



# A Review of the Literature on the Effects of Lost Pregnancies on the Mental Health of Women and Childfree

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**Abstract.** In wealthy nations, miscarriage affects 10–25% of clinically recognized pregnancies, making it a common problem for expectant mothers. This may result in trauma, melancholy, grief, and depression, which may cause involuntary childlessness. The psychological effects of miscarriage and childlessness have not been well-studied in the past, thus literature research was required to find it. The purpose of this study was to determine the psychological effects on women who miscarry and those who are childless. A literature review approach was used to conduct the research, and 234 papers from the years 2018 to 2023 were found. Scopus, Science Direct, and Google Scholar were utilized by the database. The following keywords, which have been modified to comply with Medical Subject Heading (MeSH), are included in this review literature: woman childfree, mental health of pregnancy loss among women, psychological impacts of miscarriage on mothers, women without children, mental health impact on mothers who miscarry. PRISMA, which generates research papers for systematic review, serves as the foundation for this investigation. The findings demonstrated that psychological issues like depression, melancholy, and traumatic experiences were common among women who either lost or chose not to have children. The study found that, among other things, reproductive problems—which are the biggest sources of stress for women—have an impact on the fear and traumatic experiences associated with pregnancy and labour that women without children face. Determine the most important variables influencing women who are childless or have lost a child and look for ways to address them.

**Keywords:** Mental Health, Pregnancy Loss, Woman Without Children, Psychological Effect.

## 1 Introduction

Each and every couple should strive to achieve happiness by getting married and starting a family. The process of becoming pregnant is something that married couples who want children always look forward to and want to happen. Nevertheless, the process of pregnancy does not always proceed without any complications. Certain instances of pregnancy processes are accompanied by complications. A miscarriage is the most common issue that women who are pregnant face [1,2].

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Miscarriage experienced by pregnant women can be due to spontaneous abortion or provocateur abortion. Spontaneous abortion, or early pregnancy loss and miscarriage, usually occurs in the first trimester of pregnancy [3]. As a result of several data sources, losses from miscarriage are estimated to be 10-25% of clinically recognized pregnancies in developed countries. An estimated 50% of early miscarriages are due to chromosomal abnormalities – a "random number of chromosomal errors" [4]. Other maternal (and sometimes paternal) characteristics have been identified as risk factors, especially in recurrent miscarriages, including clinical, social, behavioral, health factors and psychological factors [5,6]. In general, of women who miscarry, 50% experience psychological disorders within a week to several months after miscarriage. Psychological disorders experienced can be in the form of anxiety, sadness, anger and guilt, fear, panic, self-blame and also social [7]. The results of other studies state that women who experience miscarriage will experience a deep sense of sadness, grief and depression [8]. Miscarriage can also cause bad experiences and trauma that have an impact on the perception of couples to decide not to have children [9]. While there is no particular loss to those who involuntarily remain childless, they do report deep feelings of loss and mourning for a child they never had. Involuntary childlessness experiences are associated with more health complaints, more significant anxiety and depression, and complicated grief for women. These women also reported that they were still thinking about it. They do not have children and experience low self-esteem and feelings of social isolation [10,11].

The aforementioned study's findings have illuminated the psychological effects experienced by both childless women and mothers who have lost a pregnancy. Nonetheless, it is crucial to look for literature research in order to better understand the psychological effects on childless and miscarried women.

## 2 Method

This research was carried out using the literature review method. The data used in this study are secondary data obtained not from direct observation, but obtained from the results of research that has been carried out by previous researchers. Secondary data sources obtained are journal articles of national and international reputation with pre-determined themes. This literature review was screened and identified using the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) checklist. The eligibility criteria of this study have been determined using PICO (Population, Intervention, Comparison, Outcome). Empirical studies of this design meet the inclusion and exclusion criteria specified in Table 1.

### 2.1 Search strategy

Search for review literature using databases with high and medium quality criteria, namely Scopus, Science Direct, Google scholar. Article or journal search uses keywords and boolean operators (AND, OR NOT or AND NOT) which are used to expand or specify the search, so that Make it easier to determine the article or journal used. The

keywords in this review literature are adjusted to Medical Subject Heading (MeSH) and consist of the following "the psychological effect of pregnancy loss, woman childfree, Mental health of pregnancy loss among women, psychological effects of miscarriage on mothers, women without children, mental health impact on mothers who miscarry" The search was carried out in a span of 5 years, namely from 2018-2023.

## 2.2 Study Selection

Article search results are selected related to duplicate articles. The title, abstract and full text are then filtered; All members of the review team contribute to the screening process. Each screening process is identified based on inclusion and exclusion criteria. Filtering conflicts are identified and resolved by a second, independent reviewer at random.

## 2.3 Data extraction and synthesis

Two researchers (RTA, R) extracted data from the resulting and qualified data using standard data extraction tables namely authors (year), country, study objectives, study design, samples and findings. Each extracted article was cross-examined by two researchers (RTA,R) to ensure accuracy and minimize reporting bias. The results are presented narratively from the findings.

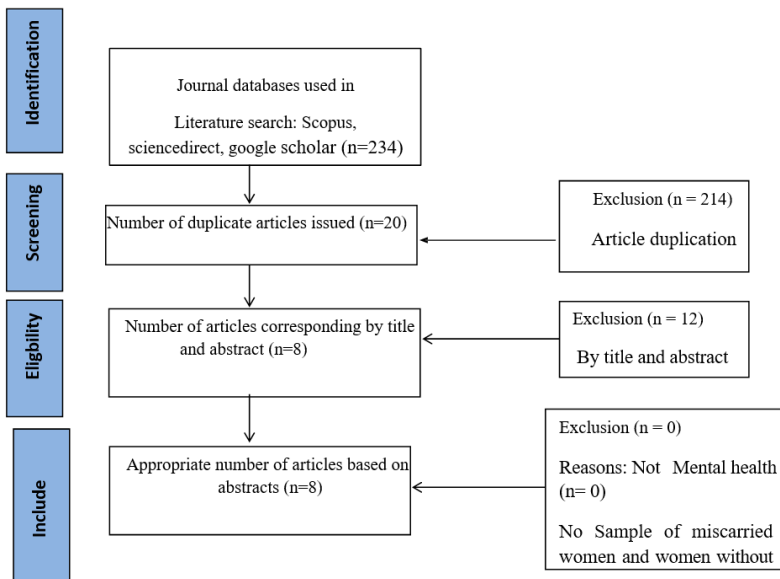


Fig. 1. Article identification, screening and selection process

**Table 1.** Inclusion and exclusion criteria

<b>Criterion</b>	<b>Inclusion</b>	<b>Exclusion</b>
Population	Women with miscarriage and women childless	Women with pregnancy
Intervention	None	None
Comparators	None	None
Outcomes	Psychological impact of women with miscarriage and childless women	General health
Study design and Publication type	Quantitative and qualitative study design	None
Publication years	2018-2023	Before 2018
language	English	Languages other than English and Indonesian

### 3 Results and Discussion

#### 3.1 Study Selection

The search results that have been carried out identified there are 234 articles (Fig. 1). After identifying duplication, we screened 20 articles and after reviewing the suitability of titles and abstracts there were 8 articles that did not match. We distilled the full text to get 8 suitable articles. So those 8 articles were included in this review.

#### 3.2 Study characteristics

There are 8 literature studies, there is 1 cross sectional study, 1 descriptive research, there is 1 secondary data analysis study, 1 cohort research and 4 qualitative studies. Participants included women who had lost children and did not want children. Samples ranged from 7 to 1098 people. The results of the study were conducted in Denmark, Australia the characteristics in this study are fully presented in Table 1.

#### 3.3 Psychological impact on miscarried mothers and childless women

All women in the resulting study sample indicated that women who lost children or did not want children experienced psychological problems (Table 2). The results of the study proved that women who experienced abortion experienced sadness, depression more pronounced than their male partners [12]. The results of other studies say that women with early miscarriage experience post-traumatic stress, anxiety and also the presence of high levels of depression [13].

Other research studies have also shown that women who lose their children suddenly experience prolonged and persistent grief disorder. Symptoms of role confusion and anger are the most common symptoms reported [14]. In addition, the results of other studies also show that the level of distress, sadness and loss associated with miscarriage is very significant even though respondents have received health care assistance by medical personnel during the course of miscarriage [15]. The results of other studies on

the psychological impact experienced by women without children are traumatic experiences and fear of birth [16].

**Table 2.** Data Extraction

<b>Title, Author(s), (Year)</b>	<b>Study Design</b>	<b>Aim of Study</b>	<b>Sample</b>	<b>Key Findings</b>
<b>An investigation of the effects of infertility on Women's quality of life: a case-control study</b> Bakhtiyar, Beiranvand, Ardalani, Changae, Almasian, Badrizadeh, Bastami & Ebrahimzadeh BMC Women's Health No. 114, Volume 19 2019	Case-control study	the impact of infertility on a woman's quality of life.	180 infertile and 540 fertile women	The results of the multivariate modeling show infertility can potentially affect various aspects of women's quality of life such as physical health ( $p < 0.001$ ), mental health ( $p < 0.001$ ), social health ( $p < 0.001$ ) and the total score of quality of life ( $p < 0.001$ ) significantly.
<b>Prospectively assessed perceived stress associated with early pregnancy losses among women with history of pregnancy loss</b> Schliep, Hikle, Kim, Sjaarda, Siver, Stanford, Purdue-Smithe, Plowden, Schisterman, Mumford Hum Reprod , 2022 Sep 30; 37(10): 2264-2274. doi: 10.1093/humrep/deac172	Secondary data analysis of the EAGeR trial (2007-2011)	association between perceived stress during peri-conception and early pregnancy and pregnancy loss among women who have experienced a prior pregnancy loss	women with an hCG-detected pregnancy (n = 797 women).	Among women who had an hCG-confirmed pregnancy, 188 pregnancies. Women with high (>50th percentile) versus low ( $\leq$ 50th percentile) peri-implantation or early pregnancy weekly perceived stress had an elevated risk of experiencing any pregnancy loss (hazard ratio (HR): 1,60), with higher risks observed for women experiencing an hCG-detected loss.
<b>Longitudinal study of emotional experiences, grief and depressive symptoms in women and men after miscarriage</b> Volgsten, Jansson, Svanberg, Darj, Stavreus-Evers J.midw, 2018	Description	to study emotional experience, grief and depressive symptoms in women and men, one week and four months after miscarriage.	Women, (n = 103), and their male partner (n = 78), were recruited at the gynecological clinic after miscarriage	Grief and depressive symptoms were reduced with time, which was not the case for the emotional experiences of miscarriage.

Title, Author(s), (Year)	Study Design	Aim of Study	Sample	Key Findings
<p><b>Posttraumatic stress, anxiety and depression following miscarriage and ectopic pregnancy: a multicenter, prospective, cohort study</b> Farren, Jalmbrant, Falconieri, Mitchell-Jones, Bobdiwala, Al-Memar, Tapp, Calster, Wynants, Timmerma, Bourne DOI: 10.1016/j.ajog.2019.10.102</p>	a prospective cohort study	to investigate levels of posttraumatic stress, depression, and anxiety in women in the 9 months after early pregnancy loss, with a focus on miscarriage and ectopic pregnancy	Seven hundred thirty-seven of 1098 women (67%) with early pregnancy loss (including 537 miscarriages and 116 ectopic pregnancies) and 171 of 187 control subjects (91%) agreed to participate.	Women experience high levels of posttraumatic stress, anxiety, and depression after early pregnancy loss.
<p><b>Recurrent pregnancy loss: couples' perspectives on their need for treatment, support and follow up</b> E Koert, G M H Malling, R Sylvest, M C Krog, A M Kolte, L Schmidt, H S Nielsen Human Reproduction, Volume 34, Issue 2, February 2019, Pages 291–296, <a href="https://doi.org/10.1093/humrep/dey362">https://doi.org/10.1093/humrep/dey362</a></p>	qualitatively interviewed	What do couples referred to or attending a recurrent pregnancy loss (RPL) clinic believe they need in terms of treatment, support and follow up?	Over a 2-month period in 2017–2018, 13 couples who were referred to the national RPL program in Copenhagen, Denmark were qualitatively interviewed	Both men and ladies portrayed the total impact of RPL with an increment in weight and weariness by the third and consequent misfortunes. Men felt constrained to stay positive and bolster their accomplices in spite of their possess sentiments of misfortune. They wished for acknowledgment from the therapeutic community that RPL encompasses a noteworthy mental affect, and pushed that compelling treatment ought to incorporate both individuals of the couple, with consideration to both physical and mental angles of the RPL and ought to

Title, Author(s), (Year)	Study Design	Aim of Study	Sample	Key Findings
<p><b>The Grief of Mothers After the Sudden Unexpected Death of Their Infants</b> Goldstein, Lederman, Lichtenhal, Morris, Human, Elliott, Tobacco, Angal, Odendaal, Kinney, Priger-son; PASS Network</p>	The Qualitative interview	To know about PGD (Prolonger grief disorder ) in mothers after sudden infant death syndrome (SIDS)	49 SIDS-bereaved mothers living in informal settlements near Cape Town, South Africa, and on the Pine Ridge Indian Reservation and 359 SIDS-bereaved mothers affiliated with SIDS parent-support organizations in the United States, United Kingdom, Australia, New Zealand, and the Netherlands.	<p>be tailored to their current regenerative arrange, in arrange to assist them adapt with the negative affect of RPL and the uneasiness related with conception and another pregnancy</p> <p>Extremely high, persistent, and similar rates of PGD were found in both samples at every time interval. The prevalence of PGD was 50.0% in either sample (mean months from loss: 20.5 vs 24.9). Daily, intrusive emotional pain or yearning was found in 68.1% of subjects; yearning was significantly associated with emotional pain (<math>P &lt; .0001</math>). Role confusion and anger were the most prevalent symptoms, reported by the majority at every time interval. Rates of role confusion, anger, and diminished trust in others remained constant. Acceptance was less prevalent than other grief indicators at every interval.</p>
<p><b>"The loss was traumatic... some healthcare providers added to that": Women's experiences of miscarriage</b></p>	The Qualitative interview	to explore the psychological distress experienced by women as a result of	Fifteen women were recruited in Australia and participated in	It was found that for most women, the levels of distress, grief, and loss associated with their miscarriages were significant. While women experienced

Title, Author(s), (Year)	Study Design	Aim of Study	Sample	Key Findings
Bellhouse, Temple-Smith, Watson, Bilardi DOI: 10.1016/j.wombi.2018.06.006		miscarriage, as well as the perceived support provided by healthcare professionals.	semi-structured interviews either in person or over the telephone.	both positive and negative interactions with healthcare providers throughout their miscarriage journeys, all women interviewed expressed their increased distress following negative experiences.

### 3.4 Discussion

The desire to have children and bear children is determined by various factors from both the male and female sides. Factors that influence it can be individual, social, economic or religious. The existence of obstacles to have children or the desire not to have children poses a psychological burden for women and their partners. Based on the results of a review of various studies conducted in the 2018–2023-time frame relating to the psychological impact on miscarriage mothers and women without children.

The psychological impact experienced by miscarriage mothers is most often sadness, anxiety and depression. This is caused by reproductive problems experienced by mothers, both those who already have children and those who are just about to have children. Miscarriage becomes a frightening experience and becomes a traumatic experience for the mother. These traumatic events will have a negative impact on women's mental health [12,13]. In addition, the influence on the female reproductive system can also cause disturbances in women's self-image. Women will become low self-esteem and become depressed because they are different from other women. The support of spouses and family and health workers is very meaningful for women who experience miscarriage, but the results show that the services of health workers in carrying out care during a miscarriage have not been able to reduce the impact post-miscarriage maternal psychology. Mothers who experience miscarriage still experience very significant psychological changes [15]

In this study we also found that women without children have psychological problems. The result we got was that women without children experience fear and have traumatic experiences related to pregnancy and childbirth [16]. This is influenced by various factors, one of which is reproductive problems which are the biggest stressors for women. These results show that the psychological impact is a significant problem for mothers who experience miscarriage and women without children. Efforts to provide mental and psychological health support are not only when the mother experiences a miscarriage but also need to provide holistic support so as not to become a stressor triggering depression, anxiety or trauma.



## 4 Conclusion

The desire to have children and bear children is determined by various factors from both the male and female sides. Factors that influence it can be individual, social, economic or religious. The existence of obstacles to have children or the desire not to have children poses a psychological burden for women and their partners. Miscarriage becomes a frightening experience and becomes a traumatic experience for the mother. Such traumatic events will have a negative impact on women's mental health. In addition, the influence on the female reproductive system can also cause disturbances in women's self-image. Women will become low self-esteem and become depressed because they are different from other women. In this study we also found that women without children have psychological problems. The result we get is that women without children experience fear and have traumatic experiences related to pregnancy and childbirth. This is influenced by various factors, one of which is reproductive problems which are the biggest stressors for women.

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