements in the mental health of women who had experienced a miscarriage. The therapy, which consisted of four sessions—decision, subjectivation, metaphor, and projection—employed a constructivist approach. This method focuses on deconstructing and reconstructing episodic narratives with various meanings and coherence, specifically within the context of loss (Andrade et al., 2017).

Another non-pharmacological approach is happiness counseling, which enhances cognitive and emotional well-being, allowing individuals to adopt a more positive outlook on life and respond optimistically to challenges and changes (Hemati et al., 2017). This increased sense of happiness can lead to greater satisfaction and security in life. Studies have shown that happiness counseling can effectively reduce depression, anxiety, and stress in women who have experienced a miscarriage (Elsharkawy et al., 2021).

## CONCLUSION

Miscarriages often cause stress and other psychological disturbances that compromise a woman's physical and emotional well-being. Best efforts are urgently needed to address this problem. This review summarizes and discusses the range of interventions that have been used to reduce stress in women who have experienced miscarriage. The review identified several effective interventions to address stress despite some shortcomings, particularly in relation to the limited time and social support available to women who have experienced a miscarriage. The interventions can be tailored to the characteristics and preferences of the patients so that efforts to prevent and reduce the likelihood of stress can be maximized. Future research needs to investigate the effectiveness of stress management programs that do not have time, cost, and easy to measure limitations such as the application of telehealth in preventing and managing stress in pregnant women at risk of miscarriage to experience miscarriage remotely. Despite the variety of interventions used, each intervention was found to reduce stress. Differences in methodology and quality of research make it difficult to draw conclusions about which interventions are most effective.

## Declaration of Interest

There are no conflicts of interest.

## Funding

None.

## Data Availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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